

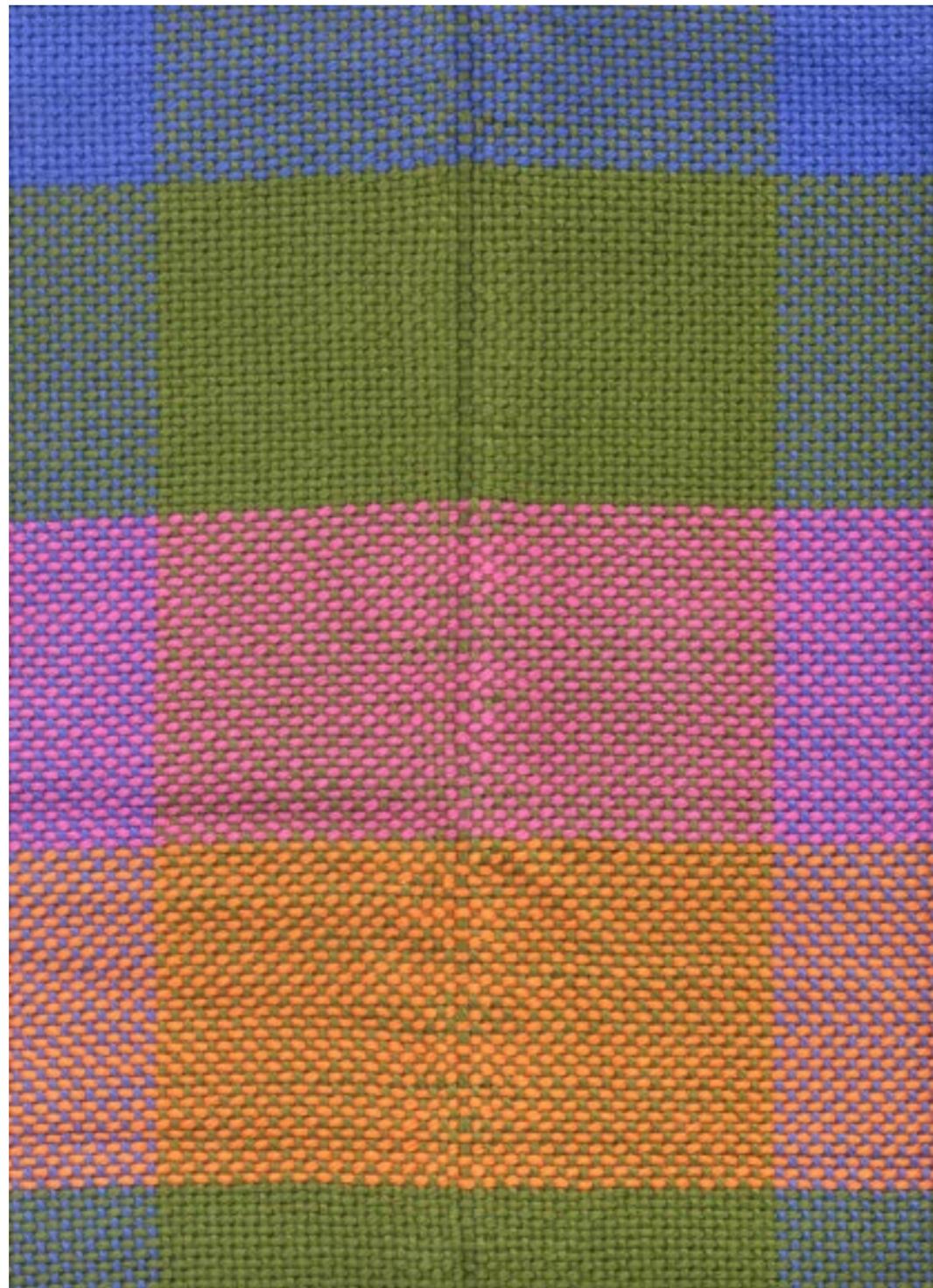
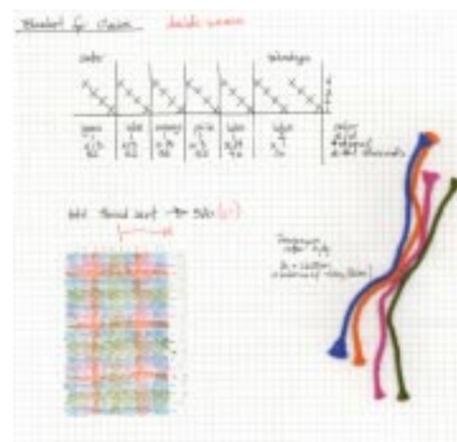
## introduction

The word “fabric” is used in discussions of cities, towns, and neighborhoods so often that there is a risk that it will be taken as one of the many fashions or fads in the architectural lingo we all know and some love, the word disconnected from its meaning in relation to the subject. But “fabric” is actually the perfect word with which to talk about a neighborhood. Because a neighborhood is made of layers of threads, all interwoven and contributing to the whole effect. Each element - the house, the block, the street, and so on - constitutes one of these layers, intertwining, intersecting and interacting at various levels. A good neighborhood will have many layers, an intricate structure that gets richer as you dig deeper. In a good neighborhood, there will be many small parts contributing to the whole.

This is the study of a such a neighborhood. It is an analysis of the fabric (seen as the physical manifestation) and the structure (which includes the non-physical aspects, or the *form*) of a “village”, an attempt to understand how to approach the question of an addition, a reconstruction, a renovation, an intervention, a change in a tissue that is already whole, already solidly structured, with its own rules and its own peculiarities. Especially one which was founded upon the ideals of a certain social model no longer the norm.

In this study, these layers of elements, the threads which hold together and form the neighborhood, are peeled apart, analyzed and set out for examination. Because it is often at that point at which two things come together to form a third that all three things, both the old and the new, can be fully understood.

I am an architect, but I am also a weaver, and it is part of what I do to look for patterns in things. Sometimes it is only in the picking apart that one can understand the coming together. It is only in the understanding of the works of a watch and how they fit and interact one piece with the other with all the others that one can figure out how to fix what may be broken.



## social history

Hilton Village was designed in 1917 - 18, during the first World War. This was the Progressive Era, a period leading up to a time of great transition in America, aptly described by Peter Rowe as “crossing over into modernity”. (Rowe, p. 3) It was an era which saw great social and architectural change, an era which saw town planning come into its own as a discipline, a period during which the government role in the social welfare of its citizens began to change, and during which certain ideas were disseminated and becoming crystallized. And while not all of these ideas were new, they were coming together in new ways and with new strength. It is not the purpose of this study to provide an in-depth discussion of the changes which were taking place at that time, nor to provide a full history of the development of town planning. Nevertheless, it is important to understand the history and background, both social and architectural, from which the design of Hilton Village came in order to understand the place itself.

The idea of a connection between architecture (environment) and social reforms (a “correct” family life) had once been fairly limited to the ideology of the religious utopians. During the late 1800’s the idea spread from the religious utopians to the social utopians and then to society as a whole. Building on the work of early theorists, such as Fourier, philosophers and social reformers postulated a society in which the proper moral and intellectual education would eventually lead to the ideal state. Great emphasis was placed on the “natural” and on physical exercise, on cleanliness, and on good health as contributors not only to the overall well-being of a man, but also to his mental development.

By the beginning of the 1900s, an awareness of the social and economic consequences of industrialization was becoming widespread. People had begun to blame environment, and specifically the worker’s daily living environment, for many social and economic ills. And the initial enthusiasm for the machine and the city was being drowned out by a call for a return to the “healthy” life of the country, even if that “country” were only a suburb. The invention of the cable car and the electric trolley was making this return possible. The great shift towards the city was beginning to reverse itself, especially with regards to the middle and working class, leading to a major decentralization of urban areas. There was a move towards community and society, and away from isolation and privatism. In connection with this decentralization came a change in the way most people thought about architecture and, more specifically, about a house.

Better sanitation, more ventilation, more efficient kitchen layout, more indoor space made by including built-ins instead of furniture, more outdoor space for exercise. The house began to be seen as a laboratory in which design simplicity led to increased efficiency. Common standards were developed, not only to guarantee the “correct” environment, but also to avoid competition and class distinctions. In worker’s housing especially these issues became important, with management and

social reformers believing that increased efficiency, sanitation, and ventilation in the home, as well as ample outdoor space, would result in a better and more industrious worker.

So it was also partly an economic issue. As early as the 1850s, with the development of mill towns like Lowell, Massachusetts, an attempt had been made to “make a better worker” by improving his or her environment. Gradually, broader social questions, such as education and worker’s rights, began to be taken into consideration as well as economic ones and the two threads, utopianism and capitalism came together. Architecture, and specifically the newly evolving discipline of town planning, were to provide the environment. And the government was to provide the means.

