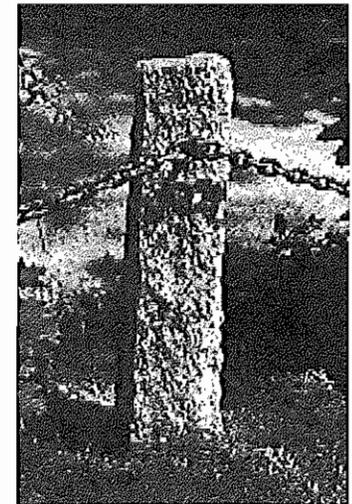
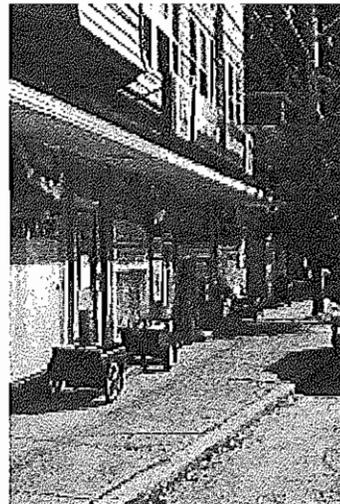
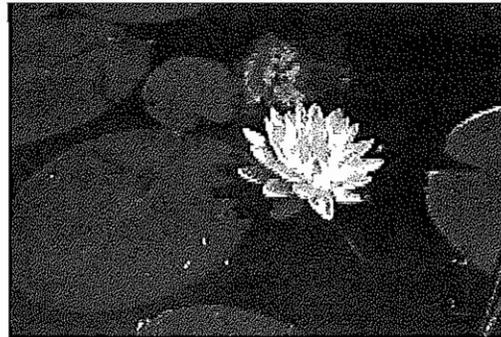
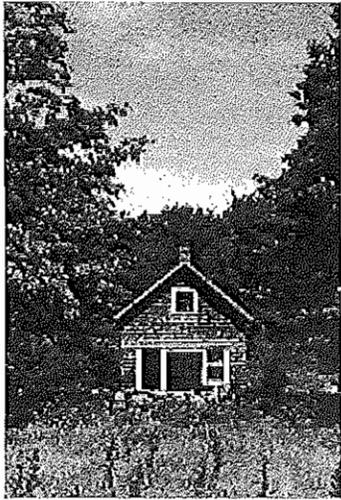


South Kingstown Residential Design Manual



Town of South Kingstown, Rhode Island



South Kingstown Residential Design Manual

Town of South Kingstown, Rhode Island

Prepared for:
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Wakefield, RI

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January, 1999



Acknowledgements

TOWN OF SOUTH KINGSTOWN, RI

RESIDENTIAL DESIGN MANUAL

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Chapter 1 - Introduction

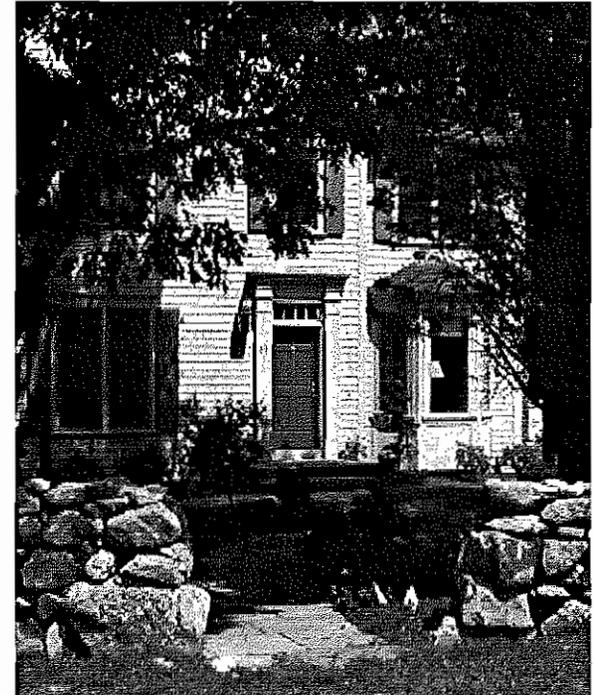
This design manual is part of a larger effort over the last decade: including a comprehensive plan, targeted plans for specific districts, and revisions to the zoning bylaws and subdivision regulations. During this process it became clear to members of the planning board and other local residents that despite agreement on overall goals for managing growth in the town, as well as a complex zoning bylaw and extensive development review process, recent subdivisions do not seem to “fit in” with the character of the town. It is not that the typical subdivision is poorly designed or unpleasant — indeed some of the older ones are the most desirable neighborhoods in town — but they have certain drawbacks: a repetitious layout, with the same lot size, house location, driveways, etc. duplicated over and over; strict lot size and setback requirements that create a



The typical subdivision replaces existing site features with a monotonous pattern of homes with identical lot size, setbacks, and frontage.

monotonous uniformity and make preservation of unique features difficult; design of homes, driveways, garages, and landscaping that follows an equally repetitious pattern; large lots and frontage requirements that spread houses over the landscape, making homeowners more dependent on their cars and diluting neighborliness; and finally, a design approach which focuses on the private yard and home and ignores the possibility for shared public spaces that foster community spirit. There are significant legal and market forces behind these factors, but the result is the land use equivalent of a fast food hamburger — predictable, inexpensive, comfortable, but rather dull.

In 1996 Dodson Associates, together with Attorney Mark Bobrowski, was engaged to examine the impact of recent development on South Kingstown’s historic character. We found that, as expected, the typical cookie-cutter subdivision does not blend well with South Kingstown’s rural landscapes and historic town and village centers. Yet even cluster developments, which allow smaller lot sizes in exchange to permanent preservation of open space, have generally been disappointing. A few subdivisions, however, were much more successful: usually, it appears, because of a commitment on the part of the developer to a subdivision that is consciously designed to reflect the character of its surroundings. The better examples work not because of adher-



A few new development projects, represented by this new home at Case Farm, demonstrate ways that new development can respect the character of the land.

ence to setbacks, road widths, and the usual elements controlled by zoning, but because the many design decisions made during the planning and construction process followed a strong design theme.

While the zoning and subdivision regulations will continue to be modified in order to encourage more sensitive development projects, it was agreed that one of the best ways to influence development for the better is not through more extensive regulations, but through a process of education and discussion — hence this manual.

Its purpose is to explore South Kingstown's varied landscapes and to suggest ways to design residential development that fits into its context. It consciously avoids a "one size fits all" approach in favor of development that expresses the unique "sense of place" of each neighborhood. It is meant to be a resource for good design ideas, a touchstone for a more sustainable style of development, a generator of discussion.

To that end, the manual is organized in stand-alone chapters. Chapter two contains an overview of the natural and cultural history of South Kingstown; discussing the physical processes that created the landscape and the way that landscape was modified by human use. It concludes with a review of the principal landscape types that resulted from an interaction of people and the land that has lasted for centuries, if not millennia. Chapter three discusses the patterns that one finds —both at the townwide level and within specific neighborhoods — patterns in the way roads were laid out and houses located, for example, or of architecture and landscaping, or in the way people lived and continue to live in their neighborhoods. Chapter three also introduces the importance of shared, public spaces to the success of residential neighborhoods, and concludes with a discussion of "the sense of place." Chapter four introduces a design process for better residential development. It begins with methods for better understanding the

development site, and includes ways to create a development that responds to its specific context. The chapter concludes with an evaluation of why this approach benefits not only the public, but the developer. Chapter five consists of six development scenarios designed to demonstrate how these ideas can be applied to real situations. Each of the scenarios is based on an actual vacant site in South Kingstown; showing the kind of development that is likely under current trends, contrasted with a more creative approach to each site that achieves the same level of development but finds a way to design it in a way that fits in with its context. Finally, chapter six presents a detailed discussion of specific development issues, from the design of streets and driveways to stormwater management.



This design manual is meant for people who are involved in the day-to-day development process: builders and developers, Realtors, engineers, surveyors, architects, and landscape architects, as well as those who review their work; planners, lawyers, town officials and board members, and interested citizens. With this diverse group of readers in mind, the manual has been written to emphasize practical ideas over theory. Ideas which designers and theorists have struggled through whole careers to define and explore are often skimmed over lightly if not ignored, for which we apologize. Likewise, while every attempt has been made to avoid jargon, in the interest of efficiency we sometimes are forced to use terms which may be unfathomable to the layperson. As an aid to those who are new to the design and development process, we have included a bibliography and list of contacts as an appendix.

The intent of this manual is not to cover every possible situation that a developer might run into, but by exploring a number of examples to suggest an approach to development better able to meet the needs of both developers and the town. We believe that design that preserves and enhances a site's specific sense of place has an increased value that pays back many times over the investment in time and effort that better design requires.

Chapter 2 - Understanding South Kingstown's Varied Landscapes

South Kingstown is blessed with an extraordinary variety of landscapes, overlain with a tapestry of human uses that mirrors every period in the history of North America. This chapter describes in general terms the geological and natural history that produced this unique landscape, as well as the long history of human activities that followed. It concludes with a review of some of the distinct landscapes that are visible today, landscapes that must be carefully managed if the complex character of the town as a whole is to be preserved.



The Mark of the Glaciers

Perhaps the most significant resident of South Kingstown was a glacier that, 10-12,000 years ago ended just uphill from the current location of Route 1. As glaciers do, this one was both stationary and constantly in motion, functioning as a conveyor belt which dumped a giant pile of sand, gravel, rocks and silt in a line that stretched from Watch Hill to Wakefield. This is the Charlestown Moraine, a rolling chain of hills pockmarked with small kettle ponds, which formed when great hunks of ice gradually melted, leaving behind water-filled craters. As the ice age came to an end, the glaciers retreated, and the rushing streams that flowed in that period left deep deposits of sand and gravel along the ancient stream beds, and a gently-sloping outwash plain that stretches from the base of the moraine to the sea. Like a child's construction on a local beach, the moraine acts as a giant dam, halting the flow of water from the interior. The basin that is formed contains Worden's Pond, set within the Great Swamp; this vast, watery landscape eventually drains into the Pawcatuck River, which heads west in a roundabout journey to Block Island Sound.

North of the Great Swamp the land rises again to an area of fertile farmland and wooded hills that runs across the Northern third of the town. This too was left by the retreating glaciers: uneven deposits of glacial till, interspersed

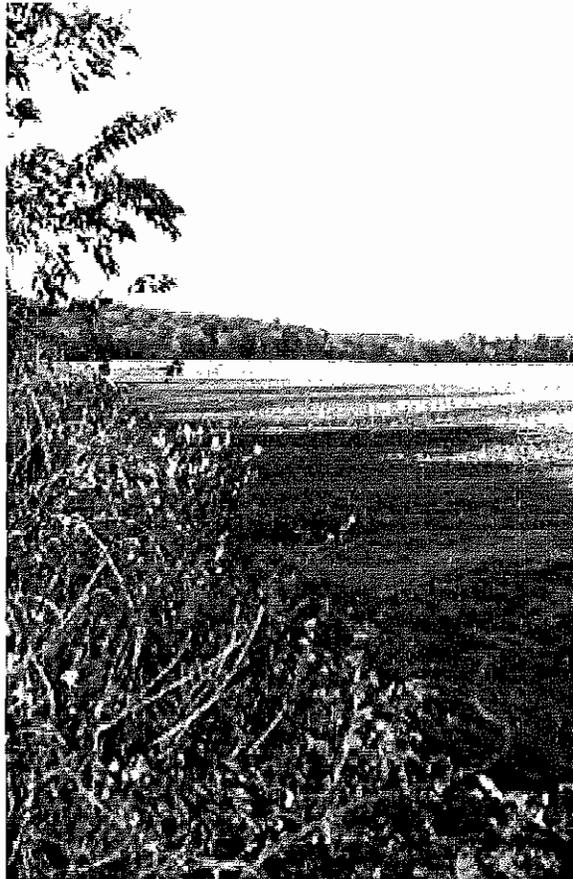
with flat deposits of sandier outwash material left a lively mix of flat, fertile plains interspersed with rolling hills. West of a line generally following South Road, all the water drains into the Great Swamp Watershed; to the East the water flow into the Saugatucket River, which empties into Point Judith Pond, one of a series of salt ponds that line the edge of the coastal plain, separated from the ocean by five miles of barrier beach.



Flora and Fauna:

Before there were people to enjoy this beautiful landscape, a community of plants and animals grew up in a diverse collection of ecosystems: Red Maple Swamp, Atlantic White Cedar swamp, freshwater ponds and streams, bogs, mixed deciduous forest, White Pine forest, Pitch Pine forest, ocean beaches, salt marshes, brackish and salt ponds, and coastal

scrub land (Source: Rhode Island Natural History Survey). “In this diversity of habitats there is a great diversity of organisms. Of the 445 species of plants and animals of the Rhode Island Natural Heritage Program’s list of rare species, 156 can be found in South Kingstown (35% of the state’s rare flora and fauna). Of these, thirteen are known from no other township in the state.” (Lisa Gould, RINHS)



Field edges offer a rich habitat, and cover for animals feeding in the open fields and meadows.



Pastureland in Perryville, looking south across the outwash plain. This land has probably been used this way since the days of the Narragansett Planters 250 years ago.

Native Americans and European Settlers

According to a report by the Rhode Island Historical Preservation Commission, titled Historic and Architectural Resources of South Kingstown, the first human residents of the town were the Narragansetts, who pursued a migratory way of life “...centered seasonally near the shores of the ponds and the oceans, where they caught fish and shell fish and planted crops, and in the secluded forests, which provided food from animals, nuts, and berries, and which afforded shelter in the winter.” This lifestyle, which had probably been pursued since the glaciers began to recede, came to an end with the arrival of Europeans, who in 1657 bought a tract of land that included South Kingstown. Friction between native americans and whites led to King Philip’s war twenty years later, and the virtual

annihilation of the Narragansetts at their village in the Great Swamp, on December 17, 1675. Scattered or killed — some sold into slavery — little remained of South Kingstown’s first residents but the names they gave the local streams. The landscape they had farmed and hunted for thousands of years was open to white settlers.

A Rural Society

Settlement began in earnest at the beginning of the 18th century, starting with the farms along the coastal plain first cleared by the Narragansetts. A group of aristocratic landowners, known as the Narragansett Planters, held most of this land in a few large plantations, a system found nowhere else in New England. Nearby water access made that the principal route for trade and shipping of supplies

and farm products to larger centers like Newport and Providence. Using slave labor, these plantations produced horses, cattle and sheep, as well as milk, butter, cheese and wool, and prospered until the time of the revolution.



Little Rest, which became Kingston, has always been a center of civic and intellectual life.

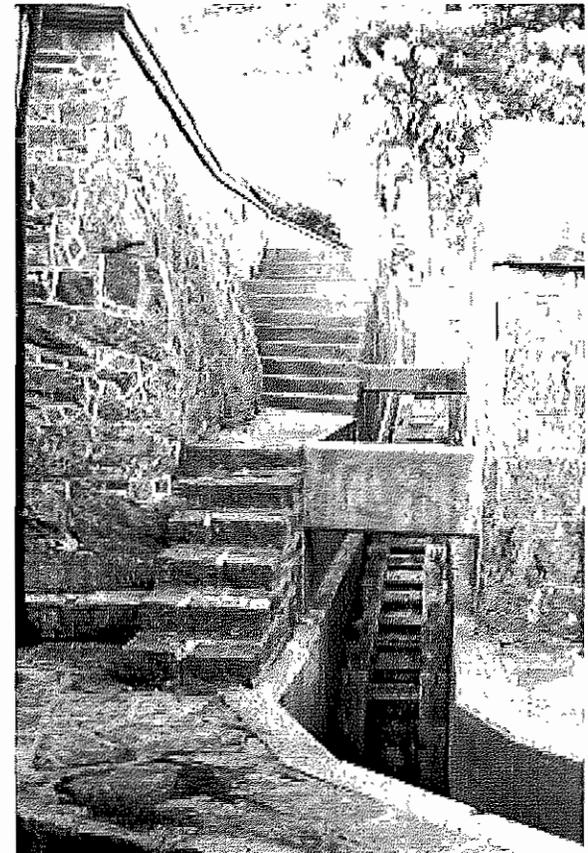
Gradually the hillier inland areas were developed, with the first community center established at Tower Hill. The post road, following today's route 1, provided a land route to towns to the east and west. For all of the 18th century agriculture was the dominant land use.

Forests were cleared for farms; mills sprang up wherever the flow of a pond or stream could be made to turn a wheel. The hills along the Charlestown Moraine were a treeless sheep pasture. After 1752, the county courthouse was moved to the village of Little Rest, which became Kingston, a classic Yankee hilltop village, notable for its fine architecture, commodious Inns, and sweeping views over the landscape. As in the rest of New England, this rural society saw its zenith in the early 1800s, a period of general prosperity when agriculture was still the principal basis for the American economy.

Industrial Revolutions

Even during the 18th century, small scale industries were beginning to rival agriculture in importance. During the early 1800's, textile mill development began in earnest in several locations. By 1815, the mills in Peace Dale were providing every step in the wool manufacturing process, from carding the raw wool to weaving the finished cloth. The success of this enterprise and other textile mills like it, fostered vital mill villages, particularly along the Saugatucket in Rocky Brook, Wakefield, and Peace Dale. Other mill centers arose along the Usquepaug River in Usquepaug and Glen Rock, on the upper Saugatucket at Mooresfield, and at several pond sites in Green Hill and Matunuck. A railroad line was built across the Northwest corner of the town, fostering a new hamlet at Kingston Station. By

the 1840's, significant mill towns were growing, especially at Peace Dale and Wakefield, although Kingston Village still led in the religious and intellectual life of the town. This process continued through the 19th century, and agriculture gradually took a back seat to manufacturing. Some of the rockier and wetter farms were abandoned as their owners headed to the mill towns, or sought greener pastures in the American West. Others became

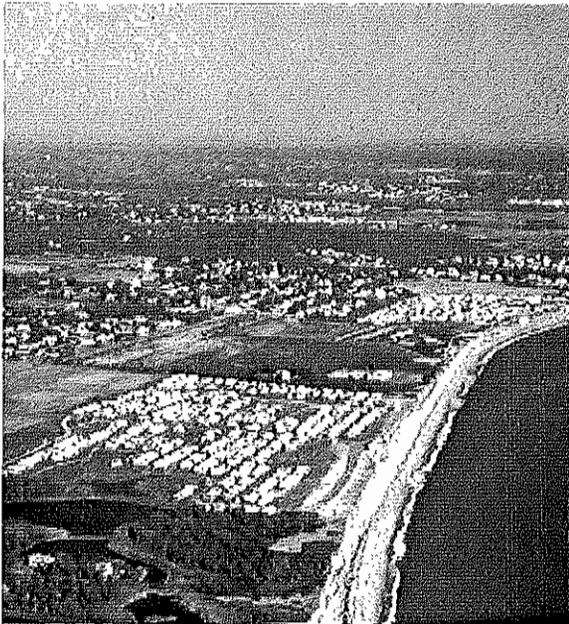


Stonework at the Peace Dale Mill. Early industrialists built to last, using native materials.

estates that evolved from the ancestral homesteads of the early families, or were established by those made rich by the development of the mills. A culture of gentleman farmers began to be established.

The Post-Industrial Landscape

According to the same Historical Preservation Commission report: “By the end of the 19th century, South Kingstown had achieved something of its current aspect. The venerable village of Kingston remained an intellectual center with the establishment of the state agricul-



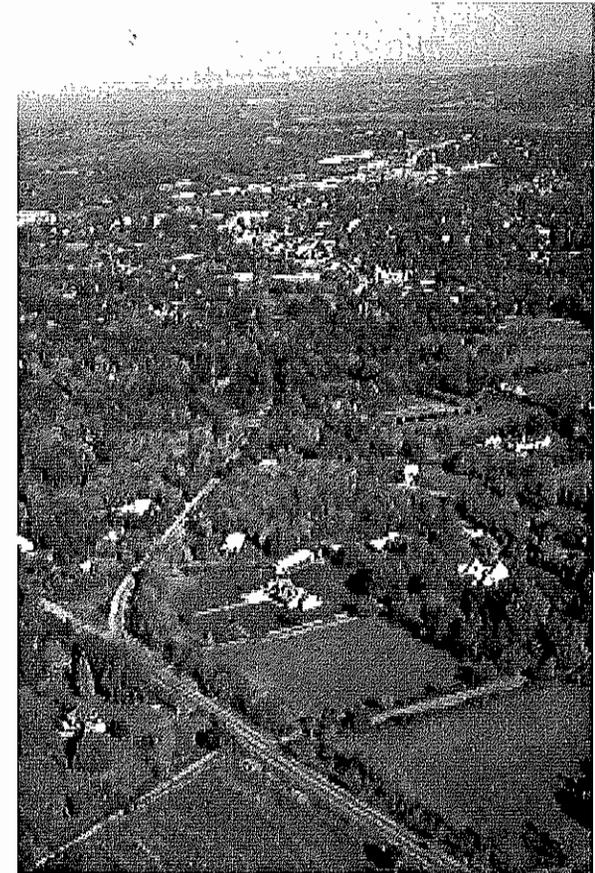
During the modern era, the coastal plain has seen a mix of development; most significantly summer colonies like Matunuck, and subdivisions on higher ground that are occupied year-round.

tural school there in 1889. By this time, farming’s century-long decline had abated; according to the 1895 census, there were 673 farmers in town, and the number and size of farms had remained more or less the same for several decades. Most of the land was in pasture, mowing land, or woodland, with only a small percentage cultivated. Farmers grew large amounts of Indian corn, cabbage, lettuce, potatoes, pumpkins, squash, apples, and strawberries, and raised sheep, swine, milk cows, and poultry to produce wool, meat, milk, butter, cheese, and eggs.

By century’s end, the formerly separate villages of Peace Dale, Wakefield, and Rocky Brook had coalesced into a contiguous urban area which contained more than half of the town’s residents. Smaller Villages and hamlets listed in the 1895 census included West Kingston, which developed around the railroad station; Matunuck, with 182 residents; Perryville, Curtis Corner, Usquepaug, and Mooresfield, with over 100; and Tuckertown, Green Hill, Gould, and Glen Rock, with fewer than 100 residents.” Total population in 1895 was 6,413, mostly of Yankee extraction.

During the 20th century, this basic structure of the landscape remained in place — most of the population was in the villages, with open farmland or forests in between. Manufacturing continued in the mill centers, though the textile-based economy began to decline after

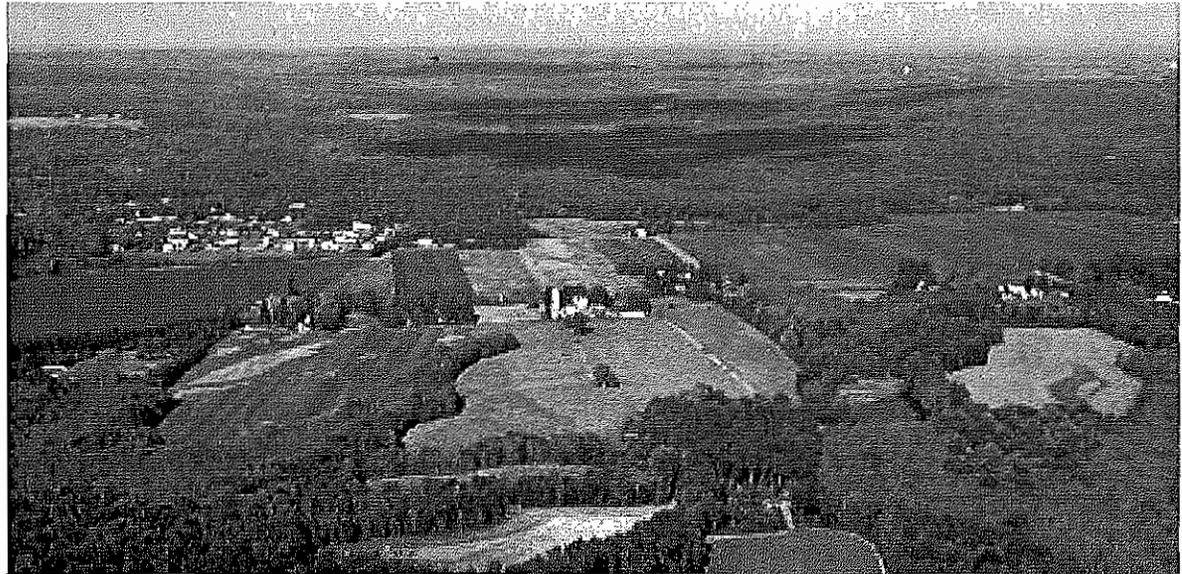
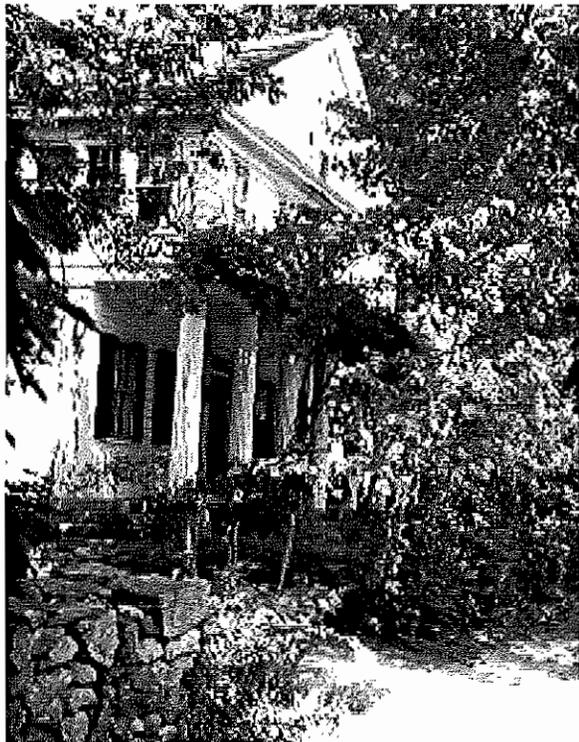
World War II. Today, South Kingstown’s economy is centered on the University of Rhode Island, a number of Mid-size Industrial Firms, and a larger commercial economy that provides goods and services to tourists, summer residents and commuters.



Aerial View of Wakefield from the Southwest: Despite the growth of Wakefield and Peace Dale, family farms and estates have kept significant parcels close to the town centers in an undeveloped state.

South Kingstown's Diverse Landscapes

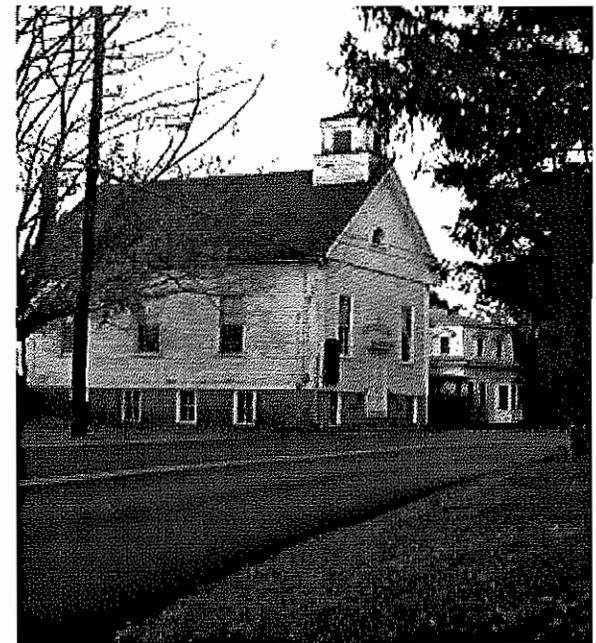
The natural and cultural history of South Kingstown thus briefly described created a series of distinct landscapes, each with a unique character reflecting the interaction of geology, nature, and human culture. One of the themes of this design manual is that development should be carefully tailored to each of these landscapes — that one size does not fit all. Some of the principal landscapes are described below. Later chapters will explore ways that the design of residential development can vary to fit the specific character of these different landscapes.

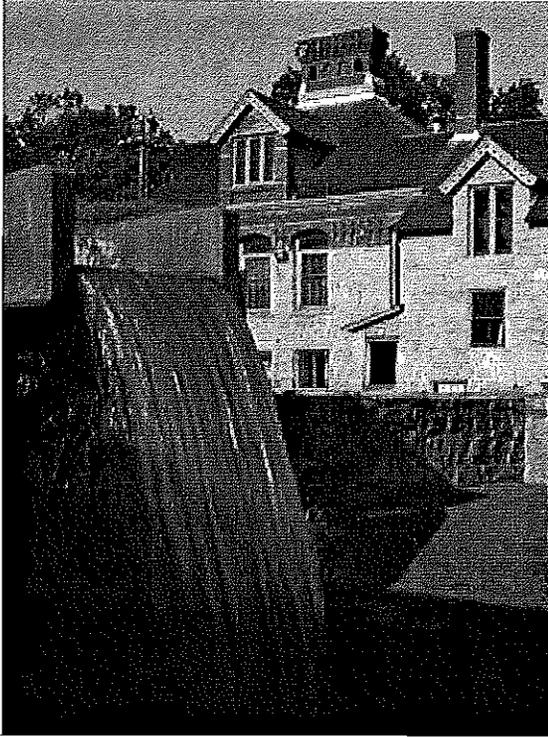


Above: Farmland along Rt. 138, looking North from over the Usquepaug River. Below, left: An historic structure in the Kingston Historic District. Below, right: Small country churches are part of the rural landscape

Upland Farms and Old Village Centers Along Rt. 138:

The East-West Corridor followed by Rt. 138 starts at Tower Hill, descends into the Saugatucket Valley, climbs back up to the village of Kingston, and descends again into the flat farmlands of West Kingstown and Usquepaug. It is a landscape of great variety, with a beautiful variation between open farm field, hedgerows, dense woods, farmsteads and village centers. It really is a classic New England landscape, where no single part is particularly unusual, but where the entire composition creates patterns of stunning beauty.



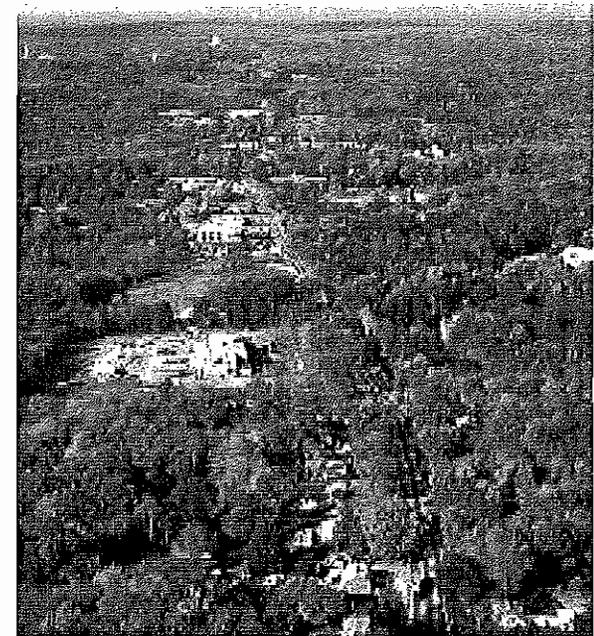


The Mill Villages of Wakefield and Peace Dale:

In contrast to the open landscape to the north, the dense mill centers are much more urban in feeling, reinforced by construction in granite, often with a certain utilitarian starkness that is a delightful counterpoint to the leafy green countryside beyond the edge of the village. Indeed, it is the presence of a clear edge between the urban center and the countryside that makes these villages pleasant places to live, work, and visit. If they become merely the denser heart of a suburban landscape they will not have the same impact.

Developing Commercial and Residential Areas:

One type of landscape that continues to undergo dramatic change is the area between the old centers of Kingston, Peace Dale, and Wakefield. The two latter villages began to grow together a long time ago; now development reaches north along Kingstown Rd, creating a nearly continuous corridor of development. Developed in bits and pieces over the last 30 years, this corridor has some of the hallmarks of a typical commercial strip; uncoordinated, isolated development, conflicting uses, poor connections, etc., but pending development or redevelopment of a number of sites offers the opportunity to establish a sense of community focus.



Kingstown Road, looking North from Peace Dale,

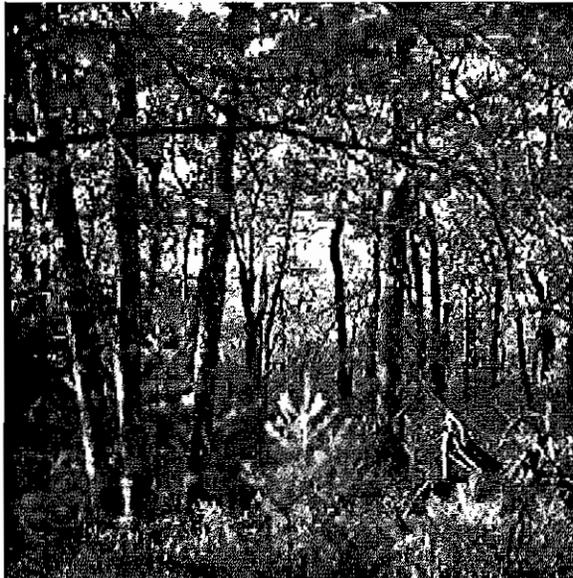


Commercial growth on Tower Hill Road places growth pressure on the Kingstown Road Corridor, providing a potential threat to the character of the area. But this also provides an opportunity to find a better way to develop than the typical commercial strip.



The Great Swamp and Worden's Pond:

At over 1000 acres, Worden's Pond is the largest natural lake in Rhode Island, while the Great Swamp is the state's largest forested wetland. (Source: The Comprehensive Plan) Both these features exist because water flowing from the north backs up behind the moraine and is forced to take the long way around, meandering slowly west as the Pawcatuck



River. What resulted is a unique landscape: flat expanses of water, marsh, and swamp under a giant expanse of sky. Low hills project into this landscape around the edges, clearly visible from the air because of the change in vegetation from Red Maple swamp to Oak forest. Sparsely settled, the area is dotted with isolated farmsteads and estates, with the village of Tuckertown the principal focus.

Wooded Hills along the Moraine:

The rugged landscape that divides the Great Swamp from the coastal plain is covered with a dense growth of oaks and pines. The area is roughly divided in two by Ministerial Road. To the east of this is an area of kettle ponds, which in the last century was developed as a number of large estates. It is marked by beautiful roads that meander among thickets of Rhododendron and Laurel. West of Ministerial Road, the hills continue, though there are fewer ponds and more recent residential development.

Coastal Farms, Salt ponds and Summer Colonies:

South of the moraine the coastal plain slopes down to the sea. At its upper side the village of Perryville backs up against the hills; the Rt. 1 corridor separates this area from the farms that stretch almost two miles down to the salt ponds that empty into Block Island Sound. The character of this area is marked by large rectangular fields surrounded by stone walls; the roads shaded by trees cut straight lines to the waters edge or run at right angles to connect the shore roads. Traditionally settled as large farms, the coastal plain is punctuated with summer colonies at Green Hill, Matunuck, and Snug Harbor, as well as a number of more recent subdivisions. Despite this development, the open character of the landscape remains intact — perhaps because much of the remaining open land has traditionally been in the hands of a few families.



Chapter 3 - Land Use Patterns, Town Character, and the "Sense of Place"

In Chapter Two, we described how the interaction of the natural landscape with human activities over thousands of years resulted in distinct landscape types. This chapter describes in more detail how patterns of land use and development work to give the town its special visual character and sense of place. Some of these patterns are present across the whole town, others at a smaller scale — but together they represent a complex system of visual relationships that to a large degree gives South Kingstown its scenic character. Like many New England towns, the visual patterns were the result of functional relationships that may no longer be active, but which still provide an underlying sense of order which most people find very satisfying. The result is a great variety of places in the town, each with a specific visual character that emanates from the interaction of human use with an existing site. There may no longer be water-powered manufacturing occurring in the mills; likewise the functional value of some of the remaining farms may be fading into history — but the dramatic contrasts between these two types of landscapes, and any of at least a dozen others, provides the town with a remarkable range of experiences and a strong “sense of place.”

A. Large scale patterns.

One set of patterns is that which is evident as one drives through the town from one end to the other. Typically this involves passage



Contrast between natural elements and human artifacts enhances the scenic quality of the landscape at both large and small scales.

through a series of distinct landscape types. Entering the town the traveler passes deep woods and wetlands, and enters agricultural areas with scattered homesteads. The road leads to the outskirts of a village and then to the center of the community with a mix of commercial, residential and public functions all occurring in close proximity. Leaving the village center, the same transitions are evident in reverse. This pattern was once nearly uni-

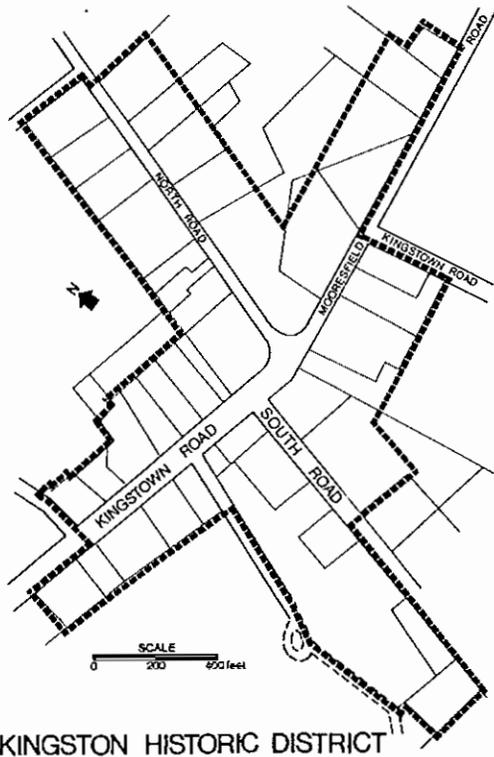
versal in New England — the result of strong cultural forces, the limitations of a pre-industrial technology, and the close tie of most people’s livelihood to the land on which they lived. It resulted in an extraordinarily varied and beautiful landscape, beautiful not least of all because the underlying function of the land is represented in its actual appearance.

B. Small scale patterns

Within the larger patterns of the landscape are many small patterns, likewise the result of the interaction of human needs and activities with the underlying structure of the landscape:

1. Density, lot size, and use

Since World War II, zoning regulations have generally prescribed a single use and minimum lot size for each zoning district. As a result, different uses are separated in different areas around the town, which helps to avoid conflicts between uses, but makes traveling between them more complicated and time-consuming. People live in one place, shop in another, and work in yet a third location: there is little choice but to drive from one to another. Within the districts, the minimum lot size requirement spreads each dwelling or business out in an even swath across the landscape. Frontage and setback requirements likewise separate buildings from each other and make it hard to walk between them. Again, this was



This map of the Kingston Historic District shows the great variety in lot sizes and configurations that exists in a relatively small area.

designed to minimize conflicts between adjacent buildings, to protect property values, etc., but the result is the typical suburban style of development - functionally inefficient and extremely monotonous visually.

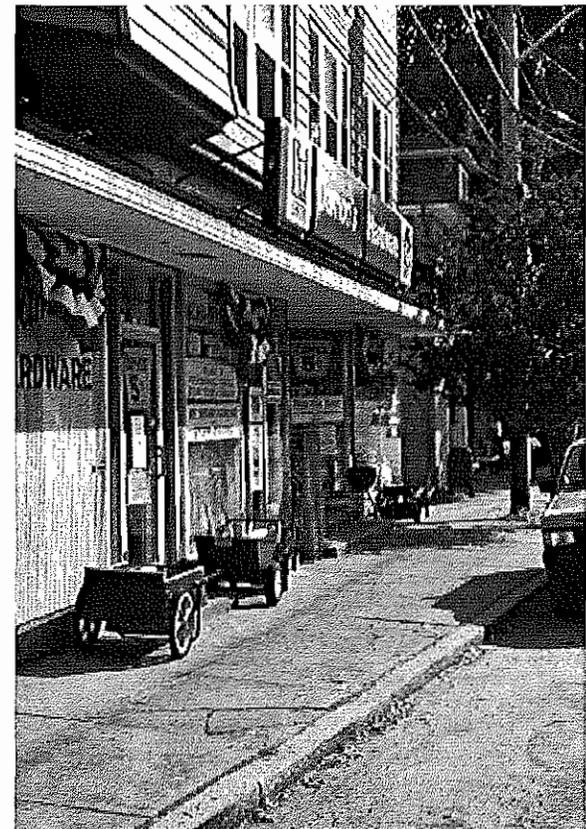
In contrast to the pattern of land use and density found in the typical zoning bylaw are the historic patterns of South Kingstown: Lot sizes respond to the land use that was actually occurring on a site: large lots for farms, small

lots for houses, a mix of lot sizes within the village centers with a corresponding mix of uses. The average number of units per acre may not have been that different from what zoning now calls for, but the net density is much higher. Within the villages this mix of uses and lot sizes is particularly noticeable; it was a natural outgrowth of a time when most daily travel was on foot, and when villages had to be self-sufficient in providing daily services to their residents. As a result it did and does function very efficiently. It was also more functional socially. Right next door to a fine house built by some prosperous farmer or merchant one can find more common houses, many with more than one unit within a single structure. Across the way a line of shops with apartments on the upper stories provide homes for still another group of people. The sense of community was enhanced by shared uses and activities; the church, the Town Hall, and the library.

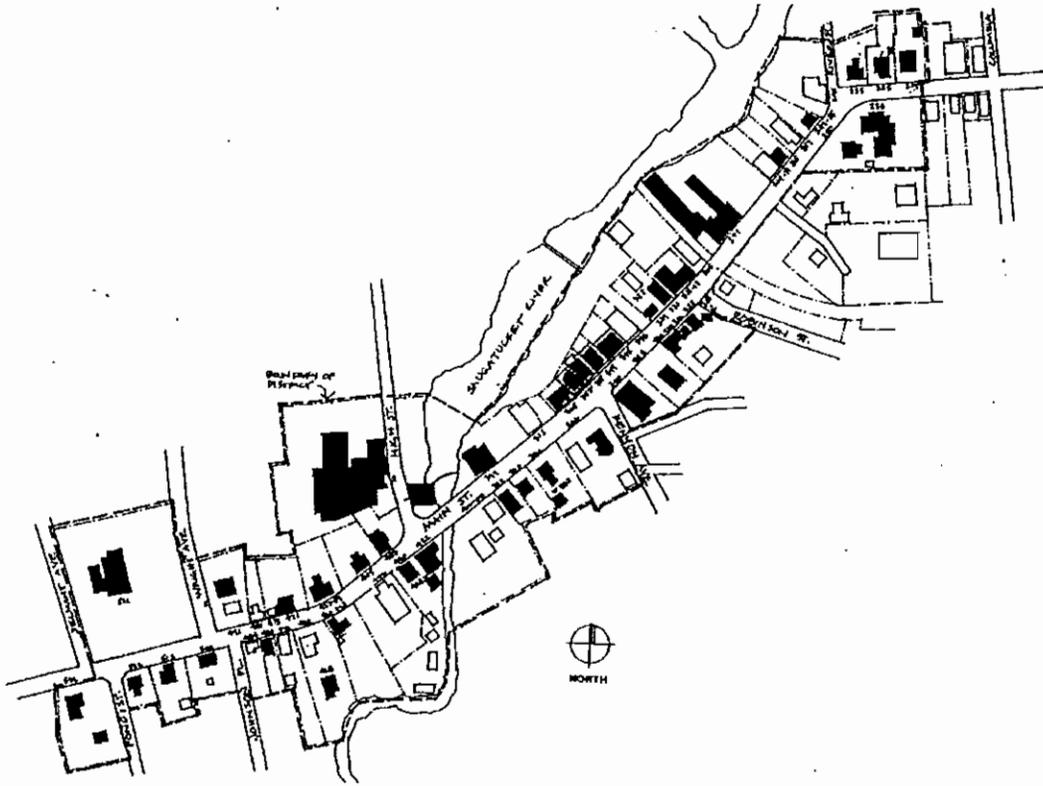
2. Location of roads, buildings and parking areas

In the days of horsepowered travel and pick & shovel construction, roads and buildings had to be built in ways that respected the lay of the land, the limitations of soils, and local supplies of materials. Roads started small and were expanded as necessary to meet demand; thus there was a wider variety of road types than typically exists today. These spanned a range from the typical broad Main Street, with

room for horses and carts to pull up to the curb, perhaps a trolley line down the center, etc., to narrow lanes serving a single farmstead or back alleys servicing a few adjacent residences. Likewise structures were seldom located far from the street; it was just too expensive to service them. (In fact, one of the things that made and continues to make the typical sub-



Life in South Kingstown has always been lived close to the street. The center of Wakefield (map, next page) is organized around the spine of Main Street. Cars and pedestrians share an enclosed space lined by a mix of commercial and residential uses.



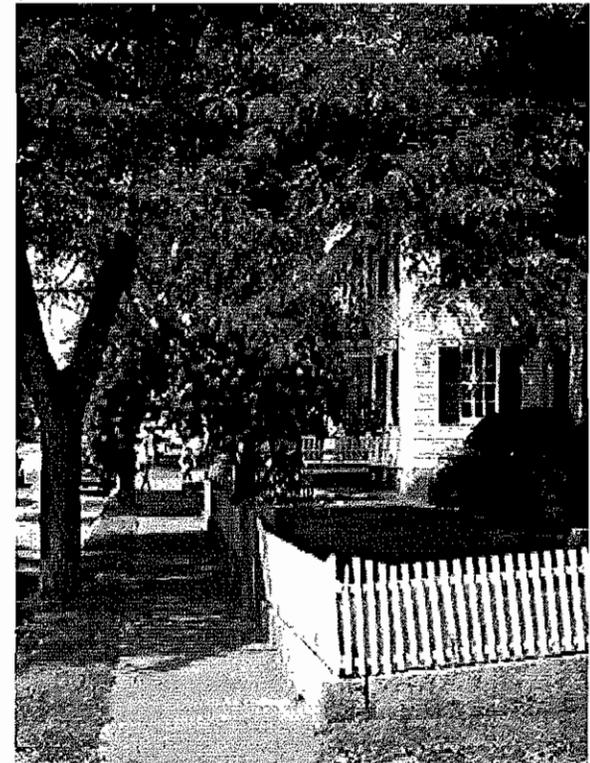
A map of the Wakefield Historic District shows how close the buildings are to the street. This continuous wall of structures creates a long "outdoor room" along Main Street that gives it a strong sense of place.

urban house so popular, is the association of the form with the country villas of the 19th century, when only the wealthy could afford to build them.) In all of South Kingstown's historic districts, structures are located quite close to the road. Parking traditionally was either on the street in front of the buildings or behind them. On both rural homesteads and village sites, as buildings were expanded the various additions were used to form protected courtyards that blocked winter winds and sheltered sunny entrances.

