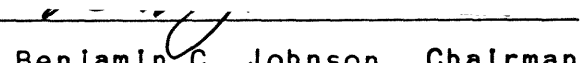# URBAN ALLEYWAYS:
A POTENTIAL OPEN SPACE ASSET

KIM M. BRIGHTWELL

Thesis submitted to the Faculty of the
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in partial fulfillment of the requirements for the degree of

MASTER OF LANDSCAPE ARCHITECTURE

APPROVED:

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Benjamin C. Johnson, Chairman

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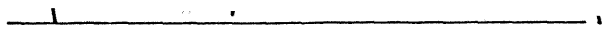Gregory K. Hunt   Paul A. Hellmund

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RAMSAY GALLERY ANTIQUE POSTERS 213 Ramsay Alley

For Kevin, who inspired me to reach the light at the end of the tunnel

ABSTRACT

This study set out with the premise that many urban alleys have the potential to become city open space assets. The project was designed to develop a process by which alley characteristics may be evaluated for their effect on alley open space potential.

The alleys of Old Town Alexandria, Virginia were the inspiration for this study. Old Town is an 18th century city which was established as a settlement on the Potomac River in 1749. For nearly 100 years it flourished as a seaport town. As the town grew, property owners created alleys through the blocks providing rear access to their homes and businesses. The alleys bustled with activity, and became a circulation subsystem to the street and sidewalk circulation.

This paper follows the process used to discover alley open space potential in Old Town. However, it is not the findings for Old Town that are most important. It is the process which is the true result of this study. This process can be used as a model by any city or town where there is a desire to better use alley spaces. The four tasks which were found to be important in discovering this open space potential are outlined below.

Task One: Evolution of Alley Spaces
The purpose of this task is to understand the part the alleys play in the city's circulation system. To know the history of their development and the way they have been used in the past is to learn what makes them important and distinct from other circulation systems in the city.

Task Two: Evaluate the Alley Paths
The elements that create the "floor, ceiling, and walls" of the alley paths are defined and evaluated for their potentially positive or negative impact on the alley as it is refurbished for pedestrian open space use.

Task Three: Alley Potential Use
Task three looks at the way different land uses use their alleys. Knowing present alley use allows the development of an alley typology from which decisions concerning potential use can be made.

Task Four: Design Proposals
Finally, the first three tasks are brought together in the form of design proposals. The proposals become a pallet with which to refurbish the alleys in a way that is sensitive to their history, their character, and their particular open space potential.

The project teaches that all urban alleyways are not the same. Each has its own story, and its own particular combination of characteristics. In knowing the alleys as individual, their design as viable open spaces becomes more imaginative.

Introduction

Urban planners have long recognized the fact that the innovative planning and design of urban open spaces contributes an important vitality to a city. Heckscher (1977) wrote that, in fact, "a crucial role of the city is to set the comings and goings of men and women within a frame that enlivens them."[1] He felt that although the traditional park has reigned as the primary open space setting for activities designed for this purpose, now new types of open space should also be found. He stated that whatever its scale or form, open space has a potential to become an asset to a community.

Alley spaces are one such open space that are being looked to for their potential for redevelopment and redesign as pedestrian ways. They can, and in some cities have, become lively, popular pedestrian oases, an alternative to the sidewalks which follow the busy, auto-trafficked streets. Alleys are passages which access the block interiors, forming a circulation subnetwork reinforcing the structure of many 18th and 19th century towns and cities. They may be through-the-block passages or simply penetrate the block part way as shown in figure a.

Alleys were developed as needed by property owners as a place for those activities which were considered improper to take place on the street side of the buildings (servant's housing, stables, trash collecting and its associated smells). While the streets out front were being planned, the alleys were growing in a mix and match form.

In some urban centers, such as Washington, D.C., alleys even became the slums behind the more elegant streetside homes. Back lots were sold off at low prices and the homes densely placed on them were not much more than shacks. The inhabitants were poor and alley communities developed with their own set of laws and social rules that were different from those "outside". The dark alleys, then, came to be feared in some cities for the potential muggers, theives, and rapists which the outside world concluded they housed.