*Hilton Village, post World War II*

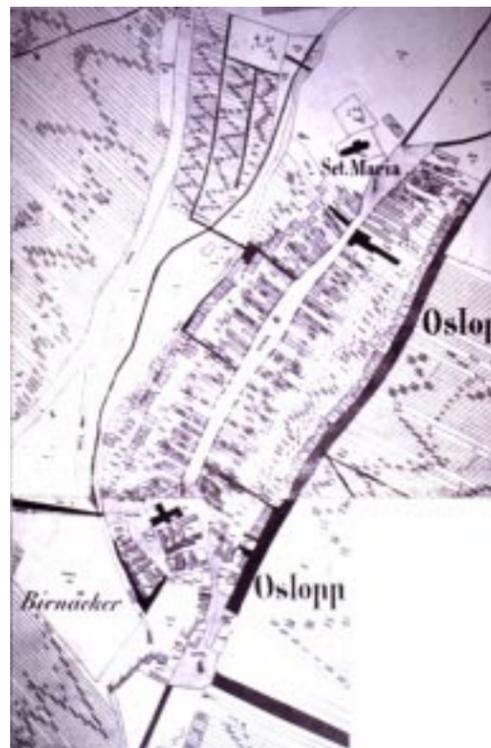


### community planning history

Human settlements have existed from the time when man succeeded in producing a surplus, allowing him to form stable and static communities. Aside from specific structures that provided the “intellectual fabric”, or the formal order or development, most cities and towns were not planned, but instead grew somewhat haphazardly as people arrived and built what was needed. Early exceptions to these examples tended to be those places that fulfilled ceremonial or religious functions, rather than normal everyday ones. Even in America, a place in which groups of people were settling new towns all at once, the “planning” involved was generally at the most basic level: a gridiron plan with houses arranged around a central village green. Only the early settlement was planned; usually no provision or plan was made for future growth. Savannah, Georgia, for example, was laid out around a formal series of squares around which the houses were built and which exerted a strong organizing influence on the pattern of the city as it grew. But the individual buildings built did not conform to any predetermined plan.

Whole town planning, or community planning in the sense of not just the plan pattern, but also the houses and the necessary community structures, had heretofore operated on a paternalistic model, mainly limited to a specific land owner or businessman who was responsible for housing his people. Most of these settlements were small villages or hamlets - a few houses, a main street, perhaps a store. The early towns formed by mill owners prior to the mechanization of the yarn-making and weaving process are examples of such settlements. The mill towns developed after mechanization, such as Lowell and Lawrence Massachusetts, stand instead at the fulcrum point between this older paternalistic model and the next model, in which government became directly involved in housing and planning issues. Developed and built by the cloth manufacturers a certain class of employee, the mill towns were a direct result of the needs of the milling process and its specific geographic requirements. The towns were built to ensure a steady and stable work force. Aesthetic issues, if considered at all, came a distant second to the goal of fulfilling simple functional needs cheaply and easily.

But there are some early examples of government involvement in community planning. One such example is the town of Osip, developed in the 1850's by the Austrian government in a part of the country that had formerly been Croatian territory in order to encourage settlement there. Built for three-generation families who worked the land, the houses were centered around a private courtyard, off of which the house and farm buildings opened. Stretched out along a central axis, the houses present a unified front and form a boundary to the street. Each single or double house sits on a long thin lot. Because of this peculiar lot and ownership structure, in which each family owned a thin strip of land that continued through the fields, the town could develop only along a continuation of the main axis. This “isomorphism” in which form and fabric are directly overlaid is one of the common reasons for the failure of planned communities. The architectural principles of town planning are subserved by the social; the result is inevitably stagnation.

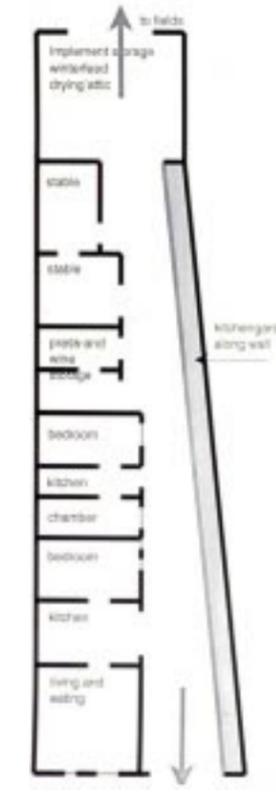


plan of Osip, 1855

views of Osip houses



typical plan, Osip double house



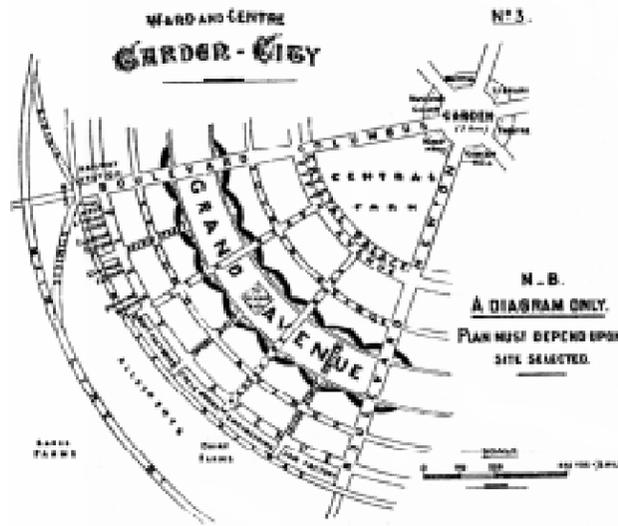
typical plan, Osip single house



The late nineteenth and early 20th century was a time of accelerated activity in the field of planning. Haussman had implemented his plan for Paris beginning in 1852, Camillo Sitte published his treatise, *Der Staedtbau nach seinen kuenstlerischen Grundsuetzen (City planning according to artistic principles)* in 1889. Wagner published his text, *Die Grozstadt* in 1909, and Tony Garnier published his seminal work, *La Cite Industrielle*, in 1917. But these works mainly concerned the city as a whole, and Garnier's plan was the only one to fully include and address social questions. Garnier, coming directly from a socialist and utopian background, formulated an extremely comprehensive plan for an ideal city, taking into account some of the issues (such as circulation and functional separation) which were to become fundamentals of planning later in the century.

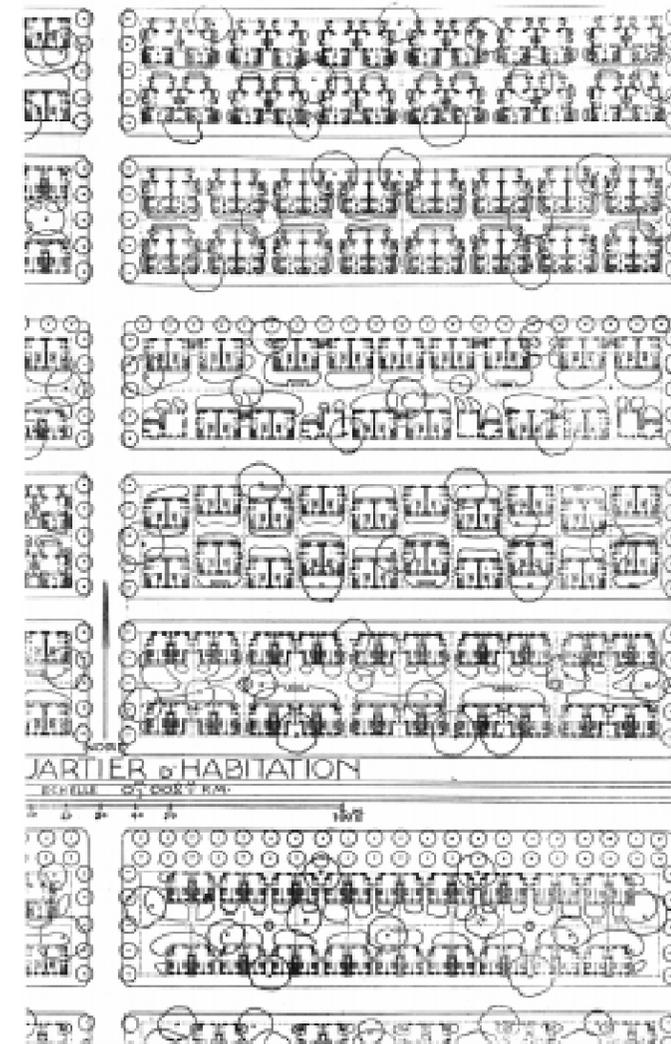
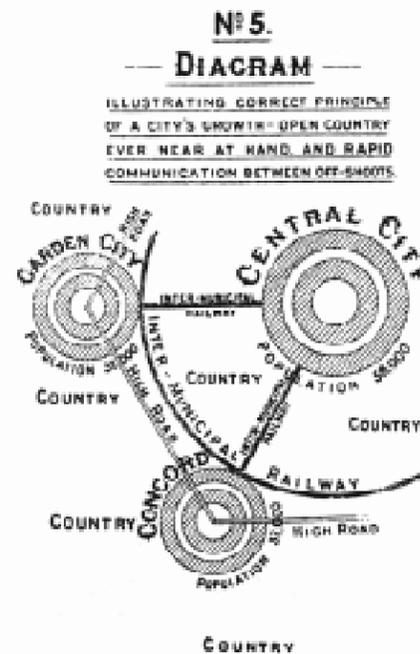
More directly related to the development of Hilton Village was the garden city tradition of England based on the theoretical ideas of Ebenezer Howard in his 1902 book, *Garden Cities of Tomorrow* (originally published in 1898 as *Tomorrow: A Peaceful Path to Real Reform*). Howard, building on the example of experimental workers communities in England such as Port Sunlight and Bourneville, as well as the ideas of Americans Frederick Law Olmsted and Edward Bellamy, theorized an ideal community structure based on self-sufficiency and collectivism. He codified the increasingly popular theory which held the city and urban industrialization responsible for social ills and aesthetic deterioration by proposing a new civilization based on the idea of service to the community in which smaller "Garden Cities" would grow up around a larger hub, all of which would be connected by roads and railway, and each of which would be surrounded by an agrarian belt. The garden cities were limited in size to approximately 30,000 people, divided 6,000 person wards, thereby avoiding the anonymous characteristics of the city. His was an ideal and theoretical view. Viewed by some social theorists as simplistic, Howard's plan nevertheless succeeded in bringing a new language to the discussion of town planning.