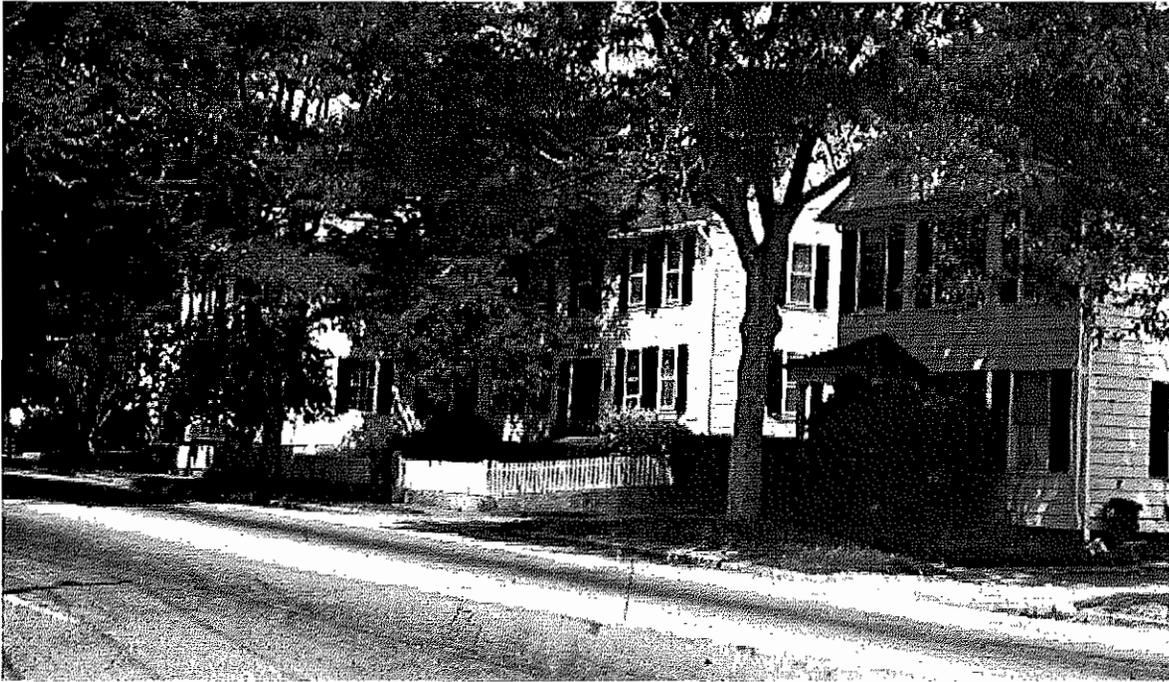
3. Circulation for vehicles and pedestrians

When the old village and town centers were built, most people pursued their daily tasks entirely on foot. As a result, much more attention was placed on providing sidewalks and making usable pedestrian connections between uses. At the same time, relatively less space was given over to vehicles. Buildings were close to the road, and trees were planted down both sides to provide shade for pedestrians and

horses. What resulted was what designers call a high degree of spatial enclosure; the important effect today is that cars driving down such a street are much more aware of their speed, and usually feel they must slow down. We have all driven through old villages where the trees have been cut down and the road has been widened by the highway department — usually you aren't even aware that the speed limit changed until you see the flashing lights behind you. In contrast is a healthy Main Street,



Older village centers have clear boundaries between the public street, the sidewalk and private yards. Separation and protection from both sides is important to creating a comfortable sidewalk that people like to use.



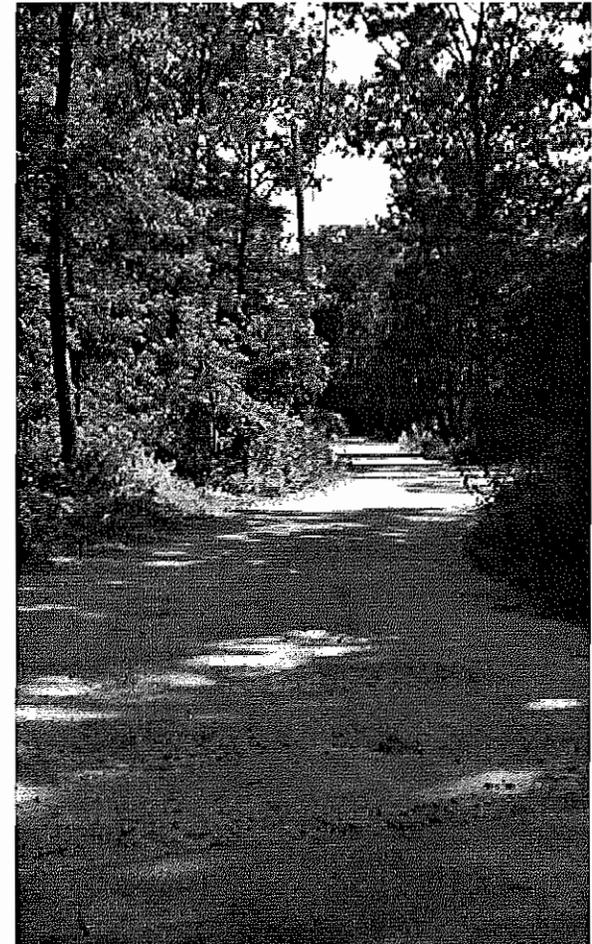
Homes in the Kingston Historic District show the layering of public and private space and separation of circulation patterns that gives villages their livability and visual interest. Street trees provide shade and slow down cars by enclosing the street. Fences and hedges allow visual access to private spaces in front of homes, but control physical access. Private backyards are protected by the mass of the building from the noise of the street.

where a combination of enclosure, clustered uses, imposing buildings, and pedestrian activity all serve to make drivers slow down. The centers of Wakefield and Kingston retain many of these elements; as a result they remain pleasant places to walk, shop, and do business.

South Kingstown's older residential neighborhoods offer some clues to better design of new subdivisions. Roads tended to be simple and functional, and subordinate to other land uses.

On a typical rural area, for example, narrow lanes followed hedgerows and stone walls to reach the farmsteads. Roads seldom went across the center of fields or woodlots, but were tucked in around the edges on less useful land. In the days of hand labor, streets were made no wider than absolutely necessary. Where they were wider, as in the center of the villages, the street served a variety of purposes — parking, service and loading, marketplace, parade ground. Other streets could be narrower because they were arranged in an

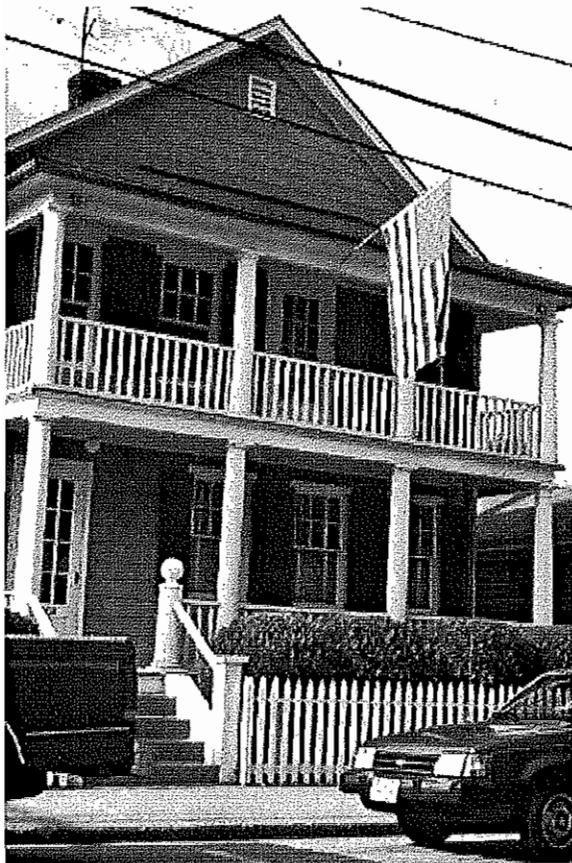
interconnected grid pattern. If traffic slows on one block drivers can easily bypass it. Shared driveways and narrow alleys connected garages at the rear of lots, even crossing lot lines to do so.



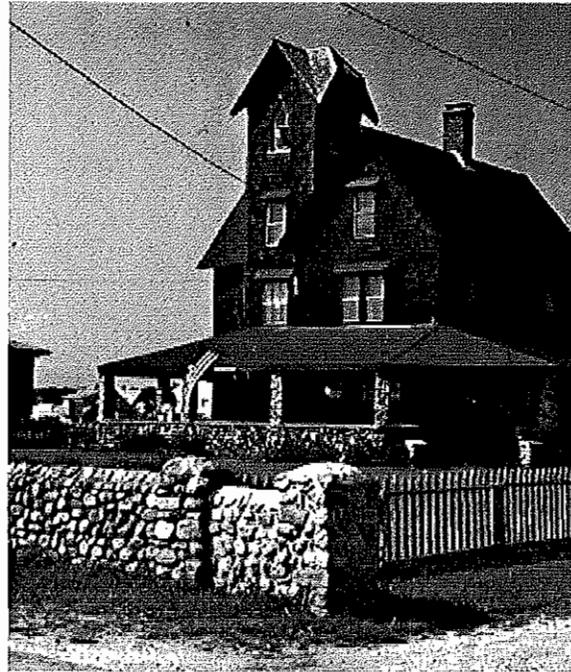
Roads in rural area curve to fit the landscape, or follow features like wall and hedgerows. They are seldom wider than common sense deemed necessary.

4. Architecture

Living as we do in an age without a single dominant architectural style, it is hard to imagine the strong shared traditions that shaped the architecture of South Kingstown in its heyday. Corresponding to periods of strong economic growth, a series of 19th century architectural styles, from the Greek Revival to the Beaux Arts, left its mark. The consistency with



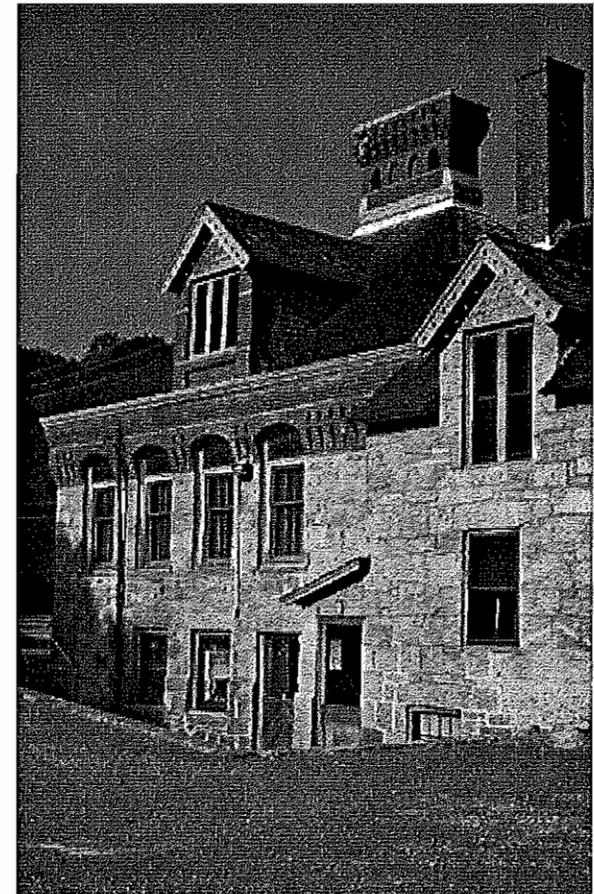
Historic homes share a formal, dignified quality and a strong relationship to the street, a public face.



South Kingstown has an rich architectural legacy, born of an unusually varied combination of land uses and landscape types. Summer homes related to the seaside landscape (Matunuck, above); the mill village of Peacedale had its own architectural styles (right).

which these traditions were employed was the result of a design tradition carried on not just by architects, but by everyone involved in construction, from the master builder to the lowliest hod carrier, and passed down through the system of apprenticeship. Thus from a mansion to a very simple dwelling one finds a great consistency in details, materials, massing techniques, etc. While styles changed over time, at any point there was probably just one way of doing things. The limited availability of materials, and what you could do with them

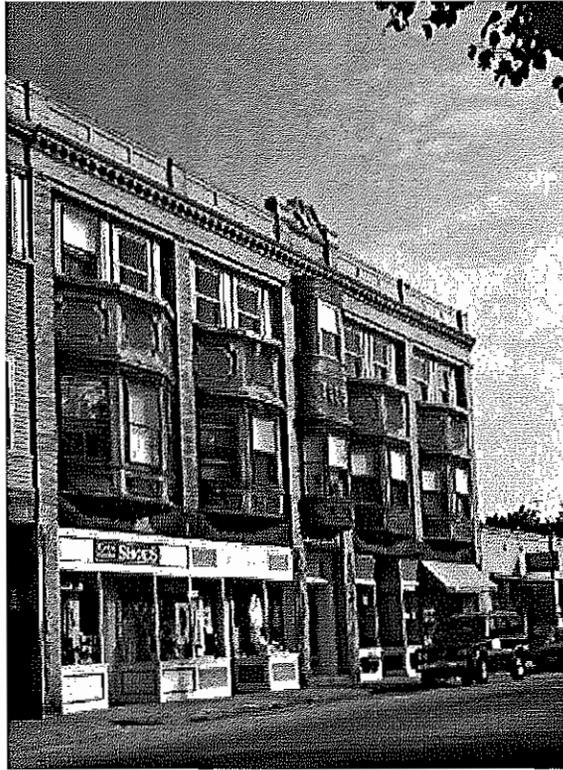
with hand tools, also added to this consistent approach to architecture. Even as styles changed many other elements remained the same: individual windows and doors, clapboards, bricks, stonework and roofing shingles, etc. The result as you walk down one of South Kingstown's historic streets is the very definition of good design; a delightful balance of variety and consistency, a harmony between structures based on their many shared elements.



5. Landscaping and Streetscaping

Like the architecture, the landscape of the villages resulted from adherence to a necessarily limited palette of materials and an approach to design that was consistent to the point of stodginess. Brick, granite, iron, and wood; picket fences, stone walls, a few favorite varieties of plants; the list is short and simple — and the result a landscape that is both durable and attractive. Again, while larger houses or commercial structures might boast a more elaborate display of landscape elements, the same basic materials were shared by the more common homes. Because most lots were small, these materials also served as more than decoration. Fences, hedges, and other plantings were used to separate public and private areas, to create shelter from sun and wind, etc. Maintaining the smaller lots was less time-consuming, even with hand tools, than cutting the lawn on today's big suburban lots.

Because less of an investment was made in private yards, more went into the public streetscape. This is why in older neighborhoods one often finds beautiful sidewalks, street trees, benches, etc., on the public right of way — elements that developers today cannot afford, but which they could if more of their development capitol was directed at enhancing public amenities rather than private yards. Paradoxically, a greater investment in



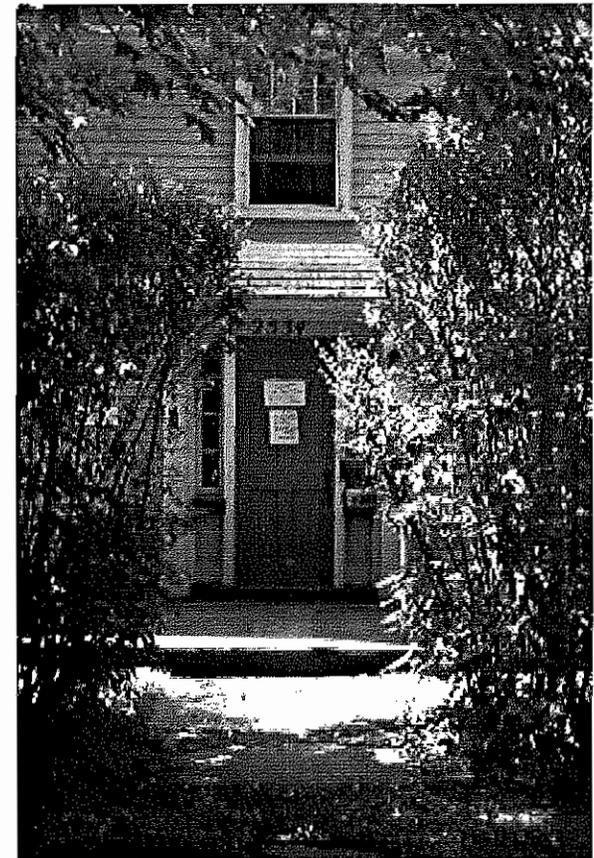
Main Street, Wakefield. Commercial blocks mix uses on a small footprint, which keeps rents low and lets people live downtown. Ground-floor shops, offices and apartments bring life and activity to the village center.

the public space along the street often increases the value of a home more than an equal investment in its private yard.

C. Development based on public values and shared community goals.

Perhaps the most significant thing about older town centers is that they grew on the basis of shared public values which were expressed in

the physical structure of the community. In contrast to the typical modern subdivision, private house lots were designed to be subordinate to the public realm. Sometimes this is as simple as a traditional residential street with its sidewalks, trees, etc. In other cases the relationships are more complex. But what results is a community which is efficient to build and maintain, and where a large number of



A simple hedge separates public from private, creates visual interest and a sense of mystery -- and it's good for wildlife!

activities can occur simultaneously with minimal conflicts. It is based on creating shared public spaces, with clearly defined boundaries between public and private.

A good example of this is the Kingston Historic District. Buildings are close to the street, but separated from it by layered materials that divide the space up into clearly defined areas, each with its own role. The street is separated from the sidewalk area by a consistent row of trees. The sidewalk is separated from small front yards by fences and hedges. Porches or stoops form another kind of transitional space between the front yard and the interior of the buildings. The pedestrian on the sidewalk enjoys the benefit of physical protection from both traffic in the roadway and activities in private yards, and a measure of psychological comfort in using what is clearly a public path along the street. Residents in their homes likewise have both physical screening from prying eyes and straying feet and a sense of psychological control over their surroundings.

The typical modern subdivision, by contrast, has a single kind of space — the yard around each house, which in most cases is so poorly defined that even though a stranger feels uncomfortable walking down the sidewalk, the homeowner feels equally unprotected. The elements that traditionally separate public and private space and provide privacy in the village; walls, fences, hedges, etc., are missing.



The typical suburban house, even a relatively expensive one such as this, generally sits on, rather than in its site.

The result is that even though there is a much larger area for each house than in most old village centers, there is less privacy. A resident may not know her neighbors very well, if at all, but still finds herself exposed to their constant inspection. Another missing element is the community focus created by the main street, the town square, etc. Physically separate from other dwellings, lacking a visual or functional focus, the typical suburban house is an island unto itself, and feels like it.

C. South Kingstown and The Sense of Place

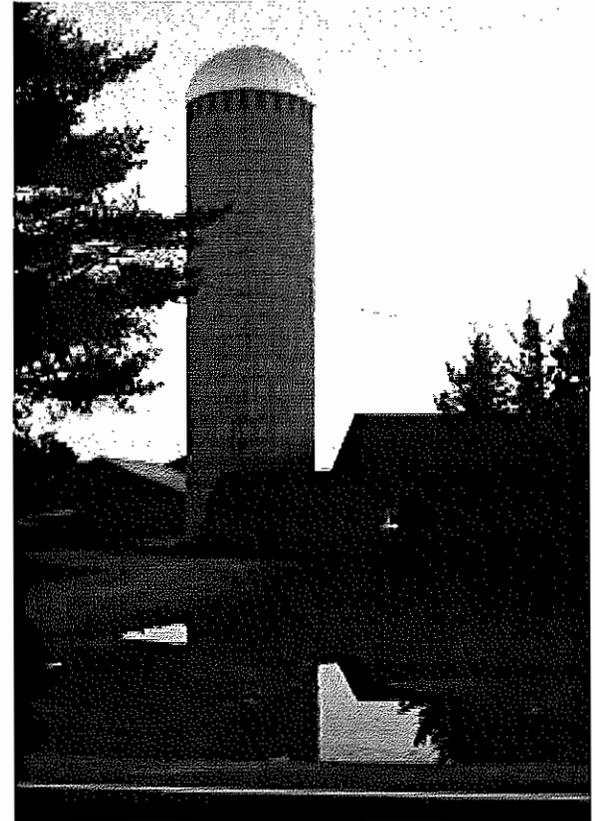
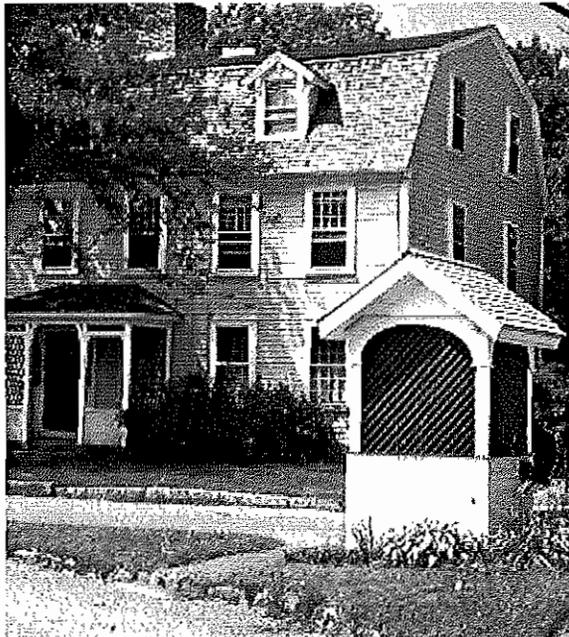
The concept of “sense of place” has to do with the meaning that people give to the landscape, the emotional and sometimes spiritual importance that special places take on as we interact with them. Sometimes this attachment comes from living with a place for a long time, but more often it is ascribed to those places that are unique and memorable, whose images stay with us long after we depart. Designers since ancient times have learned to recognize places with this unique spirit, and traditionally built temples, houses, and entire cities to take advantage of the drama of a particular location. The Acropolis, the Pyramids, Machu Pichu, the Taj Mahal — in almost every case a unique site combined with an equally inspired human construction to create something much greater than both. This concept resurfaced in the Renaissance, gave us the memorable cities of Europe, and was brought to America by the romantic designers of the 19th century. After losing favor for a while during the height of the modern movement, the sense of place was rediscovered by a new generation of post-modernists. Theorists such as Kevin Lynch combined this with scientific understanding of human perception and psychology, showing that memorable places are more beautiful and stimulating aesthetically, but just as importantly serve the needs of the community and the individual in many practical ways.



Simple, but memorable details, like this stone post in the center of Kingston, above, or an old well, right, add to the sense of place.

In South Kingstown there are many locations with a strong sense of place, and if you think about it, most result from that dynamic interaction of people and nature: the river flowing under the sweeping curve of one of Mr. Hazard's stone bridges, or through the mill

races of the Peace Dale Mills. The Mills themselves, local stone cut and piled up to capture the force of the plunging Saugatucket, a force once used to make fabric from the wool of sheep fattened in the rolling pastures of the Matunuck Hills. Or to take a rural example: the flat expanse of the Great Swamp, hundreds of acres of watery woods trapped behind the hills that block the river's slow progress to the sea; and in that vast landscape a single house might be visible, making a poem out of the work of both man and nature. This is not just a designer's romantic notion either — people learn to love places that have a strong sense of place, and that attachment translates into tourist dollars, new homes, and economic growth.



Architecture is fundamental to the Sense of Place: Above, Recognizable forms mark this as an agricultural landscape; below, sometimes ordinary buildings are important places in a community.



Chapter 4 - A Design Process for Better Residential Development

A. Understanding the Site: Analysis and Assessment

Most Landscape Architects and Civil Engineers are trained in the process of Site Analysis, which refers to a detailed inventory of all the natural and cultural factors involved in the site of a proposed development. The Design Standards section of the South Kingstown Subdivision Regulations gives the Planning Board the discretion to require analysis of the following characteristics of a site: “site context; geology and soil; agricultural lands; wetlands; coastal features; topography; climate; ecology; existing vegetation, structures, and road networks; visual features; past and present use of the site; and ...potential effects of the proposed project on the natural resources



Soils are commonly analyzed to evaluate suitability for septic systems and construction footings.

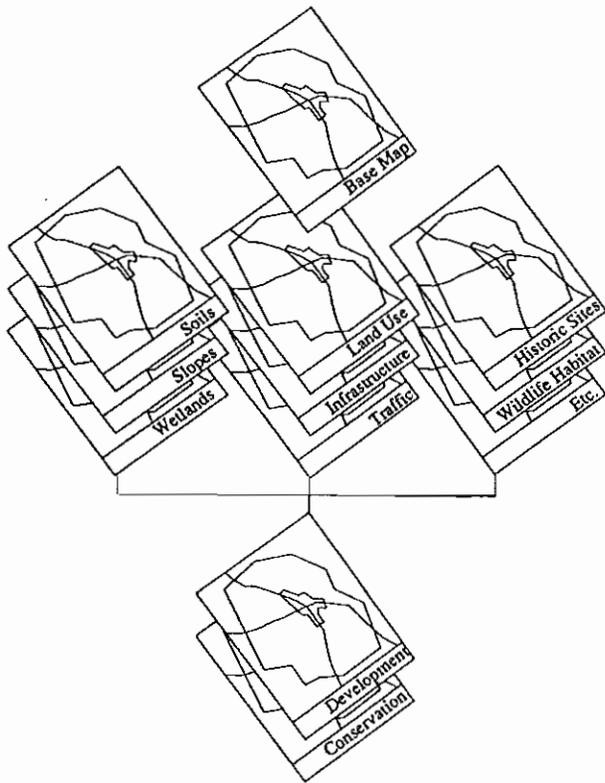


Wetlands, protected by state and federal laws, are among the factors that are most carefully analyzed by site planners; less well understood are the complex relationships between wetlands and the upland areas around them.

of the site” (Article XIII.G). Similar lists of factors are analyzed for the environmental impact statements often required for large projects at the state or federal level. At both the local and regional level, however, the emphasis is often on a inventory of the different factors involved; the resulting report has a section for each thing in the list, but generally glosses over the way they interrelate. The product has the benefit of being very objective and defensible, but the sense of the site as a complex whole is lost. Design and planning theorists have struggled with this problem for fifty years; attempting to define a process that would meet the demands of corporate development and bureaucratic review while encouraging complex, site-specific design (see Lynch and Hack’s Site Planning, or Ian McHarg’s Design With Nature).

In practice, site analysis tends to focus on “plumbing issues” over aesthetics: location of wetlands and soils suitable for a septic system, making sure a safe driveway can be constructed, perhaps locating important trees for preservation. Because zoning and building codes are based on protection of public health, safety and welfare, these issues tend to predominate, and planning boards are reluctant to push the envelope too far. It is up to developer and designers to go further, then — finding ways to better understand the relationships between the many factors impinging on a site; and analyzing additional factors that relate to more complex design issues; views, visual and spatial qualities, pedestrian links, ecological networks, conservation planning and social issues. What follows is a discussion of a few of these approaches.

Since the 1950's, a number of planning theorists have explored different ways to analyze site data in order to make land use decision that are more rational, but also incorporate the kind of complexity that real sites represent. Ian McHarg, Carl Steinitz and Julius Fabos have each published extensively on better ways to understand data. Using a process called **composite assessment**, the designer



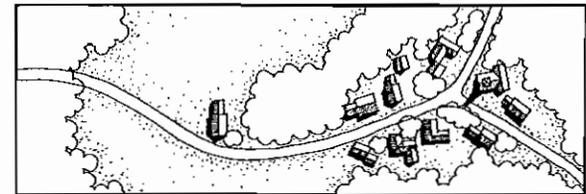
Composite Assessment Takes Site Analysis one Step Further: Generating Maps Which Show Opportunitites and Constraints for Both Development and Conservation.

takes maps that analyze individual factors and puts them together to see what commonalties exist. Thus you can take a map of soils suitable for septic systems and overlay it on a map showing slopes most suitable for development to locate an appropriate house site on a property. Adding overlays for wetlands and wildlife habitat shows you where you should not build. Typically, positive factors for development are mapped together: co-occurrences of favorable factors demonstrate opportunities for development. Likewise negative factors are groups to map development constraints. Maps showing these opportunities and constraints represent an assessment of the site's potential for different uses. Composite assessment has been vastly simplified with the advent of computerized mapping and drafting programs that allow the layering of unlimited amounts of information on the base map of a site.

Visual analysis generally focuses on views; developers look for house sites that take advantage of good views, while town boards try to protect important roadside vistas. A more comprehensive approach to visual analysis looks at the way people experience these views as a sequence of events that begins well beyond the borders of the site itself. This kind of experiential analysis can show that a particular meadow at the entrance to the site is a key part of a series of events along a stretch of scenic roadside; or that by planting a dense group of trees along an entrance road, the de-

veloper can enhance the drama of arriving at the center of a new community. Like many good ideas, this approach was often used by designers who laid out the first American subdivisions in the 19th century -- but it was gradually squeezed out of the equation by time and the demands of mass production.

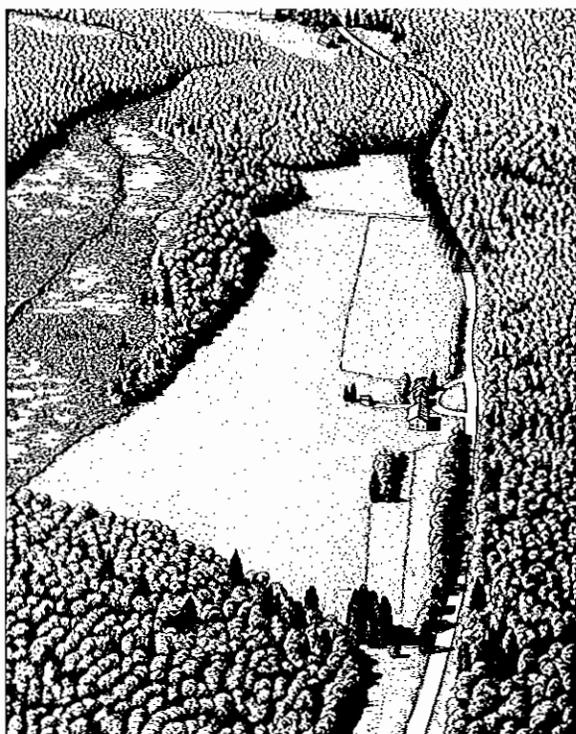
As school cost rise and open land shrinks, many communities are forcing developers to more carefully analyze the impact of their pro-



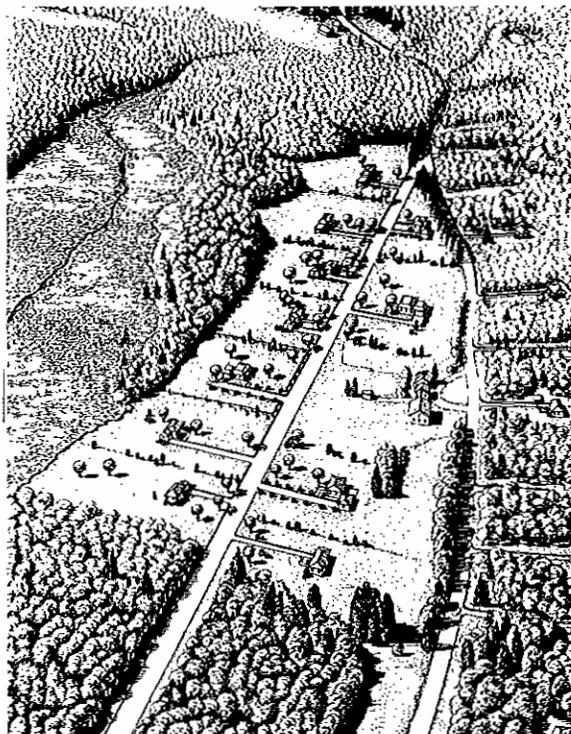
Visual Analysis starts with an inventory of important views, and goes on to show how views are linked into a series of visual and spatial experiences. This series of sketches shows the plan of a small hamlet, top; beneath it is the series of views that the driver gets approaching, entering, and leaving the village.

posals on the surrounding neighborhood and larger town. Developers and designers can take this a step further by looking for opportunities to let the development enhance the fabric of the community rather than eroding it. In this way the developer becomes a real partner in implementing the comprehensive plan. One way to do this is through **scenario planning**, which simply means exploring a number of different options for the site and then thinking through the way these alternatives fit the site and its physical and social

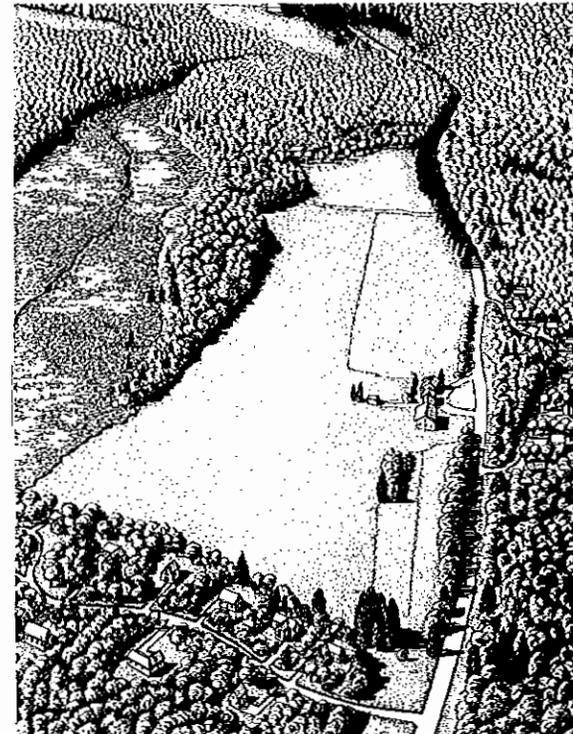
surroundings. This process thus extends the understanding of the site as it now exists and asks: What could it be? And What should it be? This often leads to a more creative approach to development that has an equal or higher financial return and fewer negative impacts on the environment and the neighborhood. The examples below are from Dealing With Change in the Connecticut River Valley.



Roadside Farm Before Development: One scenario considers leaving the site undeveloped, or "developing" for new crops, timber, recreation potential, etc.



Roadside Farm after development with a Standard Subdivision: This scenario shows the maximum allowable development under the current zoning.



Roadside Farm After Development as a Cluster Subdivision, with the same number of houses built on smaller lots, with the farm permanently protected.

B. Designing the site within its context

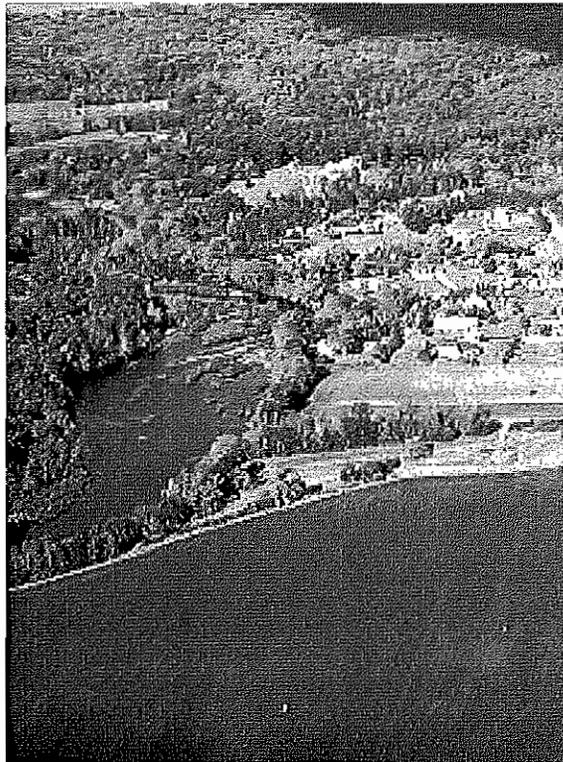
Developers, as well as town boards, often look no further than the site boundary. Except through dumb luck, however, it is impossible to design a subdivision that is sensitive to its surroundings without looking at that context at least as carefully as at the site itself. The most successful development projects recognize their context, design with it and within it. Those that do can often find ways to build more cheaply, with fewer negative impacts, but with higher returns.

Every site has a context, of course, a specific set of adjacent land cover, land uses, and activities that surround it and influence its character as much or more than what is going on in the site itself. There is also a historical context, a chain of events that produced the site as it now exists and continues to affect its surroundings. The following describes in detail some of the contextual issues developers need to be aware of, as well as some ways that these different contexts can influence design decisions on a particular parcel.

Environmental Context:

The environmental context includes the ecological systems upon which all life depends. Since rivers and streams and the animals and plants they support recognize no boundaries, the environmental context is often contiguous with features on the site itself. In South

Kingstown as elsewhere it is the waterbodies, and the networks of rivers and streams that connect them that form the most critical environmental resources. While these water bodies and wetlands are protected by state and federal laws, they are still affected by nearby construction that changes the amount of runoff, adds silt and pollutants, or disturbs the upland habitats of plants and animals that depend on wetlands for food.



Rivers carry the record of all the activities that occur in the valleys that they drain; sometimes farming can have more of an impact than development.

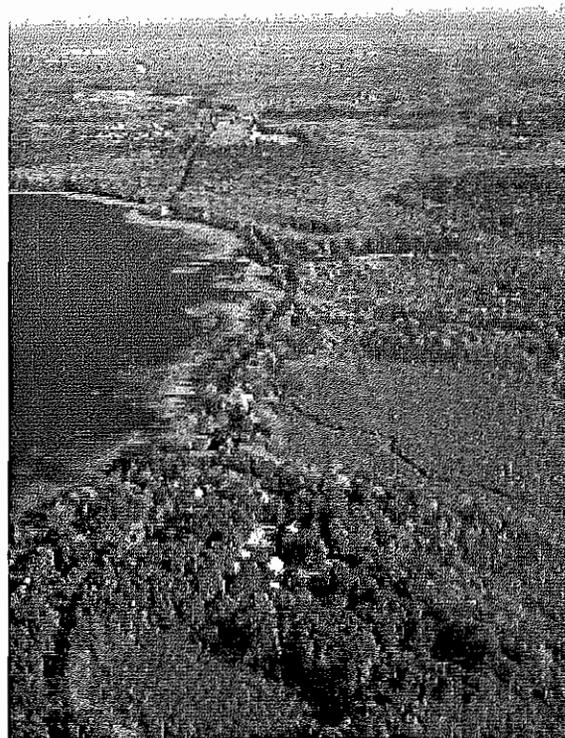
It is useful to think of South Kingstown in terms of these rivers and streams and the basins, or watersheds, that they drain. Every site falls into one of these watersheds and is affected by it and conversely has an effect on it. Plants and animals inhabiting the watershed can be expected to be found along contiguous branches of streams that cross the site, or to find their way on to the site by that route. South Kingstown is divided by its topography, particularly the Charlestown moraine, into seven or eight watersheds. The moraine blocks the route of the streams flowing out of the higher elevations to the north and turns them to the west, where they coalesce to form the Pawcatuck river, which has to flow all the way around the moraine to Westerly before it empties into the sea. Several of these tributaries first empty into Worden's pond and the great swamp. A low ridgeline generally along South Road divides this western watershed system from water that flows East into the basin of the Saugatucket River, whose flow provided the power for the mills at Peace Dale and Wakefield. South of the moraine, most of the water drains into the coastal ponds or directly into Block Island Sound.

Each of these watersheds has a different environmental sensitivity that will affect concerns about development within it. The Saugatucket River, for example, has a long history of human use and development for mills. By far the largest number of existing homes and busi-

nesses are in its watershed, and while water quality continues to improve, most of the damage was done long ago. By contrast, the basin containing Worden's Pond and the Great Swamp is comparatively pristine. According to data from the Heritage Program of the Rhode Island Department of Environmental Management, this basin contains most of the critical wildlife habitat found in the town. (Critical habitat is considered to be that which contains ecological communities known to support rare or threatened species of plants and animals.) While the sheer size of this watershed provides some buffering capacity for the impact of new development, at some unknown point the scale of development will begin to have a permanent negative impact on water quality and wildlife habitat. Already, research has identified a mysterious reduction in the vitality of the fresh water mussels living in Worden's Pond, though the cause has not been established. Another kind of impact would be expected for development of sites on the coastal plain, where water drains into coastal salt ponds on its way to the sound. All too frequently, septic systems adjacent to salt ponds provide a source of bacterial contamination to shell fish beds or eutrophication that can quickly overwhelm the fragile ecosystems of these shallow water bodies.

Just as surface drainage connects every site in South Kingstown, subsurface aquifers create an invisible network that is all the more important because it is the source of the town's drinking water. An aquifer is a subsurface deposit of sand or gravel that, like a sponge, holds water that seeps into it from the surface. Some aquifers act like underground rivers, with water slowly moving deep beneath the ground. Areas whose runoff feeds the aquifer are known as aquifer recharge areas. The principal aquifers and aquifer recharge areas are

found beneath the farmland in the Northwest corner of South Kingstown, in the area east of Tuckertown and on either side of Rt. 1 near the border with Charlestown. Each of these areas has been made part of the Groundwater Protection Overlay District, shown on South Kingstown's official zoning map. Regulations governing this district are designed to prevent contamination, particularly by industrial chemicals and petroleum products, and require specific stormwater management practices to be followed for large developments.



Worden's Pond (foreground, left, and right) is at the center of a basin that drains the center of South Kingstown. Tuckertown (beyond the pond in the aerial view) sits over a groundwater protection district.

While the waterbodies, streams and river networks contain South Kingstown's most productive ecosystems, upland meadows and woodlands also contain many important environmental resources. Many species of plants and animals have adapted to farmland, and often coexist quite happily with agricultural activities. Hedgerows and copses of trees offer important cover and breeding habitat to many kinds of birds, while open grasslands are valuable to specific species like bobolinks. Many farmers time their hay cutting, for example, to avoid destruction of grass-breeding bird nests before the young have left. Developers who work to preserve open space within their projects can use these same management practices to protect wildlife.

Wooded areas offer a special challenge for environmental protection, because their value to wildlife is often a function of how big they are; a few houses and driveways in an area of woods can totally alter the kind of animals that will live there, even though the landscape has not changed very much. While many species thrive in "edge" communities, where forest meets field (or house site), others can only live and reproduce in large areas of unbroken forest. Even if there is enough room for a couple of breeding animals, moreover, if there is not an adjacent population with which to interact the population will not be viable. The fragmentation created by development can thus eliminate much of the diversity found in the

forest, even if most of the trees are saved. (See Rick Enser, in **Vascular Flora of Rhode Island**, p. 268.)

So what should developers do? They are used to altering subdivision plans to avoid impacts on streams, ponds or wetlands — more creative approaches go beyond merely avoiding damage and instead seek to actually enhance the function of these natural systems. Near a sensitive wetland area, for example, buffer strips of existing vegetation can be left between the development and the resource area, or houses can be clustered on another area of the site. Stormwater retention ponds can also



Stormwater retention areas, like this basin at The Village at Indian Lake, can foster wildlife, especially if carefully planted and surrounded by natural areas -- and they look great, too.

be used as buffers, and can be designed to increase available wildlife habitat. In wooded areas, care should be taken to locate roads and houses in a manner that will conserve the largest amount of contiguous forest. Current and future use of surrounding parcels should be carefully analyzed so that forest preserved on the site connects with that of surrounding parcels. Sometimes leaving a narrow corridor of trees is enough to allow populations of birds and animals to continue to be viable. On all kinds of sites, care should be taken in the choice and location of landscaping materials: again, there is an opportunity to use plantings to buffer and extend existing wildlife habitat. Especially next to undisturbed woods and wetlands, native species should be favored over exotics that could otherwise use the site as a beachhead into a pristine area. Native plant species have the added benefit of growing more vigorously, fitting in better visually, and maintaining themselves better over time; all of which provides a more beautiful and productive landscape at lower cost.

(Lisa Gould of The Rhode Island Natural History Survey, Inc. provided much of the information for this section.)

Economic Context

Another kind of context that is frequently overlooked in the planning of new subdivisions is the economic context, meaning the way the existing site fits into the ongoing economic life of the town. For some uses, such as logging or agriculture, this relationship is clear; for others, like tourism, it can be somewhat oblique. Changes proposed for a given site may take away the economic value of properties surrounding it, or add to it — but either way the development will be more successful if these aspects are investigated as part of the planning and design process. In the final analysis, there is usually a conflict between the “highest and best use” of an individual site — meaning the most intensive development allowed — and the value of the properties around it. Typically development of a conventional subdivision creates visual impacts that will lower the value of surrounding properties. Yet it doesn’t have to be that way: there is a long tradition in the region of the “common wealth”, the notion that while individuals own their own property, they each have a responsibility to the others to sustain the health and vigor of the entire area, whether it be a neighborhood, a town, or an entire state. This quaint idea is starting to come back into planning circles, especially as people observe the economic decline of areas that have been overdeveloped — where traffic, pollution and suburban sprawl so erode the quality of life that people no longer want to be there. In prac-

tice, this means recognizing that development of any site affects all the others for good or bad.

Impacts of residential development are especially noticeable where there is a strong break with ongoing land uses on the site or neighboring properties. Some of these other uses include:

Agriculture and Forestry: While not a big part of South Kingstown’s economy as a percentage of sales or jobs, agriculture and forestry have an important role in maintaining the rural character of the area, which in turn supports the housing and tourist industries. Agriculture also adds a healthy diversity to the economic base, providing jobs and supplying locally grown produce, milk and eggs. Perhaps most importantly, farming and forestry keep land out of residential use, which almost always requires more in services per household than is collected in taxes. It should also be remembered that in the future, having local farms may be much more important than today, when low shipping costs and government subsidies make it cheaper to import produce from California than to grow it locally. Farmlands and forests represent strategic resources that deserve to be protected for future generations.