However, this does not have to be the case. Learning about these spaces can establish new mental images. Alleys also have the potential to become open space assets within cities, forming a network of pedestrian by-ways, incorporated into the city's open space system. In Georgetown, D.C., for example, refurbished alleys are now lined with elegant townhouses. In Louisville, Kentucky the upgraded alleys in the central business district became a highly-used pedestrian way lined with boutiques, gourmet shops, and so on.

figure a ALLEY EXAMPLES

Penetrates Through
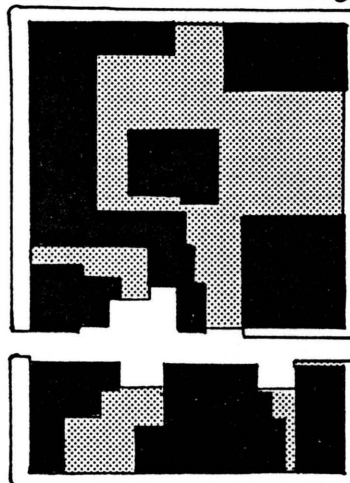
Penetrates Part Way
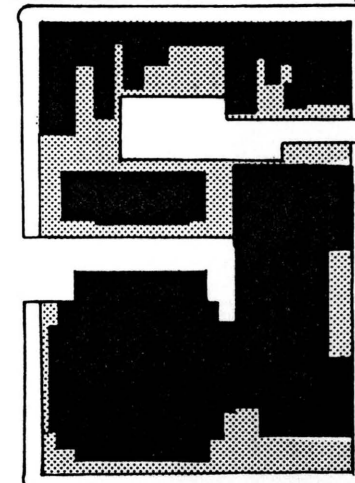
Further, alleys have a unique character which can reinforce the special character of the city environment through which they pass. That is, they explore the back yards and back ways of the city. The back ways have an interesting character of their own which can explain the city in a new way. They no longer need develop in a mix and match form without any comprehensive guidelines.

figure b

STREET AND SIDEWALK   ALLEYWAY

*See Appendix A for photograph locations.

This paper examines the open space potential of alleys and develops a process by which their potential may be discovered. The study leads to the development of a guide to understand and judge what is good and what is bad about these spaces. That is, it will explore how some alley characteristics enforce a negative public image and how others say "welcome", contributing to the creation of an effective pedestrian way. The information found was used to create design proposal examples which show ways in which the open space potential of alley spaces can be preserved and enhanced in the future. The study process used in this paper becomes a guide by which other alleys can be studied in other cities.

The literature on alleys is very scarce, and when an item is found, it is most often quite rudimentary, being more objective than subjective. Alleys have largely been ignored in the literature on urban planning. As Clay wrote, "the written history of architecture and town planning has a visual fix on frontality. Out of sight, out of mind, the American alley has been the academic, geographic, and social outcast of the built environment for at least half a century."2