If Ebenezer Howard was the theorist behind the Garden Cities movement, then Raymond Unwin and his partner, Barry Parker were among its foremost practitioners. Firmly entrenched in the socialist and utopian movements, Unwin advocated changing the entire system of housing development and of living. His book, *Town Planning and Practice*, published in 1909, solidified their reputations and spread their ideas worldwide. Unwin and Parker's projects were founded on two fundamental beliefs. First, that the goal of the planner is to guide and control the activities of a community by bringing order and a sense of design to the workings of society. Second, that aesthetic quality and well-constructed buildings could also be economical. The emphasis was on community living, and their work was aesthetically based on the ideal of the village, the English cottage tradition, and the concepts of harmony and unity. These themes found expression in the form of houses arranged in an orderly fashion, placed at regular distances from the road with private gardens in the back. The importance of green areas is a constant in their work, as is the central location of the community structures.



idealized plan for a Garden City. E. Howard

Garden City diagram. E. Howard



partial plan of a neighborhood in the industrial city. T. Garnier.

Two projects by Unwin and Parker are worth noting because they can be specifically related to Hilton Village. The first is the town of New Earswick. New Earswick was developed in 1902 as a “garden village”. With only 100 houses in the original design, the emphasis was on community living and the village ideal. In the first official garden city community of Letchworth, designed in 1904, each house had access from all sides and a small front as well as a back garden. In order to avoid what they called the “spotty” effect of single and detached houses, Parker and Unwin designed two, three, and even four family houses which were distributed throughout the town. The houses themselves, called cottages, were designed with a diversity of materials and styles, but all had the common features of large and often central gables, long sloping roofs, and dormers. All of these features cut down the amount of brickwork necessary, thereby making them more economical, but they also created a distinctive look and feeling of commonality -- harmony and symmetry without sameness. Unwin used the sloping roofs, in particular, as a means to bring the proportions of the elevation into relation with the pedestrian. In both developments, extensive consultations were done with early and potential tenants to determine their needs and wants. The interiors were simplified and streamlined, and many of the houses had built in furniture and cupboards, still a novelty at that time.

Building construction was also undergoing a change during this transition period, with the benefits of standardization and new technology being increasingly exploited in order to build a larger number of houses in a shorter amount of time. While most of these elements would not fully come into bloom until the 1920's, the roots were already firmly in place by the beginning of the first world war.

Hilton Village, for all of its stylistic nostalgia, was actually quite a modern development. Ideas such as the use of standardization in construction, increased efficiency in the layout of the house, the emphasis on a healthy environment as a necessity of life, the recognition that workers and their families should have well-built, durable housing -- all these were basically modern ideas which were incorporated in the design of the Village.

Nevertheless, in some aspects, Hilton Village shows itself with its feet firmly planted in the “old” model. The basic architectural relationships of the houses to each other and to the street clearly mark it as a continuation of the Victorian ideal which has continued as the basic suburban model to this day.



*plan for the village of New Earswick. Unwin and Parker.*

*plan for the Garden City of Letchworth. Unwin and Parker.*



*cottages in New Earswick. Unwin and Parker.*

## hilton village history

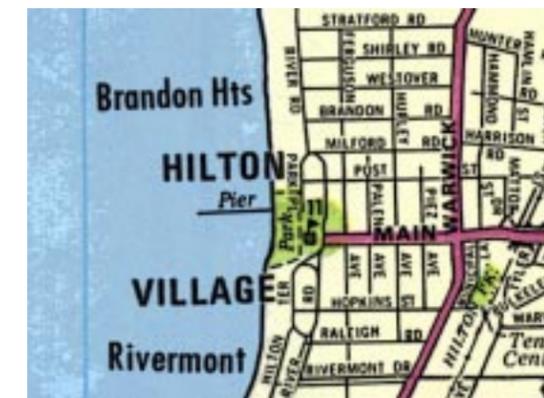
With its entry into the war in 1917, the United States found itself in the position of having to provide housing, fast, for the masses of workers needed for the war effort. Having specifically avoided involvement in the housing market up to this point, the government finally stepped in to develop communities and eventually to provide loans encouraging home ownership for these workers. These planned projects were intended to be true communities, comprising not only housing, but churches, shops, and recreational facilities as well.

Hilton Village was the first such planned community. The development of the village was initiated by the officials of the Newport News Shipyard as the United States government was hammering out its policy of loans and assistance. The shipyard owners put together a joint team of designers and engineers, including Henry Vincent Hubbard as the landscape architect and town planner, and Francis Y. Joannes as the head architect. This joint team approach was new to community planning, but it meant that all aspects of the design of the Village would be developed coherently to create a greater and more cohesive whole.

The designers, and Hubbard especially, proclaimed their goal to be to “produce the necessary accommodations for the least possible price, without being obliged to sacrifice decency, permanency, convenience, space, sanitation, nor we believe, some noticeable degree of beauty.” In the same article in the journal *The American Architect*, Hubbard wrote that, “Temporary housing, after the war, is little better than scrap; indeed, it may be much worse and not being destroyed degenerates into the worst type of slum, a destroyer of local land values, a menace to the tenant and a reproach upon the country.”

And while he went on to detail what he considered the necessary requirements (“proper houses, rightly situated...; roads, water, sewerage, fire protection, stores, markets, churches, schools, theatres, clubhouses, parks, playgrounds, playfields...”), it was clear that this development was grounded in economics. In fact, Hubbard’s article was titled, *Government industrial housing, a business proposition*. And Hubbard stated it himself, “The end product of this housing activity is the contented, efficient worker...The qualities of bodily and mental cleanliness, the normal life of the worker, are an essential part of the equipment of an industrial period.” These statements clearly reveal the general influence of the ideas of the social utopians, the concept of social change through architecture, and the specific influence of the Garden City ideas.

Following the example of Unwin and Parker, extensive research was conducted into all aspects of the development of Hilton Village, from construction techniques and costs, to the cost of the infrastructure needed, to the social and community amenities necessary for the community. Prospective tenants were consulted about their housing needs and desires, and costs were figured to the penny so that the workers would be able to afford to rent and eventually, to own.