Farmland (top) and forestry (below) are important providers of jobs and economic diversity; they also add immeasurably to the quality of life townwide.



Sand & Gravel:

The rich sand and gravel deposits of South County have a long and important relationship to the economic life of Rhode Island; yet there is a conflict between the need to take advantage of these resources and the need to protect groundwater quality and wildlife habitat. Likewise, in an area so dependent on tourism and residential development, there are other conflicts that arise when sand and gravel operations affect the visual quality of a neighborhood. Because sand and gravel deposits are also among the easiest soils to build on, they frequently get developed before other areas. An existing gravel pit can get so hemmed in by development that ongoing operations must be curtailed because of com-

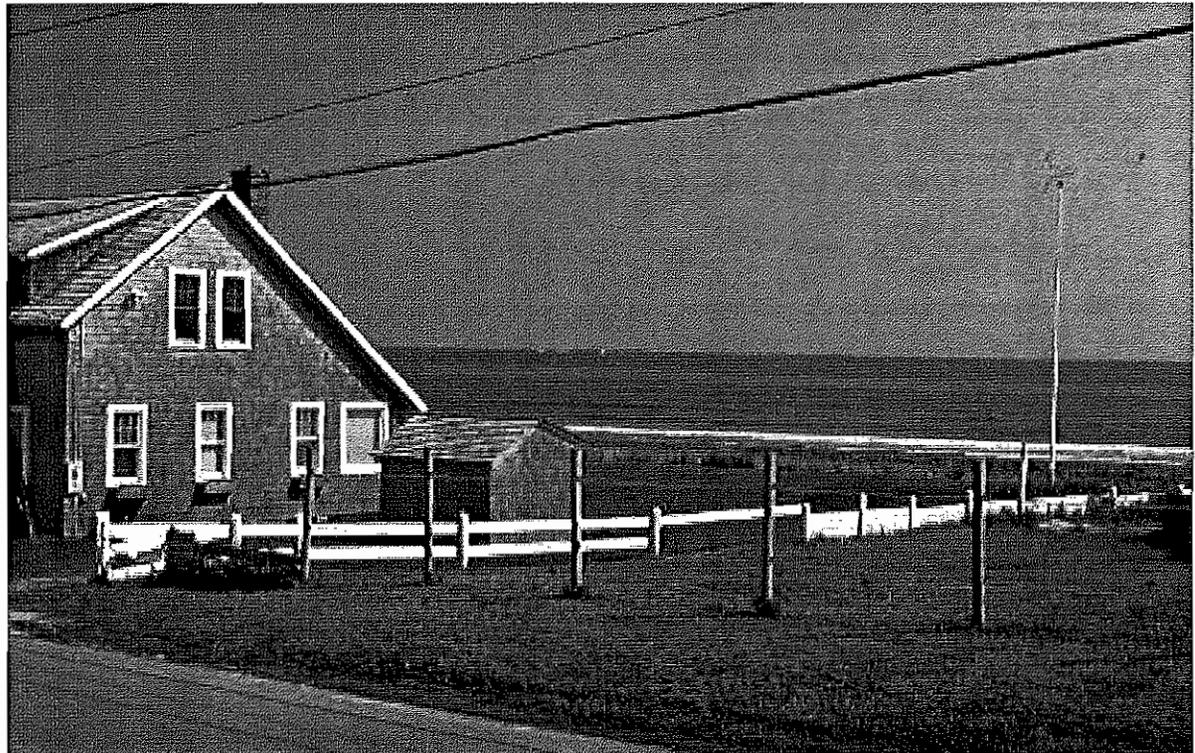


Sand and gravel operations, while generating jobs and tax dollars, can threaten scenic and environmental resources.

plaints. In the long term, these resources will continue to be important to economic growth in Rhode Island and indeed all of New England. Whether they are on or adjacent to a development site they form an important part of the development equation.

Tourism : Tourist-related activities account for much of South Kingstown's economic health, accounting for over 1000 jobs in 1986 and over \$45 million in sales. Part of the attraction of the town is the combination of ru-

ral character with the nearness of the ocean. Should that rural character be lost there will clearly be less of a reason for people to visit — and as any number of towns on the Jersey Shore could tell you, just having a beach is not enough to ensure continued prosperity. The rural landscape helps to broaden recreational opportunities for visitors and spreads the season out by providing activities (such as local grist mills and pumpkin farms) that interest visitors when the beach weather comes to an end.



Visual and physical access to the water is critical to the success of tourism in South Kingstown; increasingly, the market demands more than a quiet cottage by the sea; many different forms of recreation must be available for the town to stay competitive with other areas of the country.

Community Context

Developers typically build the development that the town has prescribed through its zoning and don't worry too much about how it fits into the neighborhood. Increasingly, however, builders are seeing the value of consciously designing public amenities that support the civic life of the community and enhance the quality of life for future residents. Typically, suburban areas are so devoid of this kind of civic amenity that new developments that provide them become the focus of the neighborhood — including surrounding subdivisions, and thereby command higher values. This doesn't require a major investment, either — sometimes a small park or town



Even small subdivisions can have a neighborhood focus: this small common is the centerpiece of a recent development in Amherst, Massachusetts.

green, a playground or ball field, can become the focus of the entire community. Other developers will provide community halls, recreation centers, or set aside lots for civic buildings such as libraries, schools, government buildings, or churches. In any case, the first step is to determine the potential of the development site in connecting to and enhancing the life of the surrounding community — especially that part of the neighborhood that is within walking distance, about 1/4 of a mile. For sites near existing town and village centers this may mean simply providing pedestrian connections; for more remote sites there is an opportunity to create a real community where none existed previously.



Housing with a community conscience need not look out of place: these subsidized units in Lincoln, Mass. are designed with an extended farmhouse theme



Community buildings are becoming more common in residential subdivisions, especially for senior housing, like this village-style development in Northampton, Mass. The structure serves as a visual focus and center of community life for residents and is used by the wider community as well: bringing new and old together.

Recreational Context

South Kingstown has a wealth of recreational opportunities; hunting and fishing; hiking, biking, and horseback riding; boating and beaching, etc. It would be difficult to find a site that is not within walking distance of one or more of these recreational resources — yet they are often ignored in the design of new subdivisions. The Open Space and Recreation Element of the Comprehensive plan suggests several ways that developers can help to meet the recreation needs of the town as a whole. Development of each individual site should be planned in relationship to this town-wide effort, as well as the immediate context of the project:

Beach, Salt, and Fresh Water Access:

As the major draw for tourists and homeowners, access to the water is a critical need. While sites with direct access have a much higher value for development, this gives their owners the opportunity to trade access rights for better design or land management with less fortunate neighbors. For example, a developer who have access to a salt pond might negotiate with a neighbor to trade access easements that benefit both parties. Or perhaps by granting access to the public, a developer receives public funds for trail development, boat ramp construction, etc. This is clearly an effort where developers, landowners, and the



Shared Access to the water is an important community amenity at the Village at Indian Lake; open space and trails within a development should connect to both neighboring properties and regional systems.

town, working together, can have a major impact on the quality of life for everyone.

Greenway System: greenways, continuous corridors of open space, protect critical natural resources while at the same time create a potential recreation network connecting all

parts of the town. The skeleton of this townwide greenway is provided by regulations protecting wetlands and water bodies, and significant areas that have been permanently protected as wildlife refuges. Ongoing efforts are being made to make this network usable for recreation by building trails, seeking necessary easements across private property, etc. The most notable projects now under development are the Saugatucket River Heritage Corridor and the South County Bikepath. In this context carefully-planned residential development provides the opportunity to link every new home to a permanently protected, townwide open space network. Ultimately this local network will be part of the statewide greenway system envisioned by the Rhode Island Greenways Council. A good example of this is the Rhode Island North-South Trail, which runs through neighboring Richmond and will eventually link the beaches in Charlestown with rural communities on the Massachusetts border.

Special Use Activities: the town has identified a number of specialized use activities as lacking in the town, including hiking and nature trails, bike paths, cross-country ski trails, sliding hills, and a linear park along the Saugatucket River. Obviously, some sites provide the opportunity to support these activities and others do not. An awareness of town goals and ongoing projects will provide opportunities for plugging into this context.

Town Character Context

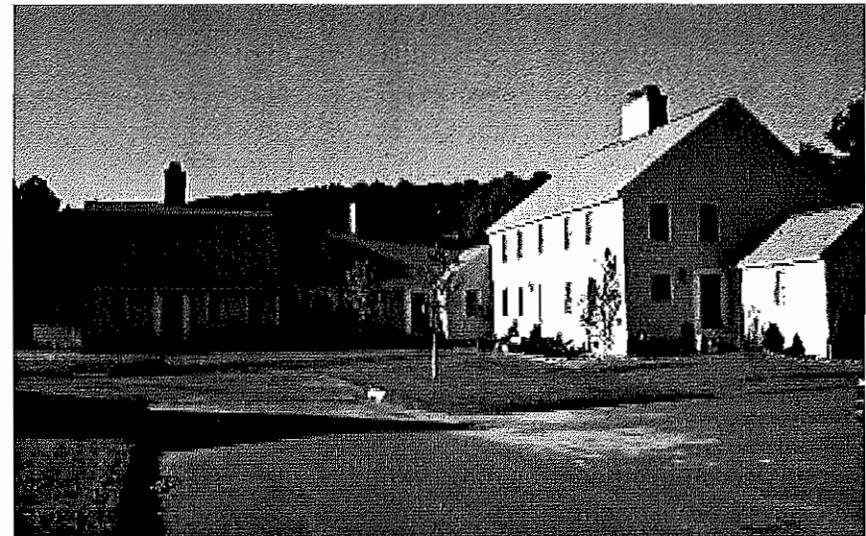
In earlier chapters we talked about how town character and the sense of place are generated by the complex relationships between the varied landscapes of the town and the various human activities that occur upon them. Every site expresses to some extent the character of its surroundings, and whether open, wooded, or part of an existing village is part of a larger pattern in the landscape. It is up to the developer to determine how the site fits into that pattern, and how changes to the site will either build upon or destroy that existing character.

Theorists have often talked about rural character in terms of the “cultural landscape.” This

refers to the kind of areas that have never been “designed”, but which look the way they do because of the how the land was used. The thing about cultural landscapes is that the patterns that exist are all expressions of functional relationships — few things are purely ornamental, but rather every thing that one sees is there for a purpose. An historic farmstead, for example, is typically located close to the road for the sake of efficiency. Barns and outbuildings are located to block winter winds and create a sheltered, sunny farmyard that is comfortable for more months of the year. Shade trees and porches serve to provide for shelter from sun and rain during the summer. Dwellings are tall and narrow to provide for efficient heating, cooling and natural light to

the interior, etc. The charming character that we find so attractive is thus merely the expression of a series of practical approaches to site planning and architecture, each with functional purposes.

Developments that are designed with an understanding of the forces that produced the cultural landscape that surrounds them tend to follow the same common sense approach, and in that way harmonize visually with the things that came before. By contrast, if you ignore the patterns present in the cultural landscape, no amount of investment in architectural frills will make a new development feel like it belongs.



A tale of two Connecticut condominium developments: On the left, a typical “cookie-cutter” approach, with the same unit stamped out over and over; on the right, similar use and density, but the units are within larger, more typically single-family-style structures. This approach fits in better visually; it also allows an irregular site plan that takes advantage of views and clusters units to block the wind and create sheltered, private entrances.

Developers can respond to the historic patterns and rural character surrounding their site in several ways:

1. Preserving Special Features and Views:

The easiest way to preserve town character is not to destroy it in the first place. This might mean preserving a meadow or stand of trees along the roadside or keeping development off a ridgeline or hilltop. The Residential Cluster and Residential Compound sections of the subdivision regulations offer the flexibility to protect these kind of features while still developing a site.

Sometimes its as simple as preserving existing trees, and using dark colors on walls and roofs to help houses blend in .



Treetops, Falmouth, Massachusetts: a contemporary interpretation of traditional Cape Cod architecture; natural materials, preserved trees and naturalized plantings help the development blend in to the landscape.



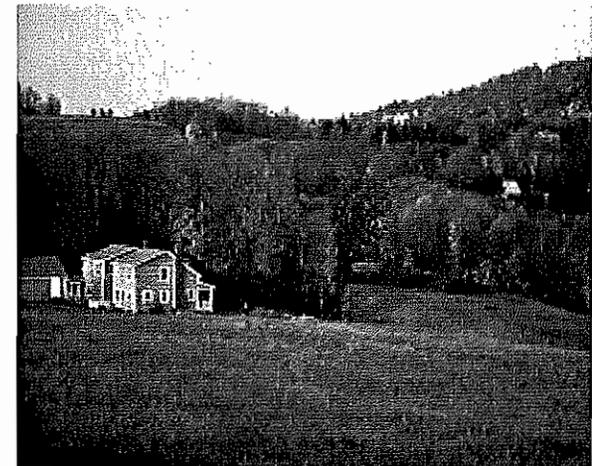
Brown's Farm Subdivision: A traditional village theme can unify a new development with a consistent approach to architecture and site planning that's rooted in common sense.

2. Using traditional site planning and architecture:

Along with protecting key features, the character of what is built can be designed to express the character of its context. This usually means developing subdivisions that follow traditional patterns -- with buildings either relatively close together, as in a traditional village or hamlet, or tucked into the landscape in accordance with the traditional farmstead or estate. The architecture itself need not be a slavish copy of an historical model, but rather a reinterpretation that maintains similar massing, proportions, and materials. Investigating the ways that nearby homes and communities were laid out can often provide a rich source of design ideas — particularly if the designer looks beyond the surface and attempts to figure out the underlying visual and functional relationships between various elements.

3. Maintaining traditional activities:

All too often residential developments that are modeled on historic examples end up being rather sterile and lifeless (especially if all the residents are driving elsewhere to work, shop, and play.) As important as appearance of a development is to fitting in to the character of a neighborhood, it is just as important to maintain traditional activities. Open space within developments should be laid out to allow continued farming and forestry activities; sometimes the success of such efforts depends on negotiating agreements between new homeowners and farmers — some towns go so far as to adopt “right to farm” bylaws that ensure that farmers will be able to get up early and start mowing without being sued by their new neighbors.

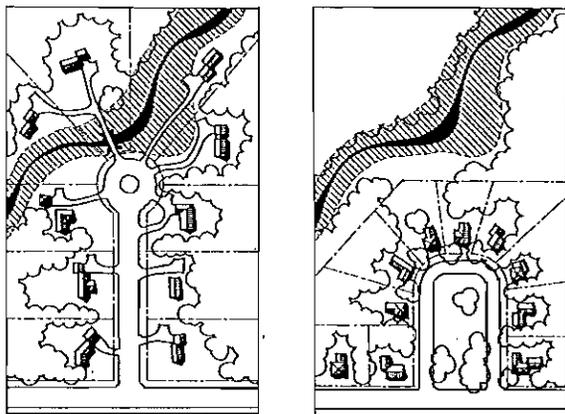


Development of these homes allowed farming to continue on the rest of the parcel; restrictions will prevent any further development, but also guarantee the farmer's right to pursue his or her livelihood -- even when it starts to smell!

C. Benefits of contextual design

It is apparent from the preceding discussion that existing local residents and the environment both benefit when developers design new subdivisions to fit into their contexts. But benefits also come to the developer:

1. Lower construction costs: the conventional subdivision, while perhaps the most straightforward approach, generally requires more clearing, longer and wider roads, and greater distances between houses. A contextual approach would probably result in less clearing, lower road lengths, and reduced road standards, all of which would result in lowered construction costs. Additional design innovations, such as naturalized stormwater management systems that avoid engineered



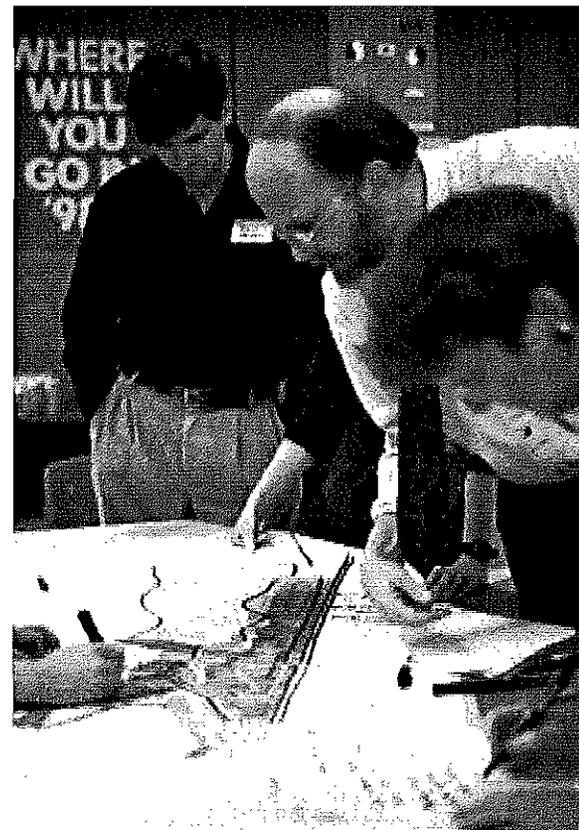
Conventional subdivision, left; cluster, right: Shorter roads, surface stormwater systems, and rural design standards can save money, allowing larger profits from fewer units, which can save the landscape.

drainage structures, native plantings, and preserved site features would also reduce costs. On large rural sites, preservation of open space in the form of forest cover or active agriculture would allow the possibility of ongoing income from these activities that could offset the purchase price of the land.

2. Ease of review and permitting: A design that fits into its context will inevitably create less neighborhood opposition than a conventional subdivision. By starting out with an objective look at what's good for the neighborhood, the developer is no longer the bad guy, but rather a positive force in the improvement of the town. The same is true for the town review process, which so often gets so bogged down in details that simplistic conventional plans go through the process faster than more complicated creative ones:

One way to pursue contextual design is through a charette process, which refers to a meeting or series of meetings where the developer, designers, town officials, and interested citizens gather to work on plans for a site or an entire neighborhood. Because no decisions have been made, it allows everyone to have participate early on in the process. Developers get valuable information about the site and the community, and abutters begin to understand the expectations of the developer.

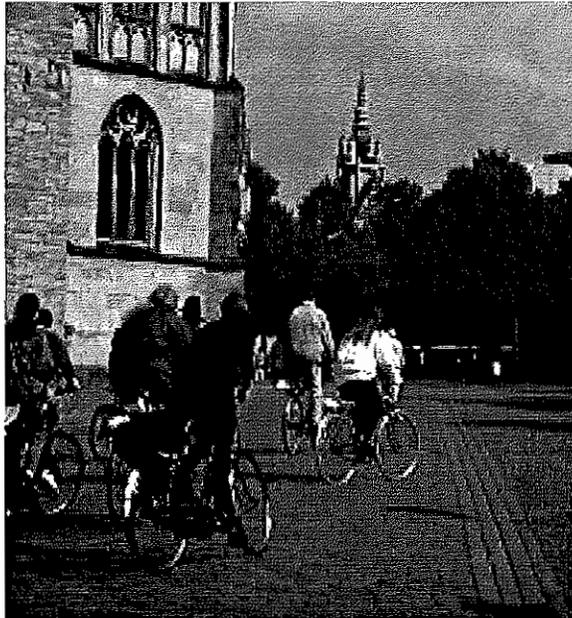
In the end, contextual design makes developers into partners in the town planning process; helping to refine preliminary ideas for neighborhood plans, completing road and infrastructure systems, extending greenways, etc. The result is that development becomes the positive force for change that it was for most of South Kingstown's history.



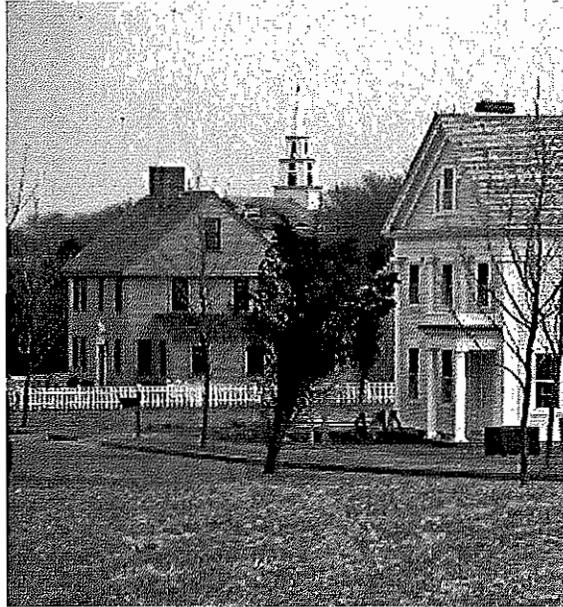
The charette process brings developers, town officials, and interested citizens together to work on plans for a single site or an entire neighborhood. It is, almost by definition, a contextual approach to design.

3. Maximum site amenity for minimal investment:

Development that takes advantage of its context can build on visual resources and physical connections to develop value. This is easy to see where protection of a special feature or vista creates an attractive view from each new home. Increasingly, residents are looking for hiking and biking trail connections to nearby parks and recreation areas. Connections to greenways and bike trails are used to market subdivisions in suburban areas outside Boston and New York; in South Kingstown every new home can and should have a direct connection to a permanently preserved open space system.



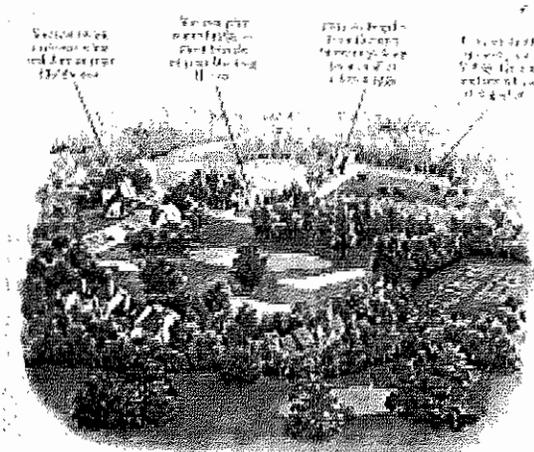
Bike trails and bike-friendly town planning are common in Europe. Such amenities are basic to marketing for tourism and residential development.



Architecture that fits its historic context, like these new homes on Nantucket, sells quicker, while costing no more to build than a typical home for that market.

4. Marketing advantages: Subdivisions that are designed with their surroundings in mind have major marketing advantages. First, they look like they belong — if people wanted to live in a conventional subdivision why move to South Kingstown? Second, they grow in faster: any new development has a period when it still looks out of place; if it is designed to harmonize with its surroundings a project will not be dependent on the growth of new trees to blend into the landscape. Finally, contextual design enhances the sense of place in a new community; that quality that makes a house a home, and turns a subdivision into a neighborhood.

In summary, a subdivision that has been designed to be sensitive to its contexts will be approved faster, can be constructed for less money, and marketed more easily — all of which will have a big impact on the bottom line. It doesn't hurt that the developer comes through with a reputation for sensitive, creative design —making the next project that much easier to build.



Why buy a house when you can afford a small village?

King's Way Real Estate, Inc. is a real estate company located in South Kingstown, Rhode Island. We are a full service real estate company with a focus on residential real estate. We are currently looking for qualified individuals to join our team. If you are interested in this position, please contact us at 401-885-1111. We are an equal opportunity employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, age, or disability. We are an equal opportunity employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, age, or disability. We are an equal opportunity employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, age, or disability.

KING'S WAY
Real Estate, Inc.

Village Style Development can be marketed to emphasize shared amenities and community character

Chapter 5 - The Planning and Design Scenarios

The scenarios that are illustrated here show how the planning and design ideas contained in this manual can be applied to actual sites in South Kingstown. Each of the sites shown is an actual vacant parcel, chosen to be representative of a one of the Town's typical landscapes. Some are in the process of planning for development as subdivisions, some will likely never be: the purpose of these scenarios is to show what is possible, and indeed likely, under current regulations, and then to illustrate a more creative alternative that accommodates an equal amount of development.

The site scenarios are each organized in the same order: first, a view of the existing site, before development; second, the same view with descriptive information about the site and its context. This is followed by a view showing the site as it would likely be developed under a conventional plan, which is the one most likely to happen. The fourth image shows a creative alternative to placing the same number of houses on the parcel in a way that fits in better with the character of the site and its context. Finally, the last picture shows the creative approach with descriptions of specific design recommendations that have been illustrated.



Upland Farm: an active farm in the rural upland along Route 138.



Village Infill: Infill in a historic neighborhood



Mixed-use District: An evolving commercial/ multi-family residential district



Wooded Hills: A forested site in the rolling landscape of the moraine.

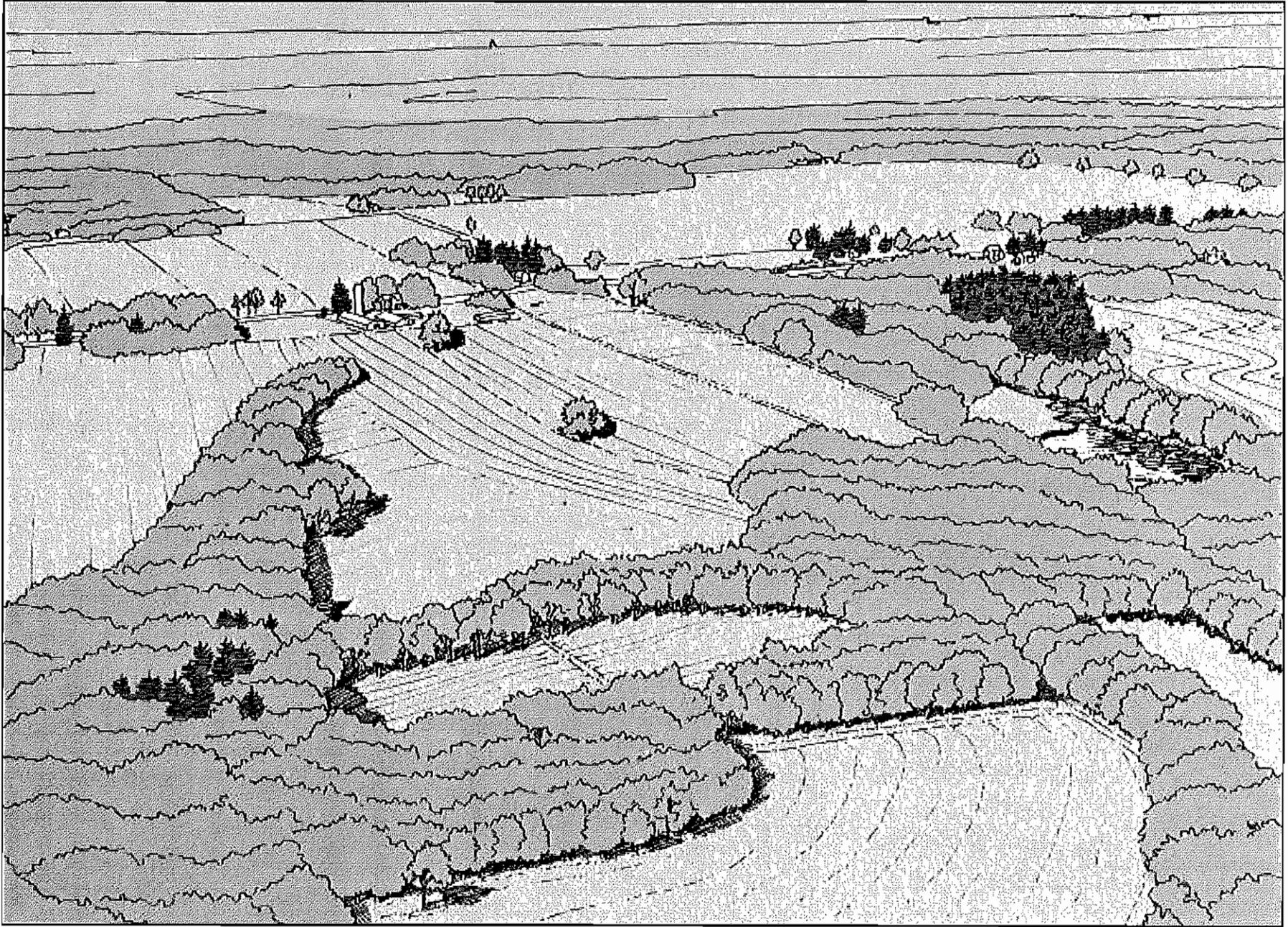


The Village Edge: Development in a landscape of open meadows and hedgerows on the edge of town

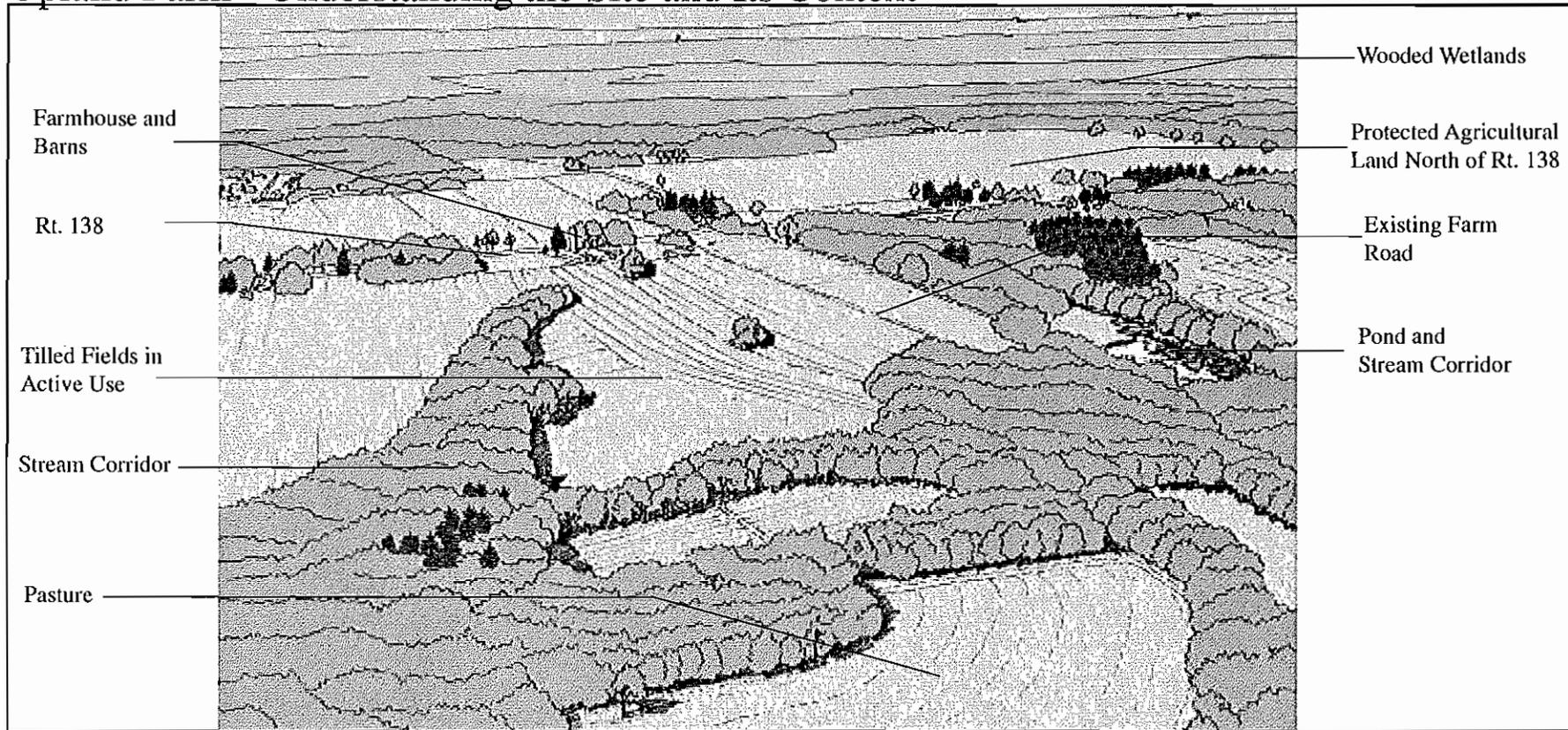


Coastal Farm: an open agricultural site on the coastal plain.

Upland Farm - Existing Conditions Before Development



Upland Farm - Understanding the Site and Its Context



Ecology:

Cornfields and Meadows provide seasonal cover and forage for many species of animals. Wetlands, ponds, hedgerows and wooded areas provide permanent habitat for even more. On this site, all these areas are closely linked to surrounding systems: streams on the site flow into the Usquepaug river; farms on all sides provide open space corridors important to the movement of wildlife.

Economy:

The concentration of large farms in the Rt. 138 corridor, many of them with some degree of protection from development, provides the critical mass that helps to make this neighborhood the most viable for continued farming. Programs to reduce taxes in exchange for conservation easements as well as limited residential

development around the edges can reduce overhead costs. In this era of cheap shipping costs, farming in New England often struggles to compete with the products of other regions - but many see our farmland as insurance against future change, as well as providing immediate benefits in terms of scenic quality and fresh produce.

Visual Character and Context:

The character of the site is remarkably varied; it includes the historic farmsteads along Rt. 138, the open fields and long views across the cultivated land, and a series of meadows surrounded by woods in the south part of the site. Adding further variety to the mix are isolated large trees, hedgerows dividing the fields, as well as streams, pond and wetland corridors. While most of the meadows and woods in the south half of

the site are not visible from the road, views of the farmland on the north half of the site are an important part of the visual character of Rt. 138.

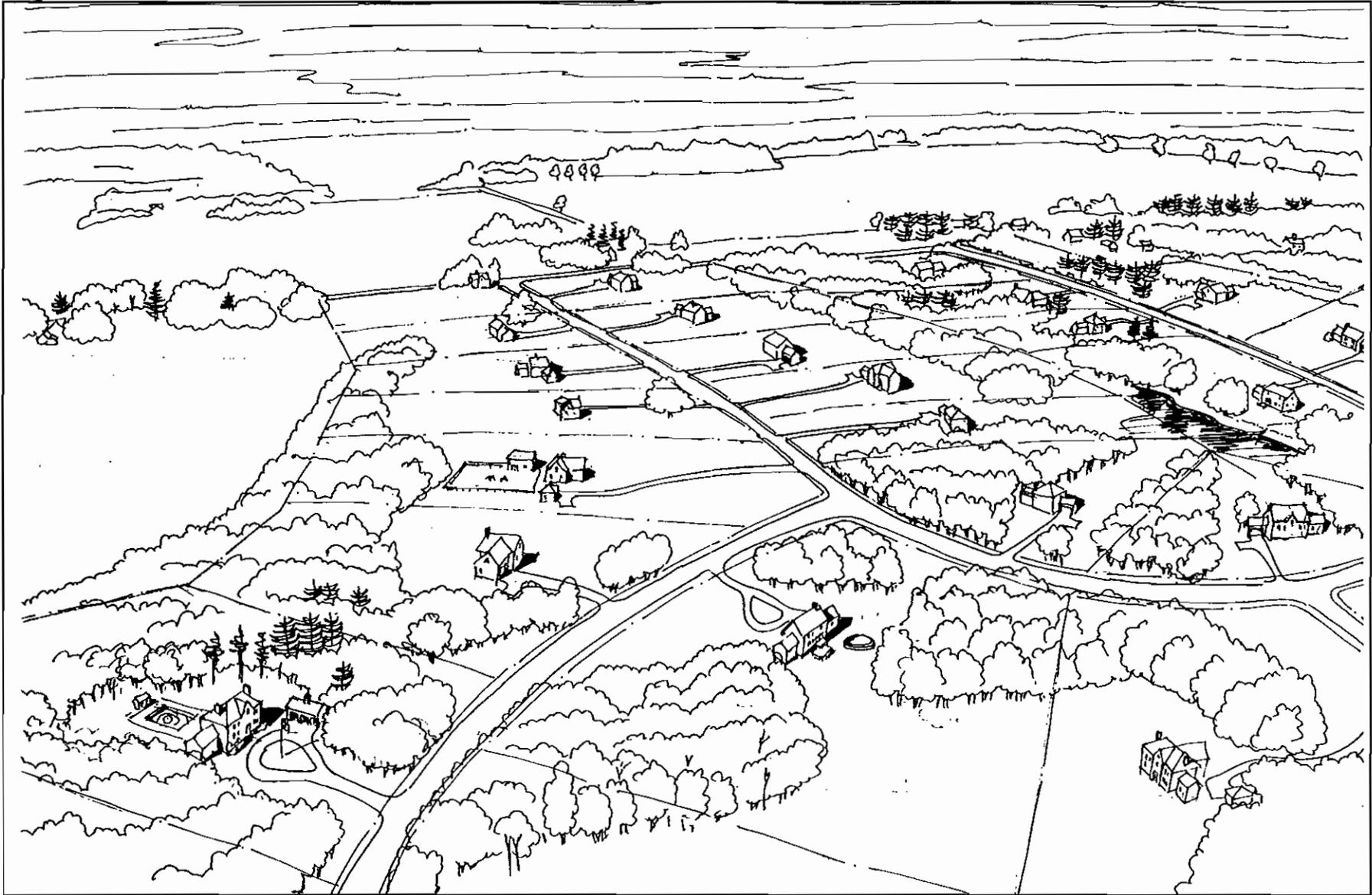
Community:

The neighborhood consists of a series of farmsteads strung along Rt. 138. The nearby church, grange hall, and village of Usquepaug were part of a neighborhood that was probably more cohesive 100 years ago than it is today, when most local residents drive to work elsewhere.

Recreation:

Public access to the site is limited to views from the road, though informal hiking, hunting and fishing are common in the neighborhood. The Usquepaug river forms an important potential greenway and trail link south to the Great Swamp and Worden Pond.

Upland Farm - After Conventional Development



Applying the 200,000 s.f. minimum lot size allowed in this district produces a subdivision of 34 lots (some out of sight below the frame of this illustration). Development of these lots and new roads to access them destroys the agricultural use of the land - though homeowners would have enough room on individual lots to keep a few horses. The open character of the landscape, particularly of the north

half of the site, would make it difficult to hide the houses. The pattern that results is something that cannot be made to fit the traditional character along Rt. 138. At best it is a more spread out version of the typical suburban subdivision, with lots too large to be easily maintained, but too small for continued agricultural use.

Upland Farm - After Creative Development



The creative approach to developing this farm allows the farmer, the residents, and the public all to benefit. Most of the areas in active cultivation remain so. A new road follows the treeline along the edge of the fields to provide access to a new neighborhood tucked into the woods and meadows on the south half of the site. The development is built using the cluster provisions of the zoning bylaws, which allow the 34 units generated by the site's 200,000 s.f. base density to be built on

half-acre lots. The remaining open space is set aside for continued farming as well as preservation of buffer zones and greenways along the stream corridors that drain the property. Houses in the new neighborhood would each face out onto small neighborhood open spaces, as well as having views and physical access to common open space in the rear of each property. The quality of life this affords keeps lot values high even though the lots themselves are smaller.

Upland Farm - Design Recommendations

Site Planning:

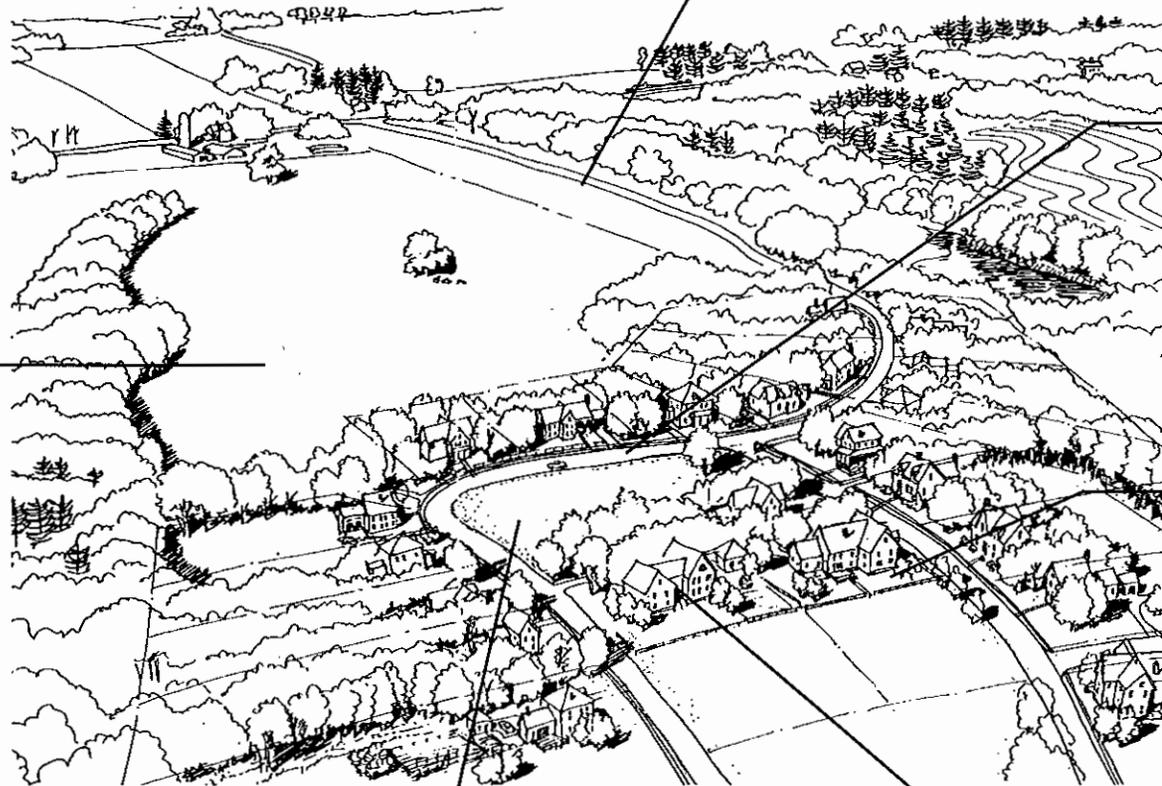
Preserve large blocks of contiguous farmland and forest, using the cluster bylaw to go from 200,000 to 20,000 s.f. minimum lot size. Use the varied meadow and forest landscape in the south part of the site to create a new neighborhood organized around village streets and neighborhood green spaces. Create buffers adjoining stream corridors, and use these to create trail connections to the larger town greenway system..

Open Space:

Open space has a variety of uses in this development: a large part continues in active agricultural use, with appropriate buffers and use agreements to protect farming activities from the potentially unsympathetic residents. Natural corridors are set aside to protect sensitive wetlands and waterbodies. Finally, open space in and next to the residences is designed for active use by the community.

Public Amenities:

Tree-lined village streets with sidewalks and fenced front yards invite walking through the neighborhood. Small greens provide a visual focus and a place for kids to play. Sidewalks connect to a trail system linking up with the Usquepaug Greenway to the West, and URI to the East. Shared stables and riding facilities (not shown here) could provide additional value, with equestrian trails circling the property.



Roads and Driveways: Provide access to the development area with a new road that follows the treeline in the path of an old farm road. Keep road width to a minimum, and follow the rural design vernacular by eliminating curbs, sidewalks, and structured drainage except where absolutely necessary.

Streetscape:

Design the street with a consistent design approach to help unify the appearance of the neighborhood. Adopt a common setback for building facades to help reinforce the sense of enclosure along the street.

Landscape:

Preserve existing trees, walls, and other site features. Create private yards for each home by locating buildings close to streets and lot lines where appropriate, using fences and hedges to separate public and private spaces. Create a common vocabulary of trees and shrubs to unify the development, using the historic vernacular as a guide

Architecture:

Use simple home styles and details found on adjoining properties; gabled roofs, porches, dormers, etc. Use additive massing, wings, etc., to break up large houses into units with traditional scale and proportions.

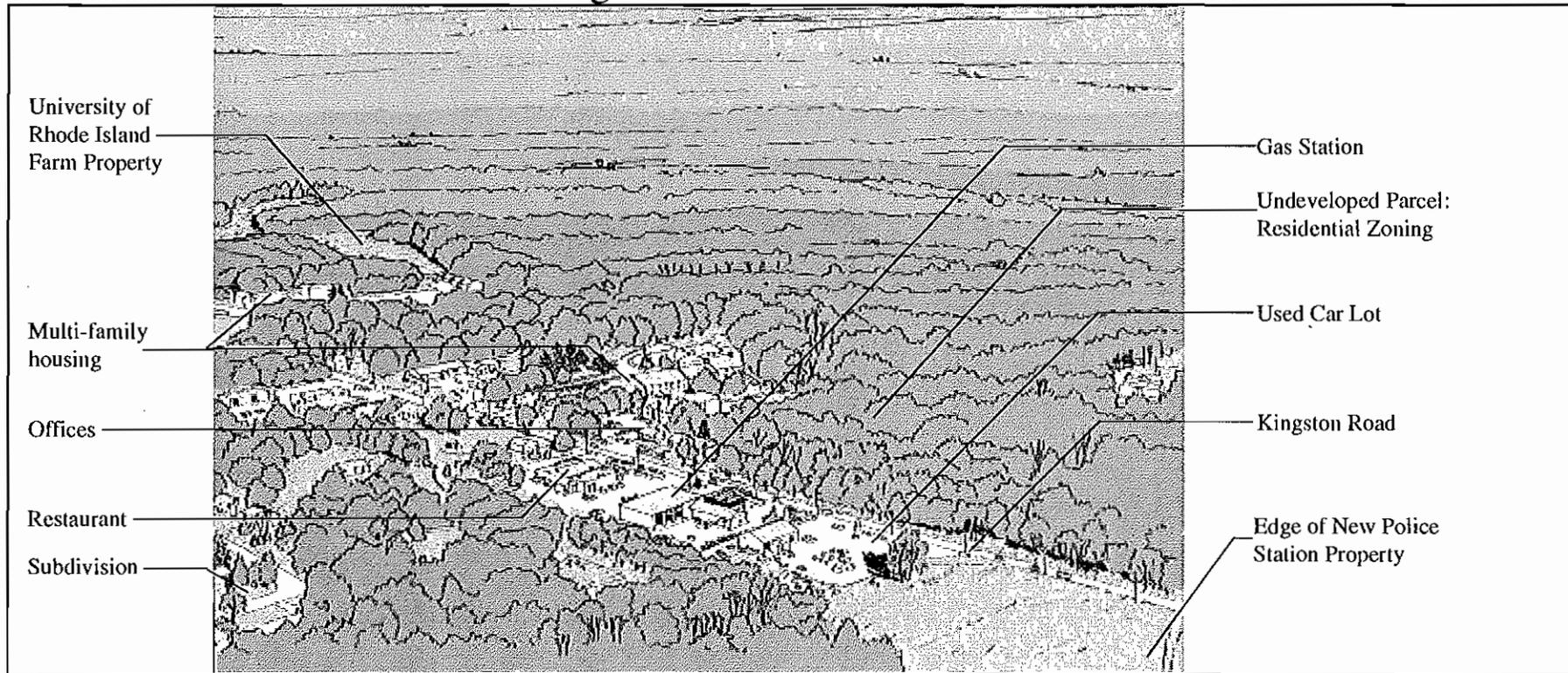
Stormwater Management:

Use surface drainage as much as possible rather than structures. Build off of existing site drainage, using improvements to create a focus for the public open space. Design surface drainage swales and retention areas to look like natural streams and ponds.