This project, then, was started quite nearly from scratch. In order to gain an insight into the character of alley spaces, a study site in Old Town Alexandria, Virginia was chosen (see figures c and d). Old Town was the inspiration for this study, for it is an 18th century city honeycombed with alleys. It was established as a settlement on the Potomac River in 1749 and flourished as a seaport town. By the late 1920's an interest in the restoration of Old Town began which eventually led to the creation of public policy for the historic preservation of the city. By 1966 the Old District of the city was designated a national landmark by the National Park Service. Many of the alleys that exist today were created early in the city's founding between 1749 and 1800. Recently, however, some have been redesigned and refurbished. Unfortunately, they are losing their original quaint and unique character as they gradually are being redesigned for plaza spaces or repaved for use as delivery and sanitation routes. No comprehensive plan exists for linking them as a system and design appears to proceed without any understanding of, or sensitivity to, what these spaces can contribute to the city.
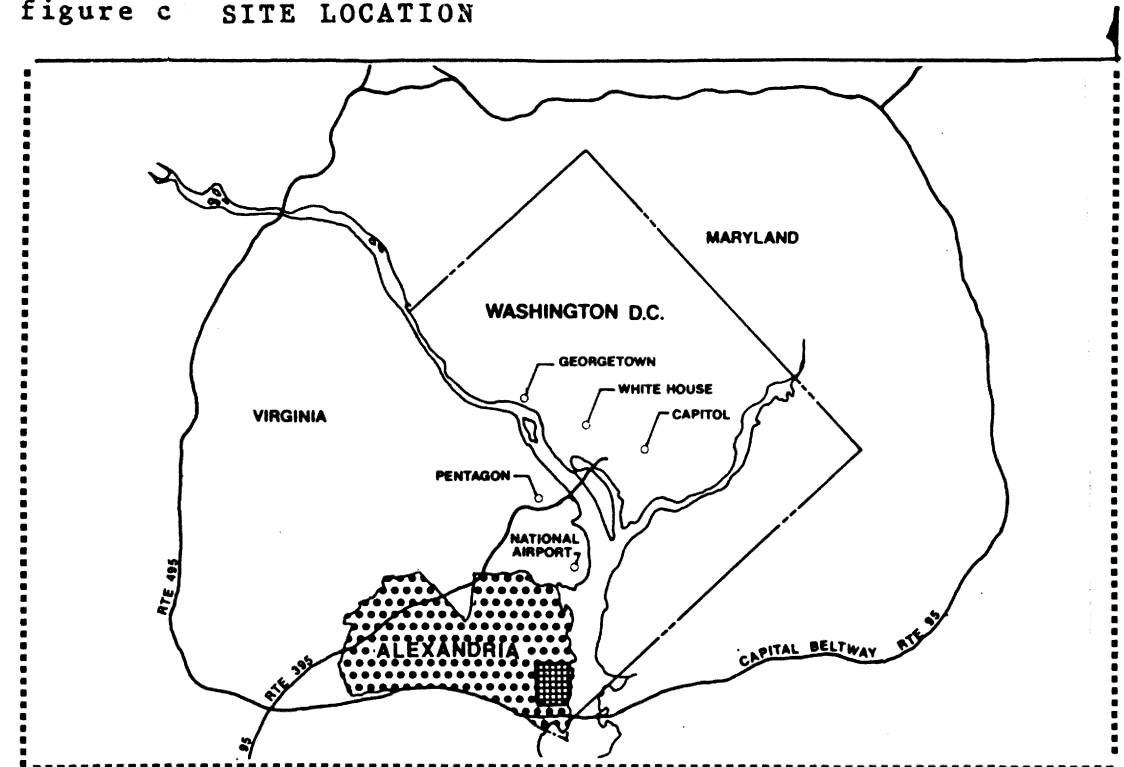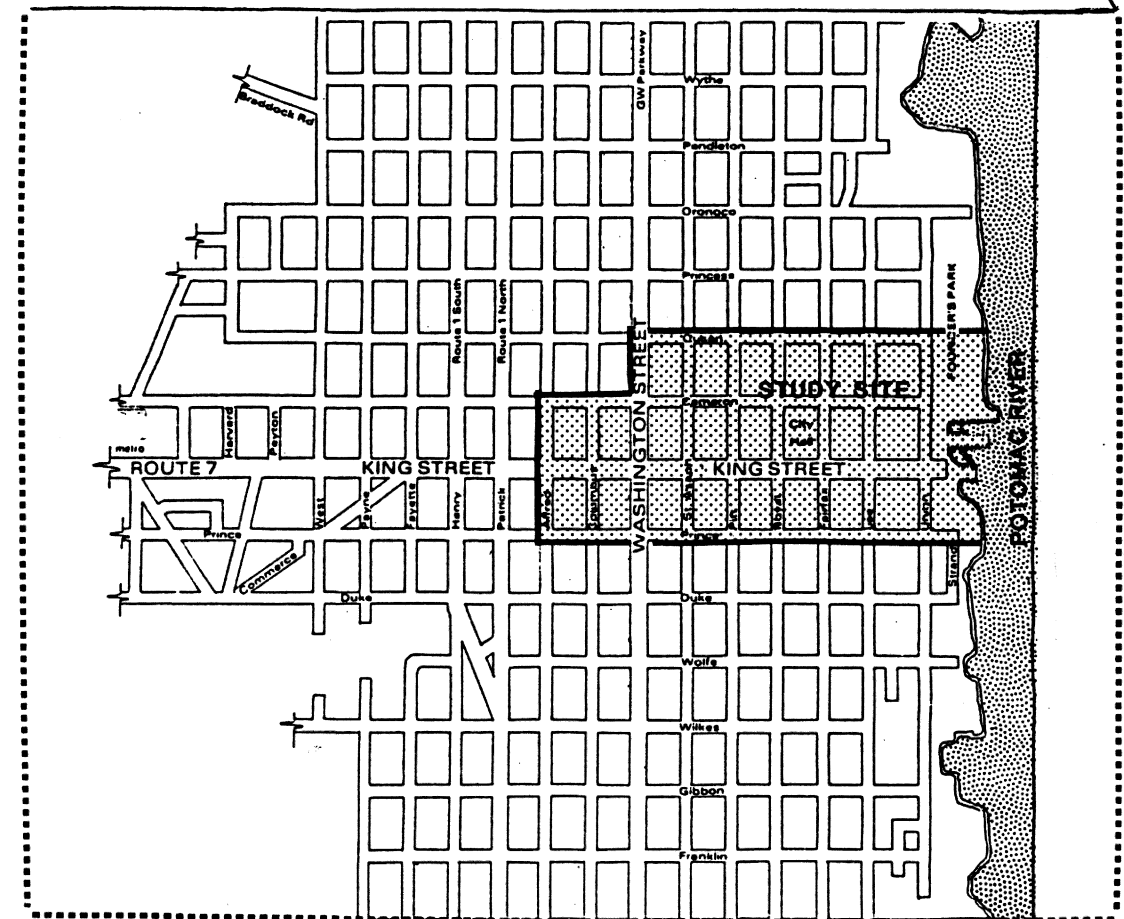
figure c   SITE LOCATION