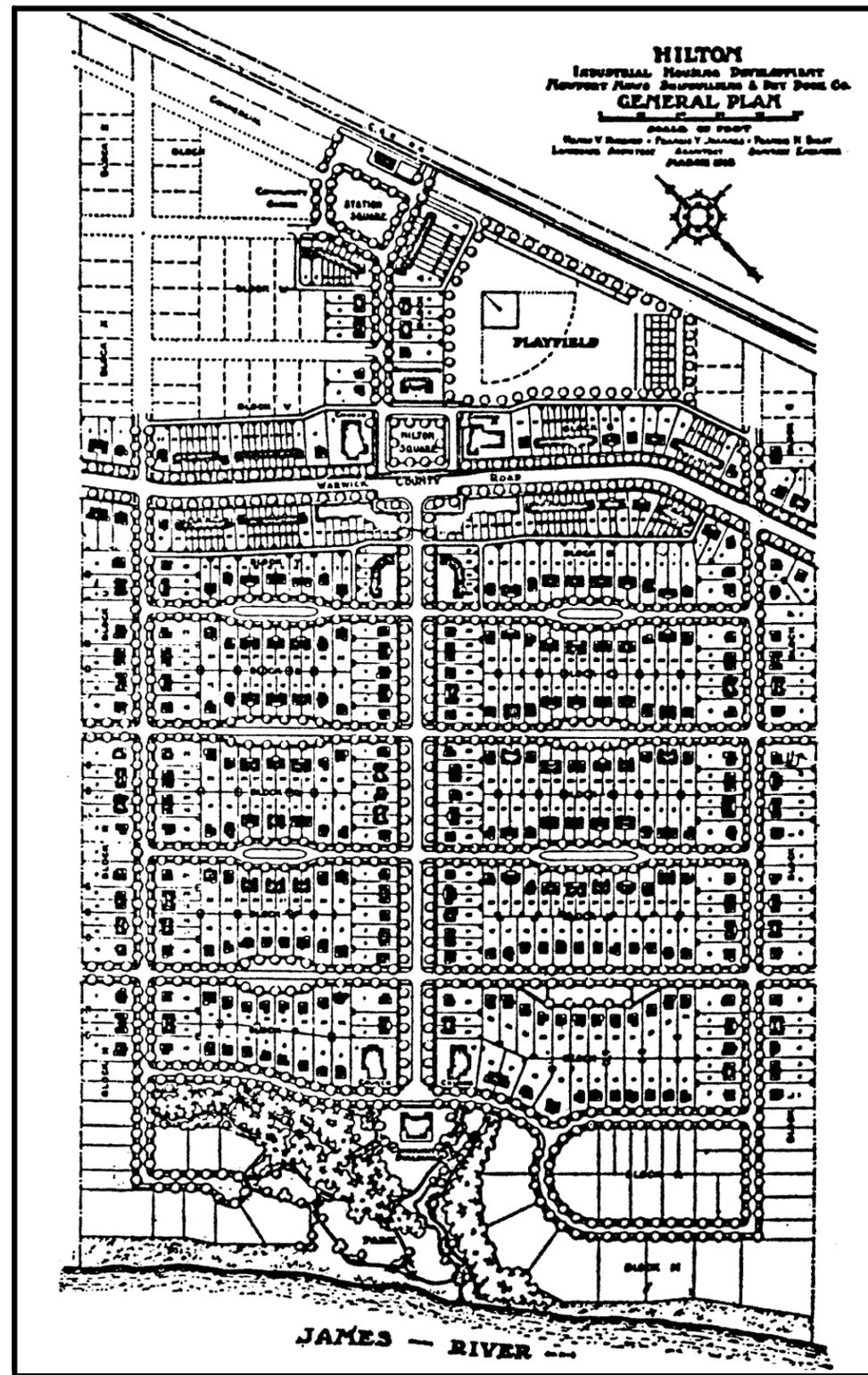
location map

The original plan as drawn and approved comprised an area which ran from the James River to the trolley line above Warwick Avenue. The plan was centered around a main axis (Main Street) which ran from the school and the two churches at the bottom of the plan, ending at the park on Warwick Avenue at the top. Two other axes run parallel to Main Street, while the secondary axes run parallel to the shore, allowing for expansion to other neighborhoods. Lots near and on the riverfront were set aside for those who could afford to build on their own. The area above Warwick was to provide a playfield on one side, community services in the center, and room for expansion on the other. The original plan called for two churches, a school, several parks and a playground, community rooms, an apartment house, and several stores.

Main Street, as befits the major axis and thoroughfare, is the widest street (100 ft.) in the village. The two streets parallel to Main (Hopkins and Post Streets) are 50 ft. wide. The roadways which run parallel to the river (Piez, Hurley, Palen, and Ferguson Avenues) are only 20 or 24 ft. wide, as they were to remain for local traffic only. The houses in the middle of the long blocks, parallel to the river, were setback to allow for an island in the middle of the road, which was to be common space and a play area.

The houses were built on long, narrow lots so that each family had a garden in back so that they could grow some of their own food. The garden sheds were originally grouped together, forming a secondary layer to the houses. And in order to avoid the "pill box" effect of single detached houses spread across the site, double houses were placed at specific intervals on the blocks.

Many of these elements are common to those in Unwin and Parker's work. The regular and orderly placement of the elements, the relationship of the common areas and buildings to the whole, the grouping of houses to visually break up the block, the varying width of the streets all make reference to the ideas of Parker and Unwin and others of the garden city movement. These commonalities are important to note because all of these elements were becoming part of a town planners standard repertoire of important elements with which to control and shape the desired community.



*original plan of Hilton Village.*

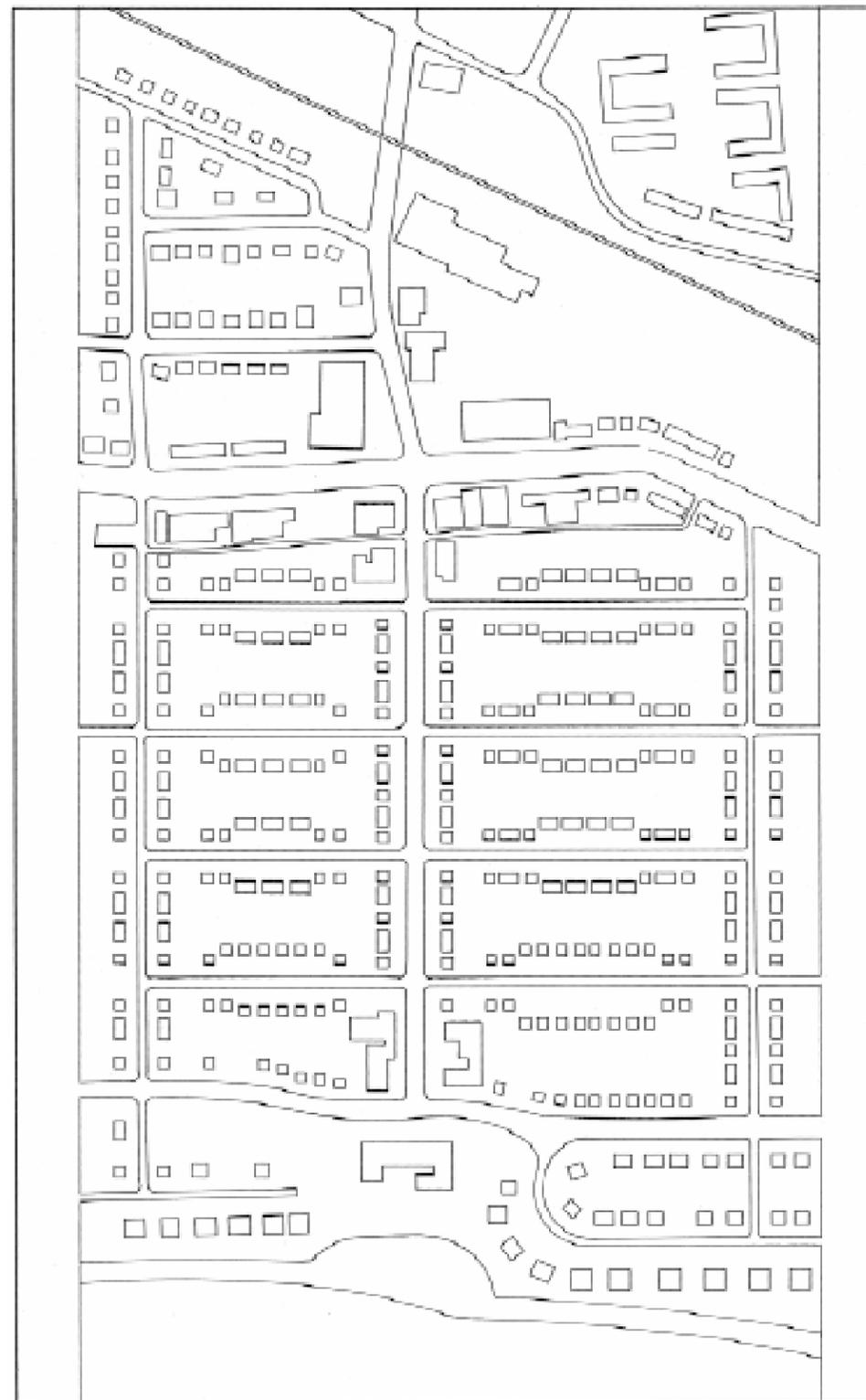
Clearing of the site began in April of 1918, and the first families moved in in October of that year. The Armistice, signed in November 1918, had a direct effect on the construction of Hilton Village. Many of the community services (the railroad station, the apartment building, and the community school) were never built. Nor were the park-islands in the middle of the street, although the houses were set back and the sidewalk paths were constructed according to the original plan. The minor roadways of the village remained dead-ended, despite a projected plan for extension. The area above Warwick was never developed, although the row houses, shops, and Hilton Square were all completed as planned.

In the intervening years, many changes have occurred in the area. Hilton Square has been built over, and many of the row houses along Warwick Boulevard, now a major divided highway and traffic artery through Newport News, have been demolished to build bigger shops. The urbanization of the Warwick area has effectively cut the rest of the village off from what was once its main boundary, and the area of the boulevard itself which bounds the Village has lost its scale relationship with the rest of the development. The proportions of the school which terminates Main Street and of the churches that flank it have also disrupted the original scale relationship of the village.

In 1969, Hilton village was declared a registered historical landmark. The historical district encompasses only a part of the original plan area; it is this section which was the heart of the development and which was completed most closely as planned. It is with this section that the study is concerned.