Mixed-Use District - Existing Conditions



Mixed-Use District - Understanding the Site and Its Context



Ecology:

While from the road the area appears to be heavily developed, the actual disturbed area is confined to a limited corridor along Kingstown Road. Beyond this on both sides of the road are hundreds of acres of undeveloped woods, wetlands and stream corridors that form a rich, if fragmented, habitat for the more common forms of suburban wildlife. The evolving nature of this commercial corridor presents an opportunity to consolidate some of these areas into meaningful natural reserves, with paths for people and protected routes for the movement of wildlife.

Economy:

The economic context is critical to the successful redevelopment of this district, which has yet to define itself fully. The existing area has a mix of local service businesses, restaurants, offices and multi-family residential, with older and more recent single family develop-

ment mixed in. As traffic grows on Kingstown Road and automobile-related businesses spread along the corridor, conflicts between uses grow. What is likely to happen is a continued separation between the businesses lining the road and the residential development behind them. While this allows the two to coexist, quality of life will continue to decline. While economic growth may continue, an important opportunity will be lost -- the chance to create a real center for this neighborhood

Visual Character and Context:

The character of the Kingstown Road Corridor is one of extreme, even chaotic variety, without a sense of a single unifying element. What results is a jarring visual experience, and a lack of logical patterns that makes navigation difficult. The result is a kind of ugliness that will not be cured by better landscaping, but which

can only be changed through the creation of a more coherent approach to the design of the whole district.

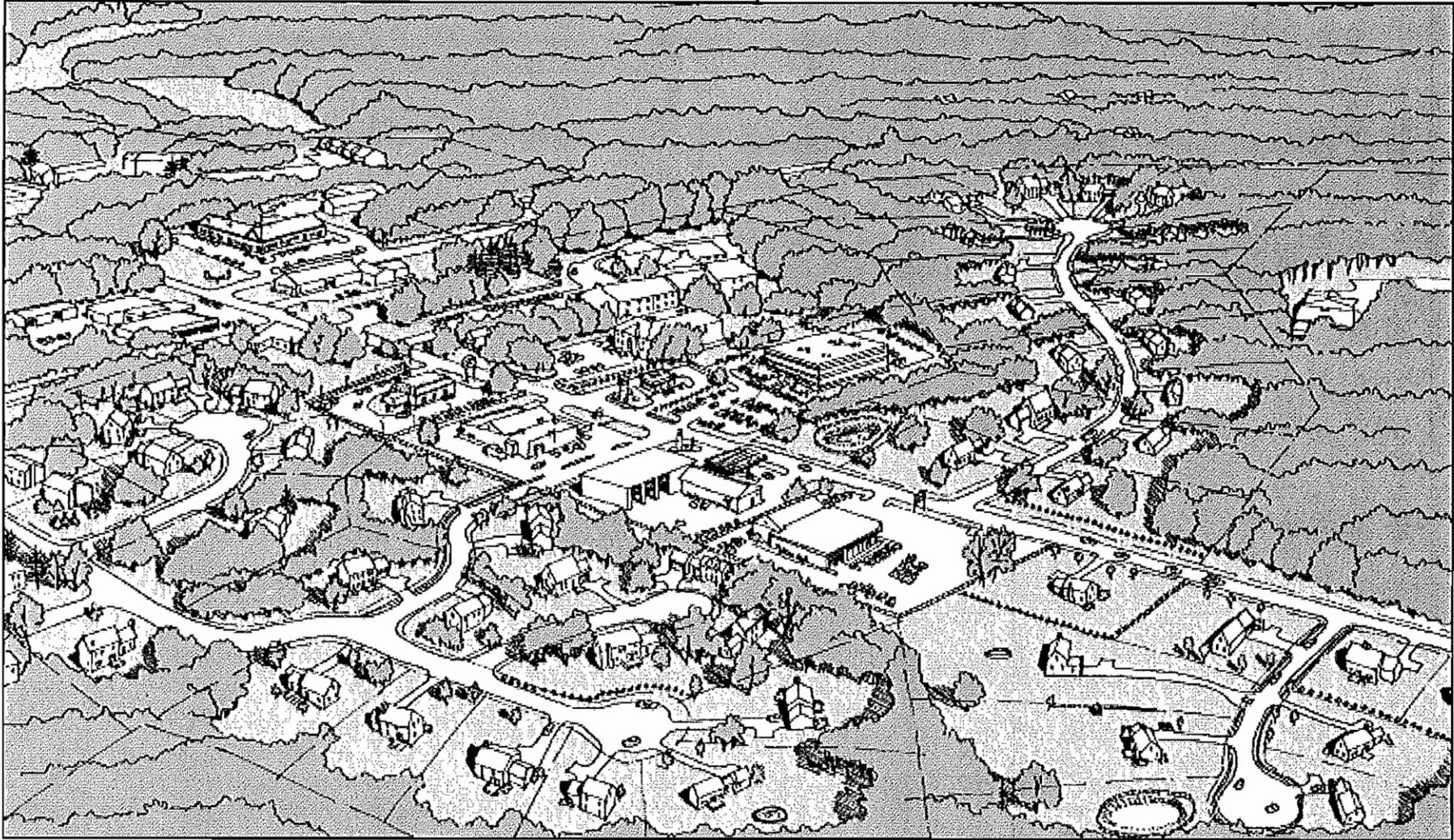
Community:

The mixed and fragmented nature of the neighborhood offers both a challenge and opportunity to create a sense among residents and businesses of belonging to a recognizable neighborhood. Residents of the different subdivisions and housing developments are cut off from one another as much by the lack of a visual and functional center as by social differences.

Recreation:

Few opportunities for recreation exist in the corridor beyond informal trails through the woods beyond its edges. Yet the size of these areas suggest the possibility of creating an extensive greenway and trail network linking this area with other parts of town.

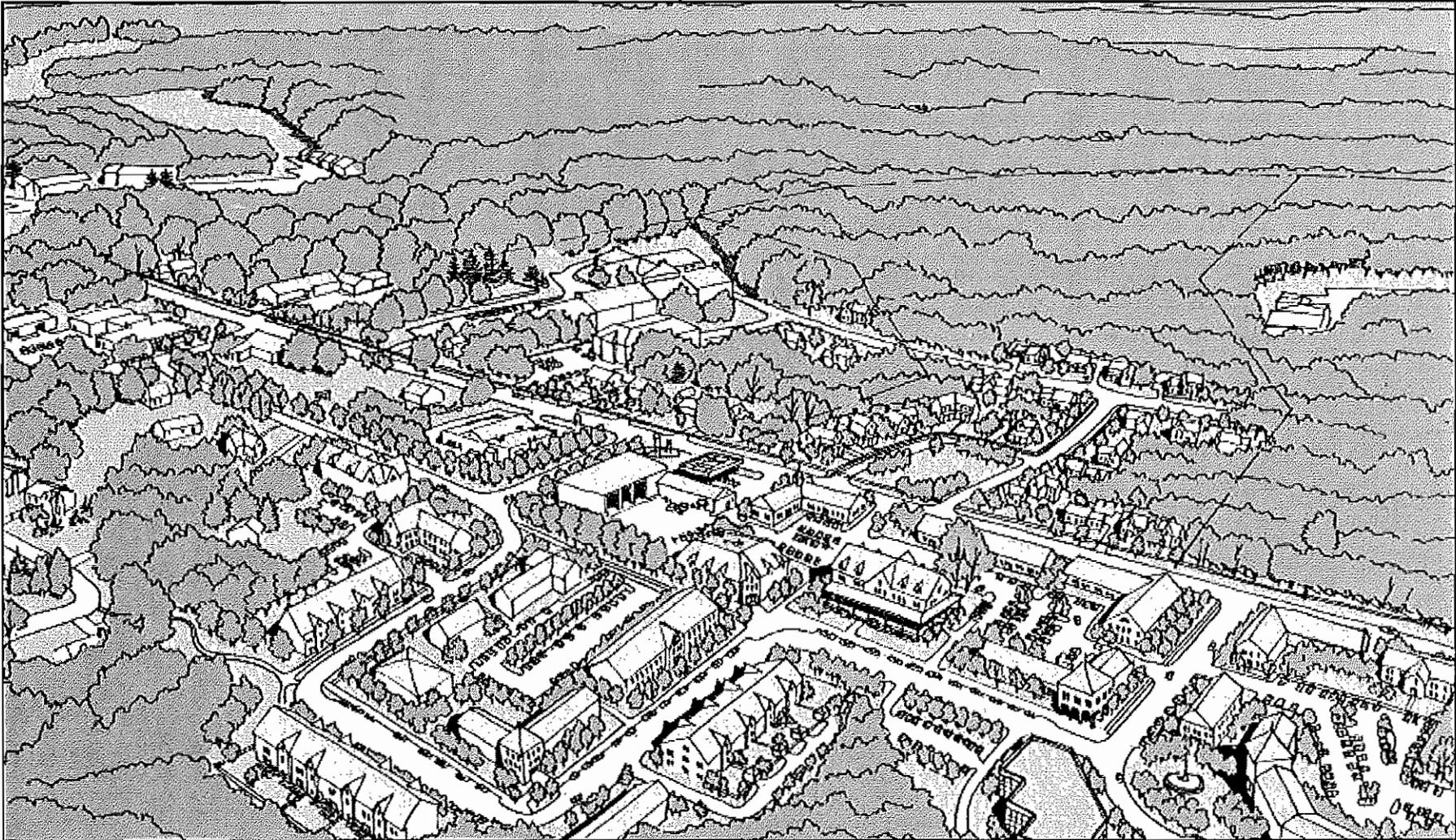
Mixed-Use District - After Conventional Development



A history of conflicting goals for the Kingstown Road corridor is reflected in its likely future appearance if development continues in its present direction. Strict adherence to the zoning map would likely produce a more finished version of what is now underway: some of the parcels would be developed as half-acre or one-acre house lots; others would be developed for multi-family use; and both would be cut off from the road by a strip of commercial buildings surrounded by asphalt. Should sidewalks be built, few people would use them just to walk past the parking lots lining Kingstown Road, and since most of the businesses would be oriented to the automobile, few neighborhood residents would be inclined to

walk to them. What results is a negative spiral that limits commercial development options to strip malls, gas stations, and other strip commercial uses, while forcing neighborhood residents to drive elsewhere to work, play, and shop for the things they need. Because the commercial and residential uses are not merely independent, but often in conflict, physical barriers are erected that further isolate the different elements within the district, and so on. Eventually it becomes impossible to get around the area except by car, it is very hard to navigate, and the sense of visual clutter and chaos worsens. The quality of life for local residents declines, as does the value of commercial property.

Mixed-Use District - After Creative Development



The creative approach to development takes all the same uses that would be allowed in the district under current zoning and arranges them in a very different way. Rather than being separated, uses would be mixed on adjoining lots, and indeed on the same lots and even the same building. Agreements between landowners foster the construction of new streets and driveways that cross lot lines to connect the neighborhood together, linking buildings and parking lots into a more coherent whole and relieving traffic problems on Kingstown Road. New interior streets, lined with trees and connecting important centers within the district, make

automobile circulation work better, but just as importantly invite residents, shoppers, and workers to walk between uses, encouraging the creation of a real neighborhood. On-street parking reduces the need for separate parking lots, which are screened to the side and rear of buildings. Structures themselves are kept close to the sidewalk and to each other, creating a continuous building wall that encloses the public space along the street. While the interior streets would be lined primarily with local services, apartments, and offices, the lots along Kingstown road could continue to hold automobile-dependent uses and regional services.

Mixed-Use District - Design Recommendations

Site Planning:

New access roads cross lot lines to connect and rationalize circulation through the district. Lined with mixed use buildings in a traditional village pattern, the street becomes the public spine that unites the neighborhood visually and functionally. Parking is handled on street and with small connected lots that wind behind the buildings.

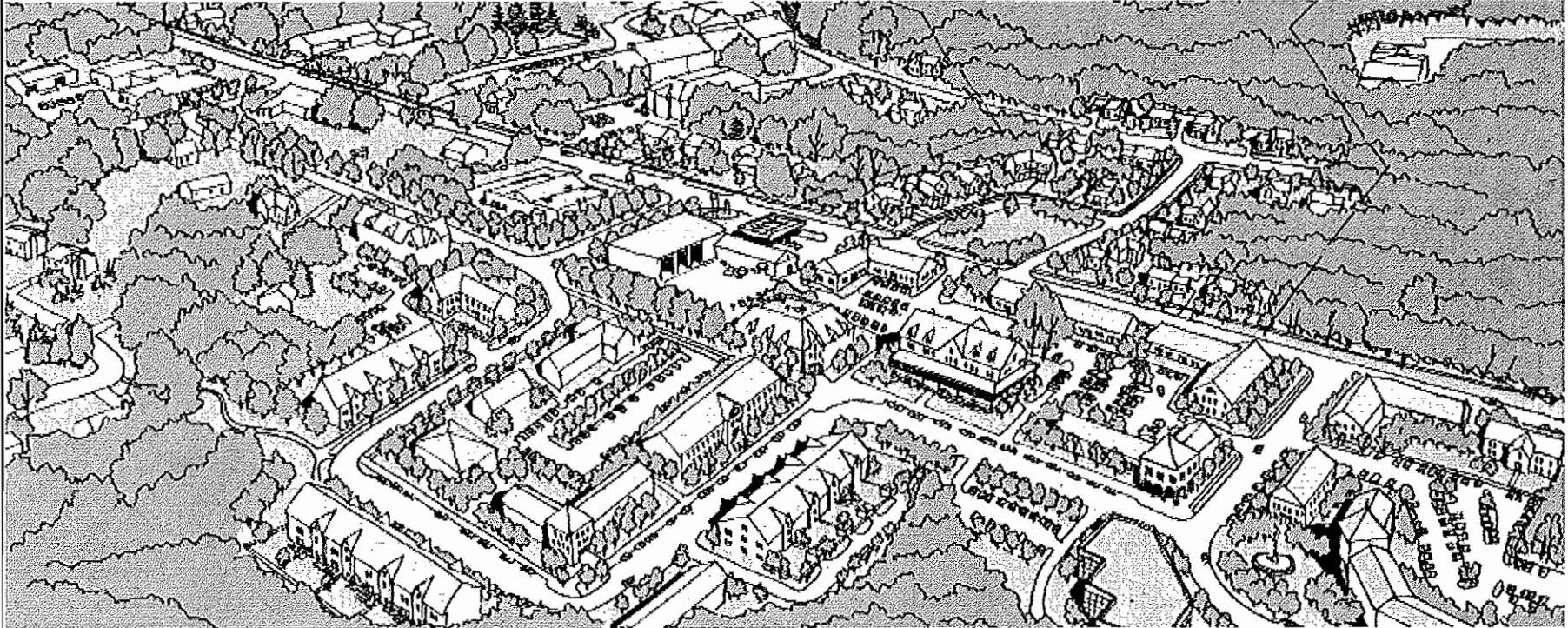
Open Space:

Preservation of natural drainage ways should be designed to bring a wild, natural kind of open space into the neighborhood. A more formal kind of open space system should follow and enhance the main pedestrian routes through the district.

Roads and Driveways: Streets should be arranged to create an interconnected grid, with relatively tight curves and on-street parking to slow traffic. Small parking lots linked by alleys provide for convenient parking and service access to each building, while reducing the visual impact of a typical parking lot. Curb cuts onto Kingstown road are consolidated at a few well-planned points to ease traffic conflicts.

Streetscape:

A consistent palette of materials for paving, planting, and site furnishings should be adopted to unify the design of streets throughout the district. Establish a consistent setback, or build-to line along the edge of the street to which the facade of all buildings must adhere. Reinforce the enclosure this gives the street with tree and shrub plantings.



Public Amenities:

Tree-lined streets and broad sidewalks lined with a lively mix of uses invite walking through the neighborhood. The most public areas should be linked together in a coherent system to form the backbone of the design. Site important buildings to terminate vistas along streets and across open spaces. Locate plazas and gathering areas at logical points where activities and lines of movement converge.

Stormwater Management:

Commercial streets should be drained with curbs and catch basins. Stormwater should be retained and treated to remove pollutants with a comprehensive system of ponds and constructed wetlands. On-site recharge should be encouraged through the use of gravel trenches, grassed swales, etc.

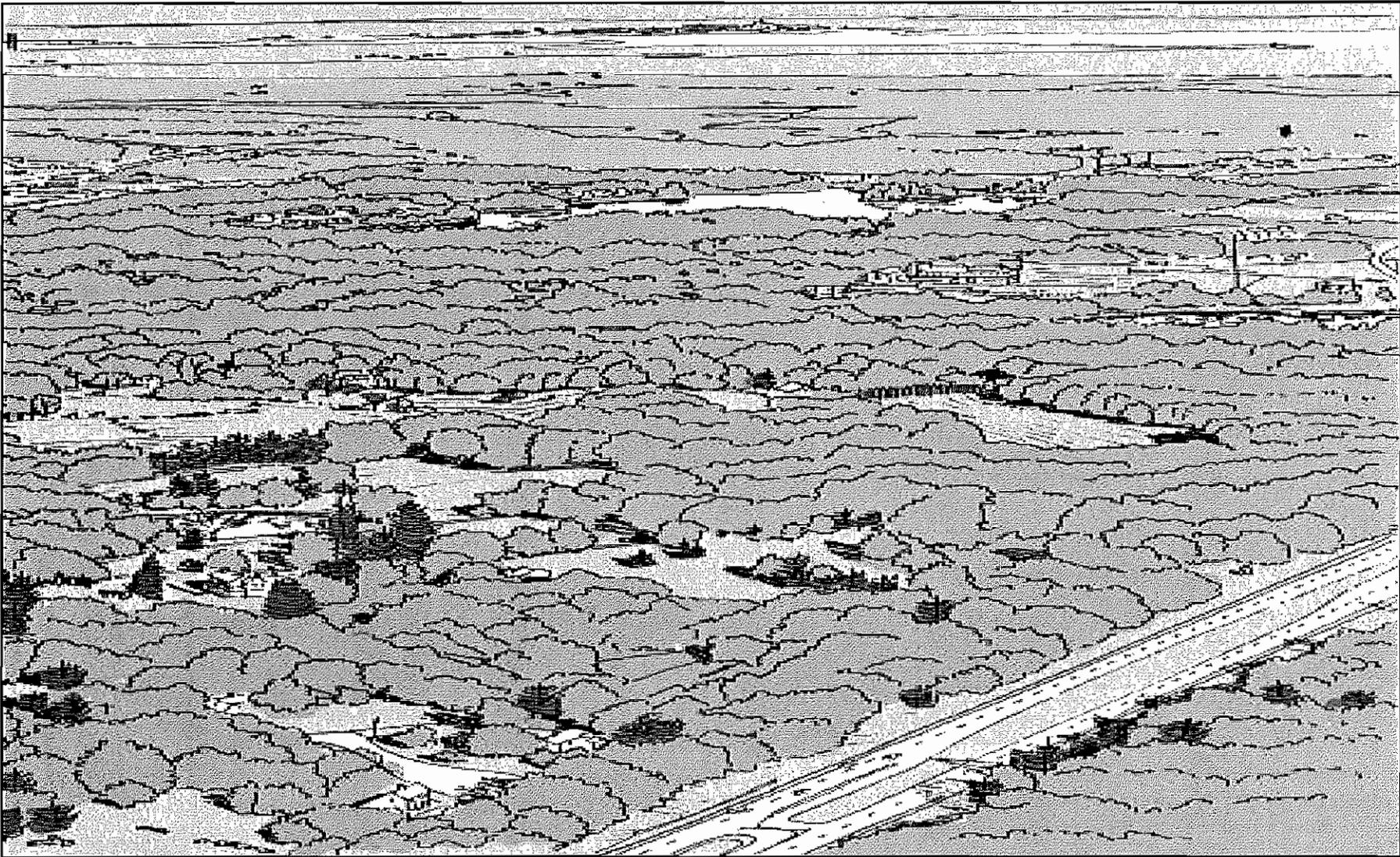
Architecture:

Buildings should be generally 2-3 stories, with active uses like shops on the ground floor and offices and apartments above. Structures should be designed with the scale and proportions found in South Kingstown's historic centers. Large buildings should be broken up into smaller volumes using additive massing and simple geometries found in the town's traditional architecture. Tall peaked roofs with dormers should be encouraged over flat roofs, though flat facades with cornices facing onto public streets and squares are another good option.

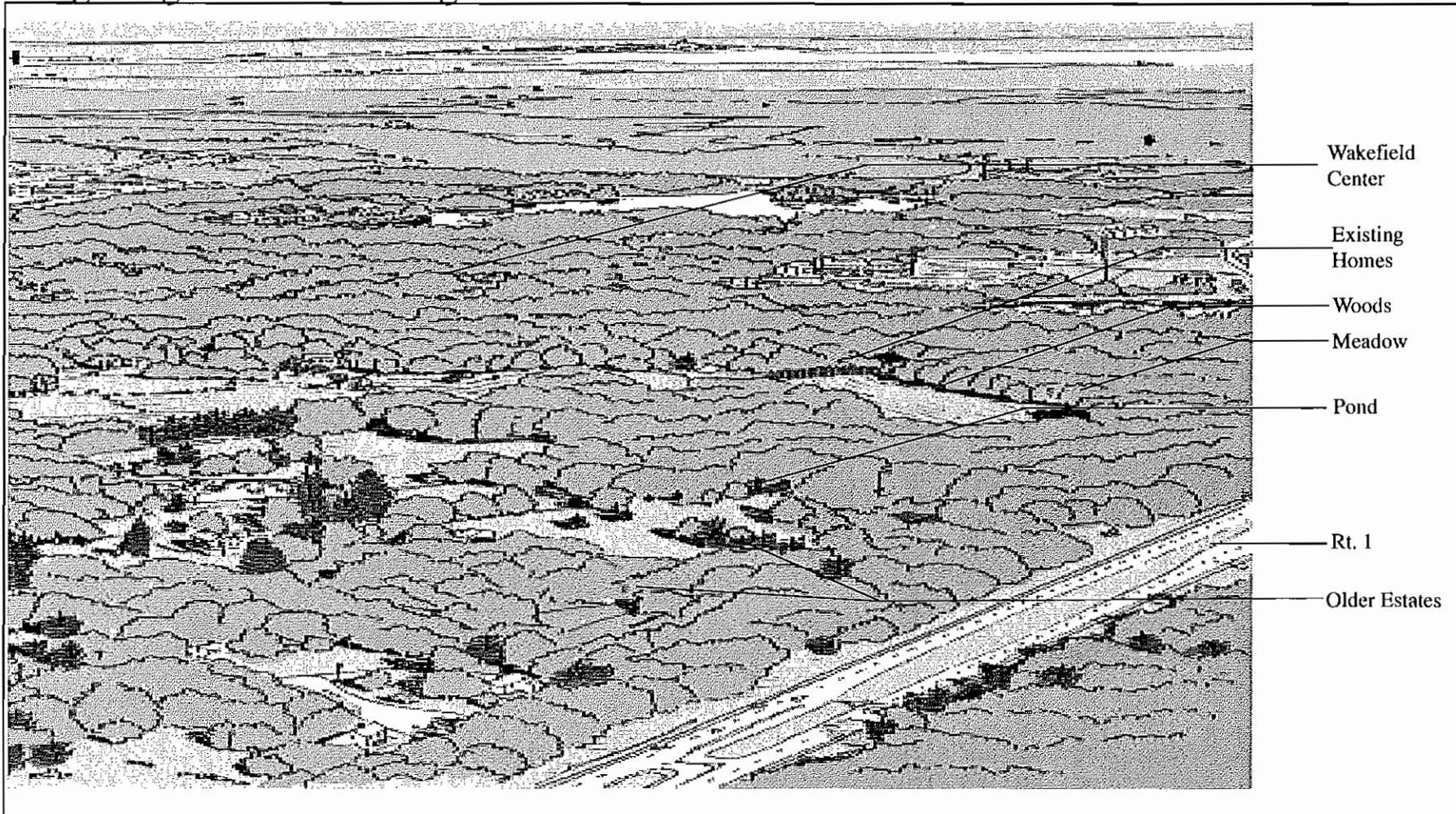
Landscape:

Landscaping within the center of the district should focus on strong plantings of street trees to shade sidewalks and parking areas, and masses of shrubs and hedges to provide privacy and screen undesirable views. Permeable paving, generous tree pits, and protected islands should be used to favor long-term survival of plant material.

The Village Edge - Existing Conditions Before Development



Village Edge - Understanding the Site and Its Context



Ecology:

The site has a great variety of different habitats within a relatively small area, from pastures divided by hedgerows to stream and pond systems, to pockets of mature forest. Despite this diversity the site is ecologically isolated, cut off from larger systems by surrounding roads and residential development.

Recreation:

The site is not open to the public, but is enjoyed informally by local residents for walking. Potential recreation links include the planned river greenway, which passes through the center of Wakefield.

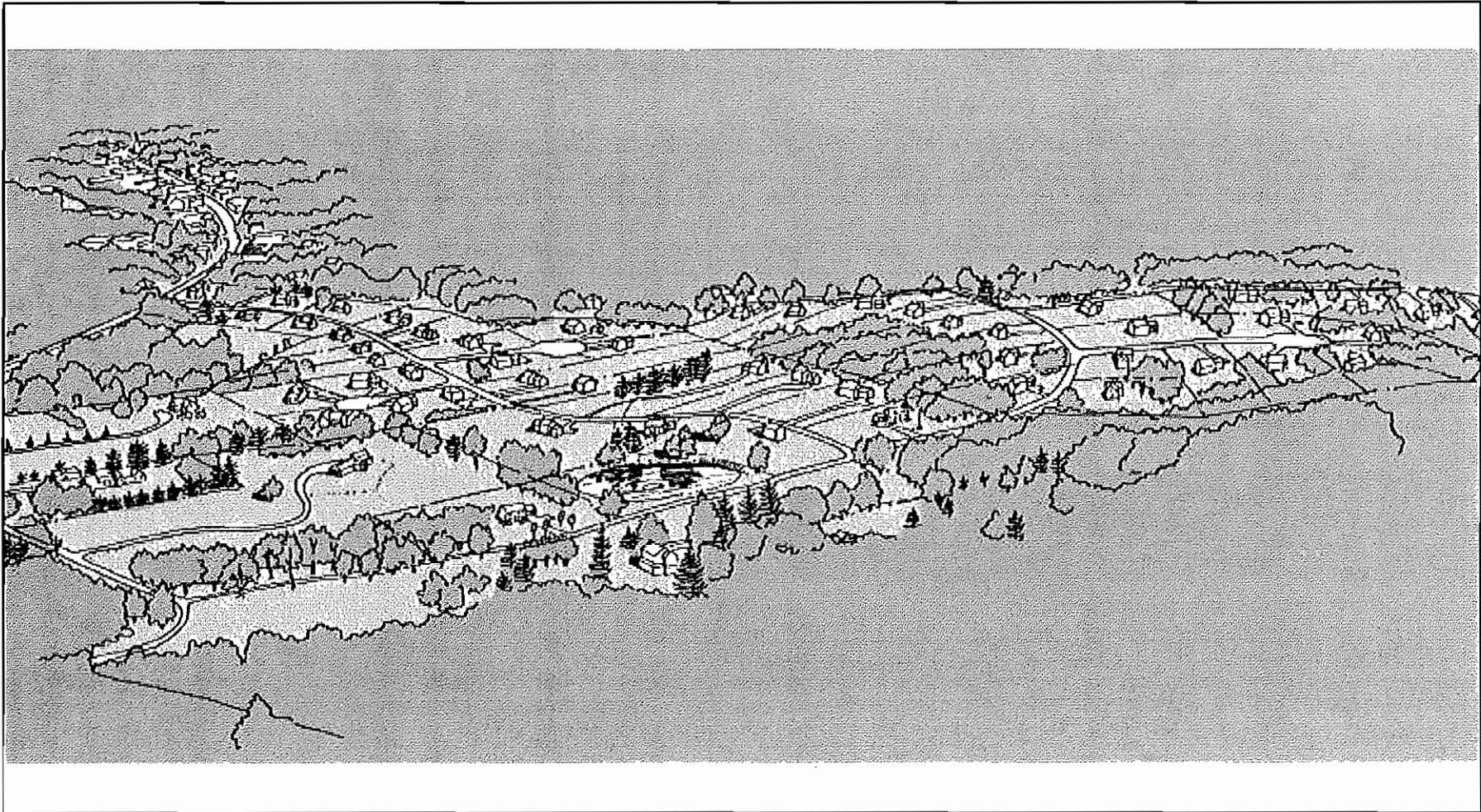
Community:

The site lies just at the edge of the developed center of Wakefield, with village streets on one side and low-density estate-style development on the other.

Visual Character and Context:

The character of the site itself is one of rolling farmland, with small meadows and fields, separated by hedgerows and wooded areas, and punctuated by streams and ponds. These features are visible from several points along surrounding roads, as well as from neighboring homes. It is one of the few remaining open spaces at the historic edge of Wakefield, and as such has an important visual role in maintaining this edge.

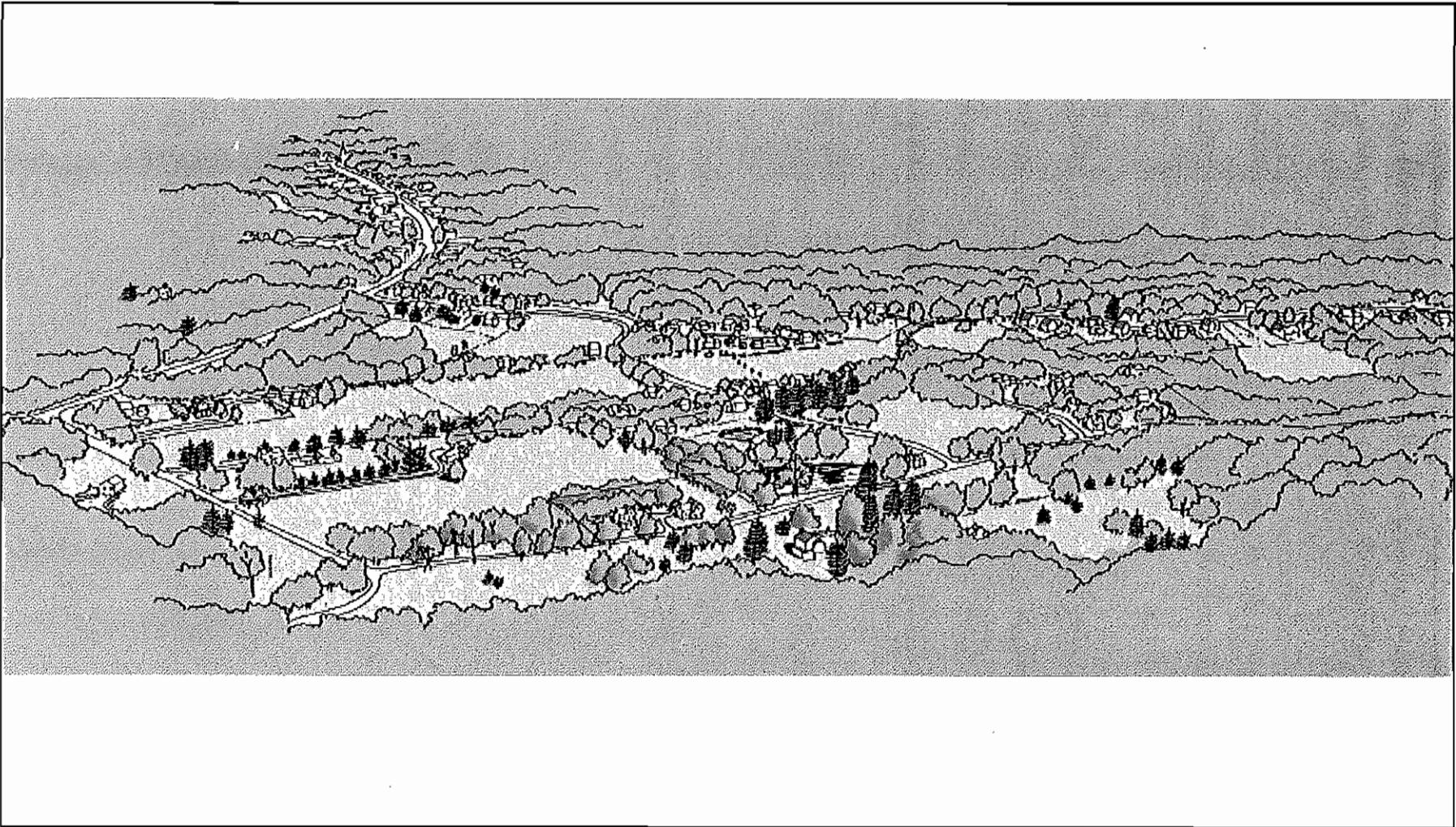
Village Edge - After Conventional Development



New subdivision roads cross the site, providing access to 20,000 s.f. lots. A few prime estate lots are also developed, particularly on the west side of the property. The new roads and house sites eliminate any chance of continued farming on the property. At the same time the visual variety within the site is lost behind the monotonous march of house lots across the landscape. Most importantly, also lost

is the sense of the old edge of the village: no longer the dramatic break between village and countryside so valued in the landscape of New England but now the same kind of suburban ring that has swallowed up most towns closer to our major cities.

Village Edge - After Creative Development



With a more creative approach to developing the site, the cluster provision of the zoning bylaw is used to reduce the size of the lots, which are located to blend into the landscape in a way that continues the existing pattern. Some new units are built adjacent to homes on the edge of Wakefield Center; the edge of the village thereby moving out into the site, but still maintaining a strong break between village and countryside. The remainder of the new houses are located in clusters tucked among the hedgerows and wooded areas on the site to reduce their visual

impact. A few homes are located on large estate lots, with careful siting of driveways and building envelopes to reduce intrusions on the visual character of the landscape. The result is a development that accommodates the same number of new homes as the conventional plan, but which preserves the rural character of the site and its value as a strong edge to the village.

Village Edge - Design Recommendations

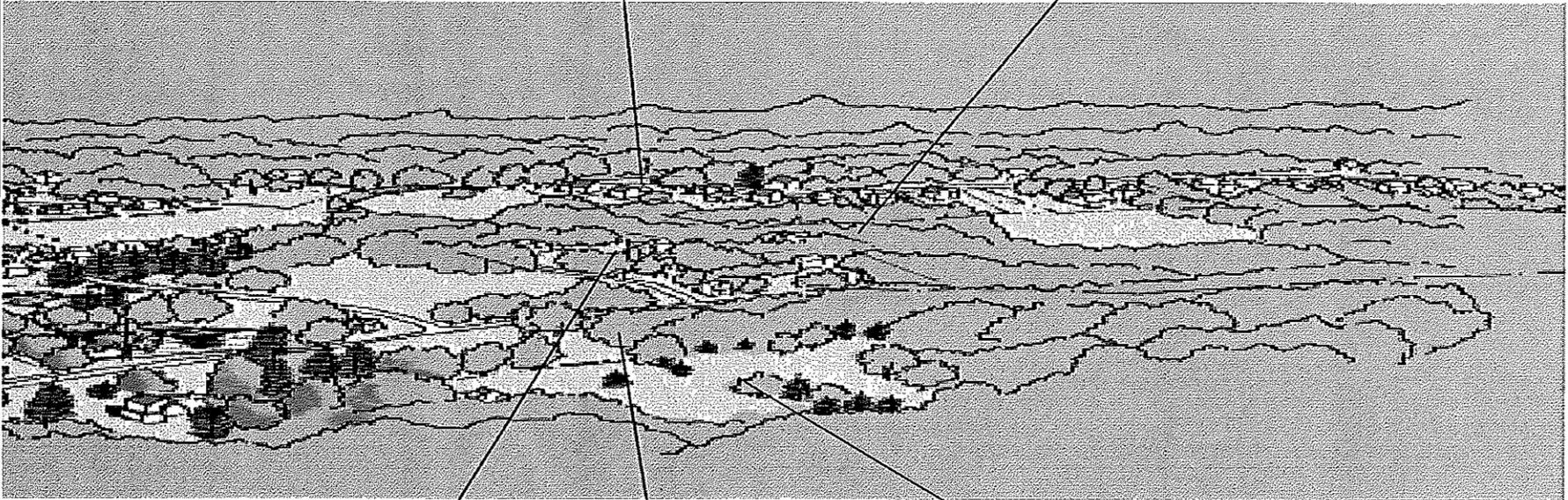
Site Planning:

Use development patterns surrounding the site as a guide to locating new units. Allow the village edge to expand into the site, but retain a strong break between uses. Use estate-style planning to locate some homes at edges of woods and fields. A central hamlet absorbs additional units in an areawhere several hedgerows come together.

Roads and Driveways: Keep paved road width to practical minimum. Roads and Driveways should parallel topographic contours and follow existing hedgerows and stone walls. Use shallow swales rather than curbs in a rural setting

Landscape:

Locate homes and driveways to preserve as many of the existing trees, walls, and ledge outcrops as possible. Create private yards for each home by locating buildings close to streets and lot lines where appropriate



Open Space:

Use preserved open space to retain meadows and cultivated acreage in agricultural use. Organize the open space to create a permanent greenbelt at the new edge of Wakefield.

Stormwater Management:

Surface drainage to naturalized ponds and wetland systems are most appropriate on a farm property. Locate necessary improvements to buffer and expand existing wetlands and waterbodies protected by law.

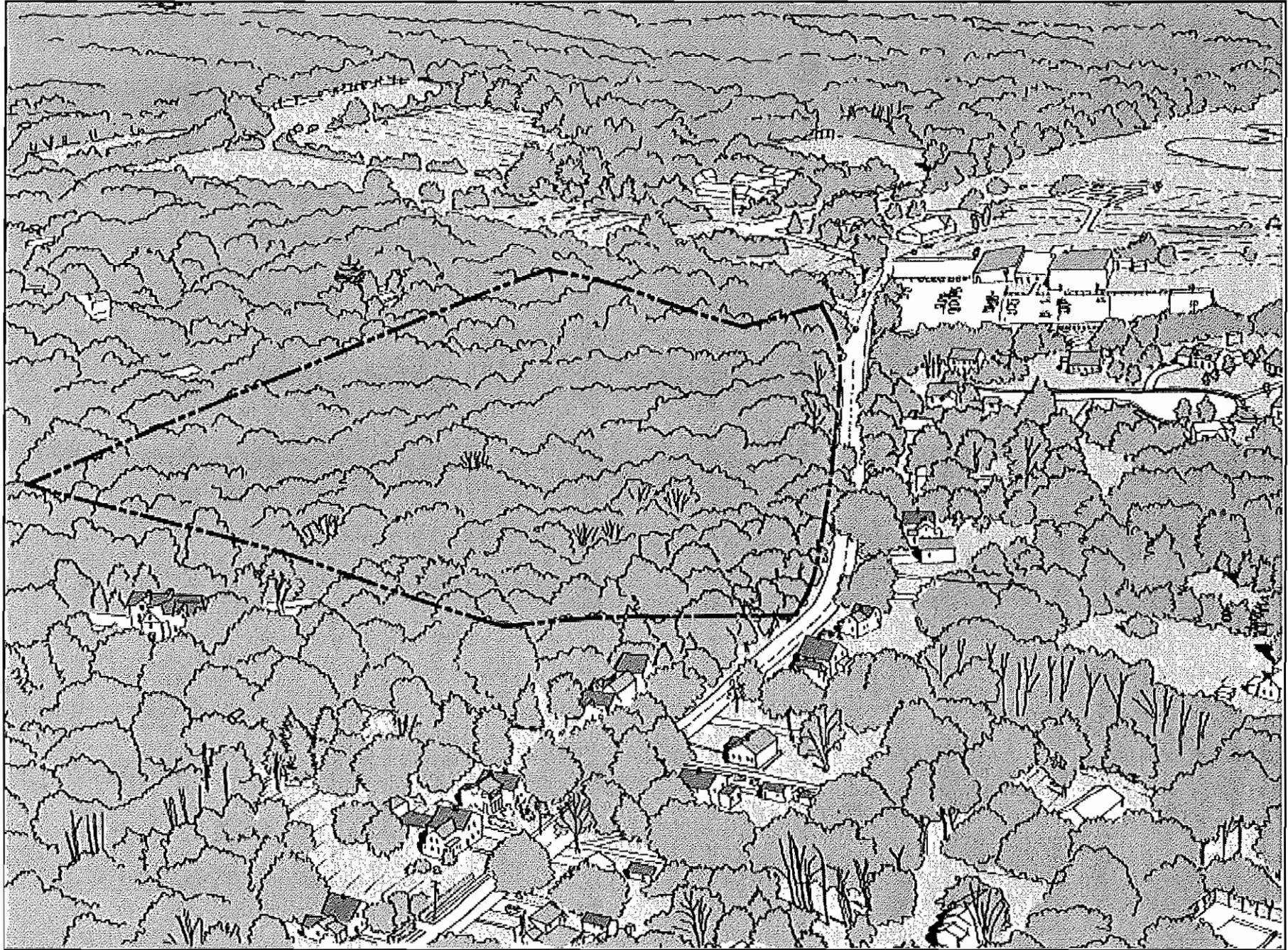
Public Amenities:

Views over the preserved farmland from individual units and new site roads are the principal public amenity. Links to the town center and the river greenway tie this preserved open space to the rest of the village.

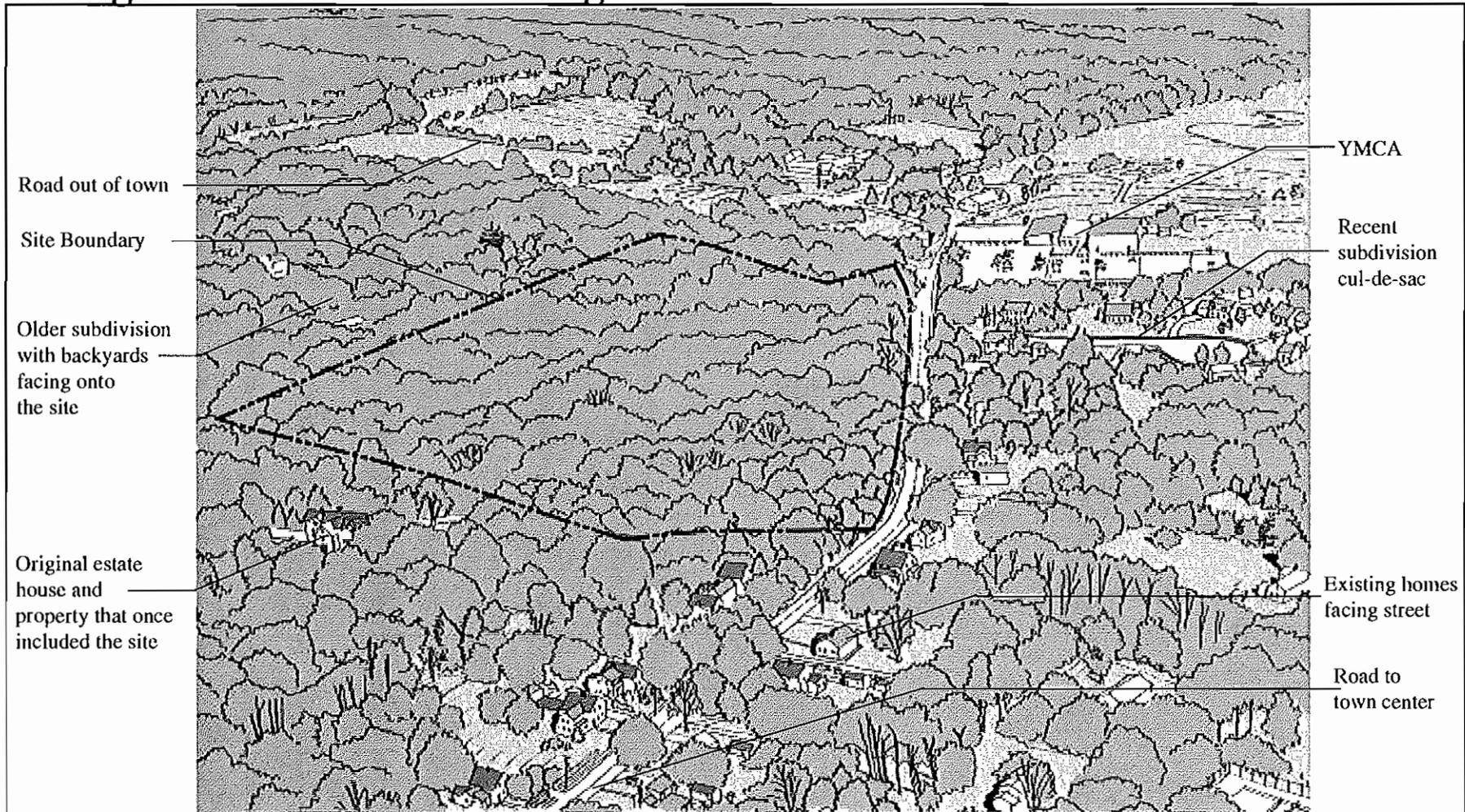
Architecture:

Use traditional village home styles in the local vernacular. Homes that are part of the village should fit in with existing neighbors. Dark natural colors help to hide new homes in the woods and edge of meadows.