figure d   STUDY SITE

In order to learn from these alleys, several questions must be answered:

* How have alleys evolved as the city and its streets evolved? That is, how have changes in the directions or axes of growth in the city and changes in land uses surrounding the alleys affected these spaces?

* What characteristics of an alley make one inviting and another uninviting or even forboding?

* What elements creating the space and mass (ie. ceiling, floor, and walls) of the alleys contribute a character to the space which can give it positive traits, making a good path with a rhythm of spaces that can say "welcome" and attract people? And conversely, what negative factors inhibit the creation of a successful urban space?

At this point, it should be understood that Alexandria is merely a case study. It is the process used to study this city's alleys which has broader applications, and not the specific findings of the case study. For, alley spaces in other cities may also have the potential to function as part of urban open space systems as well-maintained pedestrian ways which can become an asset to a city. This type of open space is important now, for as Heckscher (1977) wrote, "the spatial organization of today's cities is being largely determined by the fact that people like to be on foot as observers and participants in the urban scene."[3]He found that people are increasingly prepared to park their cars and take part in the activity of the city as pedestrians. The use of alley space offers a unique opportunity to provide open space settings for this purpose.

Each chapter represents a task in the process. Alley open space potential was slowly revealed with the completion of each task. The first chapter defines the study site explaining its merit as a representative site in Old Town, and discussing the process and sources used to study this site.

Chapter two provides a written and graphic history of the emergence and development of the alleys as this coincided with the growth and development of Alexandria. In the process, an understanding of the uniqueness of this space to other types of pedestrian ways in the city (such as sidewalks) is gained. In addition, the way alleys were used and the reasons they developed help provide insights into the functions these spaces serve. This information became a basis from which to identify the space.