*plan of village  
historic district*

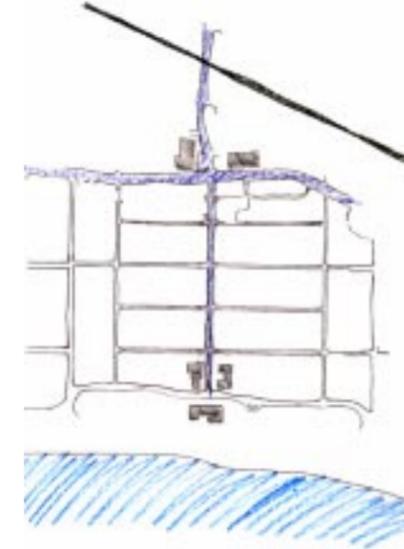
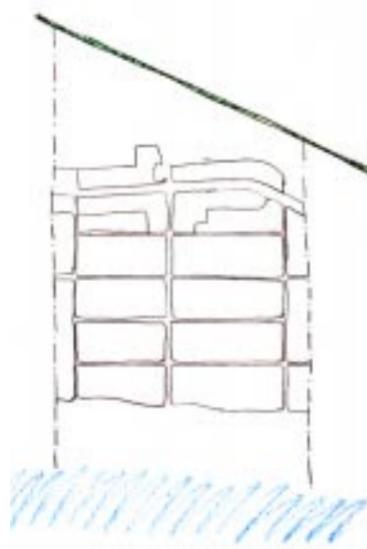


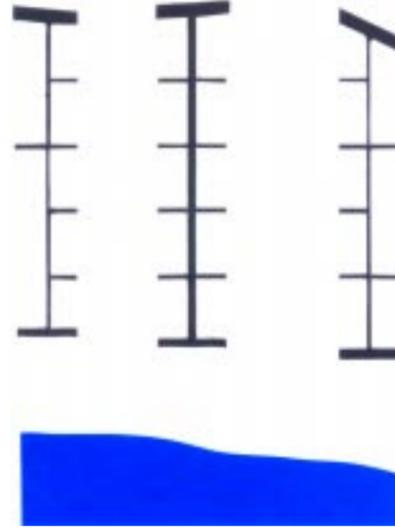
*contemporary plan of Hilton Village.*

## neighborhood fabric studies

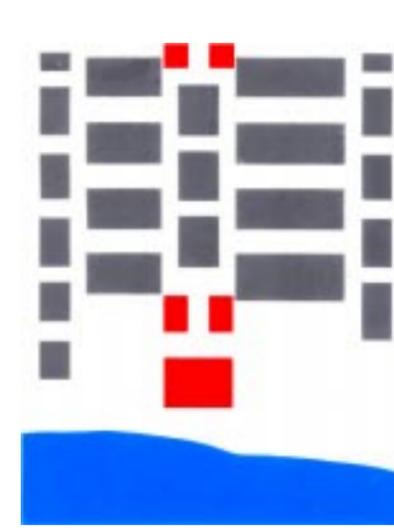
*In weaving, the warp of a fabric is made up of the threads that are strung on the loom. These threads form the base, or structural layer, of the cloth to be woven. The weft is made up of the threads which are then interwoven with the warp. Infinite variations are possible in the warp and/or the weft in terms of thread type, weight, color, and technique of threading or weaving, all of which contribute to the overall finished piece. But without a warp or without a weft, the fabric cannot exist.*

The first thread in the fabric of a plan is the overall structure of the plan itself. The plan organizes the basic defining elements of the neighborhood into a hierarchy and a set of specific relationships. It is in how these elements relate one to the other and all to the whole that provides the framework for the interaction and interweaving on the smaller scale. So the first step in understanding the place is to find this underlying structure, these defining elements, and their organization.

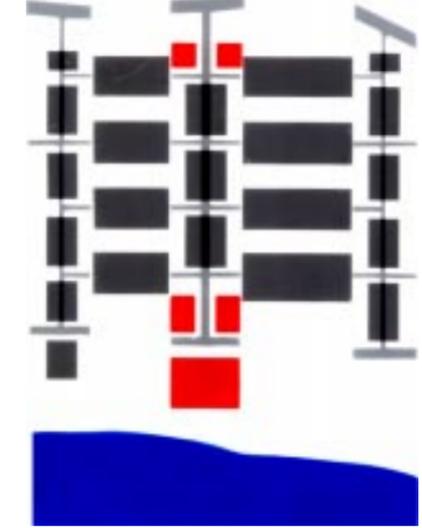




*main axial pattern*



*overall block pattern*

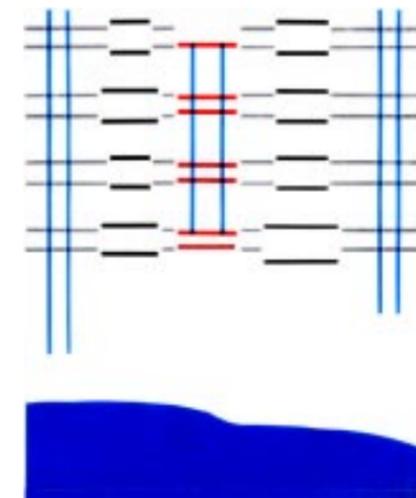


*interwoven axial and overall block pattern*

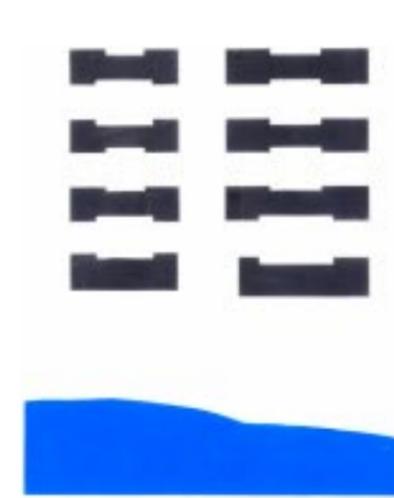
By peeling apart this overall structural fabric of Hilton Village, its individual layers are revealed: the main axial pattern, the overall block pattern, the outside block pattern and the inside block pattern. The plan above provides a key to finding and to understanding each layer.

The main axial pattern is formed by the axes which run perpendicular to the river. Warwick Boulevard and River Road, the large roadways parallel to the river, act as stops to these streets, and as the immediate boundaries of the village. The block structure pattern consists of the five anchor elements at the top and bottom of Main Street, and the basic blocks formed by the houses. Together, these two layers form the base, the warp, upon which the village is built.

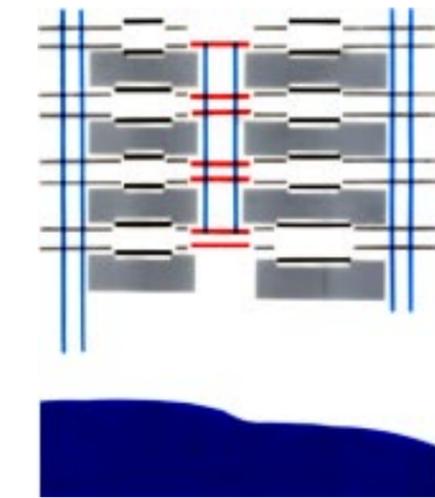
The outside block pattern is made by the house placement on the lot in reaction to the street and to each other. The mid-block setbacks on the avenues visually break up the block, in effect making a series of mini-blocks set within the larger unit. The inside block pattern is the negative of the outside block pattern,; the two patterns interconnect to form the first layer of weft which begin to define the overall fabric.