Village Infill - Existing Conditions Before Development



Village Infill - Understanding the Site and Its Context



Ecology:

Old beech trees and mature understory are relatively unusual within the town. Large living and dead trees, as well as vernal pools within the site offer wildlife habitat. Since neighboring properties are mostly developed and no streams cross the area, limited movement of wildlife across the site would be expected.

Recreation:

The site is enjoyed informally by numerous abutters for walking and nature study. Shady sidewalk along the existing road makes an important pedestrian connection to the YMCA

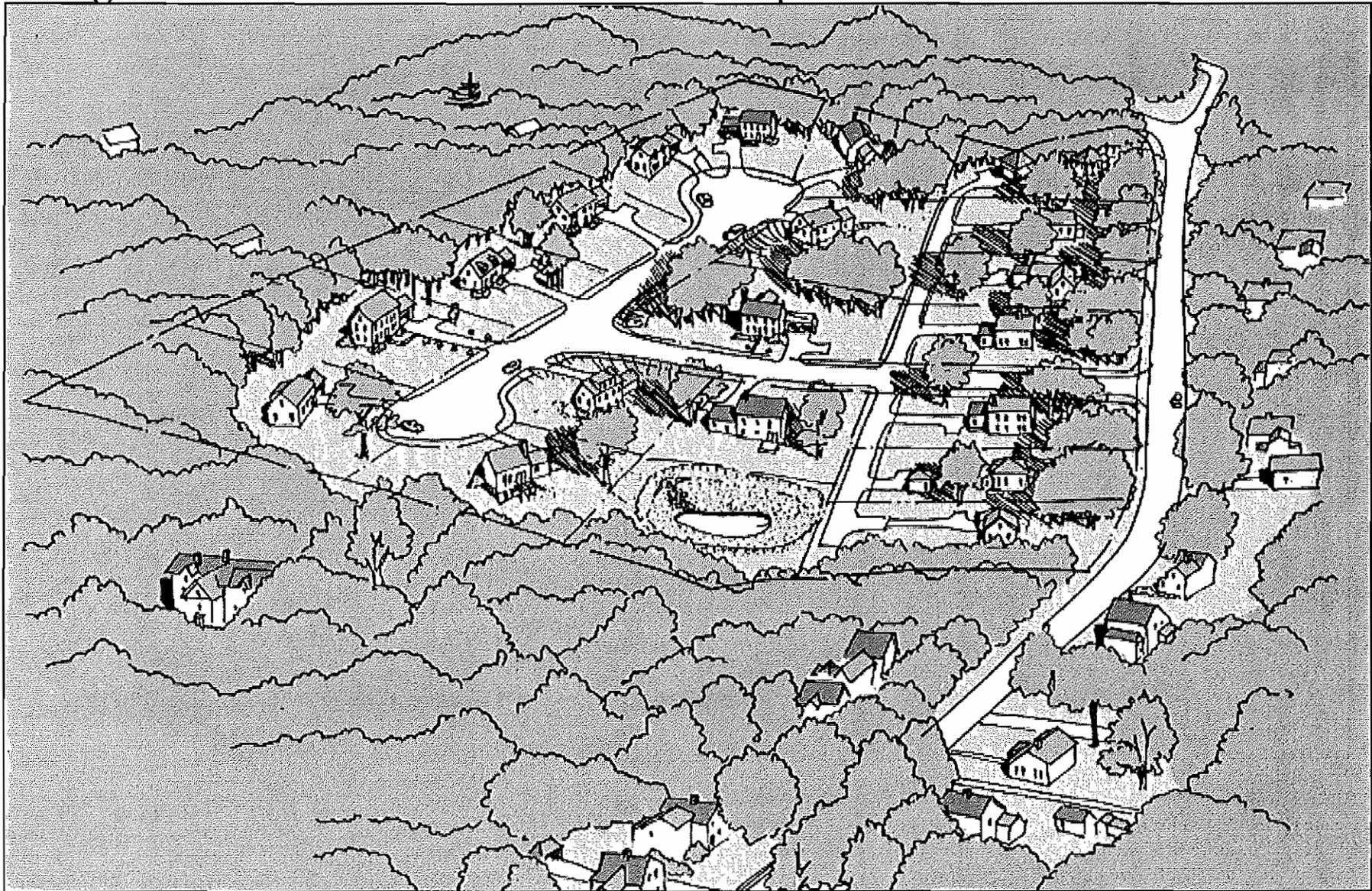
Community:

The site lies within a neighborhood of around 100 homes near the northeastern edge of the historic center of Wakefield. The existing road is used by everyone who lives in the neighborhood or goes to the YMCA.

Visual Character and Context:

With its stone walls and mature beech trees, the site is an important neighborhood open space: even though access is limited by private ownership, views from the road and neighboring back yards are a neighborhood resource. The character of the neighborhood is one of traditional village streetscape; houses with a strong relationship to the street, a front door, often with a porch leading to a sidewalk leading out to the street. The other pattern is one of the old estates: a stone wall with a gate, a long driveway leading to a house set well back from the street and only partially visible

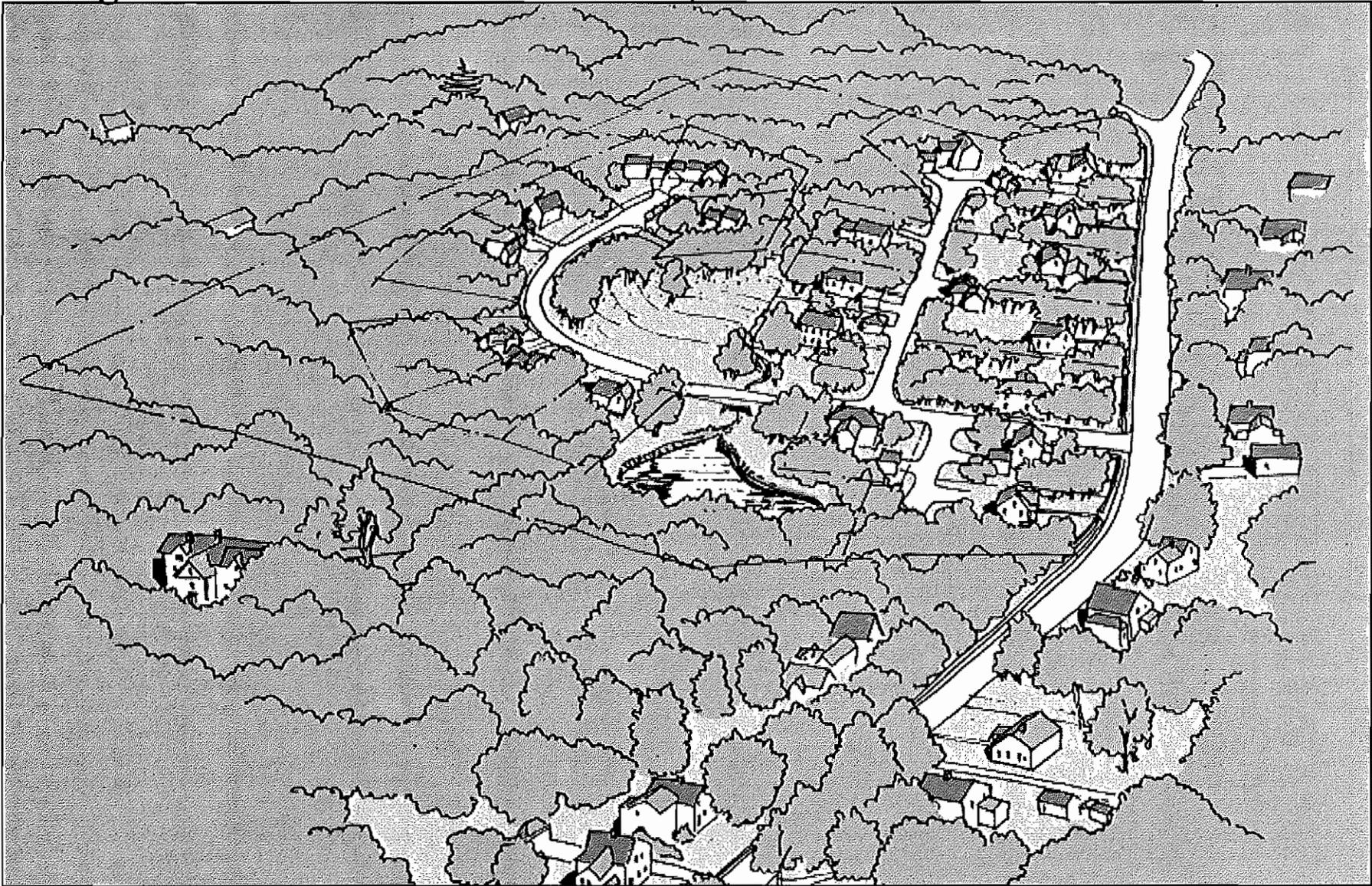
Village Infill - After Conventional Development



Current zoning allows nineteen 20,000 s.f lots with frontage on a 24' road ending in two 80' diameter turn-arounds. An easement at the rear of lots fronting on the existing road provides for rear alley access, which will replace 7 individual curb cuts on the public street and allow preservation of the stone wall and street trees. Within the site, however, construction of the road and dispersed houses leaves little

of the existing site unchanged. A stormwater detention basin handles run-off, but hidden from the public way by private house lots has little benefit as a visual amenity. While the development provides the most privately-owned space around each home, views are limited to the neighbor's house -- little of the existing character of the site remains

Village Infill - After Creative Development



Using the cluster provision of the zoning bylaws, the 19 units allowed under conventional zoning are built on lots of 10,000-15,000 square feet, with 40%-50% of the site remaining as protected open space. This open space is used as a central feature of the development; providing views from private homes, areas for recreation, together with a naturalized stream and pond system that serves to contain runoff from the site. Homes fronting on the existing street are located to continue

the pattern of existing older homes on adjoining properties, completing the village pattern, rather than competing with it. Reduced-width roads provide rear access to these lots, as well as lots facing onto the central open space network. The result is a development where individual lots are smaller, but where values of those lots are enhanced by a pleasing neighborhood design and shared open space amenities.

Village Infill - Design Recommendations

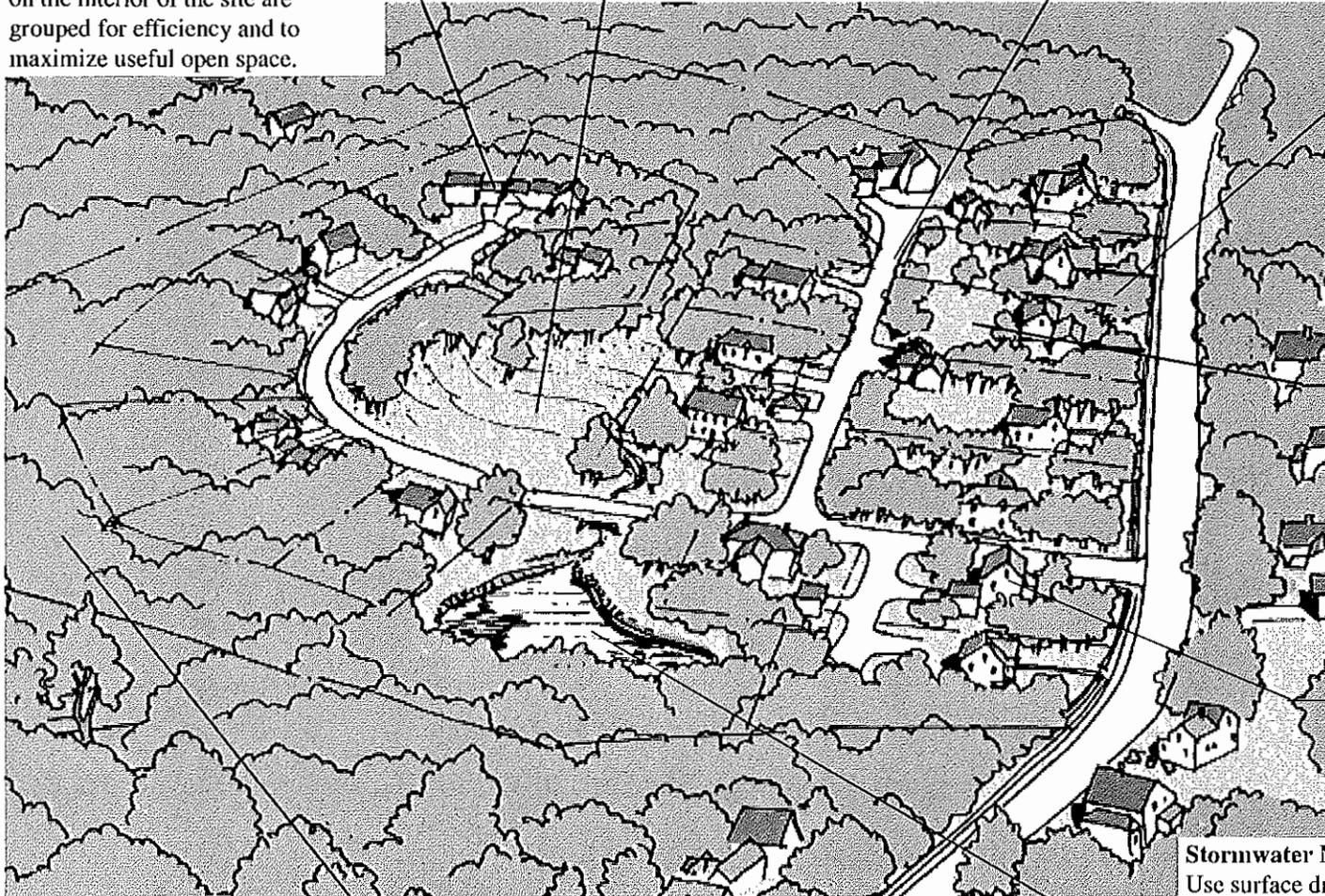
Site Planning:

Use existing neighborhood pattern as the basis of the development. New homes front on existing street with access from rear alley. Homes on the interior of the site are grouped for efficiency and to maximize useful open space.

Public Amenities:

Create central lawn for neighborhood activities. Use informal paths rather than sidewalks to link open space to neighboring properties.

Roads and Driveways: Keep paved road width to practical minimum. Provide access to frontage lots with rear alley. Use hammerhead turnarounds to minimize vehicle speed and site impacts.



Streetscape:

Maintain setback line of existing homes. Protect stone walls and roadside trees. Widen and improve sidewalk to improve walkability of the neighborhood.

Landscape:

Locate homes and driveways to preserve as many of the existing trees, walls, and ledge outcrops as possible. Create private yards for each home by locating buildings close to streets and lot lines where appropriate.

Architecture:

Use simple home styles and details found on adjoining properties; gabled roofs, porches, dormers, etc. Houses that touch at the lot line save space and construction costs.

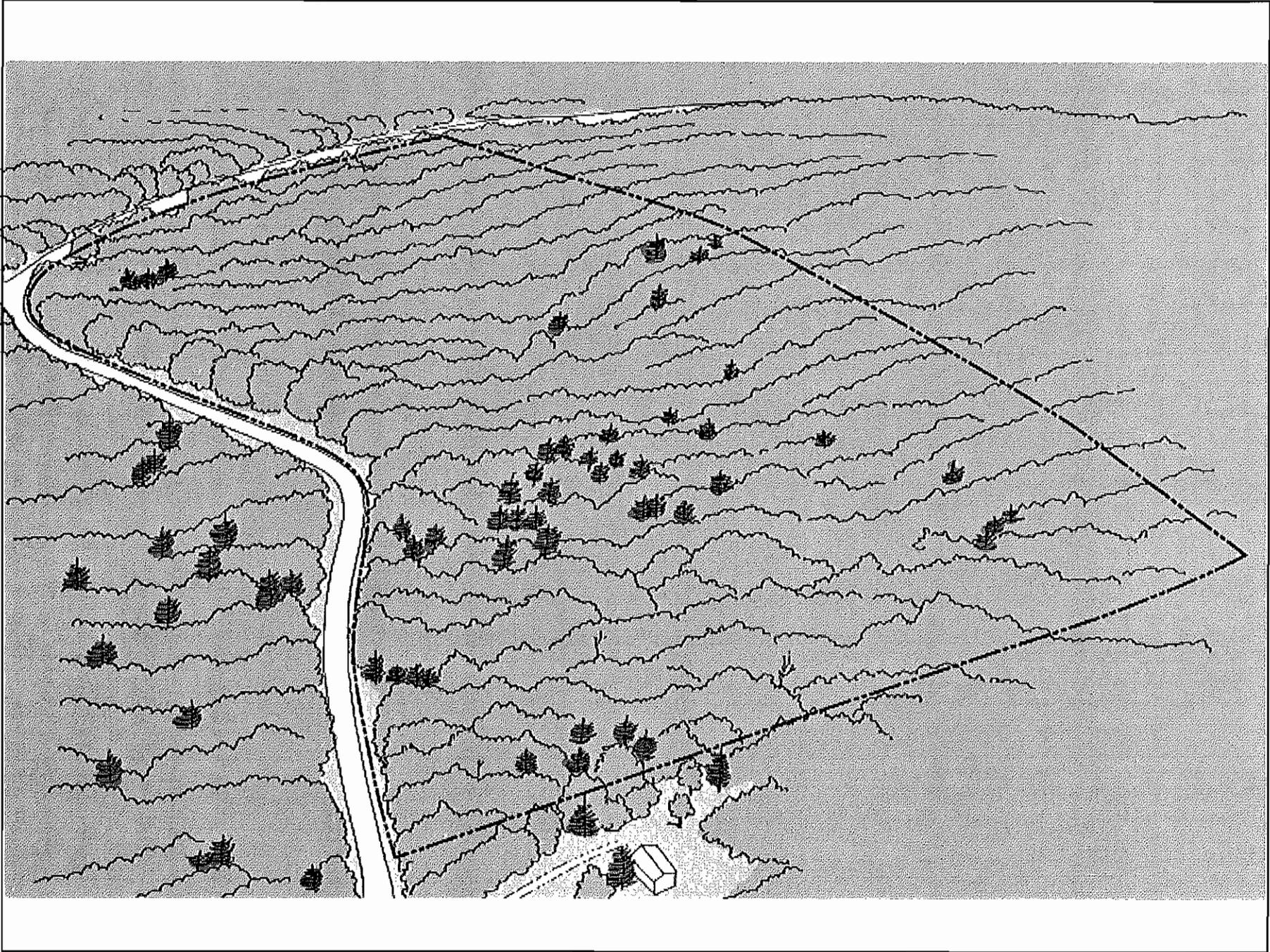
Stormwater Management:

Use surface drainage as much as possible rather than structures. Build off of existing site drainage, using improvements to create a focus for the public open space. Design surface drainage swales and retention areas to look like natural streams and ponds.

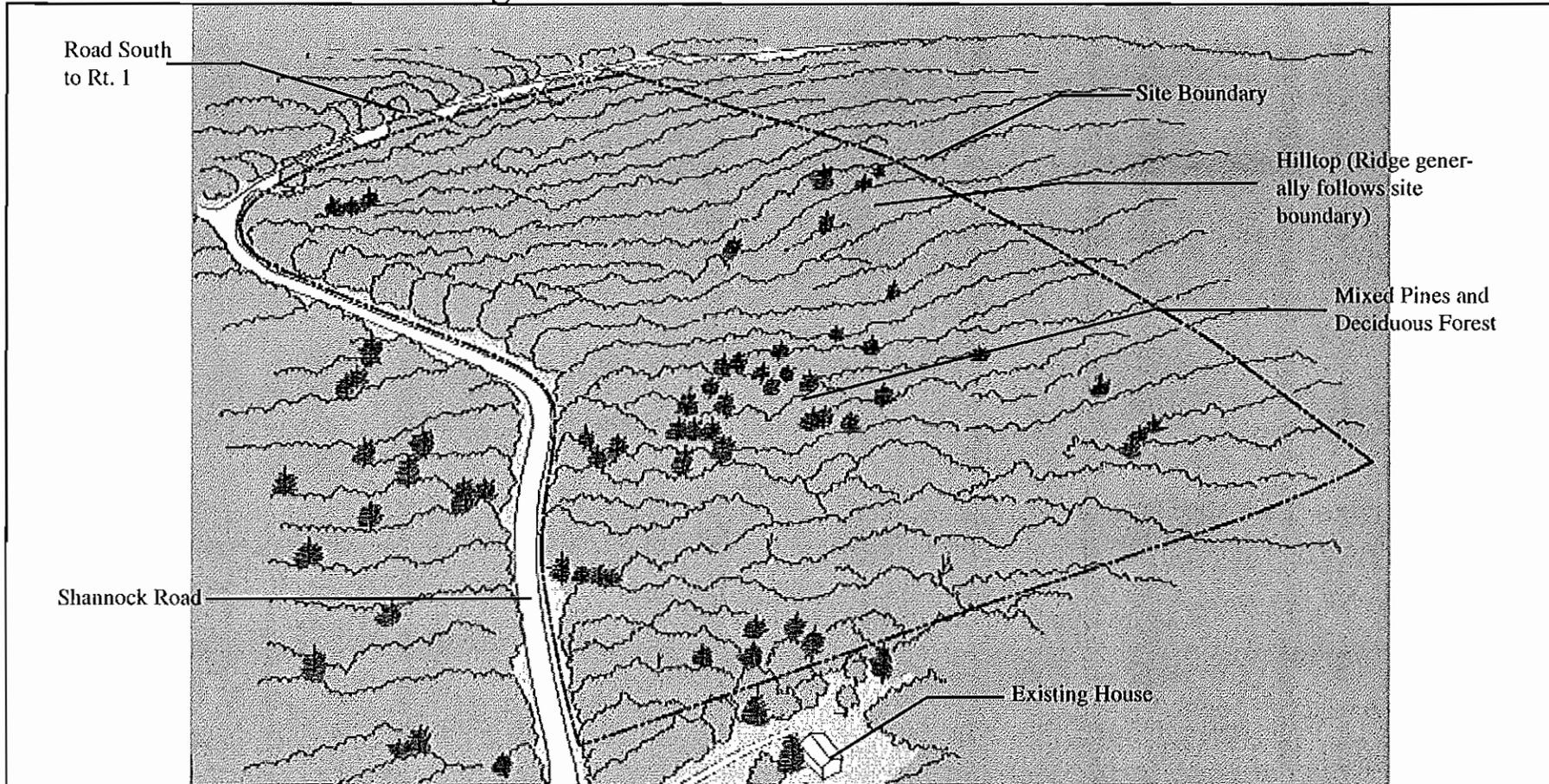
Open Space:

Layout common open space to create a central park -- providing views from homes and a focus of neighborhood activity. Create a buffer for abutting back yards, protecting neighbor's privacy and preserving wildlife habitat.

Wooded Hills - Existing Conditions Before Development



Wooded Hills - Understanding the Site and Its Context



Ecology:

Wooded hillsides do not support the numbers of plants and animals found in more productive habitats such as wetlands, but they are important for many plants and animals adapted to the mature forest ecosystem. Typically this means a larger area is needed to support an individual or given population. Where sites become fragmented by roads and other development, connections with adjoining forested parcels become more important. On a site like this, potential open space connections need to be mapped out ahead of time and the development designed around them.

Economy:

Like farming, forestry follows a cycle of profitability that often makes subdivision development seem like a much better alternative. On the town-wide scale, loss of many such parcels to development make continuation forest-based industries impractical. Another town-wide issue is the decline of tourism and quality of life for year-round residents as rural roadsides are developed for houselots.

Community:

The site is in an area of low-density residential development. Many scattered homes and isolated cul-de-sacs without a real focus or center.

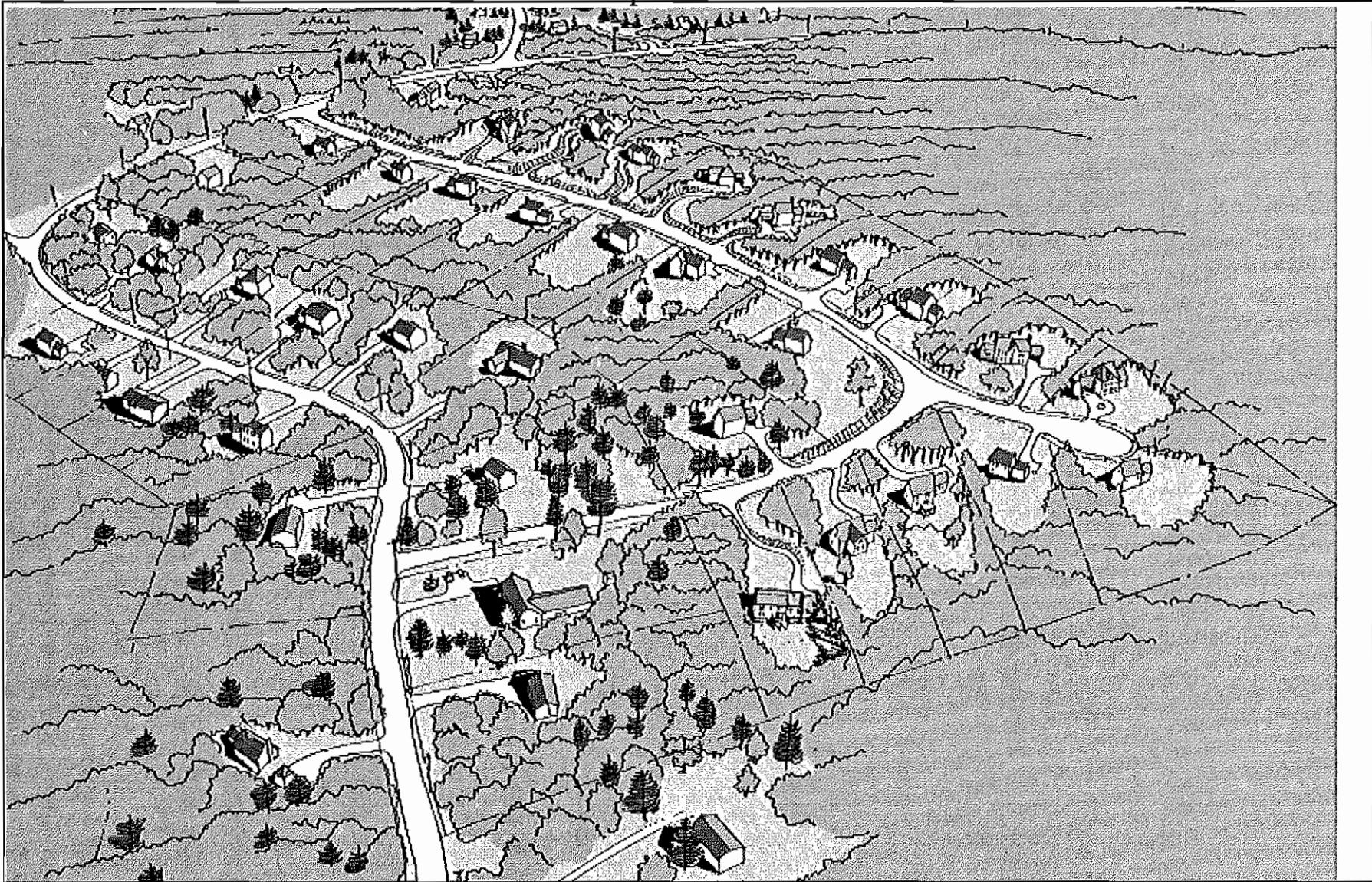
Visual Character and Context:

The site is heavily wooded, but fairly long views underneath the branches of the tall trees can be had from the roadside. The larger context is an area of winding roads through the hills, with quite a few homes, but still enough undeveloped land to give the sense of a quiet rural neighborhood.

Recreation:

The site is open beneath the trees, and some existing trails get informal use from neighbors. There are no important town-wide trails nearby, but important potential links north to the area of the Great Swamp.

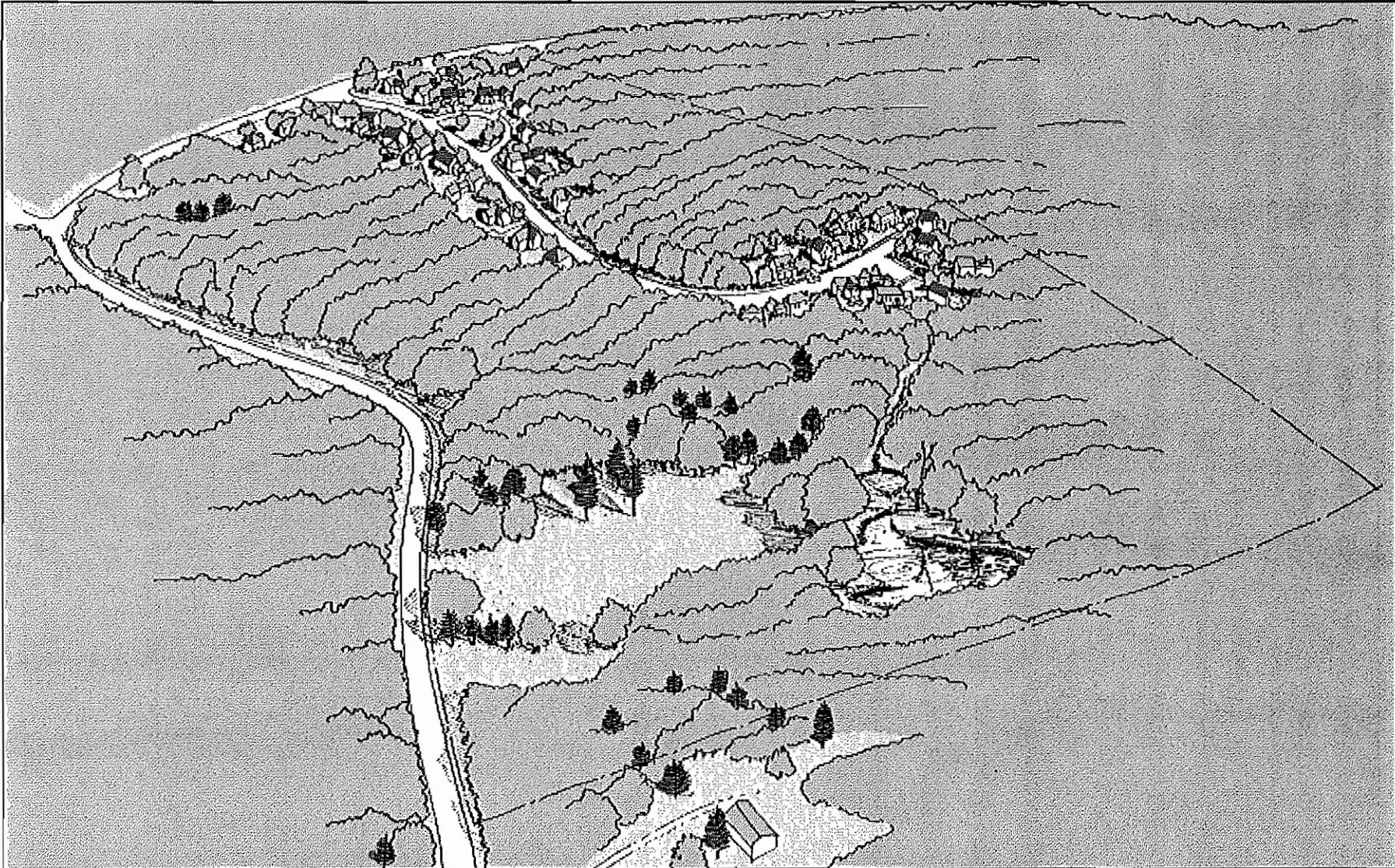
Wooded Hills - After Conventional Development



The zoning for the site specifies 40,000 s.f. lots with 150 foot frontage, resulting in a subdivision of 34 lots, some with frontage on Shannock Road, the others off a new subdivision road that carves across the hillside. Clearing and regrading to create the road, as well as that necessary to build a new house and septic system on each lot, results in the destruction of most of the existing forest on the site. Views

from Shannock Road would be dominated by a series of driveways and mailboxes, front yards, and a monotonous row of new dwellings. Most of the site's value as wildlife habitat is lost, as well as the corridors that are now used by animals crossing the site as they move from the hilltop to the wetlands to the north.

Wooded Hills - After Creative Development



The 34 lots allowed under the zoning for the site, each a minimum of 40,000 s.f., are built on lots of 20,000 s.f. using the cluster provision of the zoning bylaws. A new subdivision road enters at the upper end of the site, wrapping around the shoulder of the hill to connect two neighborhoods of new homes. The scenic roadside, the top of the hill, and important wildlife corridors, are permanently preserved as open space. Setback and lot width requirements are waived to allow buildings to be close to each other and to the street, which helps to create an

enclosed, friendly streetscape on one side of the houses, while yielding larger, more usable and private yards at the rear of each new home. A constructed pond/wetland system handles all the runoff from the site; a clearing nearby shows the location of a common septic system. Both these elements, while serving a practical function, are carefully designed and landscaped in order to fit into the natural surroundings. This, together with the preserved woodlands on the site, creates a public park for the residents of the development.

Wooded Hills - Design Recommendations

Site Planning:

Use the cluster provision of the bylaws to build the allowed number of units on smaller lots, preserving much of the site in its natural state. Protect views from Shannock Road, as well as a wildlife corridor leading from the top of the ridge to the wetlands across the road to the north. Arrange new homes in neighborhood groups to give some variety to the development as well as preserving an open space corridor to the hilltop.

Open Space:

Use open space to preserve public benefits, like views and wildlife habitat, as well as to enhance setting for the new homes. Each house in the development should have views and physical access to the open space system.

Landscape:

Preserve existing trees and stone walls, and keep re-grading to a minimum. Plant native trees and shrubs to blend with the existing forest and to provide food for wildlife. Design should be informal and naturalistic.

Public Amenities:

Design necessary improvements, such as the clearing for the shared septic system and the stormwater treatment pond/wetland, to create a public park that will be the focus of the open space on the site. Keep portions of the new road clear of development to add variety to the driving experience as well as to facilitate trail connections.

Roads and Driveways:

Keep paved road width to a practical minimum and use hammer-head turn arounds to slow down cars and make the street more inviting for pedestrians. Driveways should be short, informal, shared wherever possible, and located to keep cars away from outdoor living spaces.

Streetscape:

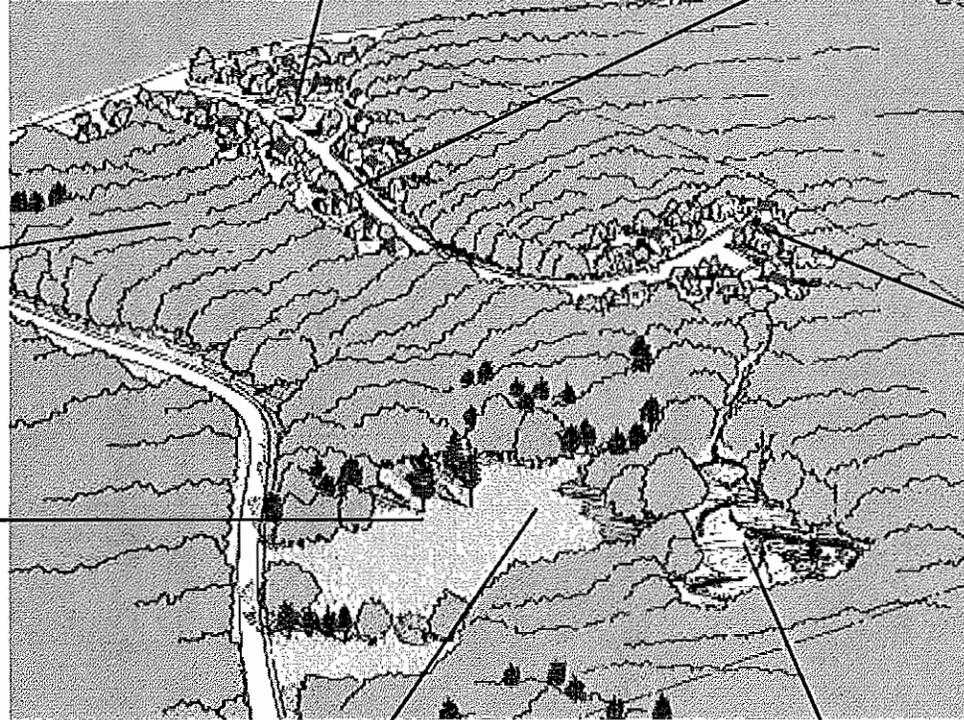
The new road forms the spine of the development, and should be designed as a public space, with informal sidewalks or paths within the right-of-way to encourage walking. Private front yards should be separated from the public streetscape by fences and hedges. Sidewalks should lead directly to a trail system giving access to the common open space areas.

Architecture:

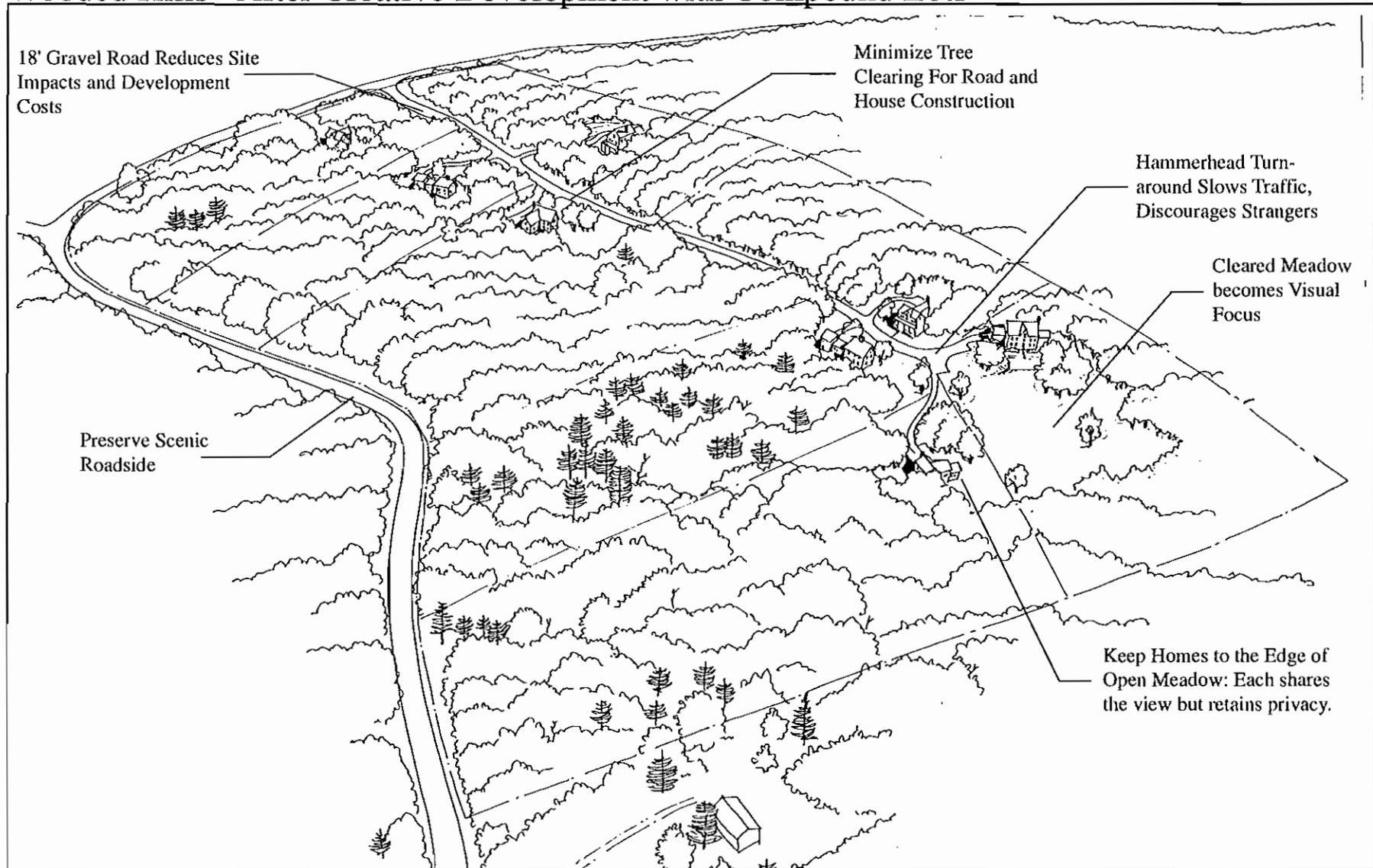
Use traditional village-style architecture, with porches, gables, and varied rooflines, to add variety and livability to the development. Natural materials and dark colors will harmonize better with the wooded setting, and reduce the visibility of homes near the top of the ridge. Keep garages to the side or rear of homes to make the streetscape more people-friendly.

Stormwater Management:

Runoff from the road and houselots should be collected in surface swales and conducted to a constructed pond/wetland system for treatment. On a sloping, wooded site potential erosion and siltation problems need to be carefully managed during construction: temporary swales and siltation basins can become part of the permanent stormwater treatment system if planned for.



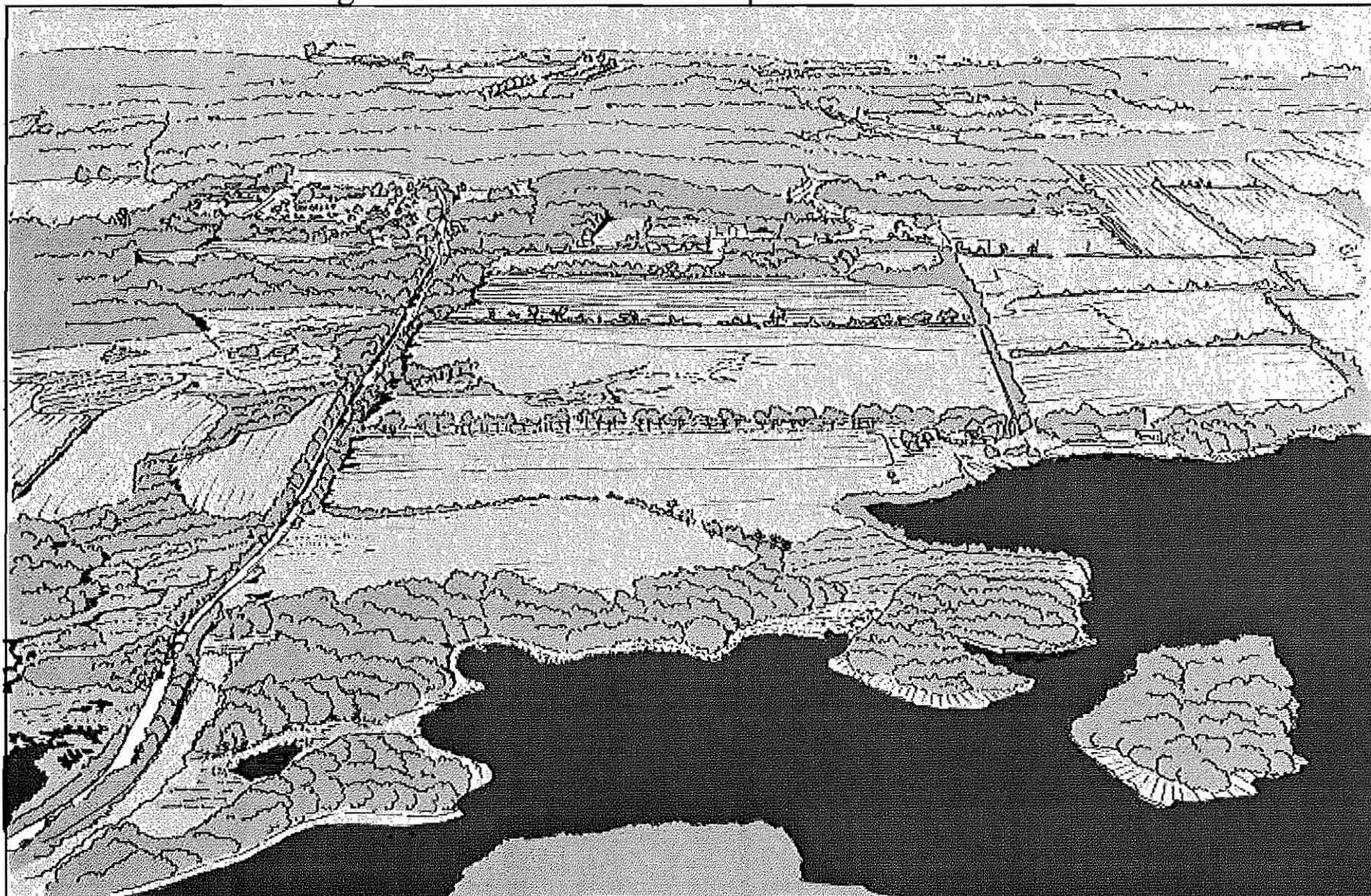
Wooded Hills - After Creative Development with Compound Lots



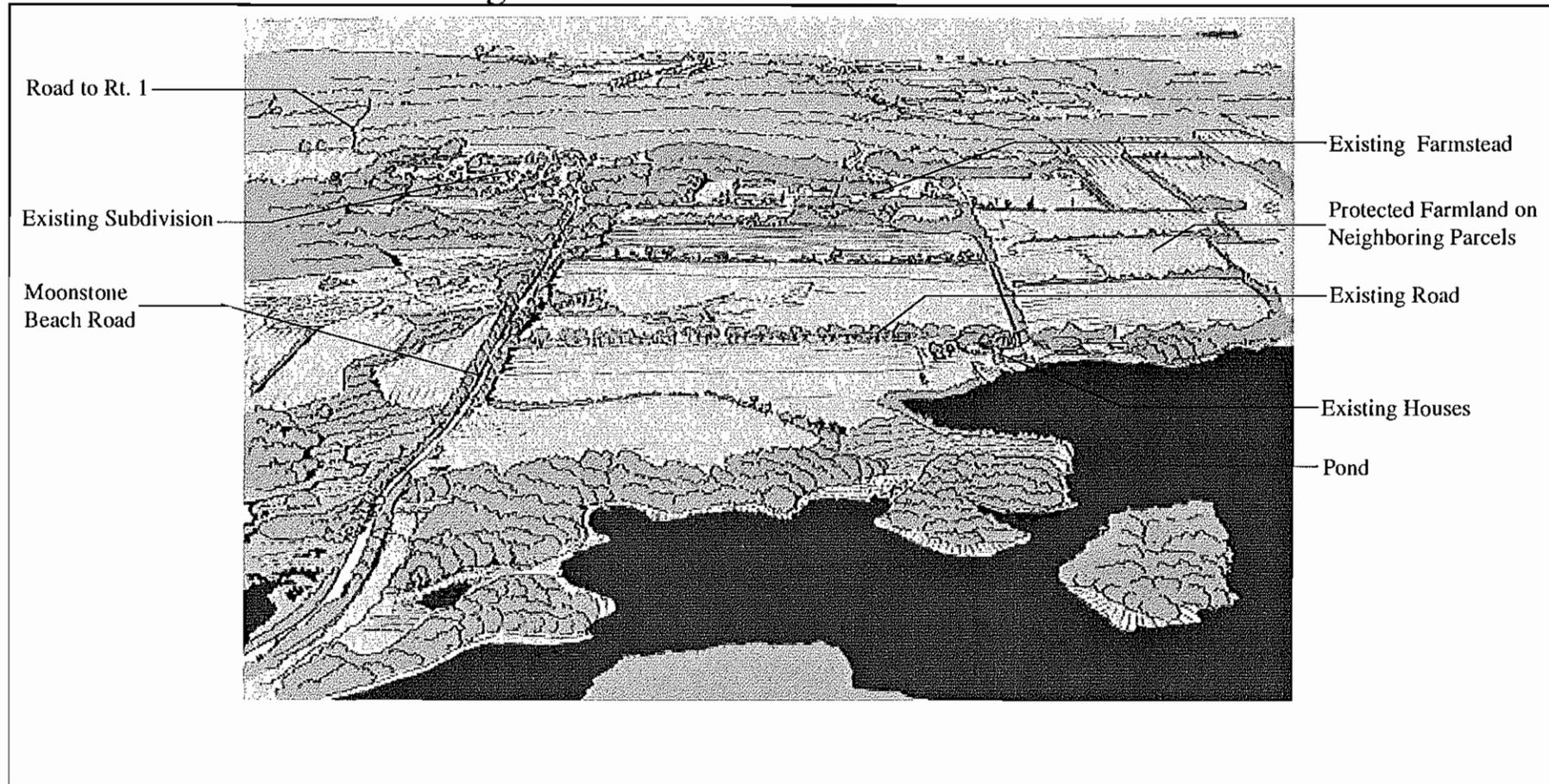
Using the Residential Compound provision of the Subdivision Regulation, 8 lots, each with a minimum area of 200,000 s.f., are created on a new subdivision road. In return for this lower density, South Kingstown allows reduced development standards: an 18' gravel road, in this case ending in a simple hammerhead turn-around. Despite having fewer lots to sell, reduced construction costs can make for a profitable development. The plan is modeled on an old estate theme: each house

is located to have views and privacy, but also to have a formal and dramatic approach from the road. Even with the large lots, the homes are grouped somewhat to avoid a monotonous repetition of eight duplicate lots. The resulting open spaces create an interesting variety of views as one travels down the new street, which culminates in views across a meadow between two of the new homes.