In chapter three, design variables which have been found to have an important impact on the success or failure of urban paths and spaces are listed and defined. These variables were accumulated from the existing literature on that subject. The literature search led, in particular, to four books which were research-based and therefore appropriate for this study. These sources are outlined in chapter one. The list became an important guide from which to recognize and evaluate the design elements which contribute to the character of the alley spaces. Photography became a valuable tool for this part of the study. Through the photographs, alley furniture, walls, fences, paving, plantings, and other details were visually compared in a way which was not possible in the field. A certain continuity of design elements was found to exist within each alley.

Chapter four explains the effect that land uses adjacent to alleys have on alley use. It includes photographic and written documentation of this effect. Consistent correlations were found to exist between the two elements, so that from these correlations the uses these alleys serve today became evident. A number of these uses conflict with pedestrian use and this became an important consideration when producing design proposals. From this part of the study, an alley typology became clear. There are basically six types of alleys in the study site, although a number of alleys are a hybrid of several. This typology gives important information about the open space potential of individual alleys.

Chapter five offers a pallet of proposed design elements which can be used to ensure that the re-design of the alley spaces reinforce and intensify the unique characteristics and strengths of the alley spaces in Old Town. The design proposals stem from information discussed in chapter three of this paper. The proposals use graphics and written documentation to show how development can occur under direction and with a plan rather than in the haphazard, discontinuous way they develop now. These proposals are intended to be a guide for Alexandria and not as a final authority for all cities. For, the alleys in each city may tell their own story and have their own unique characteristics.

The final chapter outlines the process used in this paper to make decisions on alley potential and to arrive at the creation of design proposals, in the hope&that it will be a useful guide for others to follow in other cities. It provides a design example showing how each task in the process can work together. The merits and limitations of the guide are discussed, and finally, questions for further study are suggested and the implications of the study are put forth.

Study Site and Methodology

Like many towns of its era, Alexandria's streets were designed in a grid pattern. The Alexandria town plan created 84 half-acre lots, with the specification that each house on the lot should have at least a 20 foot square footprint. The homes were built up to the lot lines fronting on the streets, which left space behind the buildings. This space became residential gardens, or back lots for businesses. Property owners also began to use some of this space to create alleys through the blocks, behind their homes to allow rear access for servicing. Through the years, many of these alleys have remained so that today Old Town has been described as a city "honeycombed with alleys". Some of these alleys have been redeveloped and redesigned for pedestrian use, but many are simply the "outbacks" of homes and businesses. Larry Brown of the Alexandria Transportation Department stated that many alleys are presently used by the Sanitation Department for servicing, by residents and businesses for off-street parking, and frequently by pedestrians as shortcuts to their destinations.

The map shown in figure 1.1 was created by the Alexandria Department of Transportation and Environmental Services. The alleys are proposed for public ownership upon request by adjacent landowners to have them paved and maintained by the city, or upon request by the Sanitation Department to have them paved for ease of use as trash pick-up routes. Once paved, the alley becomes public property. Thereafter, it is patrolled by the police and is subject to parking regulations, and rights-of-way.

Old Town's streets, particularly in the business district, have strict parking regulations. People who work in the city, but do not live there cannot purchase a parking sticker exempting them from these regulations. The posted parking regulations generally allow the driver to park for only two or three hours at a time. A large number of alleys in the study site are privately owned (see figure 1.2) and are therefore not subject to the parking regulations. The private alleys, then, are one place non-residents can park free all day. Finding a parking nook in such an alley is a wonderful treat for the visitor who is fortunate enough to find one.