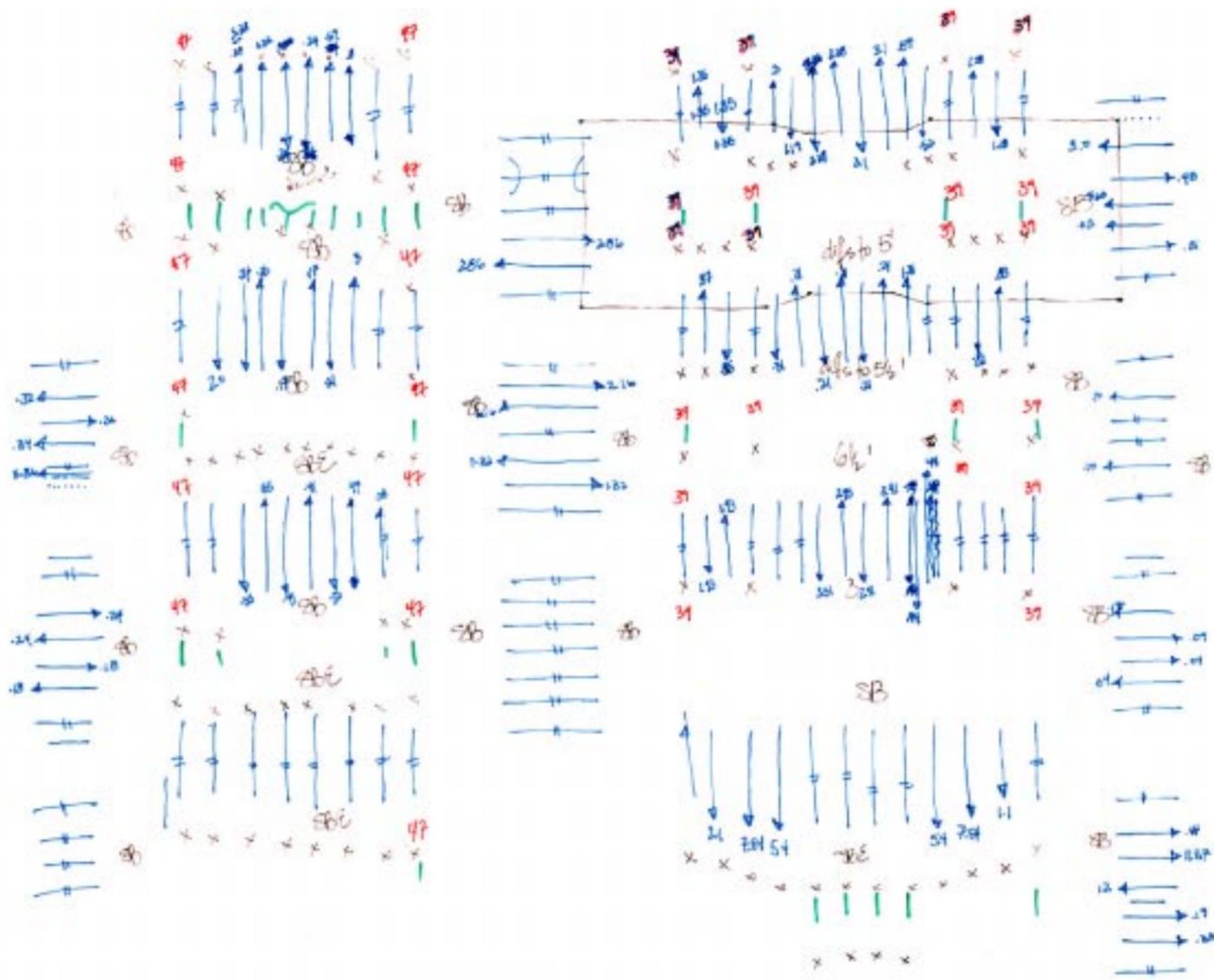
*outside block pattern*



*inside block pattern*



*interwoven block patterns*



*multiblock*  
*best exp.*  
 SB = symmetrical block  
 x → the opposite partner of lot (lot in same position in forward of same side of block) is =.  
 ic, water  
  
 lot 1 = 6 are same size  
 → arrow indicates which of pair is larger, number (eg, 12) say how much  
 || lots are exactly =.  
 green line = back to back lots are equal  
 red line = recurring and lot measurement

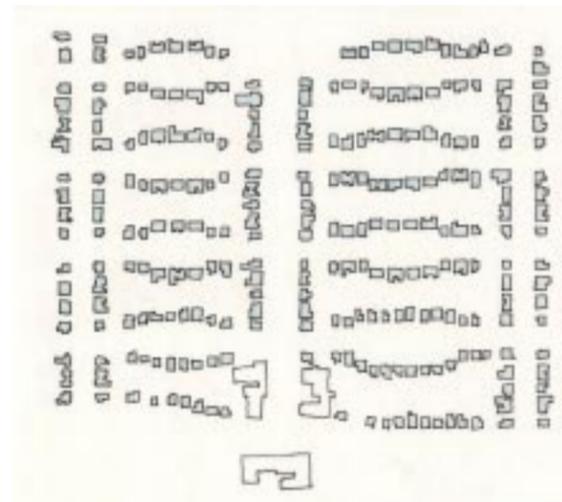
lot pattern study

The house placement has its own pattern, as does the placement of the garden sheds.

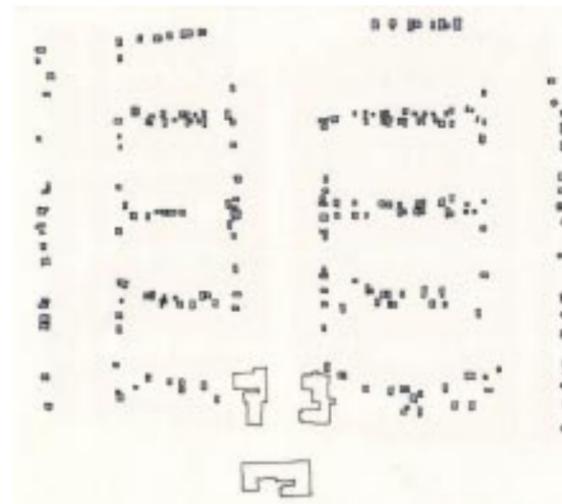
Together, they form the larger texture of the blocks themselves.

Although many of the garden sheds have been moved from their original grouped positions, they are still dense enough to form a secondary layer behind that of the houses.

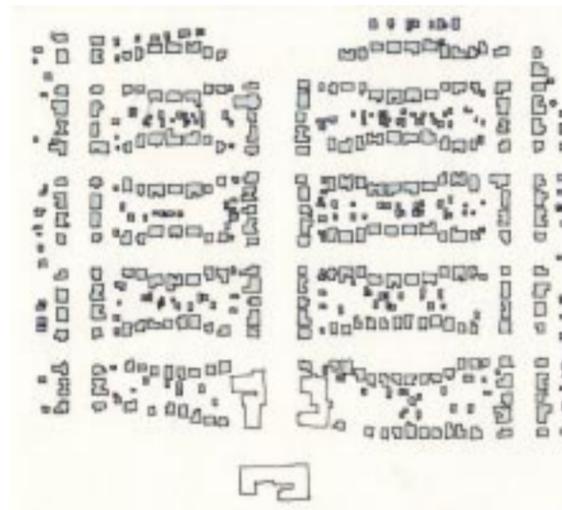
If there were no fences to the yards, the inside of the block would be a miniature village, albeit without formal structure, the majority of the garden sheds ranged along the middle line as if it were a street.



*house pattern layer*



*garden shed pattern layer*



*combined pattern layer*

## elementary pattern studies

A neighborhood or a village, a town or a city, is made up of architectural elements like the use of material, the relation of the buildings to each other and to the street, building type and even style, all of which if consistent enough, give that place a recognizable character. So Savannah is made recognizable by the use of brick, the second floor entries, and the squares set out at regular intervals throughout the old city. And Oslip is made recognizable by the long courtyard houses, the village layout, and the uniform material and style of the buildings. These elements constitute the smaller individual threads that together make up the texture of the neighborhood fabric

It is in precisely this aspect of recognizability that most developments, or any predesigned town or neighborhood, can quickly become stale, visually bland and endlessly repetitive. Because if not enough sameness means there is no coherence, then too much sameness means death by visual boredom.

Endless jokes have been made about the American suburb, especially those developed and built in the post-World War II years. There is a cartoon that depicts one such neighborhood, in which the entire frame is filled with a vast sea of identical houses. Two vehicles are stopped on a street in this neighborhood and a woman is leaning out of her car to ask the postman in his truck, "I live at 2524 Barker Street. Where is my house?"

The beauty of Hilton Village lies partly in the treatment of this question of repetition. At every level in the design of the Village, a series of variants or possibilities were created, allowing for the combination and recombination of the elements in different ways. It's a little like the work of the hard-edge painters; the number of colors used might be limited, but manipulations in the way they are placed next to each other set up an infinite variety of relationships one to the other.

What comprises these first textural layers are the basic architectural elements of a neighborhood structure: the block structure, the nature of the relationship between public and private space, the entries, the walkways, the houses themselves. Each of these layers can be peeled away, broken down, and analyzed in order to understand the role that each element, each thread, plays in the overall fabric.