Coastal Farm - Existing Conditions Before Development



Coastal Farm - Understanding the Site and Its Context



Ecology:

Active use as farmland limits breeding habitat to trees and hedgerows within the upper part of the site, though these are rich in animal life if left alone. Wetlands and pond edges along the south side of the site are of course important habitat for many salt pond species.

Community:

The site is in an area historically divided up into large family farms, but which also has a number of small subdivisions and beachfront cottage settlements. While there is no real sense of neighborhood, within these separate clusters there is generally a long tenure of

ownership and a strong sense of ownership that extends beyond the boundaries of individual lots.

Economy:

While the income from farming would not seem to justify preservation of the use, even small farms like this one can in the aggregate have a large economic impact. Perhaps more important is the benefit open views and scenic roadsides have to the continued success of tourism, clearly one of the most important local industries.

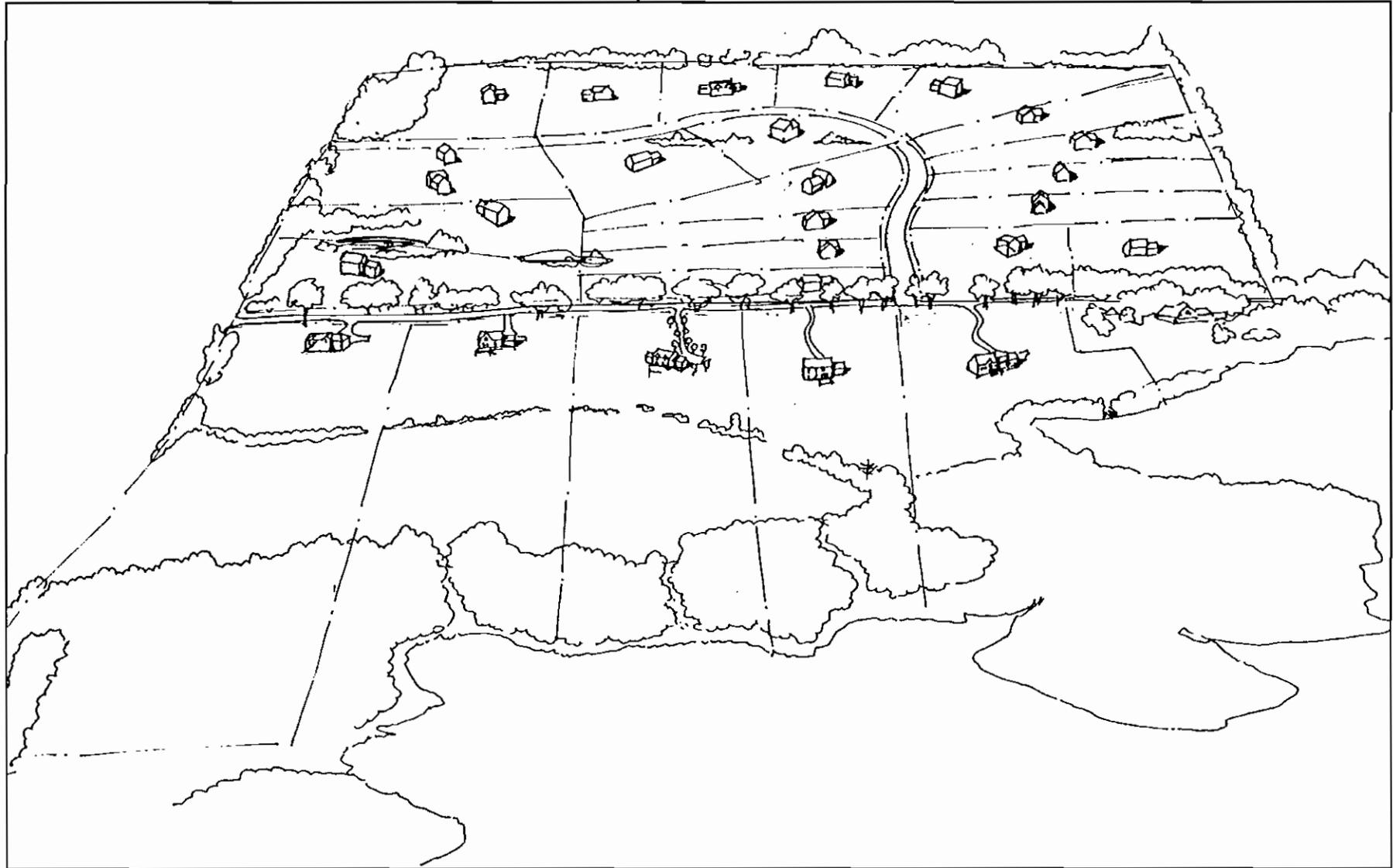
Visual Character and Context:

View of the site are often blocked by shrubs and walls along the roadside. In some ways this makes the few openings even more dramatic. Tall trees along the adjoining roads create shady corridors, from which the passer-by looks out over the bright sun-baked fields.

Recreation:

There is no public access to the site, and informal use is discouraged by farm activities, stone walls, fences, etc. The two adjoining roads, however, are major beach-going routes enjoyed by thousands during the summer months.

Coastal Farm - After Conventional Development



Development as a conventional subdivision offers few options but to spread the houses equally throughout the site. Each homeowner has the same amount of land, regardless of interest or ability to maintain it, and continued farming is no longer possible. Views from the roadside are of monotonous house lots. Despite the unique setting just a few minutes from the beach, the character of individual lots is indistinguishable from any other subdivision.

Coastal Farm After Creative Development



Using the cluster provision of the bylaw, homes are constructed along a new road through part of the site adjoining an existing cluster of houses. The remainder of the site is preserved with a permanent conservation easement, including a provision to maintain active agricultural use. Lot sizes vary, with those closer to the road approaching the minimum of 20,000 s.f., while those around the edges can be larger. The farmland, for example could be part of a single large building lot, with appropriate deed restrictions on use and location of the principal dwelling. While the new homes are on smaller parcels than they have to be, values are maintained

by views from each unit over the preserved open space. Additional benefits of using clustering in this case include preservation of the land adjacent to the salt pond as a common recreation area, with paths to the pond and the beach. Reduced road costs allow greater attention to street tree planting, privacy screening, fencing, etc. -- yielding better landscaping and more privacy than the conventional subdivision plan. The result is a pattern of development that continues the visual interest and variety, and the broad range of ownership options typically found in historic seaside hamlets.

Coastal Farm - Design Recommendations

Site Planning:

Using the cluster provision of the bylaws, build homes in a village on one corner of the site while keeping the rest as productive farmland. While views from the beach road are thereby preserved, the pattern on the cross road is changed by the addition of the new village, but retains something of the traditional pattern of dense village center surrounded by open space.

Open Space:

Maintain the bulk of preserved open space on the site as active farmland; create small neighborhood open spaces within the development to provide a visual and social focus for the residents.

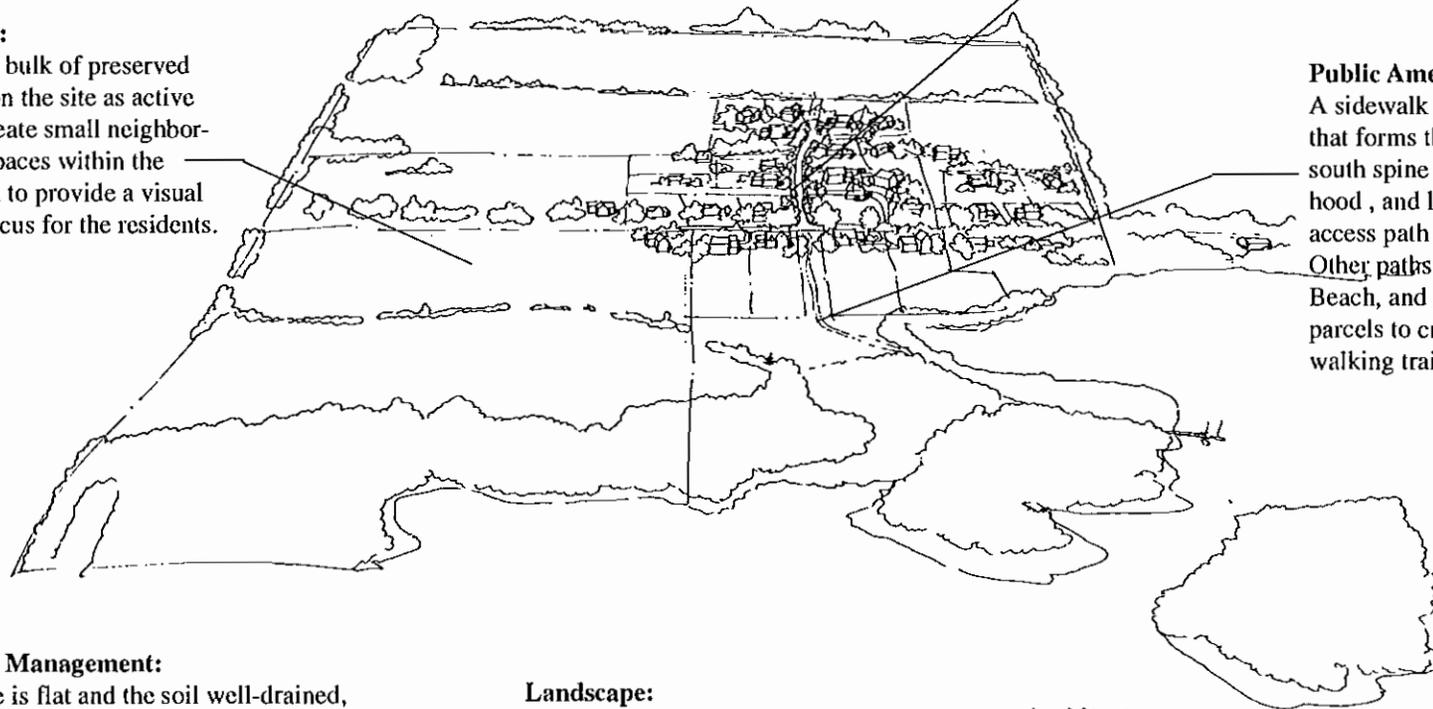
Roads and Driveways: Keeping paved street width to a practical minimum and use of hammer-head turn around will help slow down cars and make the street more inviting for pedestrians. Driveways should be short, informal, shared wherever possible, and located to keep cars away from outdoor living spaces.

Streetscape:

The central road corridor and sidewalks should be lined with trees to encourage walking to the beach and ponds. Sidewalks and paths should be durable but informal, paved with gravel or shells.

Public Amenities:

A sidewalk follows the road that forms the central north/south spine of the neighborhood, and leads to a common access path to the salt pond. Other paths lead to Moonstone Beach, and link to adjoining parcels to create an east/west walking trail network.



Stormwater Management:

Since the site is flat and the soil well-drained, runoff should be retained on site and re-infiltrated through the use of gravel trenches, vegetated swales and ponds. Design of surface swales and detention ponds should be informal and naturalized, with broad, shallow edges for safety, rather than chain-link fences. If ponds are designed within the farm area, it would be better to fence in the adjoining edge of the village rather than the pond itself -- this would help to keep children and pets off the farm fields.

Landscape:

Preserve existing trees and stone walls, and keep re-grading to a minimum. Trees and shrubs adapted to the coastal plain should be used over more tender introductions. Design should be simple, with an emphasis on screening to create private yard areas for each home.

Architecture:

The rambling, added-on-to homesteads and vacation compounds that have historically dotted the coastal plain should serve as a model for new homes. In an area that is exposed to storms, wind and salt spray, it makes sense to keep houses close together and low to the ground. Materials should favor durable cedar siding or shingles, and simple color schemes. At least one part of each house should have a strong visual relationship with the adjoining street or other public space.

Chapter 6 - Issues in Residential Design and Development

This chapter is intended to explore in more detail specific issues in residential development. Each page is a stand-alone discussion of a specific issue, from general site planning concerns to details of architecture and landscaping. Its purpose is to demonstrate good practices in planning and design that are valid in all of South Kingstown's diverse landscapes.

While the design scenarios that make up Chapter 5, are meant to be seen as comprehensive solutions to designing a site within its context, the issues discussed in this chapter are presented independent of particular sites or contexts in order that the reader can see them more clearly. The reader can therefore go directly to an issue of immediate concern or curiosity — keeping in mind that in reality, these issues are inextricably linked and interdependent - or should be. The danger of separating the issues is that they can become nothing more than a checklist of rules to be followed. The result is a design which meets all the separate criteria, but lacks either a unifying visual theme or functional elegance. As too often happens with the interpretation of zoning ordinances and subdivision regulations, this leads to subdivision design that neither looks good nor works well.

Users of this manual are therefore urged to learn from the discussion of individual issues, but to remember that the best designs are built around creative solutions that solve many problems at once. This is the lesson of South Kingstown's rural farmsteads, historic villages and town centers: while these communities evolved over hundreds of years it is possible to design new neighborhoods that look as good and work as well.

The issues are arranged in general categories, as listed in the table of contents:

Site Planning: Concerns the overall pattern of development on a site; what uses are included and how they are arranged. Perhaps the most critical decisions in site development are made around these issues, for no amount of attractive detailing or lush landscaping can make up for a bad masterplan. In South Kingstown's rural landscapes these issues are doubly important: for only through careful planning can scenic vistas and traditional activities be continued.

Roads, Driveways and Parking Areas: Cars are an important part of people's lives, for good reason, but vehicular access and parking requirements too often become the tail wagging the dog of community design. There are many ways to meet the needs of the automobile while still creating more livable, pedestrian-friendly neighborhoods.

Streetscapes and Landscaping: The idea of the streetscape is based on the notion that the "public" street, that is everything that is enclosed by the structures lining both sides of a road, should be designed as a cohesive unit. This applies to functional issues, like sidewalks, location of benches, and drainage; as well as visual issues involved in creating a unified design. The goal of streetscape design is to create out of the many parts a cohesive whole that is a public space distinct from the private yards and homes that surround it. This is a key part in creating memorable, livable communities.

Architecture: While the design of houses is rarely discussed in local regulations and ordinances, collectively the appearance of homes in a new subdivision has an enormous effect on the visual quality of the development. While styles come and go, certain fundamentals of good design remain constant -- including the general scale and massing of buildings, the shape of the roofline, the size and location of doors and windows, and materials used to cover walls and roofs. As in other aspects of residential design, looking at local architectural tradi-

tions is instructive. Traditional house design evolved in response to climate, availability of materials, and local cultural traditions -- all of which remain important, especially as consumers demand homes that cost less to heat and cool, are efficient to maintain, flexible and expandable.

Stormwater Management: Like most elements of residential planning, dealing with stormwater was for many years seen as just a functional problem, calling for a plumber rather than a designer. But the experience of many communities is that drainage design, particularly design of drainage structures, swales, detention basins, and the like, has an enormous effect on the appearance of a subdivision. With a little care, the improvements necessary to deal with stormwater runoff can be "leveraged" to produce a host of other benefits: creating scenic vistas, wildlife habitat, and recreational amenities, while doing a better job at controlling pollution than traditional solutions to the problem.

Neighborhood Amenities: Creating more livable neighborhoods means making the community the real focus of the design, the axis around which all the individual homes revolve. This can be accomplished in many ways, but as with the other issues, it means thinking about both functional and aesthetic issues and coming up with solutions that work with both sides of the coin.

Landuse and Development Pattern

General Guideline:

Both what is built - the proposed land use- and how it is built - the development pattern - should be based on the existing visual character of the site and its physical capabilities. Mixed uses are encouraged in both rural and village settings. In all districts, design should start with models that already exist in the area: the rural farmstead or estate; the crossroads hamlet, the village or mill town main street -- each offers a wealth of ideas for development patterns that are more efficient to build and maintain, encourage walking, and foster a sense of community and neighborliness.

Discussion:

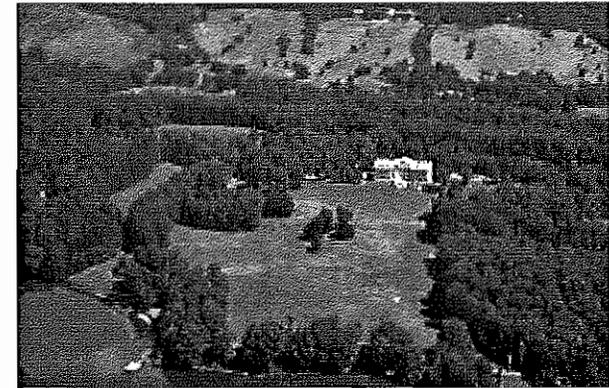
Zoning, developed over 100 years ago to control development in cities and to separate heavy industry from residential districts, succeeded too well. Today, most uses are needlessly forced into separate districts, while development within districts is further dispersed by large lots and excessive setback requirements. This approach tends to erase existing site features, destroys the character of both rural areas and historic villages, and forces a dependence on the automobile. Far better is an approach that bases uses, density and design on a careful analysis of the existing natural and cultural patterns in and around a given site.



Not recommended: Single-use districts with restrictions on lot size and shape that foster monotonous "suburban" development patterns.



In rural districts land uses and development patterns have historically been tied to the use of the land. This is clear in the case of a rural farmstead (above, left) where each building in the cluster has a functional relationship with the surrounding landscape. Even rural estates, however (above, right) traditionally had a strong functional relationship with their context. In each case the building and the landscape are part of a unified composition in which neither is dominant -- by contrast the typical suburban house tends to ignore its surroundings.



Mixed uses have long been part of the rural landscape, especially in more isolated hamlets where small mills, farms, and perhaps a general store clustered at a crossroad.



With every piece of land in productive use, old-time builders kept houses close together, even in rural areas. Today's builders can use the same techniques to save open space, lower construction costs, and enhance community spirit.



In areas within or adjacent to existing village or town centers, uses and development patterns should build on what is already there: making pedestrian connections, linking streets into a network, and matching lot size and setback patterns.



In areas already fragmented by disjointed residential or commercial growth, new development can serve to organize circulation and focus growth around new centers for each neighborhood

Building Placement and Alignment

Guideline:

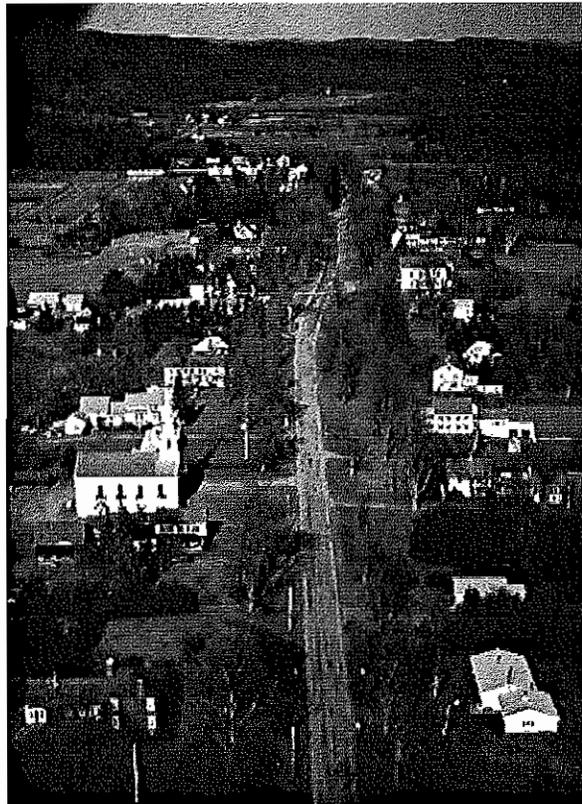
Structures in new communities should be placed with a consistent setback from the street and aligned to be either parallel or perpendicular to it. Isolated structures should be aligned with elements of the landscape to create a unified composition. Location and alignment of buildings should be included in the design process as streets and lot lines are planned. Buildings should be placed so that the largest possible yard areas remain for the use of residents.

Discussion:

A consistent approach to placement of buildings, and a formal relationship with the street helps to tie a new development together visually and functionally. Buildings aligned to form a continuous "wall" serve to enclose the public street space, enhancing the sense of place and community. Even isolated structures can have a formal relationship to the street or other elements of the landscape that helps to tie the building to the land. In both cases new structures serve to create a composition that is greater than the sum of its parts.



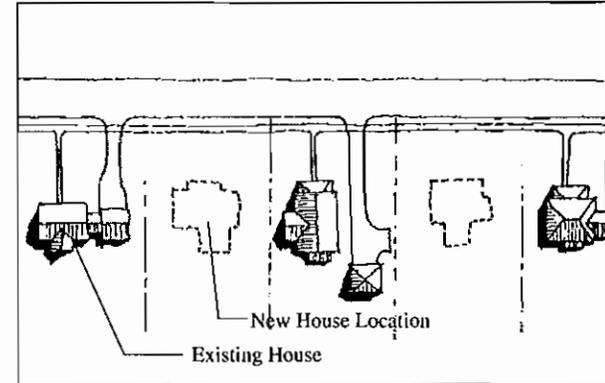
In rural areas, structures should be placed and aligned to relate to landscape elements. Individual structures (above, left) should be aligned with important views or key site features like existing roads, stone walls, hedgerows, or forest edges. Groups of buildings (above, right) can relate to shared open space, natural elements or topographic features.



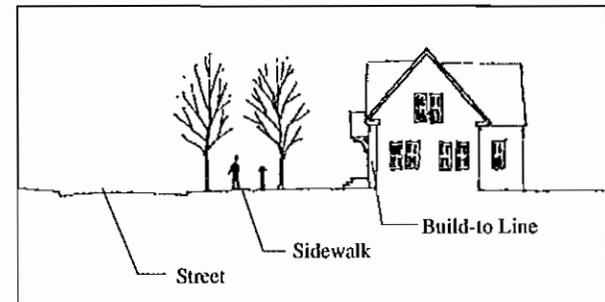
In town and village settings, buildings should be placed to help enclose and define public space along streets, squares, or parks.



Not recommended: buildings placed with no relationship to the street or each other, resulting in visual chaos without a community focus.



Infill along existing streets should match the location and alignment of surrounding structures.



New streets should be designed so that homes share a consistent setback or "build-to line." The desired setback should reflect the size and scale of the street and proposed homes, size and width of lots, and character of the surrounding neighborhood.

Lot size, Setbacks and Frontage

Guideline:

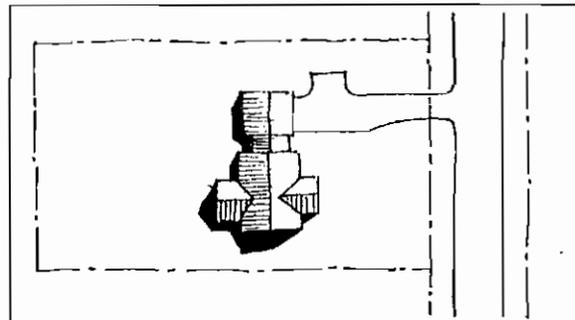
Use a mix of lot sizes to encourage variety and take advantage of unique site features. Use smaller lots near neighborhood centers to encourage a focus of activity and community life.

Discussion:

Dimensional requirements are more useful in preventing mistakes than in creating interesting, livable communities. While some minimums need to be observed, better results will be obtained by designing the best possible location and arrangement of structures first; and only afterward establishing lot lines. For example, setback and frontage requirements usually separate homes too much, diluting the sense of community and creating useless front and side yards. It is much better to treat the street as a single design problem, where setbacks, frontage width, and other dimensions reflect the scale of the street, the size of the homes, and the desired character of the neighborhood.



Traditional towns and villages like Kingston and Wakefield typically have a variety of lot sizes and frontage widths, together with consistent front setbacks. The result, as in this view of Kingston, was a great deal of visual and social variety within a unified composition



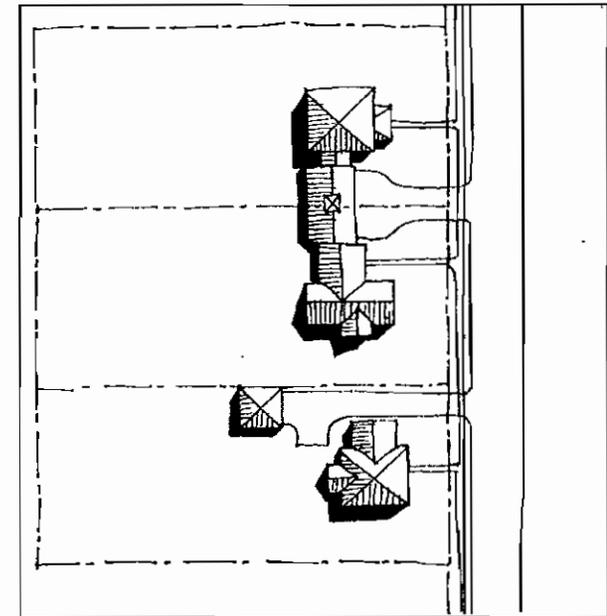
Not recommended: the typical setback places house too far back on the lot, reducing the usefulness of both front and back yards. Excessive side setbacks create more wasted space on either side.



Not Recommended: Monotonous pattern of cookie-cutter house lots, with structures placed in the middle of each lot.



Minimal front setbacks bring houses up to the sidewalk, helping to define the public space along the street and making a larger private yard possible behind the homes.



Small side setbacks allow placement of structures on or near the lot line, making a larger, more usable area of the lot available to the residents. So-called zero-lotline houses are common in high-density development, but its also a useful approach at more typical suburban densities. As an extension of this idea, houses on adjacent lots can share common building walls to achieve savings in construction and leave even more usable yard space.

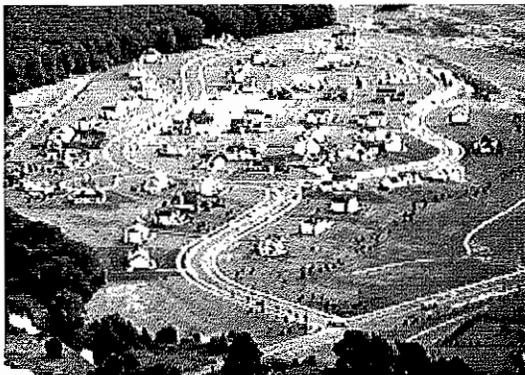
Street Layout

Guideline:

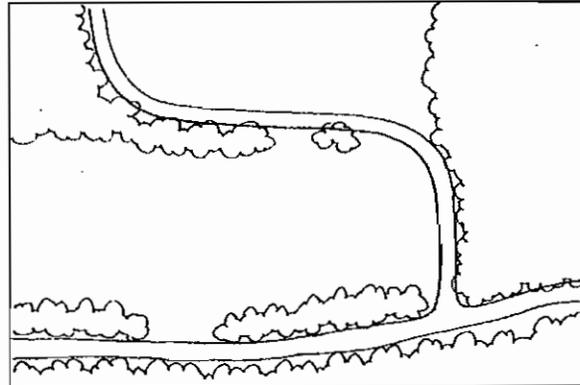
Connect proposed streets into simple networks that allow multiple routes to a given destination. Locate new streets to connect existing streets and to fill in partial grid patterns within neighborhoods. Design road alignments to follow topography and curve only where it makes sense in the landscape. Use the location of principal streets to link key public spaces and buildings within a neighborhood into a logical whole.

Discussion:

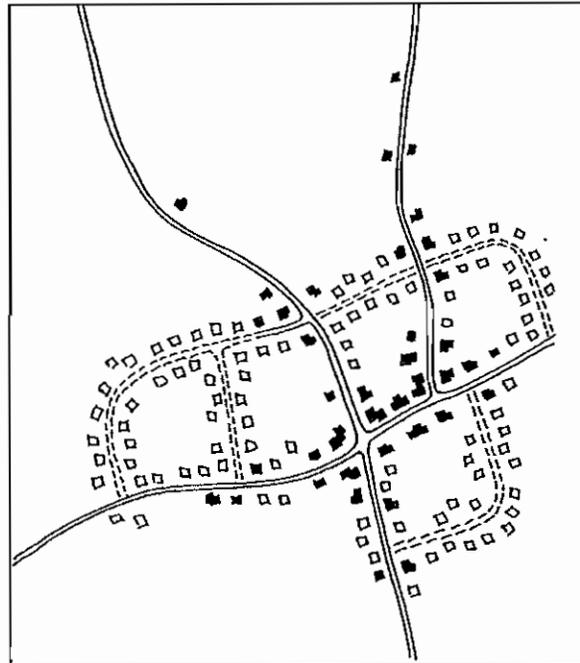
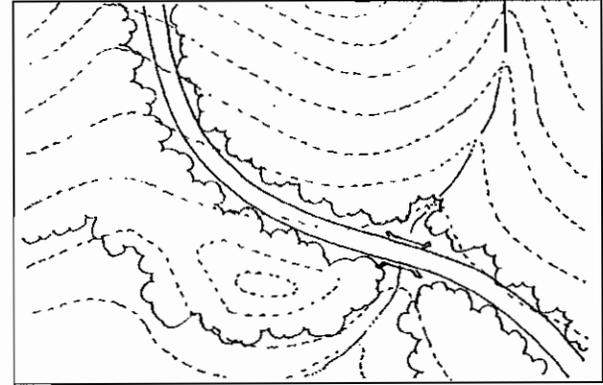
The collector road system common since the 50's -- beginning with the cul-de-sac and feeding into an ever larger series of collector streets - works well until the total amount of traffic exceeds the capacity of any single point in the larger arterial roads. Recent trends have favored a return to grid road systems that have many possible travel routes and hence no single choke point. Traffic is more dispersed, and as a result streets can be narrower.



Not recommended: wiggly cul-de-sac roads that have no relationship to the landscape and feed into a single collector.



In rural areas new streets should be subordinate to other elements of the landscape. In farmland (above, left) this can be accomplished by following existing hedgerows and forest edges. In wooded areas (above, right) streets should follow the contours of the land and avoid key features of the site.



In existing town and village settings, new streets can help to rationalize a street system, making circulation work better for existing residents as well as new ones. An interconnected street network enhances access for emergency services and helps to blend new homes into an existing neighborhood. Careful planning can avoid creation of short cuts that increase traffic through residential areas.



Since most people travel by car, streets serve to organize our understanding of a neighborhood. New streets should be located to link key views, public spaces like parks, and community buildings. Intersections are valuable locations for public spaces and structures.



In extensive new subdivisions, the old collector road system required a wide road at the entrance. A grid layout allows for narrower roads, slower speeds, and a more residential feel like that of this older neighborhood in Wakefield.

Preservation of Important Site Features

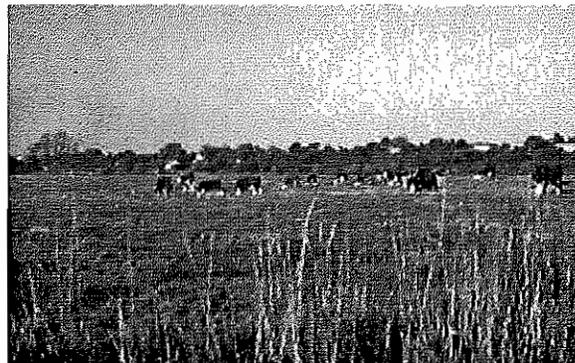
General Guidelines:

Lay out roads, lot lines, house locations, and public open space using existing features of the site as the foundation of the development plan. Roads and driveways should follow existing paths or the lines of walls and hedgerows.

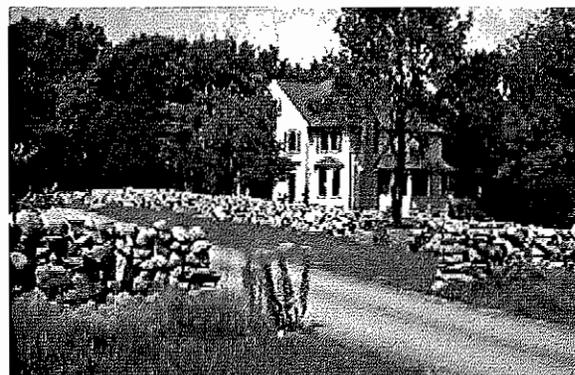
Sensitive site features like old trees, wetlands and water bodies should be made the focus of public open space -- not merely preserved and forgotten.

Discussion:

Important site features like large trees, walls, streams and water bodies should be preserved, not only for public benefit, but for the long-term value they give to a residential development. While extra effort and expense may be required to rebuild an old wall or preserve an ancient tree, these amenities often pay for themselves with higher lot values. Careful analysis of the site and a flexible approach to development alternatives can often reveal ways to build the allowed number of units on a property while still preserving its special features. Preserved site features can also serve as important design elements in the plan: for instance, homes on the edge of a preserved meadow share a common element that ties the design of the development together.



In agricultural areas, open farm fields are critical to the visual character of the area, as well as to the continuation of farming itself.



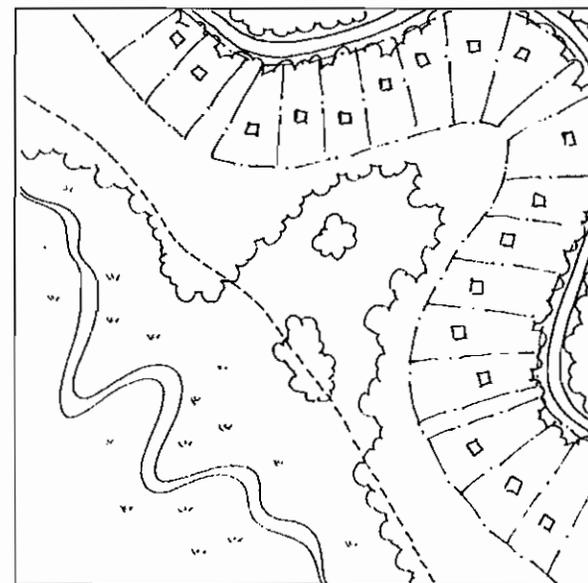
In village settings, street trees and stone walls provide "instant landscaping." Historic barns and outbuildings on infill sites add character to new development projects.



Roads that are designed to fit existing topography are less expensive to build, and by preserving the visual character of the site produce higher values



In wooded areas, old growth forest, large trees, wildlife habitat and stream corridors are valuable design elements.



While wetlands are protected under state and federal law, adjoining areas are often developed. By setting aside buffers next to protected wetlands, developers can protect a public resource while adding value to the development. Wetlands and associated stream corridors are also key elements in the town-wide greenway system -- saving open space buffers along them allows adjoining parcels to be connected by town-wide trail networks.



Not recommended: Clearcutting and regrading to build roads and create flat building sites.

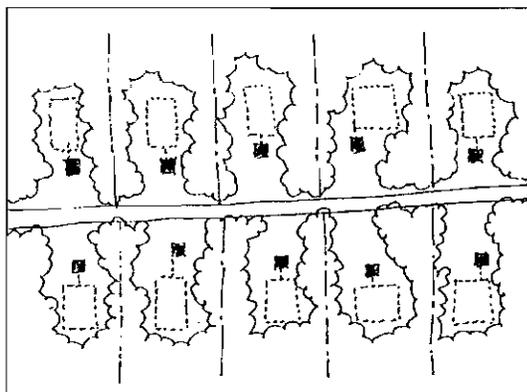
Site Planning for Sewer and Water Service

Guideline:

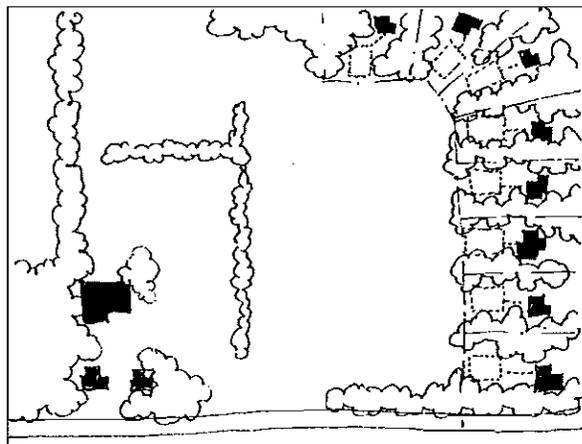
Location of individual wells and septic systems should be established during the subdivision approval process. Shared systems should be used wherever possible. Both individual and shared systems should be designed from a visual standpoint as well as a functional one. Forest clearing and grading of drainfields should be designed to blend into new landscaping around homes as well as the existing landscape. Systems should be located to extend adjoining open space areas.

Discussion:

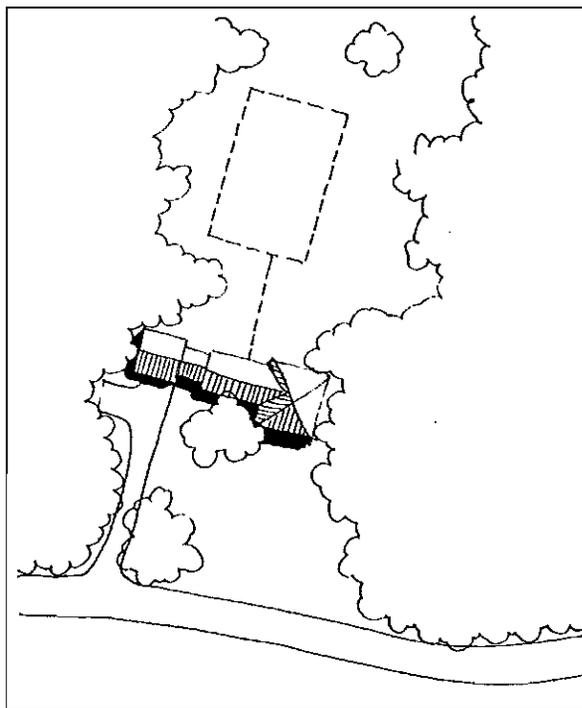
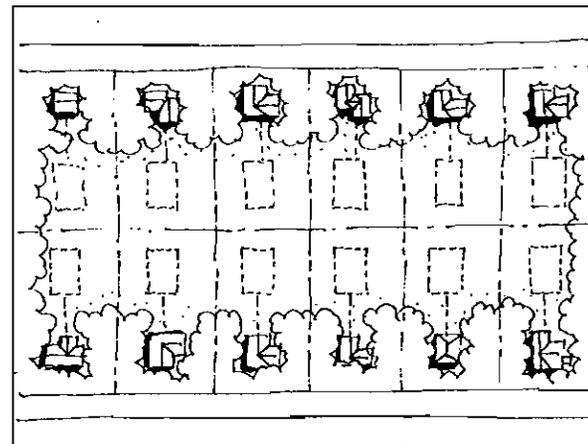
The setbacks required to prevent pollution problems with individual wells and septic systems can lead to a sprawling, suburban development pattern. Shared systems for both water and sewer can save on aggregate construction and maintenance costs, as well as allowing better design and protection of site features. Too often seen as merely a functional necessity, septic fields offer the opportunity to create a useful area for activities as well as an enhancement to the landscape, if some thought is given to the problem before construction begins.



Not Recommended: Uncoordinated construction of individual septic systems carved out of the woods or mounded above the existing landform.



Individual or shared systems should be located to extend adjoining open space; they can be used to create a buffer area next to farmland or a scenic vista (above, left), or to link individual yards into a single active recreation area (above, right).



On wooded sites, septic drain fields can be located to open up scenic vistas. Avoid creation of a sheared-off wall of trees surrounding a clearing by selective thinning and pruning of trees to create a more natural edge.



Shared wells require larger buffer zones, but if carefully located can help preserve important site features like tree groves and meadows.



Alternative sewage treatment technologies, such as this solar-aquatic treatment plant in Ashfield, Mass., can actually become a valuable visual element in new communities.

Design of Public Space

Guideline:

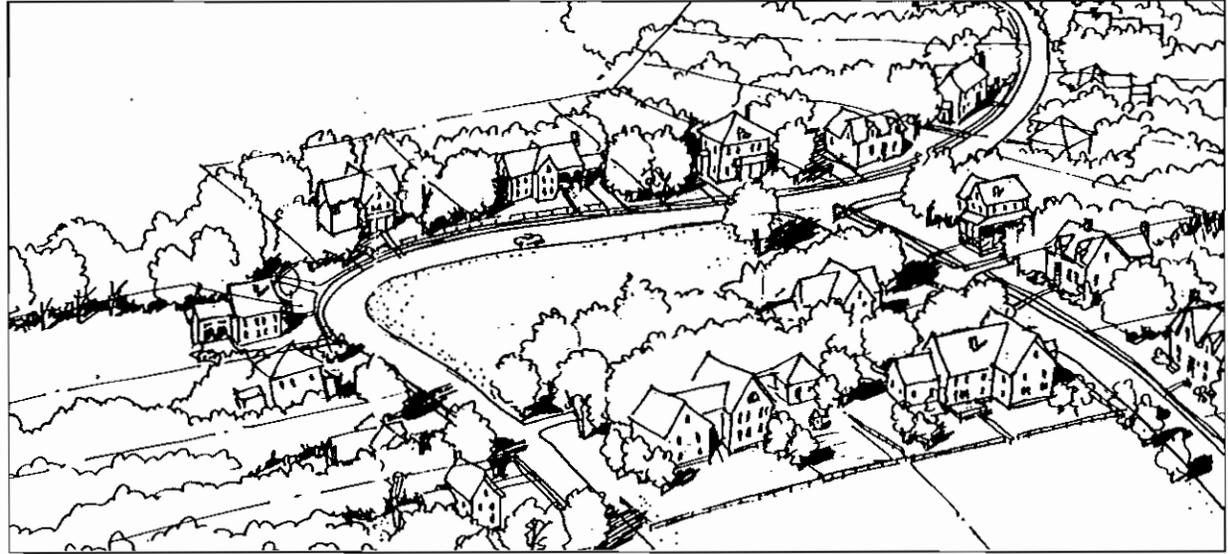
Use shared public spaces as the backbone of the development plan. Link these spaces into a system that provides a clear structure to the community and fosters participation in shared activities. Provide sidewalks, benches, lighting, and landscaping that encourages pedestrian use of public streets. Locate public buildings and neighborhood commercial centers to reinforce the public character of adjoining spaces.