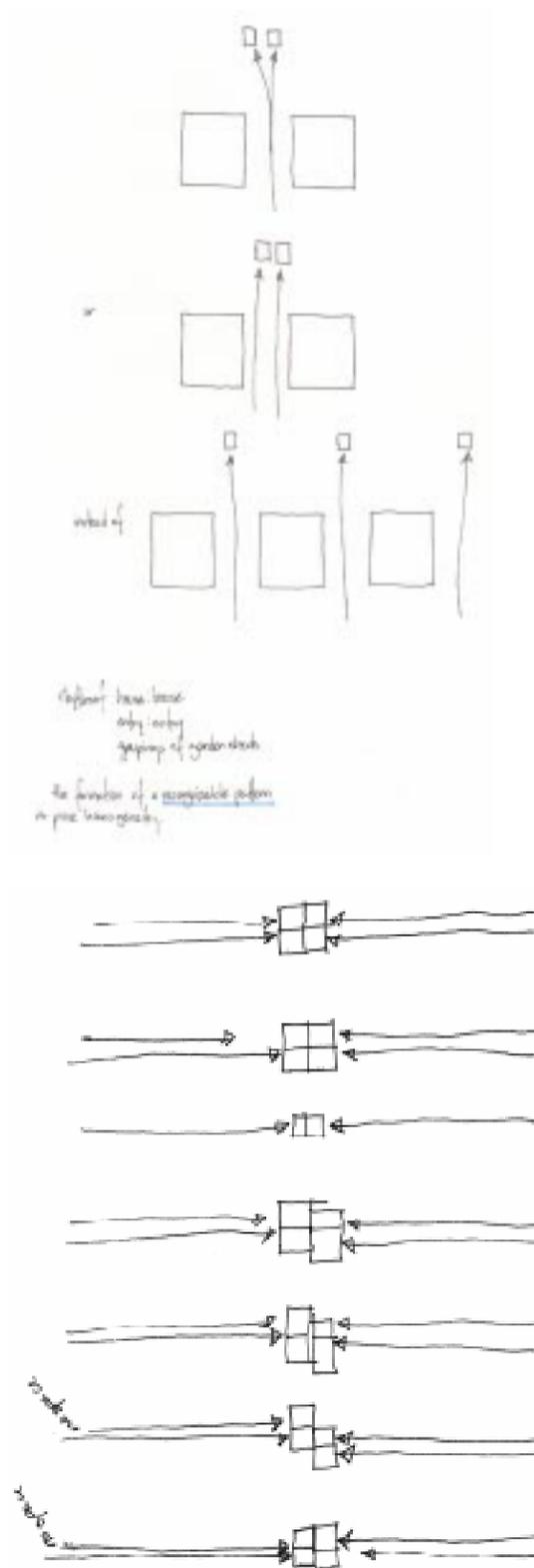
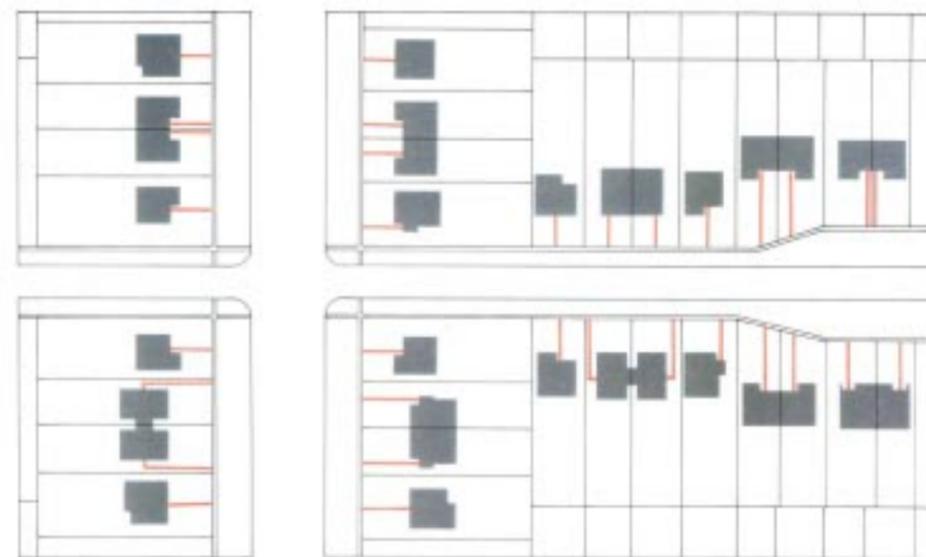


One of these textural layers is formed by the position of the entries to the houses, the walkways and the driveways. These elemental parts - the house, the street, the walkway, the driveway, the entry door - are not stuck in one endlessly repeated relationship. Instead, they skip and move down the block in a syncopated rhythm.

One drive goes to two sheds, another only to one. One house has a centrally placed entry, another's is offset to the left or right. Still others incorporate a shift in direction because the entry is on the side.

All of the pieces are the same, all are recognizable as similar and related elements. Yet the fact that there exists not one standard relationship, but instead many, gives the block and street visual texture.

*partial block plan with walkway pattern*



*driveway patterns 1 and 2*



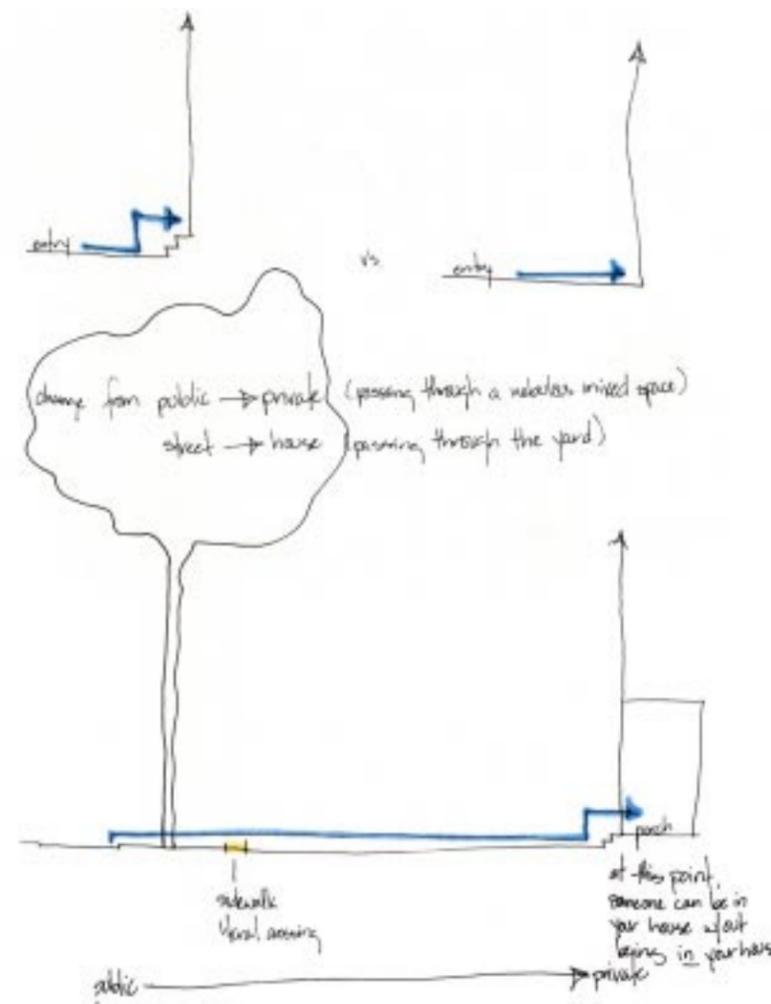
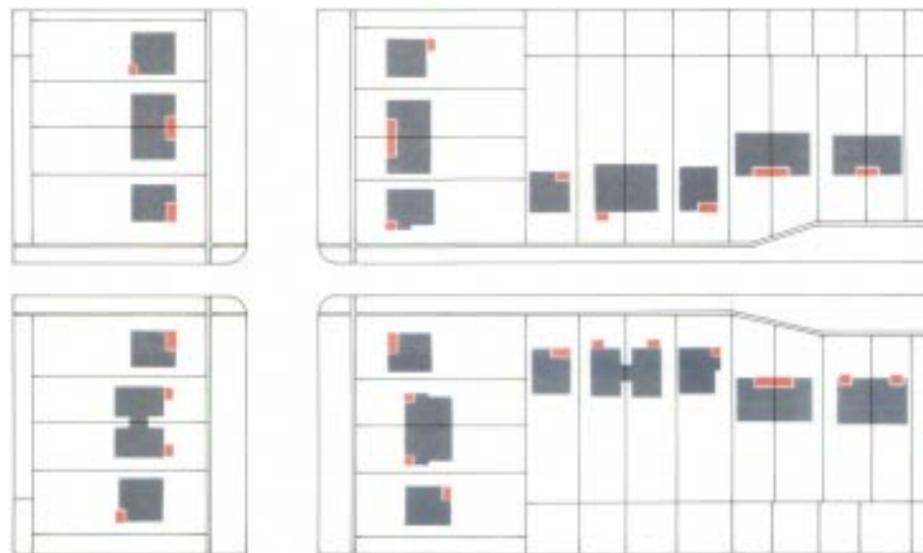
*inbetweens*

Another textural layer is formed by the threshold from public to private. This transformation begins at the sidewalk with a slow shift which takes place through the front yard. The entry into the house itself is never on the same level as the street; there is always a vertical shift and often a directional shift as well. While the yard near to the sidewalk may be considered “neutral territory”, there is clearly a point at which the front yard becomes private property, and a stranger wandering there becomes suspect. The exact location of this non-literal transition point varies. In the houses setback in the middle of the blocks, this neutral territory steps back along with the house, leaving more public space to the street side of the sidewalk.

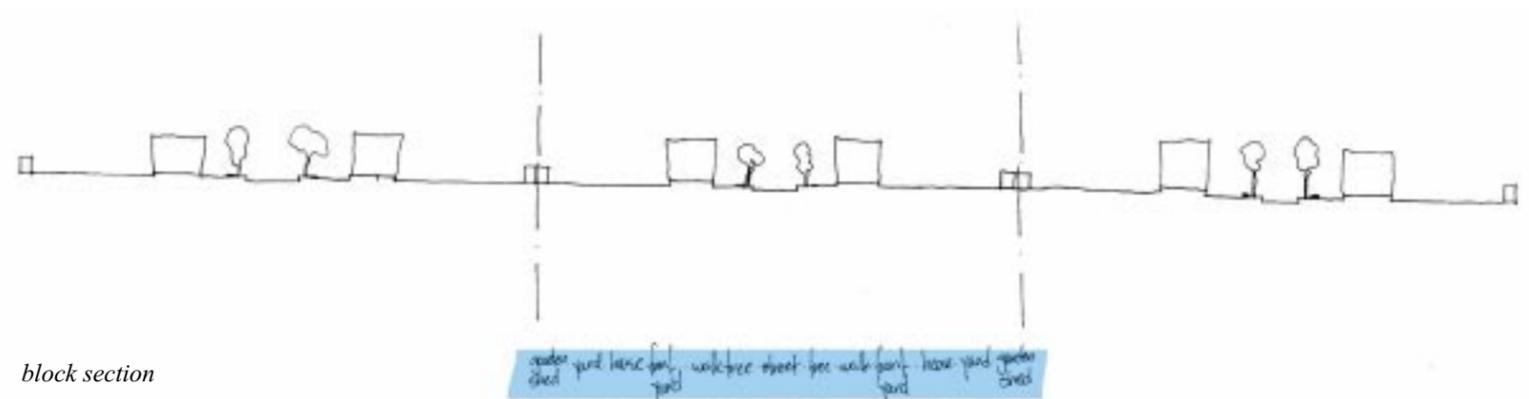
The porch space of the house adds a second layer to this movement from public to private, allowing someone to be “in” the house without actually being inside.

A section taken through the village reveals the back-to-back repeated pattern of the blocks from the boundary of the private (the garden shed) to the private (the house) to the semi-private (front yard) to the public (street) and back again.

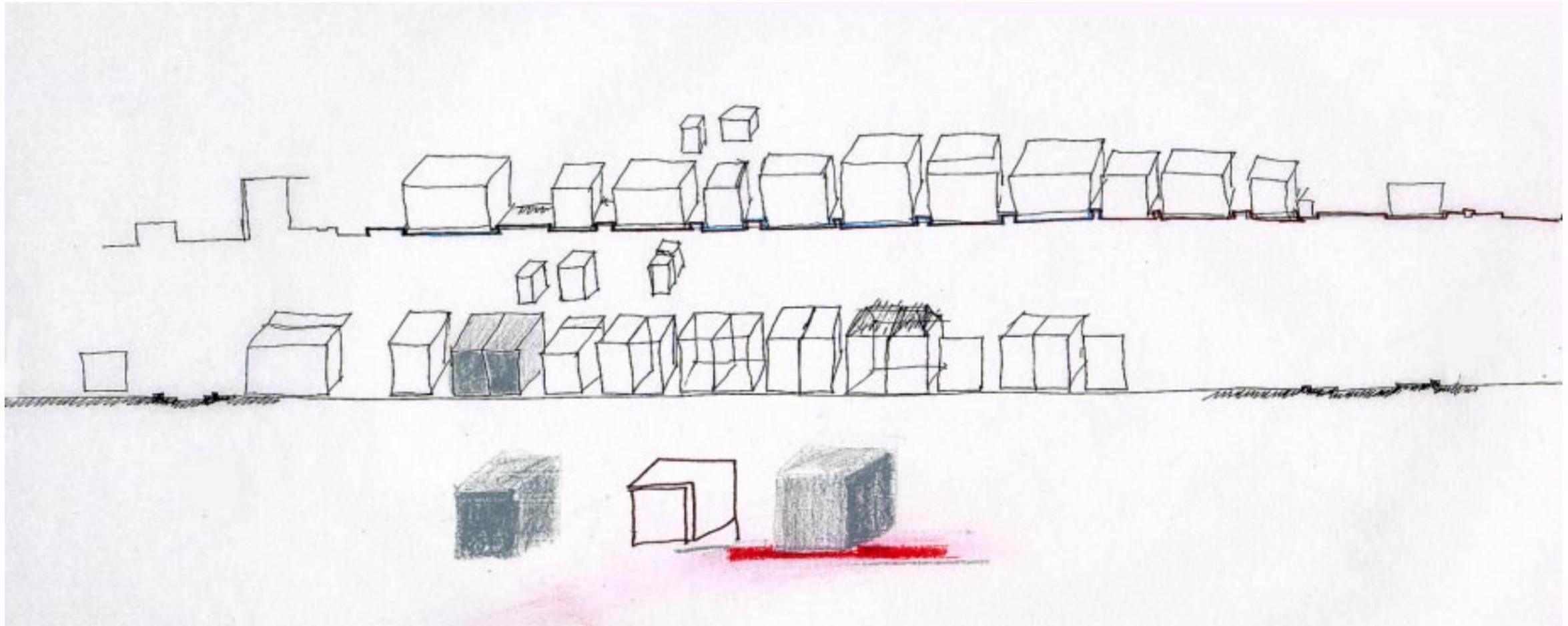
partial block plan with porches pattern



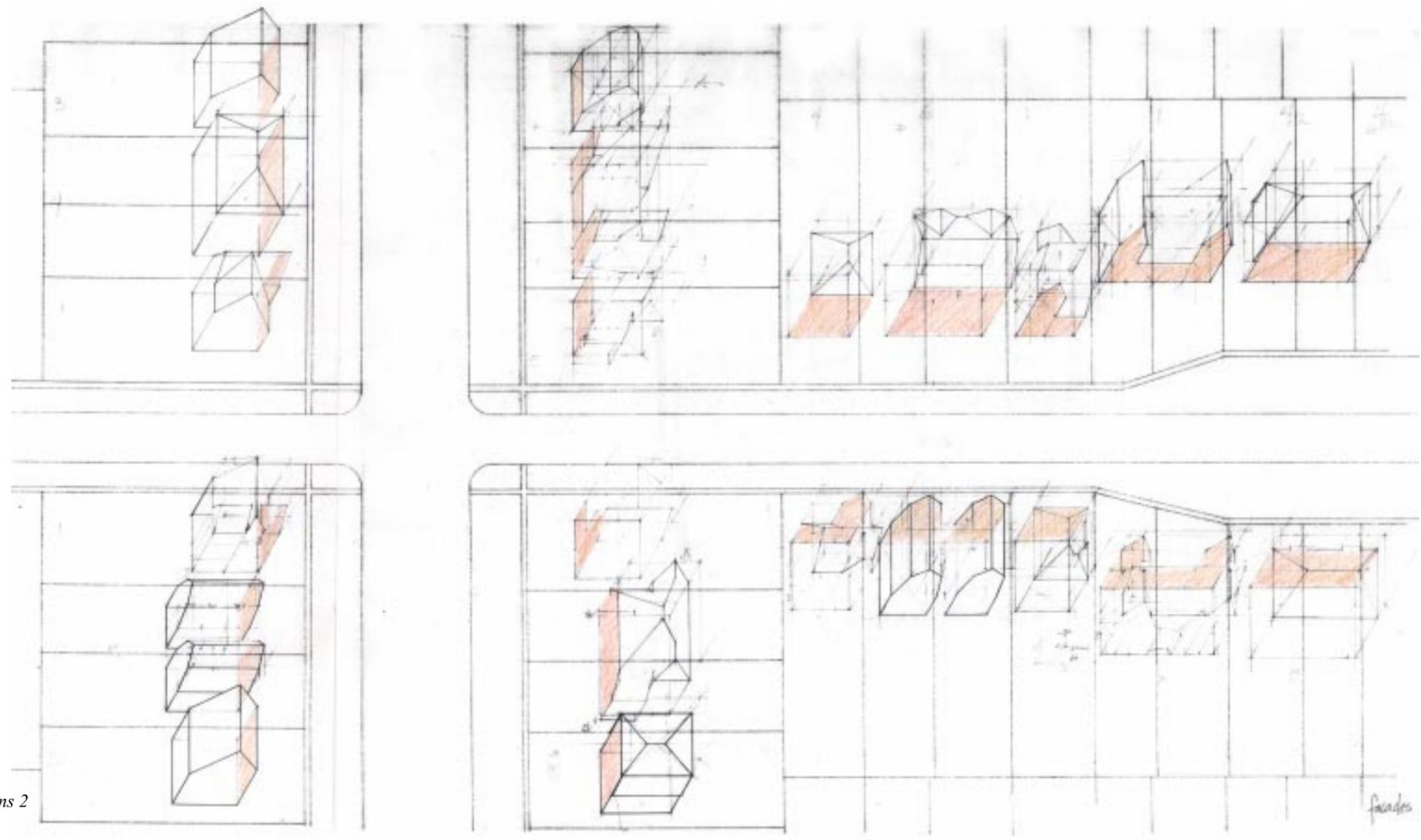
sidewalk, setback, and neutral territory



block section



*elevation patterns 1*



elevation patterns 2

façades