Discussion:

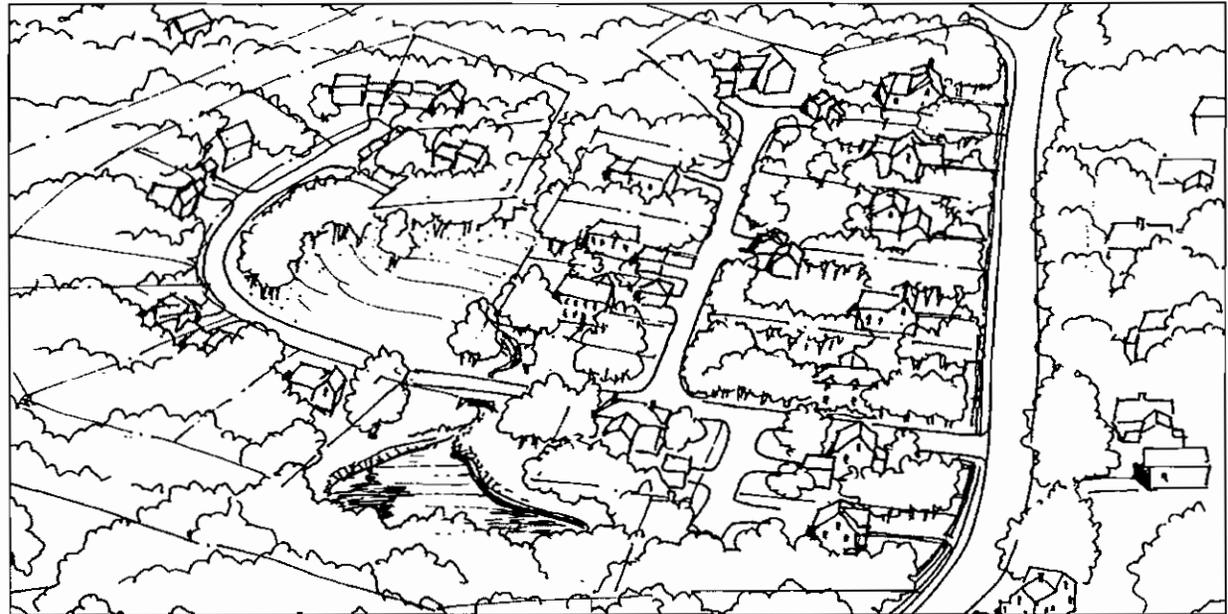
The "civic realm" is enjoying renewed attention in town planning circles, as planners realize that communities without a focus don't work as well or look as good as those with a clear public heart. Whether this is a traditional Main Street, a park or square, or just a protected natural area, public space creates a visual center for the life of the neighborhood. One benefit of plans that are organized around public space is that what happens on individual building lot is less important; the development looks "finished" sooner, and a greater variety of uses and architectural treatments can be accommodated without spoiling the unified effect of the whole.



Not Recommended: Public Space that is limited to the street, with no consideration for the civic life of the community and the surrounding neighborhood.



Even in rural areas, new communities can have a central focus. In this case there are several: first, the preserved farmland creates a visual focus for the entire community visible from some the house sites and the entrance road; second, small interior green spaces provide for active play; everything is linked together by sidewalks and trails.



In village infill or town-edge sites, design of public space should first of all reinforce the pattern of the surrounding neighborhood - as shown above in the location of new houses along the street; within the new development the focus is on creating a central visual focus and shared areas for recreation. Drainage areas and detention ponds are designed to enhance the size and visual variety of the interior open spaces.

Roadway Design

Guideline:

New streets should be as narrow as possible -- made easier if more than one access is available. Alignment should follow topography: curves should be avoided unless they are a logical response to land-form and site features. Roads should be designed to follow existing site features like walls and hedgerows, and to take advantage of views across open space areas. Surfacing, curbing, and drainage design should be appropriate to the context.

Discussion:

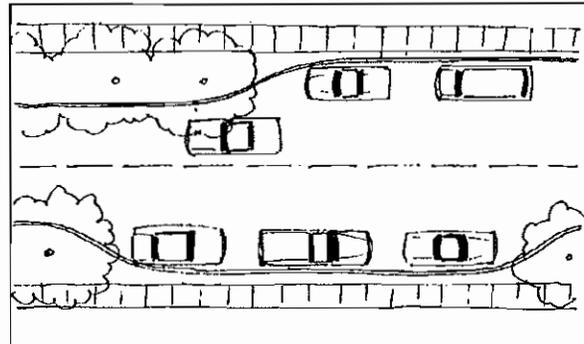
Roadway design should respond to the site and its context first, and afterwards to preconceived notions of what is needed. Narrow streets limit traffic speed and encourage walking; parking can be accommodated off the street or in areas specifically widened for that purpose. Gravel or "structural grass" shoulders can provide for emergency use, snow storage, etc. Curbs and drainage structures should be designed to fit the context; in rural areas a more natural edge, with grassed swales instead of curbs and structured drainage is often most desirable.



Not Recommended: streets that are designed for the worst case scenario, driving up costs for construction and encouraging speeding -- all for dubious access and safety benefits.



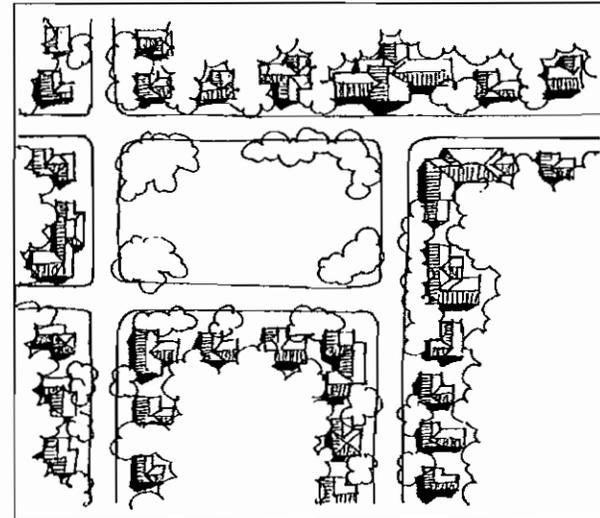
In rural areas, paved width should be minimized; there is rarely a need for on-street parking or paved shoulders. Loop roads or gravel emergency access lanes provide access alternatives should a principal entrance be blocked. Shown above, Case Farm.



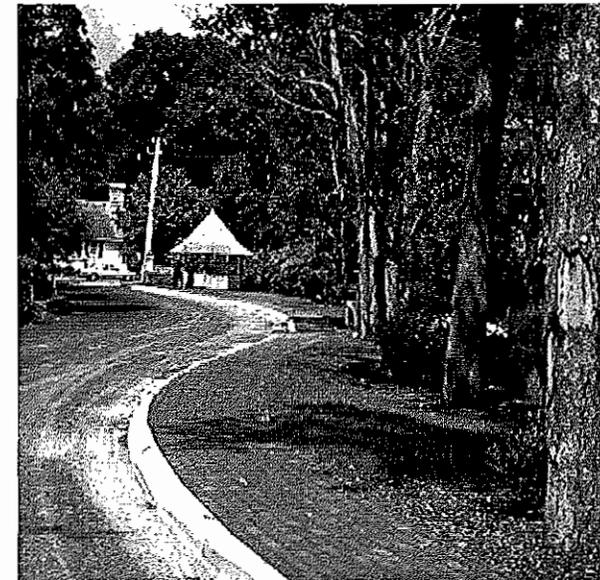
In village or town conditions, pavement width depends most on need for parking. Continuous wide shoulders should be discouraged. Parking strips should be interrupted by planted islands or "bump-outs" to break up the apparent extent of the pavement.



Roads should curve to meet topographic conditions and site features, not just for the sake of curving.



Instead of curving for no reason, visual variety is better achieved by breaking roads into shorter segments interrupted by public parks and squares.



A higher density of development and greater level of public activity justify investment in curbs, drainage structures and sidewalks. In the Brown's Farm subdivision, sidewalks provide a necessary connection to the center of Kingston; use of brick and granite helps to tie the design into the Victorian style of the houses.

Design of Turn-Arounds

Guideline:

Avoid the standard cul-de-sac turn-around in favor of approaches which create a sense of arrival and an attractive visual focus. Options include hammerheads, loops, and knuckles or eyebrow. The approach selected should be that which best fits the character of the site and the proposed development.

Discussion:

The standard cul-de-sac requires an enormous area of paving, usually for relatively few cars. Alternatives recognize that while emergency vehicles need to be able to turn around, for the most part residents turn in their driveways. Various loop arrangements that bring the road closer to the homes reduce the length of individual driveways while creating a shared open space that can be used as a community park. Hammerheads are the best at slowing traffic, and have the added benefit of introducing an interesting variety to the arrangement of surrounding houses and lots.



In rural areas, short loops (above, left) provide access to individual lots at the same time as they allow turning. Hammerhead turn arounds (above, right) allow turning while reducing the amount of paving required and reducing vehicle speeds. If carefully designed they can seem more like a shared courtyard or outdoor room than a roadway, encouraging pedestrian use.



Modifications to the standard cul-de-sac should at a minimum include an enlarged and landscaped central island, or as shown in the Roberts Court subdivision, both a planted island (above) and changes to the outside edge of the turn-around (below).



A long loop around a central "green" or other open space can reduce needed road width and avoid a standard cul-de-sac turn-around.



Not recommended: the typical paved cul-de-sac circle is a waste of space and pavement, and is visually out of scale with the buildings that surround it.

Driveways

Guideline:

Locate driveways along natural edges defined by stone walls, hedgerows, and forest edges. Limit width to serviceable minimum, use gravel or grassed shoulders and turn-outs for passing. Common driveways are encouraged for multiple residences; either as a loop crossing in front of a group of homes or as an alley behind them. Common drives are also useful in village settings to bring access to rear garages between two or three homes.

Discussion:

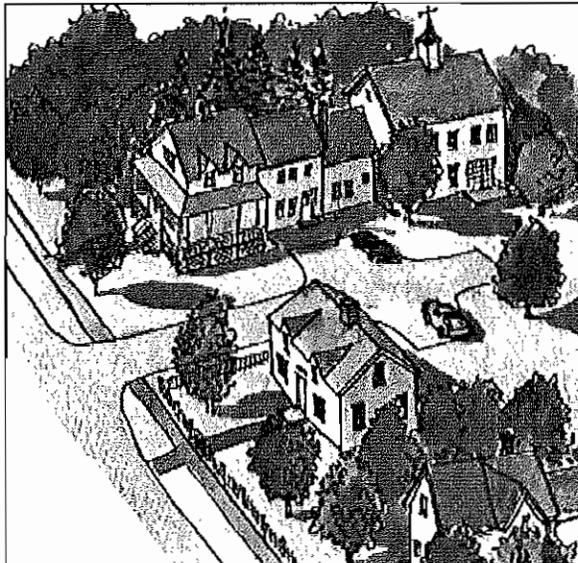
Driveways are a necessary and valuable part of every house lot, but considering the small amount of use they get they are usually too prominent, and tend to split the yard into useless pieces. Creative design of individual drives can enhance the drama of arrival by following the boundary of the lot to arrive indirectly at the house. The next step is to allow adjoining lots to share a common drive along the boundary line, or for multiple lots to be serviced by a common lane or loop. Width and materials should be appropriate to the use -- generally careful grading and base preparation is more important to the usefulness of a driveway than whether it is paved with asphalt.



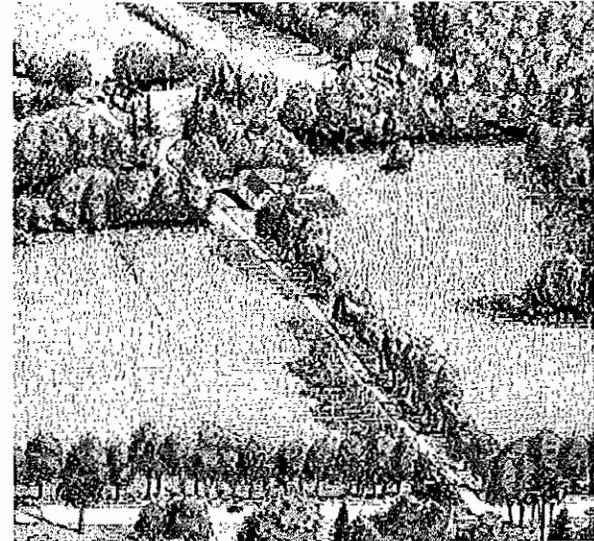
Not recommended: Driveways located in the center of the lot frontage going straight to the garage door.



In both rural and village situations, indirect driveway locations enhance the appearance and usefulness of the property. In a wooded landscape, bringing the driveway in at the edge helps to maintain a solid screen of vegetation between house and street.



A common driveway between two or three houses allows access to a shared parking and turn-around area, leaving more open yard space for each house. This creates more useful private space on the opposite side of each house.



In an open agricultural landscape, driveways that follow stone walls and hedgerows are less intrusive and allow continued agricultural use.



In some cases, a driveway can become a grand entrance, which works best when careful design makes it part of the surrounding landscape.

Alleys

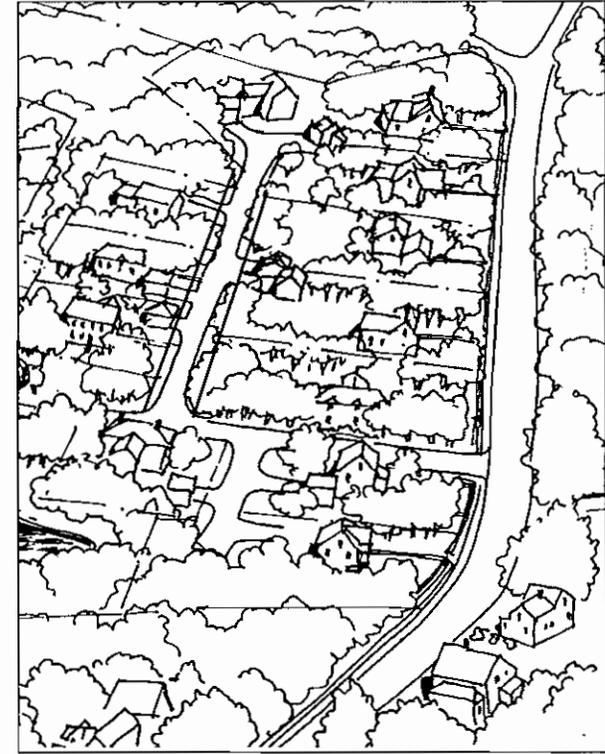
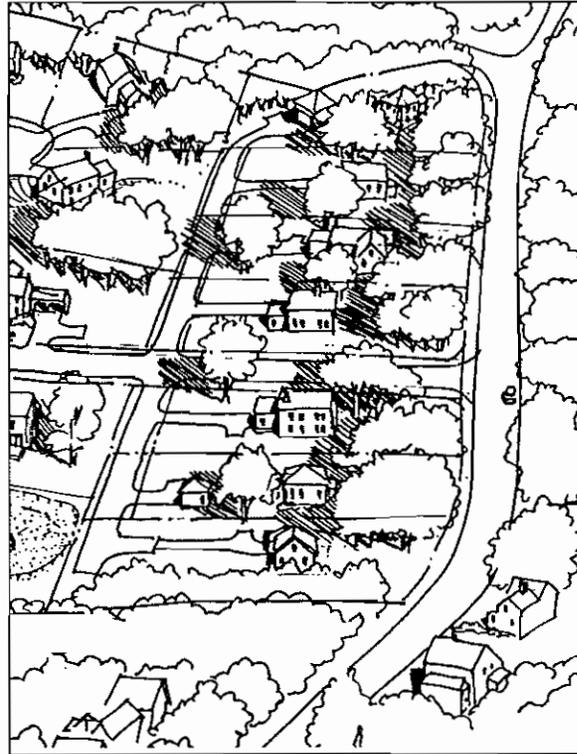
Guideline:

Use alleys to provide access to the rear of house lots, clustering service and garage areas away from the street side of the lot, and eliminating the need for multiple driveways.

Discussion:

Alleys were once a common approach to providing service access to the rear of lots in city blocks; allowing a more attractive, pedestrian-oriented streetscape. Alleys also allow houses to be closer together on narrower lots, since garages can be directly behind houses rather than along-side. This also facilitates attached town-house style development without the sea of parking lots that can make that style of development unwelcome.

Because they are, by definition, only used by residents, alleys often are wonderful community spaces. Sidewalks along the street side become safer and more attractive, and there is more room for gardens and street tree plantings. Elimination of curbcuts also makes more room available for on-street visitor parking in front of each house.



Alleys can be implemented either by means of an easement across the rear of privately-owned house lots (above, left), or within a separate public right-of-way that provides frontage for some of the lots (right). In either case they need be little wider than a driveway, widening as necessary to provide access to garages, parking and service areas.



Not recommended: Alleys that are too wide can become little more than parking lots, which defeats their purpose -- efficient access and service with a minimum of pavement.



Alleys save space by eliminating the need for separate driveways (above, left). Fences and garages preserve privacy for back yards. Meanwhile the front yard becomes a continuous green park without driveways or curb cuts: safer for kids and more attractive (above, right).

Parking

Guideline:

Parking should be located in the side or rear of units. Small lots or parking courts provide the best balance between efficient use of space and visual intrusion in both single and multi-family development. On-street parking can help reduce the need for separate parking lots and helps to meet occasional overflows. In mixed-use areas, parking lots can be shared: used by office and retail workers and shoppers during the day and residents at night..

Discussion:

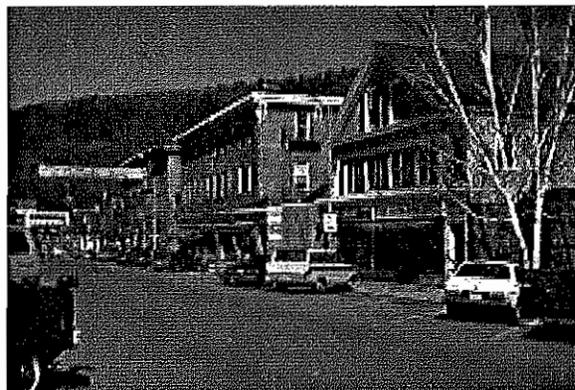
Most families have one or two cars regardless of whether they live in large suburban houses or downtown apartments. Since cars take up the same space, parking in areas with higher densities inevitably has a greater relative impact on visual quality and the environment.. Grouping parking areas together in single-family developments makes more efficient use of space. At the same time, large lots within multi-family development should be avoided in favor of a mix of smaller, dispersed lots and on-street parking. Semi-private alleys and parking courts provide a pleasant way to integrate parking and service areas with the life of the neighborhood, and foster shared uses for recreation.



For individual houses, parking at the side or rear reduces negative visual impacts.



Shared parking and service access to two or three homes creates a large, useful area for a variety of uses, while leaving more room for lawn and garden space around each house.



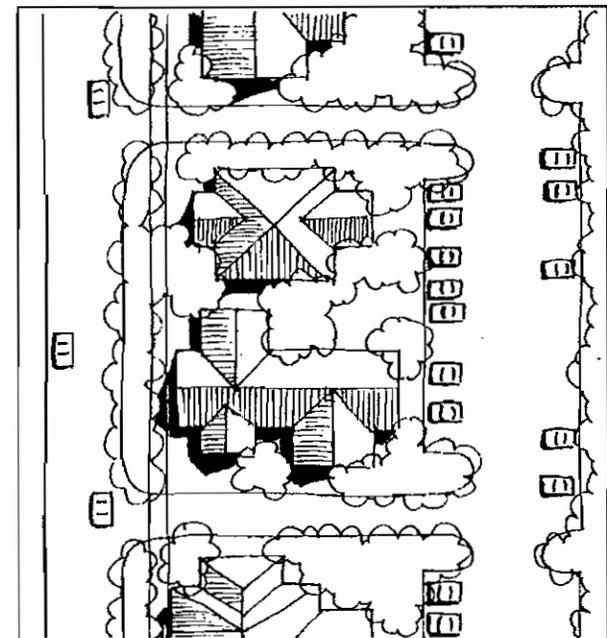
On-street parking provides flexible parking for residents and guests, and can be less expensive to build and maintain than separate lots.



Landscaping, sidewalks, and protection from the elements can make the parking and entry experience more user friendly.



Not recommended: parking between the house and the street introduces a "dead" storage function into what should be an active family and community space.



For higher density residential and mixed-use development, screened rear lots should be connected with rear access lanes to facilitate ease of movement. Permeable surfaces such as gravel or turf block systems should be used, especially for lots not likely to see heavy use.

Site Utilities and Lighting

Guideline:

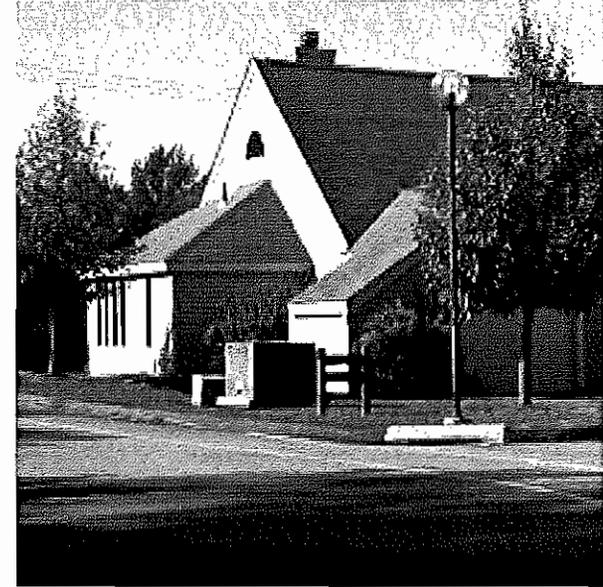
All utilities should be buried whenever possible. Transformer pads and telephone switching boxes should be carefully placed to avoid intrusion on public spaces (and the inevitable fringe of yews). Streetlights should be carefully designed to blend with the character of the street. For a residential area this usually means fairly low light poles, cut off luminaires, color-corrected lamps, and reduced wattage. A larger number of modest streetlights should be encouraged over a few over-bright lights.

Discussion:

Utilities work best when we don't notice them. Streetlights have a great effect on the character and livability of residential neighborhoods. High, bright street lights, while providing the most light for the money, are a false economy, blinding residents with their glare and polluting the night sky with misdirected light. Human-scaled streetlighting and indirect illumination of structures and landscape elements can enhance both security and beauty.



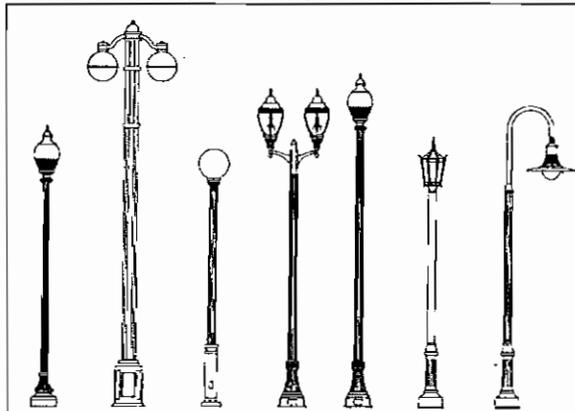
Streetlights should be combined with indirect lighting of buildings and landscape elements to provide continuous nighttime visibility. Light from many lower-energy sources is preferable to a single glaring element. Design of poles and luminaires can contribute to the visual character of the streetscape.



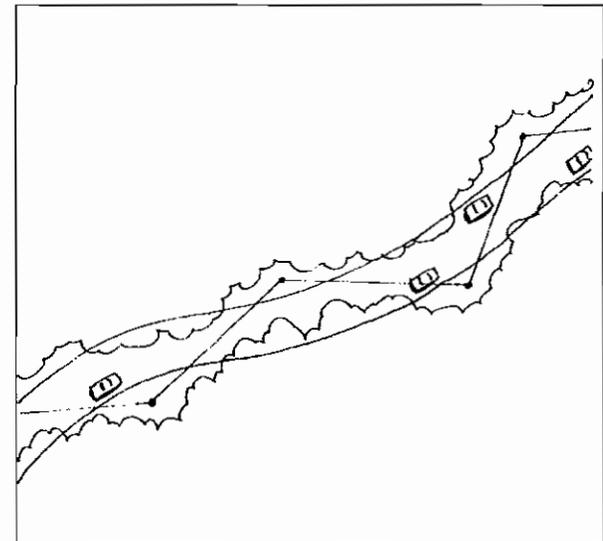
Transformers are often placed in the worse possible location as an afterthought. Planning at an early stage can reduce the need to screen an eyesore after the fact.



Not recommended: tall streetlights designed to illuminate an interstate highway are not appropriate in an residential area.



Design of streetlights should follow the theme of the development: many choices are available which provide an appropriate scale and appearance without being historic reproductions.



Where needed, utility poles and wires should be located to avoid interference with trees and key vistas. Zig-zagging wires across a road can avoid the need to sheer off the top or side of trees.

Streetscape

Guideline:

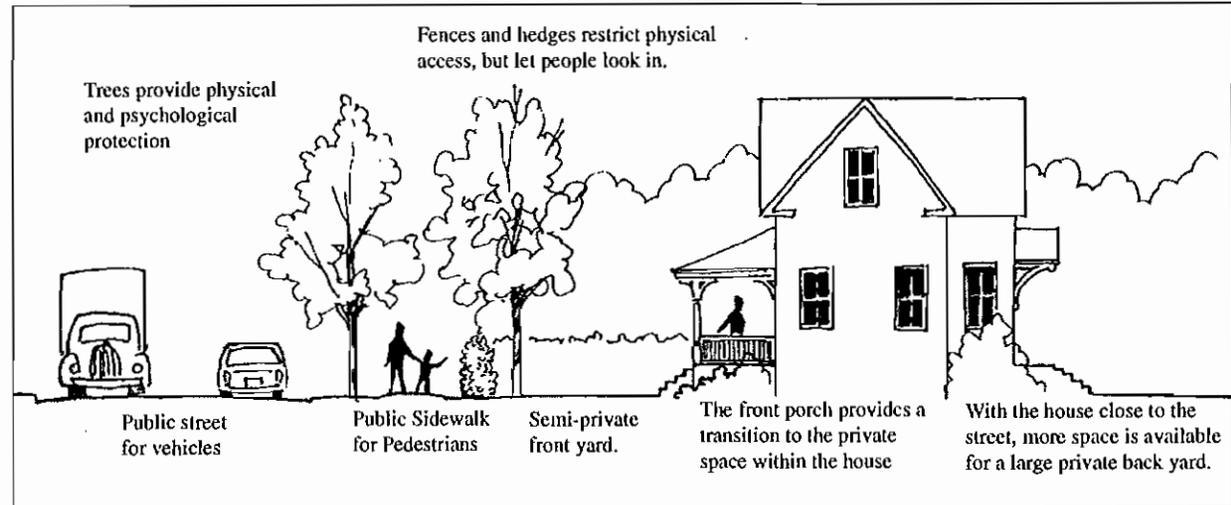
Every new street should be designed as a streetscape: an integrated system of buildings, pedestrian and vehicular circulation, landscape elements, and drainage structures. The focus should be on pedestrian comfort, livability for residents, and encouragement of community life. The design of the public realm should come first, private house lots are subordinate to a larger system organized around the public space along the street.

Discussion:

The idea of the streetscape is commonly employed in the design of commercial streets, but it is no less valuable in residential areas. It recognizes that the street is the most important element in most developments, serving to organize, for good or bad, most of the activity that happens in the public side of the houses. While most suburban development has only two kinds of space --the public street and the private house lot -- the streetscape concept deals with the transition area between them. Traditional streets have a rich layering of space within this transitional zone that makes them both more attractive and more useful to residents.



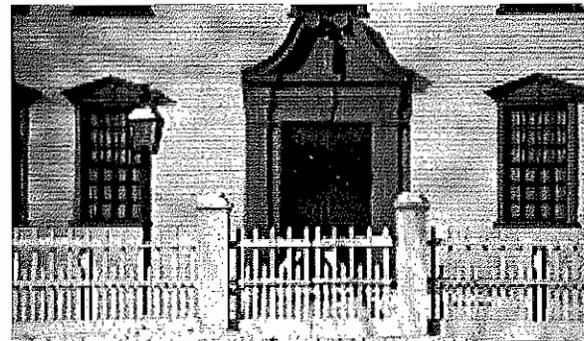
Not recommended: streets that lack a clear definition of public and private space are not comfortable for pedestrians.



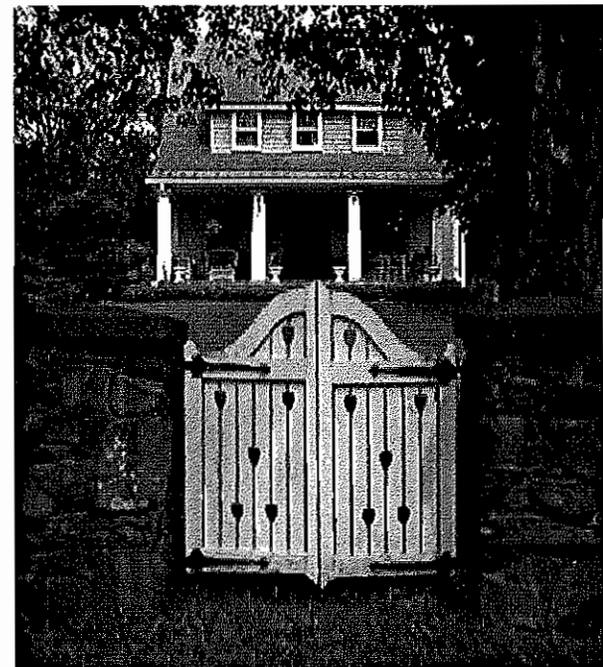
Traditional village streets like Main Street in Kingston illustrate the layering of public and private space that allows many different uses and residents to comfortably share a small area.



A new development on Nantucket uses hedges and gates to separate public and private space, making a comfortable area for pedestrians.



Rich details add visual interest to the design of the street and invite exploration by pedestrians.



Even low-density rural development benefits from a clear demarcation of public and private space. A wall or fence, or just a line of trees can do the trick.

Pedestrian Circulation: Sidewalks and Path Systems

Guideline:

Provide sidewalks on at least one side of the street. Sidewalks should be 4-5 feet wide; in mixed use commercial streets at least 8-16 feet wide. Use materials appropriate to the character of the neighborhood. Follow accessibility standards of the Americans with Disabilities Act. Provide continuous connections with surrounding properties, trail links, and crosswalks.

Discussion:

Sidewalks are often treated as an afterthought, or as something provided just to meet town requirements -- yet they are a key element in designing livable neighborhoods. In rural settings, it is often more appropriate to provide internal paths that go between houses to connect to town trails, rather than building sidewalks on the street that no one will use. Width, location and materials can vary widely; the most important need is for a continuous surface connecting the places that people want to go.

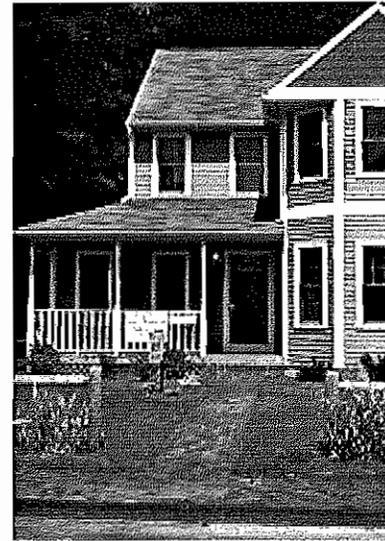
Designers often test this by imagining a typical user -- perhaps a parent pushing a stroller, or a grandmother with a toddler -- leaving their home, traversing proposed walks or paths to arrive at the corner store or neighborhood park. Can kids walk or bike to school without walking in the street or having to cross in a bad spot?



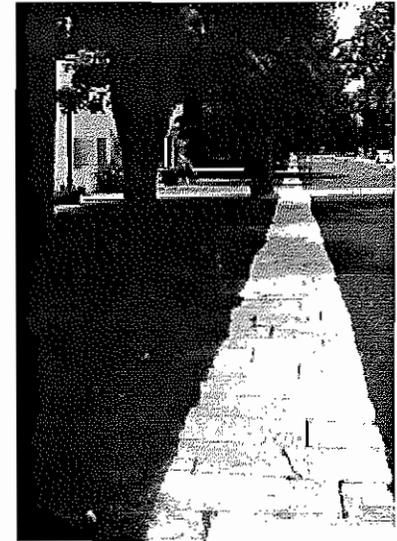
Not recommended: Sidewalks that meet requirements but don't meet any real need



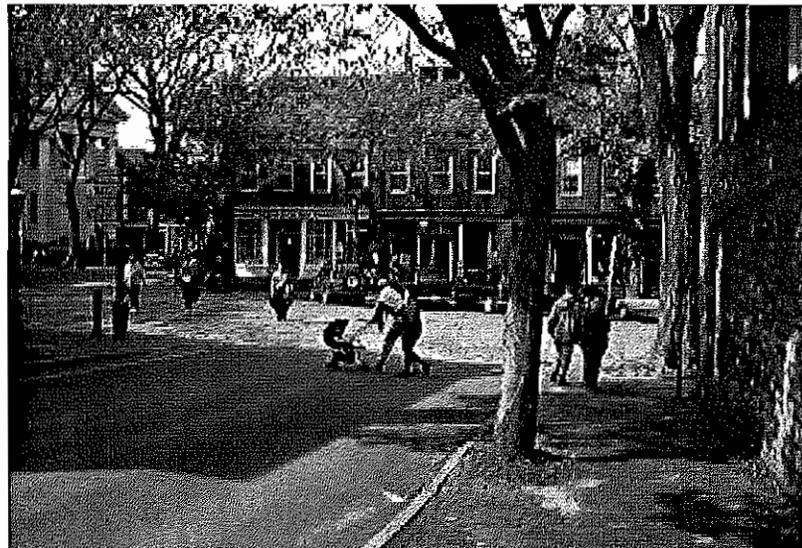
In rural sites, paths that leave the right of way to follow easements across private house lots or through preserved open space may be more useful than sidewalks along the street.



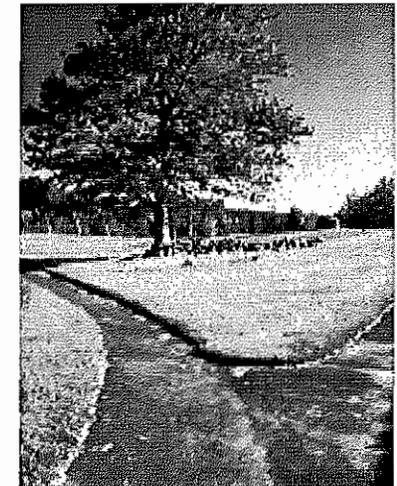
In town or village settings, sidewalks play an important role in community life, and should be designed as part of a unified scheme for front yards, fences, tree planting, curbing, etc.



Materials should vary to meet the needs of the site and the residents. A well graded, compacted base is the most important element: a variety of surfacing materials will meet handicapped standards.



A change in materials, like this old brick walk on Nantucket, provides a visual separation between vehicles and pedestrians. Cobblestone streets add visual richness and slow down cars.



Handicapped accessibility requirements require a smooth, firm surface and limit paths without railings to a maximum of 5% (1' rise in 20' distance). Steeper paths require railings and landings.

Street Furnishings, Fences and Hedges

Guideline:

Make plans for fences, walls, and hedges during the subdivision approval process and use these elements to create a finished edge to the street. Fences that pedestrians can look through or over are desirable at the front property line. Taller screens should be kept behind the front wall of the houses. Traditional materials like wood, stone, and wrought iron are preferable to chain link. Plastic or vinyl should be avoided.

Discussion:

Residential development usually leaves the provision of fences, hedges, benches, and other street furnishings to homeowners. Studies have shown, however, that these elements add significantly to the value of house lots. A comprehensive street furnishing plan, coordinated with plans for curbs, sidewalks, and street lighting, can give a new development a much more finished look.

Fences and hedges are important in separating the public street from private house lots, making front yards more usable and adding to the livability of the development. Their location and function is often more important than the materials chosen, but a consistent approach will help to create a unified appearance for the community.



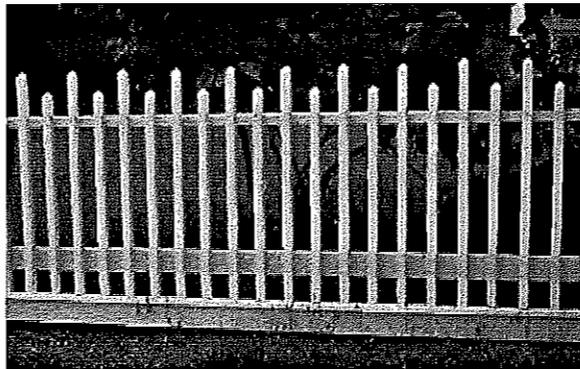
Not recommended: streets without the definition or character that well-designed street furnishings provide.



Fences keep strangers out and pets and children in. They make sidewalks more comfortable for pedestrians by clearly delineating the edge of the public domain.



In a rural setting fences continue to be important for animal control, but can also help to set the tone of a new development, like this fence at The Village at Indian Lake.



Design and materials vary -- future maintenance requirements may justify a higher initial investment in durable materials.



Hedges have the advantage of being inexpensive to install, but they require annual maintenance after reaching maturity. Plan to allow enough room for the mature size of the material.



Benches encourage walking, especially for older residents, and provide another setting for the life of the community to unfold. Low seating walls can serve the same function.



Stone walls are more expensive to build, but last forever and are best at cutting street noise. Local materials and traditions make a good fit.

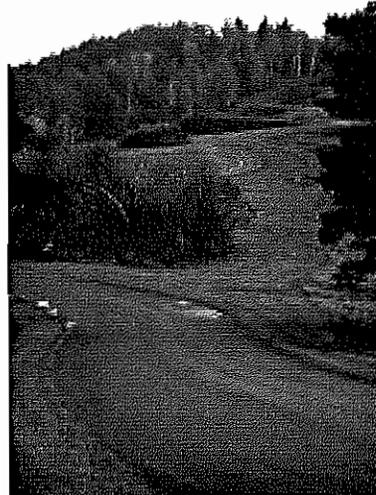
Grading and Drainage

Guideline:

Roads and driveways should be constructed to angle across contours, in locations requiring the least amount of grading. Construction platforms, mounds for septic fields, and swales for drainage should be smoothly blended with existing contours. Swales and detention areas should be scaled to fit into a residential context. Existing vegetation should be preserved wherever possible. Design should fit the context: in rural areas it is often preferable to omit curbs and collect water in surface swales; in village and town settings curbs should be used to guide water to structured drainage systems.

Discussion:

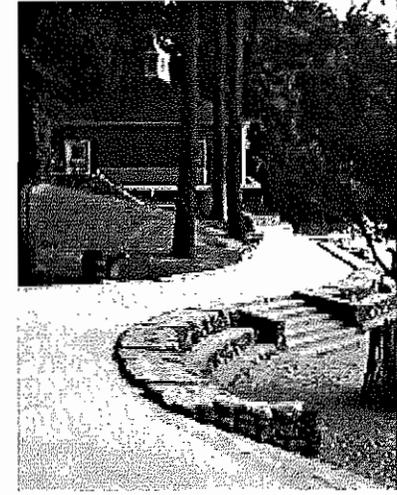
While all development requires some cutting and filling to accommodate new uses, creative site planning can almost always minimize the necessary disturbance to the site, saving on the construction budget and preserving existing vegetation. Grading and drainage that *is* necessary should be designed to fit the residential setting -- meaning shallow swales and smooth, flowing landforms. Partly this is a matter of keeping things to a small scale; but safety of children and pets is also a concern. A larger number of smaller drain inlets, for example, is preferable to a single large basin.



Grading for roads, house sites, and driveways should follow the lay of the land, even though modern equipment makes anything possible.



In village settings, curbs help channel runoff into structured drainage systems and help separate cars and pedestrians.



Altered slopes should be smoothly blended into existing contours, or retained with well-designed walls and steps.



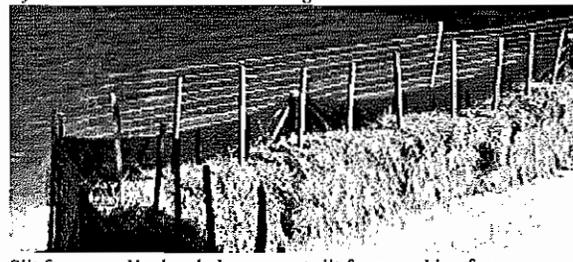
In rural areas, drainage should be more informal. Curbs are usually not necessary and surface swales help slow runoff and infiltrate stormwater back into the ground.



Changes in grade around trees should go no closer than the dripline--the line below the outermost branches that usually coincides with the limits of the root system.



Not Recommended: Grading solutions that are out of scale with a residential neighborhood.



Silt fences and/or hay bales prevent silt from washing from a development site. With careful planning use of such devices can produce a net cost-savings for development projects.



Simple stone headwalls stabilize the end of a drain pipe, while adding to the visual character of the project.

Landscape and Street Tree Plantings

Guideline:

Trees and other landscape plantings should be used to reinforce the pattern of private and public spaces -- not just for decoration. Trees should be planted in sufficient numbers and close enough together to form continuous canopies at maturity. Species should be mixed to prevent spread of blights and pests -- although massed plantings of the same variety should be allowed for design purposes. Developers should focus on creating a strong structure of plant material that can be filled in by homeowners over time. Unusual cultivars should be avoided.

Discussion:

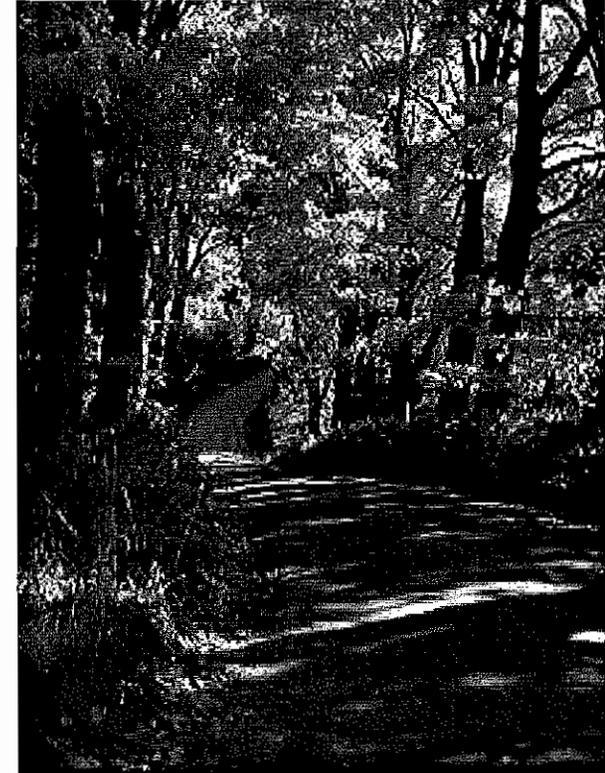
Over the long term, trees have a greater impact on the visual character of a community than almost any other element -- especially if they are arranged to reinforce the pattern of buildings, roads, and sidewalks. Trees provide natural cooling, filter pollution, screen eyesores and provide privacy for residences. Plantings of shrubs and groundcovers for screening and slope stabilization should favor native species over exotics. This is especially important in new developments adjacent to natural areas, where natives can easily be invaded by aggressive newcomers.



The contrast of architecture and trees, of man-made and natural form, is a large part of why New England villages are so beautiful.



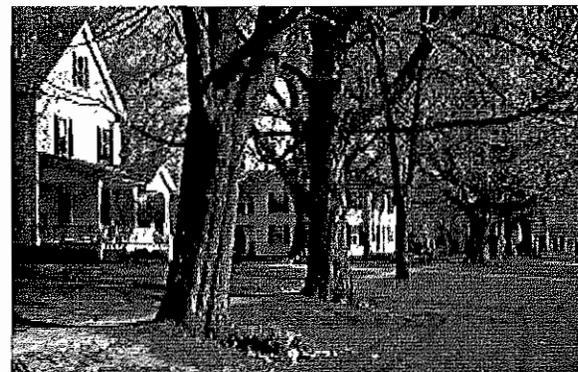
Along rural roads, tree plantings cool the road and frame vistas across open meadows.



This leafy humel can be duplicated in new development by burying utilities and planting trees close to the road.



Not recommended: excessive tree clearing leaves a scar -- better to preserve what's there than start over from scratch.



In the village, trees help to enclose the sidewalk, cut road noise and filter pollutants from the air. More formal, architectural plantings are appropriate and fit in well with the structural context.



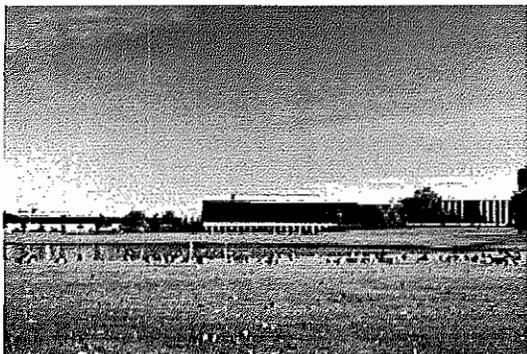
A mature street tree planting shows the potential of trees to create a strong sense of place. What happens on private lots becomes less important to the appearance of the community.

Design of Natural Areas

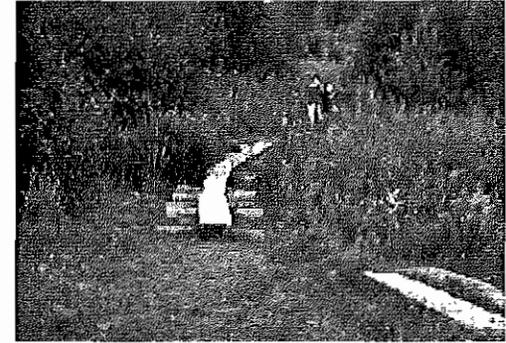
Guideline:

In areas of a development site that won't be used for active recreation, use native species and ecological design principles to create self-sustaining plantings. This approach is especially valuable where a development site is adjacent to protected wetlands or wooded areas. Promote wildlife by planting food-producing plants. Stabilize blow-downs and standing dead trees and leave as nesting sites. Protect vernal pools and intermittent streams.

Discussion: Open areas that are not part of a private house lot are often either ignored or kept mowed as a lawn. Many other options are available that require less maintenance, are better for wildlife, and a more attractive. These include wildflower plantings and meadows, managed succession, shrub masses and tree groves. Native plantings adapted to local soils and weather conditions will do better than introduced species. Transplanting native species from development areas and collection of seeds from nearby meadows and wetland areas are inexpensive planting options. Native plantings tend to require more maintenance at the beginning as exotic weeds move in, but once established they take care of themselves indefinitely.



Not recommended: Unused areas planted as lawn are expensive to maintain and visually dull.



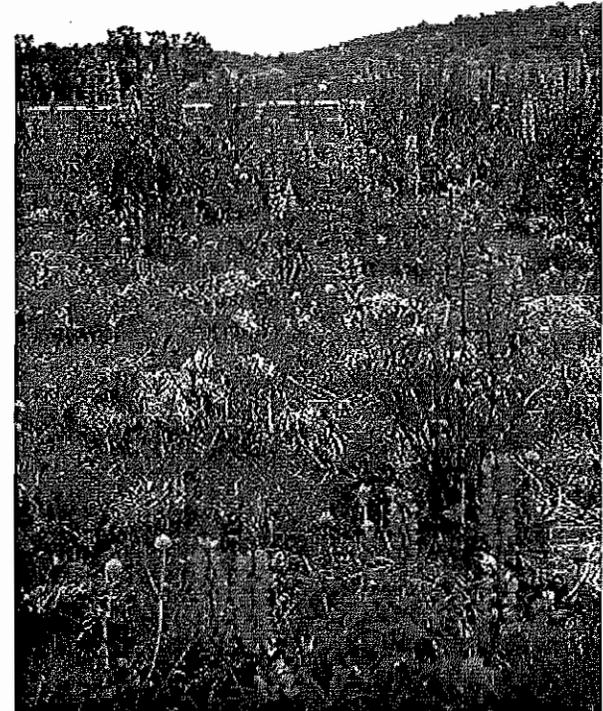
Boardwalks allow access to wet or inaccessible areas, and serve to control traffic in sensitive environments. Designs can vary from a fully-accessible boardwalk (near left) to a simple log structure (above). A narrow trail through a shady grove can provide suitable access to a natural area (far left).



Left to its own devices, ecological succession introduces a rich variety of plants and animals to an old field. Eventual growth into a forest can be prevented by mowing once every two or three years.



Meadows can serve as an informal barrier, especially when they grow as thick as this one; mowed paths direct pedestrians.



Wildflowers often thrive on sandy, infertile soil -- though several years of weeding may be required before the wildflowers take hold.

Use and Siting of Structures

Guideline:

Allow a mix of uses, including small-scale commercial, office and workshops within residential developments. Provide for a range of housing prices with apartments attached to single-family homes and duplexes. Provide affordable units by building small multi-family structures as part of single-family subdivisions.

Use traditional siting principles to locate this more diverse collection of buildings within a larger pattern in which the public space is the unifying element.

Discussion:

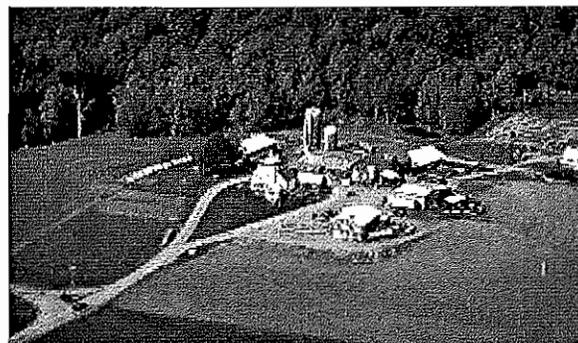
Subdivisions can be much improved by introducing some social and visual variety by means of varied uses and housing opportunities. The quiet residential character that most people are looking for need not be compromised if such uses are limited to 10-20% of the overall floor area. Traditional village development principles can help: using the mass of buildings to create private courtyards and entrances; using fences and hedges to control pedestrian access to private yards; providing a comprehensive network of sidewalks and paths so that people can get around without intruding on private spaces.



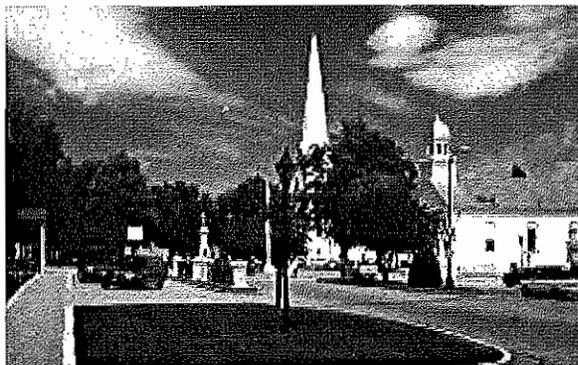
Not Recommended: single use developments with the same unit located in the same place on every lot make for communities that are as dull to look at as to live in.



In town or village centers, apartments above shops or offices provide affordable housing opportunities -- they can share the same parking lots and require no additional investment in land.



Mixed use should also be an option in the countryside, where the traditional farmstead has always been a combination of home, office, and workshop.



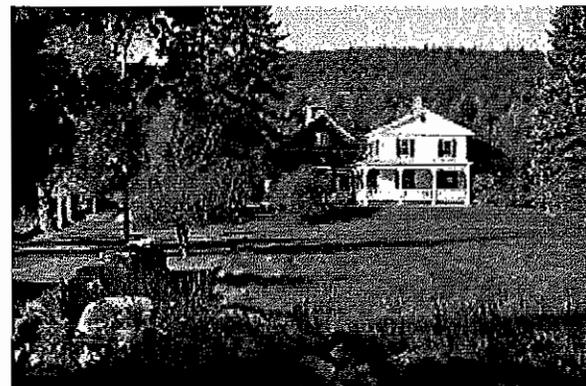
Encourage public uses within residential areas: churches, schools, daycare centers, community buildings all enhance the life of the neighborhood. Civic buildings also act as landmarks to punctuate key locations and help people find their way around.



Site structures in such a way that they help to enclose public spaces, either along the street, around a common, or simply interior courtyards.



Isolated structures in the countryside should be located to form a unified composition with the existing features of the site.



Rural structures were usually located either quite close to the road or well back from it -- rarely in the middle -- this allows the remaining area of the lot to be actively used, and avoids the boring appearance of most modern subdivisions.

Building Scale, Massing and Proportions

Guideline:

Use the human form as the basis for determining scale of new structures. Break large masses into smaller forms with traditional proportions.

Discussion:

Scale, massing and proportion refer to the overall size and shape of a building. Planners and designers have found that these factors are much more important in determining the character of a development and how it fits into its context than do surfacing material, colors, etc.

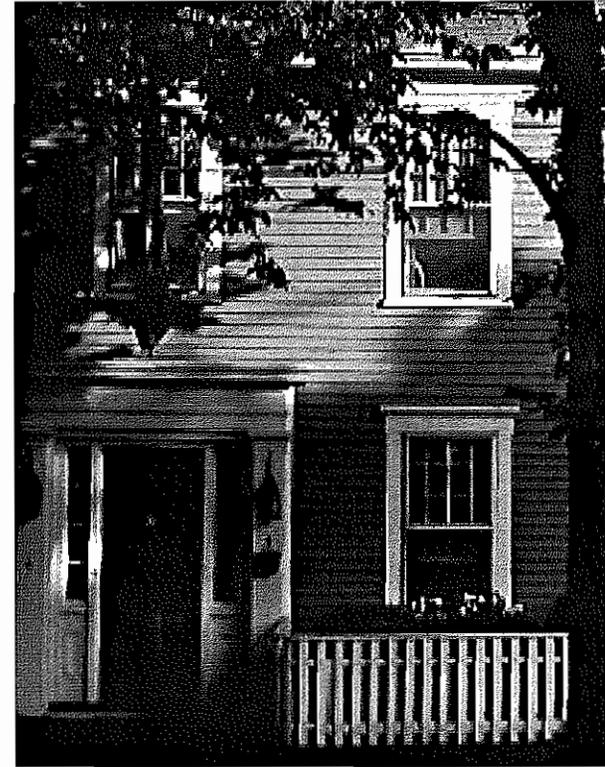
Scale refers to the relative size of something, particular in reference to the size of the human body. Massing is concerned with the way a building is configured, from a single block to a series of smaller units, and how these are placed relative to each other. Proportion deals with the relationship of length to width and height of a structure. Designers look at attractive historic structures in these terms in order to figure out how to make new buildings fit in. Conversely, when new buildings seem out of place, despite traditional material, it often is because of problems with their scale and massing.



Historic buildings have a human scale because construction techniques were largely limited to what could be accomplished with human hands.



Traditional massing also was a result of the limitations of construction techniques and materials. Additive massing resulted when structures were expanded over time as a family grew.



Buildings seem to look best when their proportions follow those of the human body: upright rectangles rather than low squat masses.



Not recommended: structures that are out of scale with the human form, arranged as single masses with squat proportions.



At first glance, the typical New England village seems like a very complicated collection of shapes; in fact there is usually just a few simple forms repeated over and over and arranged in many different ways. The shared massing and proportions (together with a common approach to material, colors, trim, window, etc.) tends to hold the whole composition together. This balance of unity and variety is the essence of successful design, and the reason New England villages are so beautiful.

Rooflines

Guideline:

Roof types should be limited to a few simple types, dominated by the gable and the hip roof. Mansards and gambrel roof styles are generally out of place and should be used sparingly. Roof pitches should generally be fairly steep: between 8:12 and 12:12. Dormers should be designed to be in scale with the rest of the building, generally limited to no more than 1/3 of the length of the eave line. Large shed dormers should be discouraged. Large shed dormers should be discouraged.

Discussion:

Rooflines are very important to defining visual character at the scale of the community. As with other architectural elements, analysis of traditional forms reveals a few common approaches that balance appearance with function in the most efficient way. Tall roofs have always been more common than flatter ones; they shed rain and snow better and open up more room in the attic. As with other design elements, simplicity and consistency are the watchwords. For example, roofs of different types were seldom combined on the same building.



Roof types include (left to right) the gable roof, the hip roof, the mansard, and gambrel. Unusual roof styles are welcome in small amounts (far right), but should be used primarily for commercial buildings and community landmarks.



Additions to the basic form of a roof should be designed with care, in proportion with the rest of the roof. Dormers should be set back from the building face and made up mostly of window area (left). Shed roofs are an inexpensive way to enclose extra space (right).



Not recommended: flat roofs or roofs with a very shallow pitch tend to fail more quickly and don't fit very well with the local vernacular.



In mixed use development, traditional roof treatments included the false front, or cornice, with a sloping roof behind to shed water to the sides.



Additions to existing structures should repeat the same rooflines.

Facades, Fenestration, and Building Entrances

Guideline:

Every building should have a clear front facade, a formal side facing the street. The principal entrance should be clearly visible, set apart by its location and detailing to mark it as the front door. Windows should be vertically proportioned, ranging from 1:2 to 3:5 proportion of width to height, and generally no more than three feet wide. Windows and doors should be arranged in a balanced, unified design -- though it need not be completely symmetrical. Glass should be limited to no more than 50% of the total area; the effect should be one where the windows have been cut out of a solid wall.

Discussion:

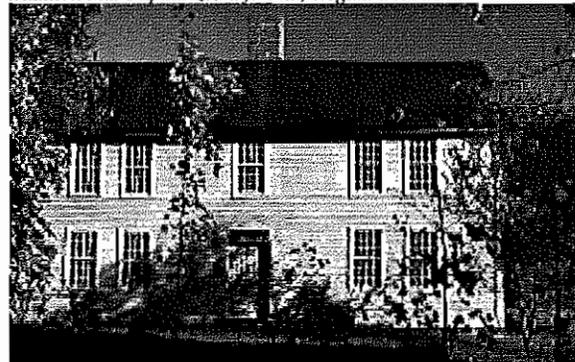
As the public face that the house presents to the street, the front facade plays a critical role in the overall appearance of the community. Generally the simple approach is the best design, with balanced windows and a well marked doorway. As the major repeating element on the walls of a house, windows should be arranged with a conscious rhythm in their spacing. All elements should be aligned with a few simple lines across the facade.



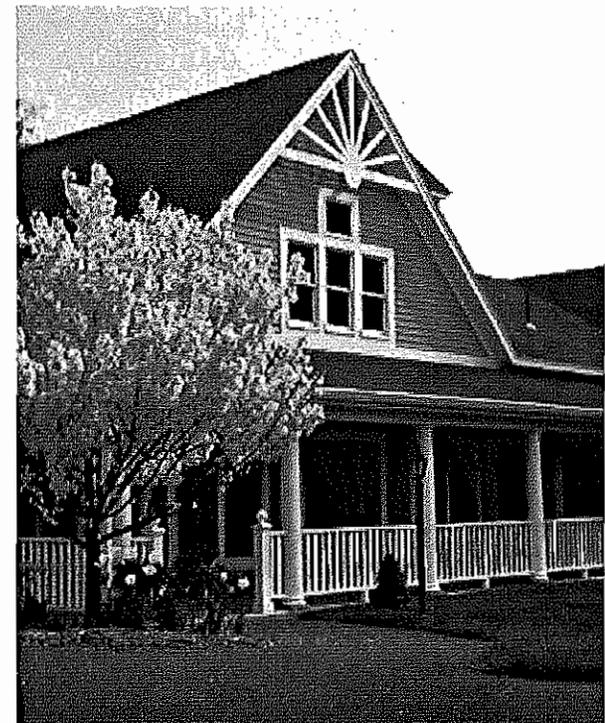
Not recommended: Unusual facade treatments can create a jarring effect from the street, even when softened by historic materials.



A balanced facade treatment is common on commercial structures (above) and old houses (below), based in a long architectural tradition that emphasized a formal, elegant treatment.



Vertical windows echo the proportions of the human body. They are more successful if separate window panes repeat the proportions of the overall window.



Doorways and entrances are traditionally celebrated as, literally, the families portal to the world (left and far left). A wide variety of treatments is possible; The best results use the architecture of the building to make the main entrance clearly visible (above).

Materials, Colors, and Surface Appearance

Guideline:

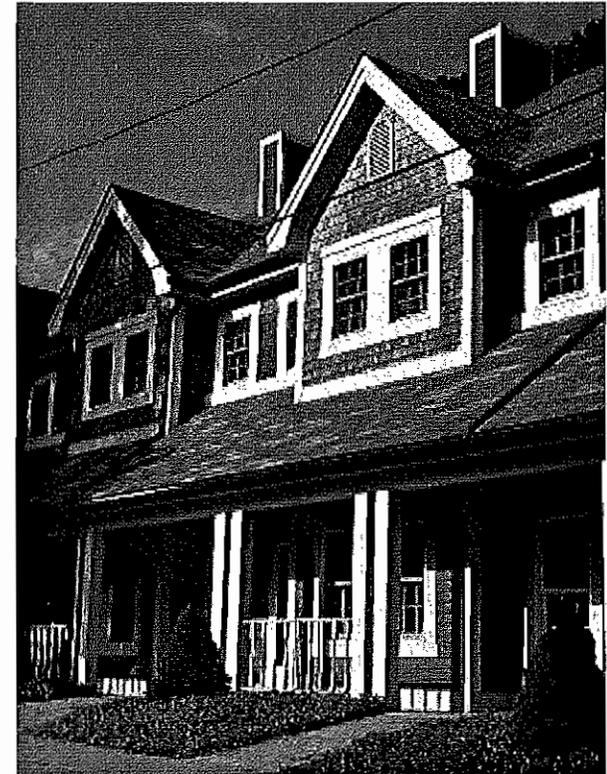
Use traditional forms and materials whenever possible. Use colors and surface treatments that help houses fit into their surroundings; dark colors in the woods and rural landscape help houses disappear; light colors unite houses in a village setting.

Discussion:

Materials are important, not just for the people who live in the house but for the appearance of the entire neighborhood. Like the overall massing and proportions of a structure, materials can either give it a recognizable, human face, or a more "modern" appearance. Using materials that are native to the region can help new homes fit into the visual character of the town. These materials have a time-tested resistance to the local climate, as well. Use of local stone and wood products can also support the local economy and helps keep undeveloped open space in productive use.



Dark tones, and earth colors help houses disappear in the woods (top); bright colors make a structure stand out, and are more appropriate in a village setting (above).



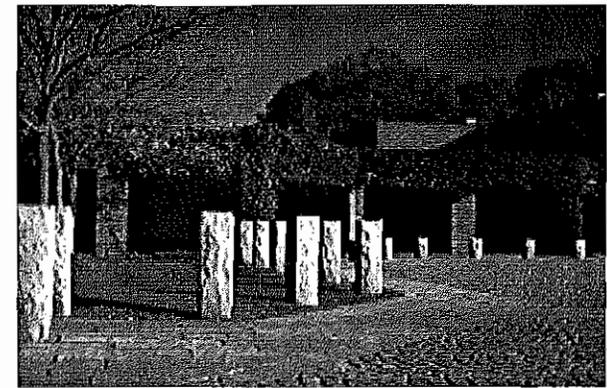
The traditional two-tone pattern continues to be effective; dark siding with light trim is the most common.



Not recommended: materials more common to industrial or other applications tend to disrupt the continuity of houses' appearance along a street.



Traditional materials used in modern ways can produce striking result -- but are best in situations where contrast with more conventional neighboring structures is not a problem.



Juxtapositions of man-made materials and natural forms can produce beautiful results.

Garages

Guideline:

Place garages so that their doors do not dominate the street view of the house: by setting the wall of the garage back at least 10 feet from the front wall of the house; by shifting the door openings to the side so they don't face the street; and finally, by using a detached garage in the rear of the property. Garage architecture should match that of the house.

Discussion:

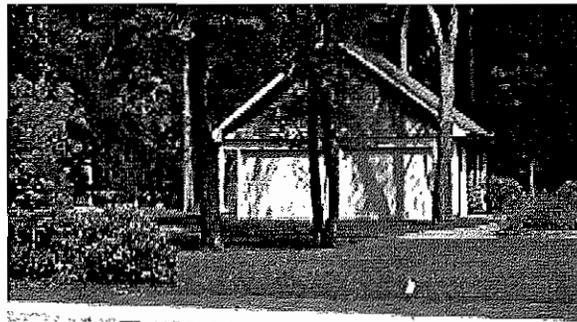
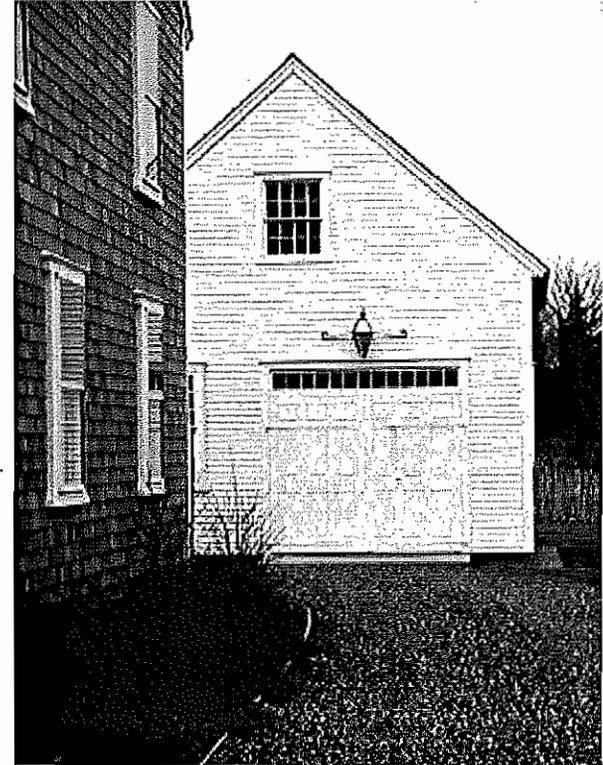
The garage, while useful as a storage area, is usually not much to look at and adds nothing to family or community life. Garages which face directly out on the street tend to take up much of the building facade with a lifeless wall that dominates the scene. It is much better to place an attached garage behind the front wall of the house, or better still, to use a detached garage in the rear of the house. Attached or detached garages offer the opportunity to help enclose private courtyards around the house, and can be combined with walls or fences to demarcate property lines. Garages from two neighboring properties can be attached at the property line, opening up more private, usable space on each lot for the use of the family.



Not recommended: garage doors that dominate the building facade and face directly out on the public way.



Garages in a new development on Nantucket (above, and right) use traditional designs and hardware to fit in with the character of the house. Second stories in garages provide inexpensive storage or studio space.



Detached rear garages let more light into the house while helping to enclose and protect the backyard.



Grouped garages shared by several homeowners can save space, but need to be carefully designed to avoid creating a lifeless facade.



Traditional detailing can make the front of the garage as attractive as the rest of the house.

Porches

Guideline:

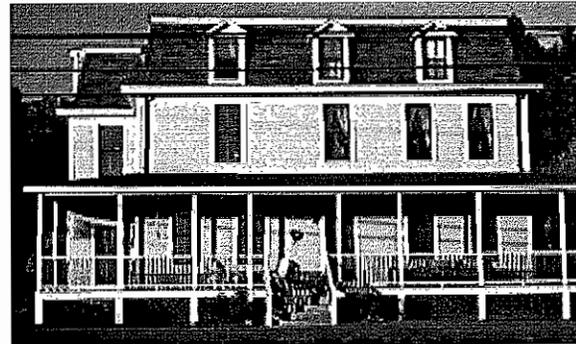
Porches can greatly enhance the appearance and functionality of a home. They can be little more than a cover over an entrance, but are more useful if given the proportions of a room: at least eight feet wide and 12 feet long. Materials and finishes should be compatible with the rest of the house, while durable enough to take the weather.

Discussion:

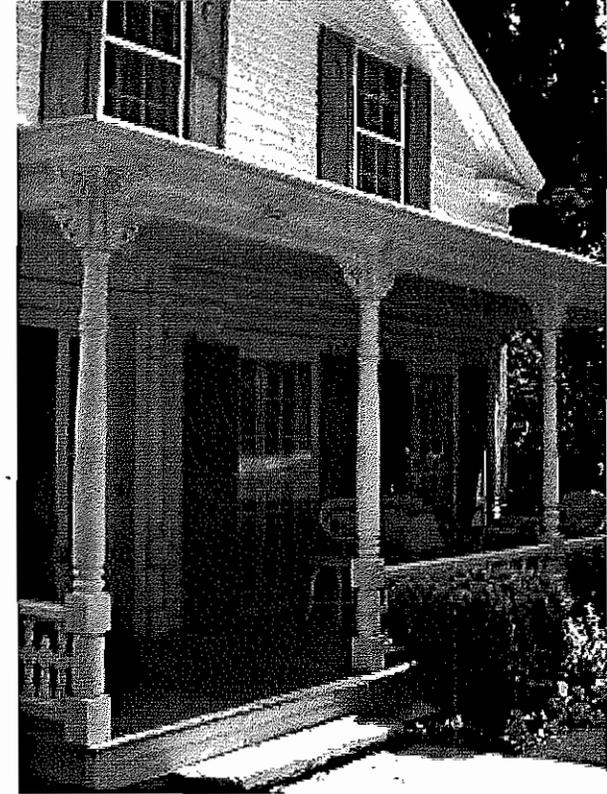
Porches provide a useful and relatively inexpensive extension of living space. They help to cool the house in the summer and provide protection from inclement weather. In the life of the community, the porch provides an essential transition area between the public space of the street and the privacy of the home's interior. Porches bring people outside and foster interaction between neighbors and passersby. For children (and their parents) porches provide a place where kids can get away from the family to play privately, while still being under the watchful eye of Mom or Dad.



Porches help tie a building into the landscape: functionally by providing an transition from interior to exterior; and visually, by reducing the apparent scale and mass of the structure to human proportions.



Porches can help unify a facade, especially one with multiple entrances, as well as providing a sheltered place to set down groceries, dry off the dog, or meet the letter carrier.



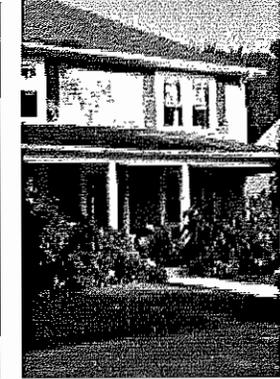
Porches provide inexpensive expansion space, especially in the summer when guests arrive to enjoy Moonstone Beach. This kind of flexible space is usually not affordable on the inside of the home.



Not Recommended: A house without a porch.



Details make a porch sing. Above, left, turned columns bracket a graceful set of stairs. Center, gingerbread serves a decorative as well as functional purpose in tying columns to the roof. Right, plants and furnishings turn a porch into an outdoor living room.



Stormwater Management: Constructed Pond/Wetland Systems

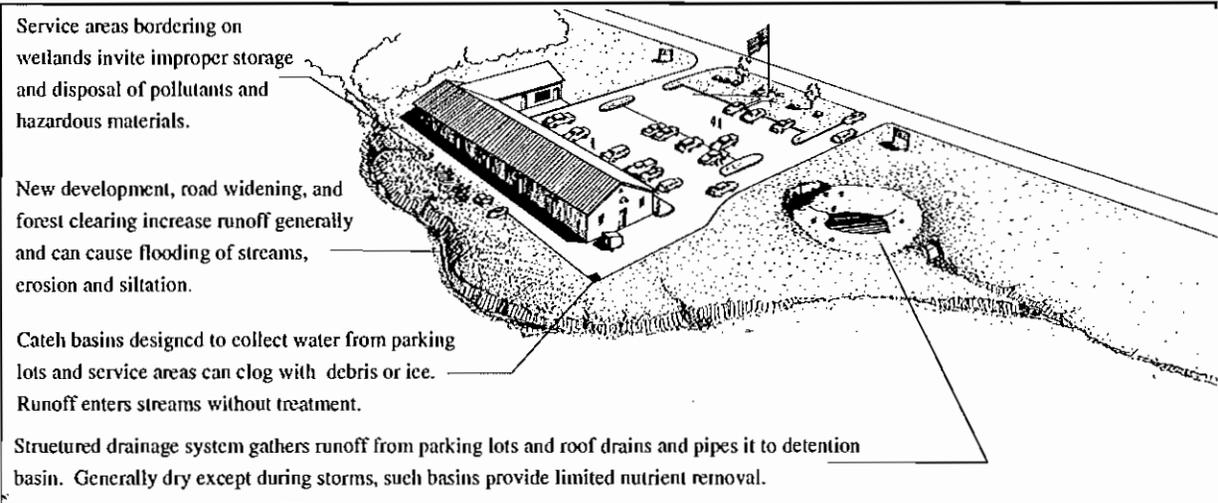
Guideline:

Use constructed pond/wetland systems to control runoff and filter pollutants, including the nutrient pollution that is the most common kind of contamination in residential development. Use natural forms -- based in the way South Kingstown's existing streams and ponds fit into the landscape. Use native species that will thrive in the local environment.

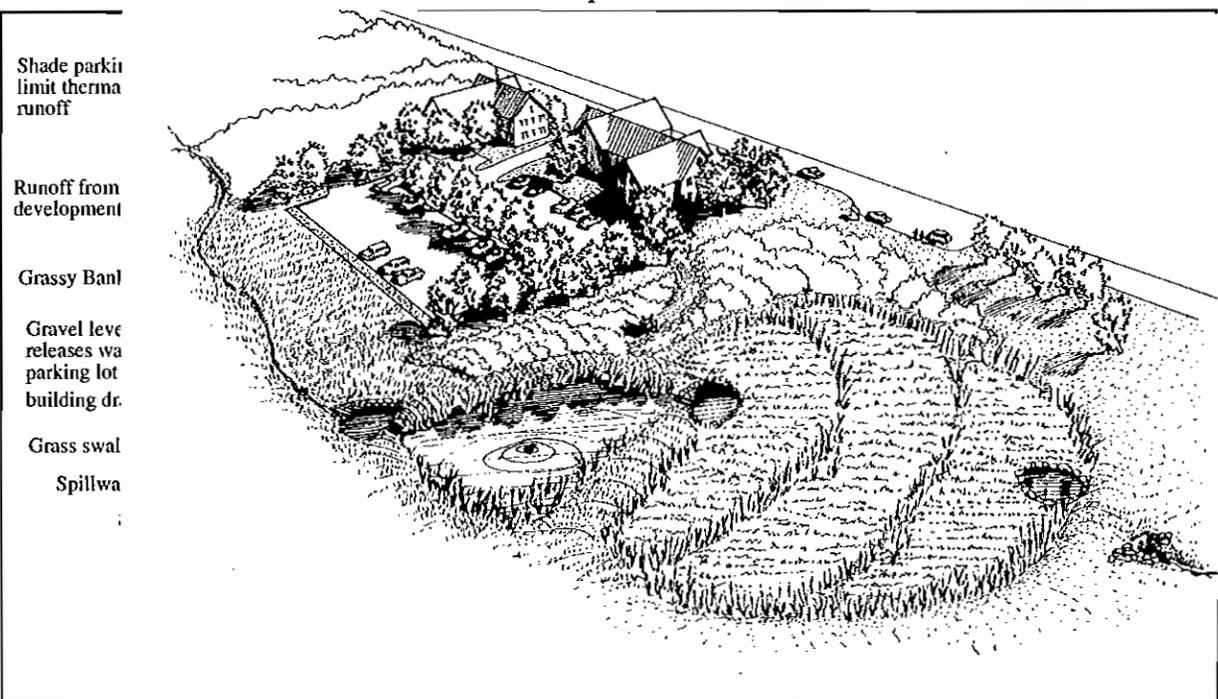
Discussion:

Natural systems have many advantages: there is little concrete or steel to crack or corrode; they expand or contract with changes in demand; they are less expensive to build and maintain. From a community perspective they can be a real asset -- attracting birds and other wildlife while creating a wonderful scenic attraction instead of an eyesore. Carefully located as part of a new subdivision, a constructed wetland can serve as a public park, as well as a buffer between homes and pre-existing streams or wetlands.

There are a number of configurations for constructed ponds and wetlands that have differing efficiencies in the removal of pollutants from stormwater. The size of a proposed treatment system varies with the amount of potential runoff. The system shown (lower right) is large enough to treat runoff from a number of existing homes and businesses as well as several new developments, and could remove up to 85% of the total suspended solids and up to 60% of the total phosphorus. This in contrast to a conventional system that does little to remove nutrients.



Not Recommended: Conventional Stormwater Management for a Small Commercial or Residential Development



Recommended: Area-Wide Stormwater Management - Constructed Wetland System

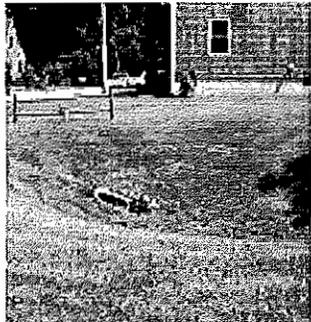
Stormwater Management: Aesthetic Design Issues

Guideline:

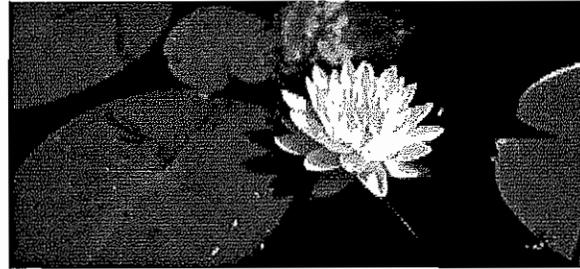
The visual appearance of stormwater management systems should be as important as their functions. Nature should be used as a guide: landforms should be natural and blend gradually into existing grades; water bodies and stream channels should be laid out according to the principles that form them in nature; plantings should be based on native species arranged in the patterns of their wild cousins.

Discussion:

As stormwater management gets more sophisticated, best management practices call for larger areas and more complex treatment systems. This is usually thought of only in terms of physical processes and practical functions, but it presents an additional opportunity: to design a system that does the job, but just as importantly creates a visual asset for the community. Without spending any more money, the developer can thus realize a higher value for the property.



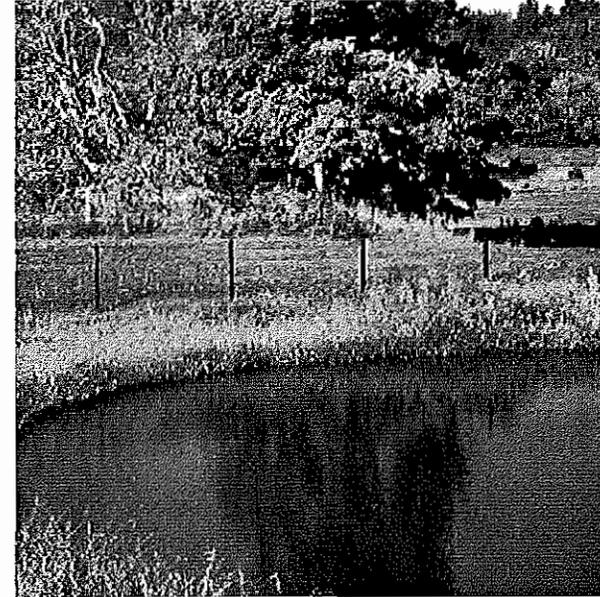
Not Recommended: unnatural ditches, odd mounds or depressions (above); shiny chain link fences ringing weedy detention areas (below).



Studying forms and plant materials found in natural wetland systems can help in the design of constructed systems.



Irregular edges, smooth, "natural" grades, half-buried boulders, and asymmetrical masses of vegetation can help a new pond look like the work of nature.



Permanent ponds enhance water quality and add an additional measure of visual interest.



Fences that may be required to control access to stormwater detention areas and ponds should be designed to fit into the character of the neighborhood.



Native plant species, like this blueberry, are self-maintaining, better for indigenous wildlife, and adapted to local growing conditions.

Design and Management of Open Space

Guideline:

Undeveloped open space should be located, designed, and managed to enhance ecological functions, scenic values, and recreational opportunities. In cluster subdivisions, open space set-asides should be used to expand regional greenway corridors and to buffer sensitive environmental resources. Open space on the interior of the development should be designed for park and recreational use, as an alternative to large private house lots.

Discussion:

Open space set aside in cluster subdivisions too often is forgotten, and adds little to the life of the community. This misses the great opportunity in clustering, which is to create from the protected open space a community asset, the value of which more than offsets the arguably lower value of smaller building lots. This requires a clear vision of what the open space is to be used for, and an ongoing management plan to maximize its potential value. Sometimes, the highest value is as an ecological preserve, to be seen but not used. More often, open space can serve multiple purposes for active and passive recreation, wildlife habitat, as well as views.



Not Recommended: Open space that is not accessible to the community is a wasted resource.



Radburn, New Jersey -- designed in the 1920's -- had an innovative plan where all homes backed onto public open space in the center of the "superblock." (right). This central space was designed as a romantic park with irregular clumps of trees, ringed by a winding series of paths (above). Paths in one block connected to those in the next by means of tunnels beneath the intervening street. All the children in the community can walk to school without crossing any streets.



Keeping agricultural land in production (left, center and bottom) solves the question of maintenance and can generate income. Deeds to adjoining lots and/or homeowner's association documents should contain protections for farm activities. Design should be based on the existing character of the landscape; formal rows of trees along a road, or irregular clumps in a pastoral scene (above) both fit.

Greenway and Trail Connections

Guideline:

Every new home should have a direct connection to the town's larger greenway and trail network. Open space within the development should be designed and managed to enhance this growing system of natural corridors

Discussion:

South Kingstown has a large amount of land that is protected from development by public ownership, environmental laws, or private conservation. Town planners and private groups are working to link protected parcels into a greenway network, with public recreational trails through many of South Kingstown's most beautiful areas. The existence of this growing network makes every new development a potential partner in the creation of the town's greenway plan. Options range from using the cluster provision to set aside 40-50% of a parcel as an extension of the town open space system to simply granting a narrow trail easement through the development. This approach benefits the town, to be sure, but also the developer, who is able to tell potential buyers that their property abuts part of the South Kingstown Greenway Network.



Not recommended: Open space within developments that is effectively isolated by physical barriers or simply lack of trails.



Every stream and wetland, protected by existing state and federal laws, is part of a de facto greenway network -- but without trails people don't know it's there.



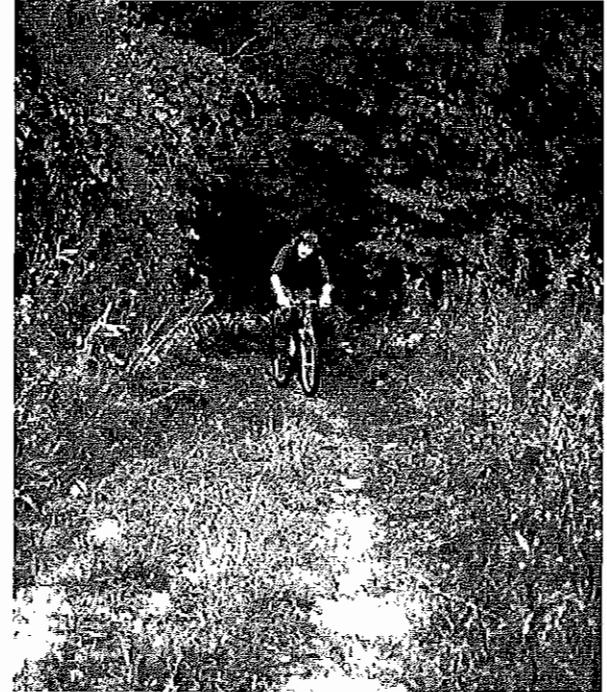
Agricultural areas form another key part of the existing greenway system -- some are protected by public ownership or easements; profitable farm operations also play a key role in protection.



Public efforts to establish hiking and bicycle trails on old railroad beds and abandoned roads are the most visible elements of the greenway network; neighborhood links can and should be more understated and private, including gates, if necessary, to maintain privacy for the residents.



Developers are sometimes leery about introducing public trails close to private homes; in practice, people are no more likely to approach a house from a public trail than they are from the street. In most cases, demonstrable benefits to homeowners far outweigh concerns about loss of privacy.



Trails should be designed to accommodate the widest possible range of uses -- within reason, and only after careful analysis of impacts on sensitive environmental features, maintenance requirements, and security concerns.

Design of Recreational Amenities

Guideline:

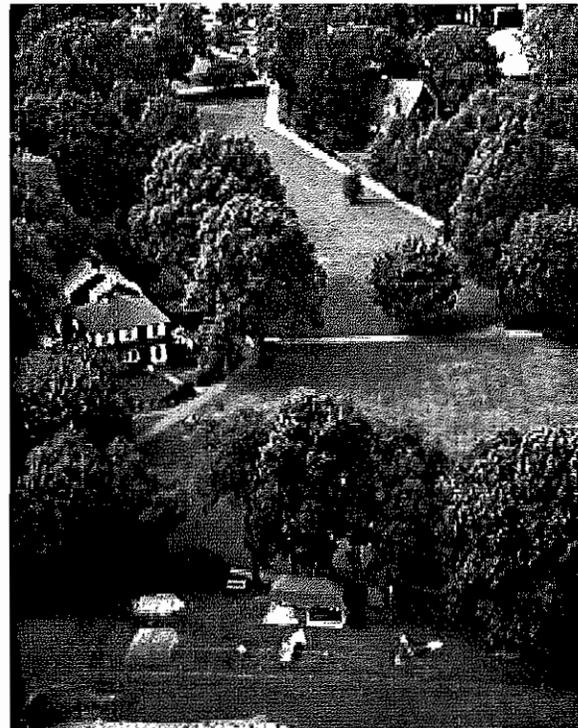
Plan for recreational amenities early in the subdivision planning process and reserve space for them in the plan. Use the ball fields to open up vistas from private homes and the public street. Even if the market will not support construction of amenities like swimming pools and tennis courts right away, leaving space for them will make the job much easier when the time comes

Discussion:

Sport and recreation facilities are fairly common in more expensive communities, and are a very common in multi-family development. The typical single-family subdivision, however, is built on the notion that recreation occurs in and around the private house lot. While recognizing the realities of the marketplace in supporting such extras, developers can work future recreation into the development plan at an early stage and at least leave behind a vision of what the community can eventually build. Recreational improvements can often be combined with necessities like septic drain fields to get extra mileage out of construction funds.



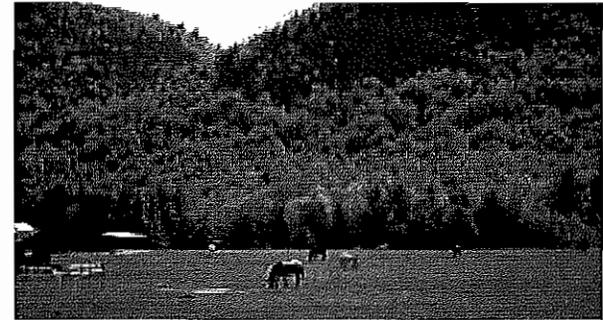
Old town centers often have a community ball field right behind Main Street. Contemporary developers are discovering that the views and recreation potential this arrangement provides can be a strong marketing advantage for new communities.



Having good community recreation facilities within walking distance, (Radburn, above) reduces the need for private facilities; houselots can be smaller, but retain their net value with lower construction costs.



Ballfields are less obtrusive if they are part of a larger, more naturally-shaped open area. Backstops and goals can be "toned down" by dark finishes that help them blend into the landscape.



In rural areas, riding stables and bridle paths continue a traditional land use, and can pay for themselves with boarding fees and riding lessons.



Not Recommended: the typical subdivision divides every available square foot into private house lots, which are so cut up by houses, driveways, etc., as to be useless for many forms of active recreation.

Creating Community Centers

Guideline:

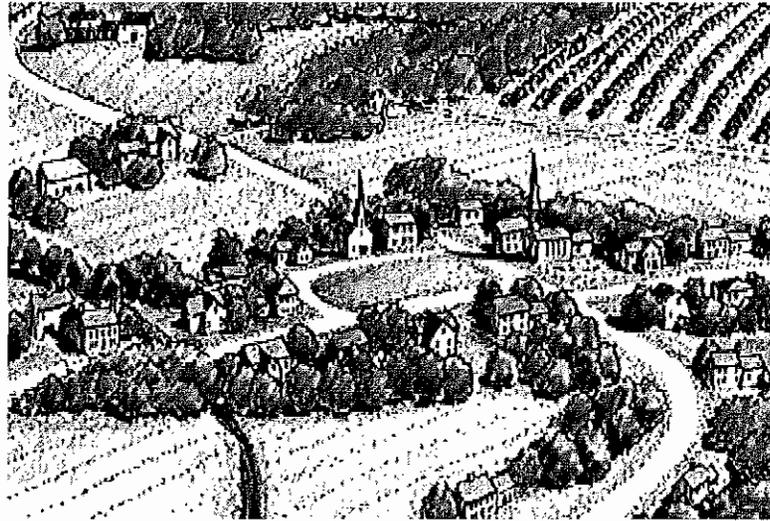
Create a visual and functional center for every new development. Reserve key locations for public parks and community buildings. Combine potential community uses with key junctions of roads and pedestrian paths to create a natural center of activity.

Discussion:

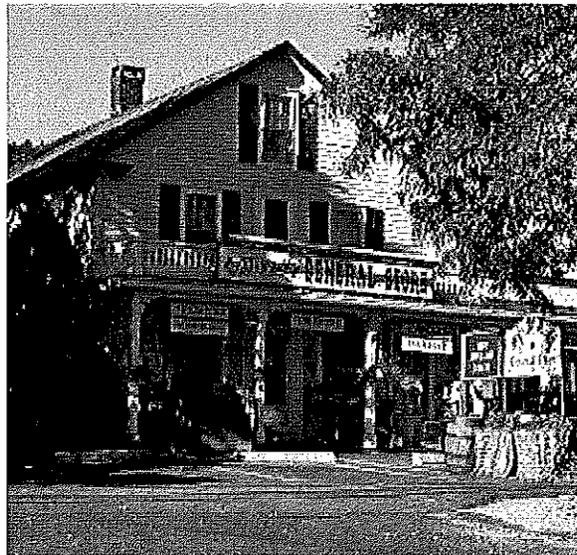
Healthy communities need strong centers, a living heart to which everything else relates. Centers need to be visual focal points, with clear landmarks that provide orientation to residents and visitors. They also need focal points of activity and community life. There is no single type of community focus; any old hamlet or town is full of examples. There are centers organized around civic uses -- town hall, library, school and church. There are centers that focus on a town green or public park. Since the 1950's many suburban neighborhoods were organized around their elementary school and its associated ball fields and playground. Of course, the traditional "downtown" or Main Street often combines all these elements with commercial and business uses. The type of residential growth occurring in South Kingstown's outlying districts is not likely to support the creation of another Main Street, but even a small neighborhood can support a corner store, a community house, a playground, and so on.



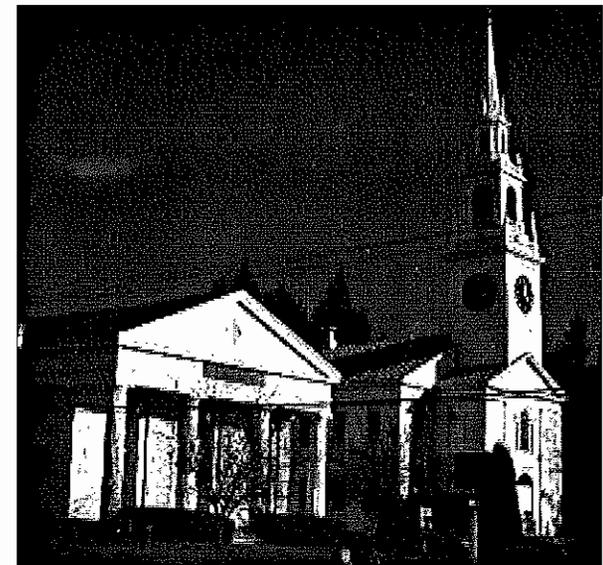
Not Recommended: Isolated new neighborhoods without a visual focus or center of community life.



The Town Common was New England's first kind of Civic Space: the most important buildings were organized around a protected green that served a variety of uses: pasture, drill field, marketplace, fair grounds. Civic space organized around Main Street (right) later became the dominant pattern. The need for flexible civic spaces continues in modern communities.



A general store, post office, or community ball field are enough of a focus to enliven hundreds of small communities in rural New England



Important community buildings, tall trees, hill tops, and water bodies can all serve as landmarks that tell people where the center of a community may be found.