figure 1.1 ALEXANDRIA ALLEY MAP
(Downtown Alexandria Alleys)
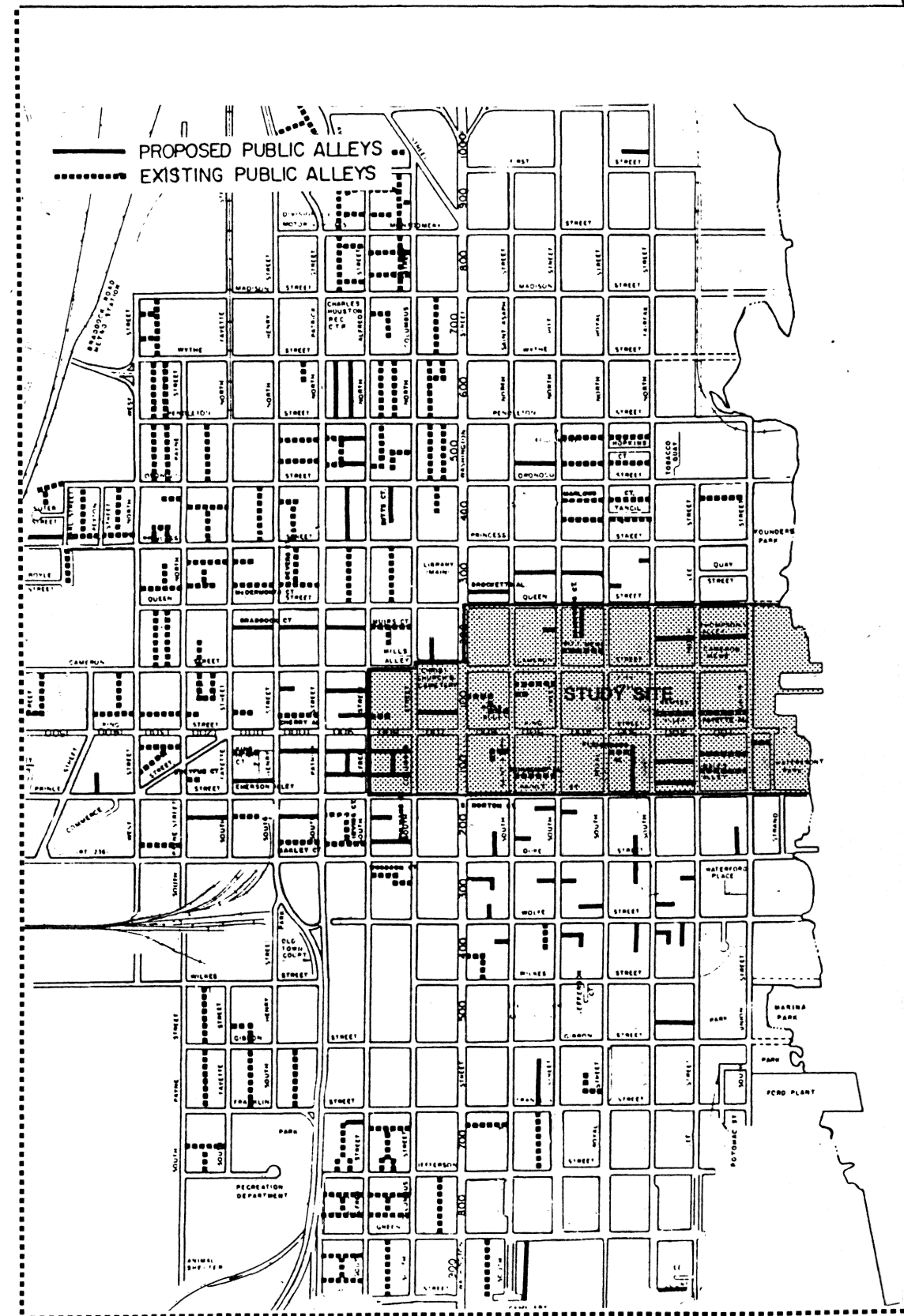
THE STUDY SITE

The site map (figure 1.2) is based on the 1985 Alexandria Real Estate Assessment Atlas which outlines the alleys, and the 1973 Alexandria Topology Map which shows building footprints as well as the location of fences and walls around the buildings. At the time of this writing, the 1973 map was the most current map showing building footprints. Therefore, it was updated by a field investigation.

figure 1.2 STUDY SITE

LEGEND

■ BUILDINGS

▨ STREETS AND ALLEYWAYS

□ OPEN
(PARKS, GARDENS, PARKING LOTS)
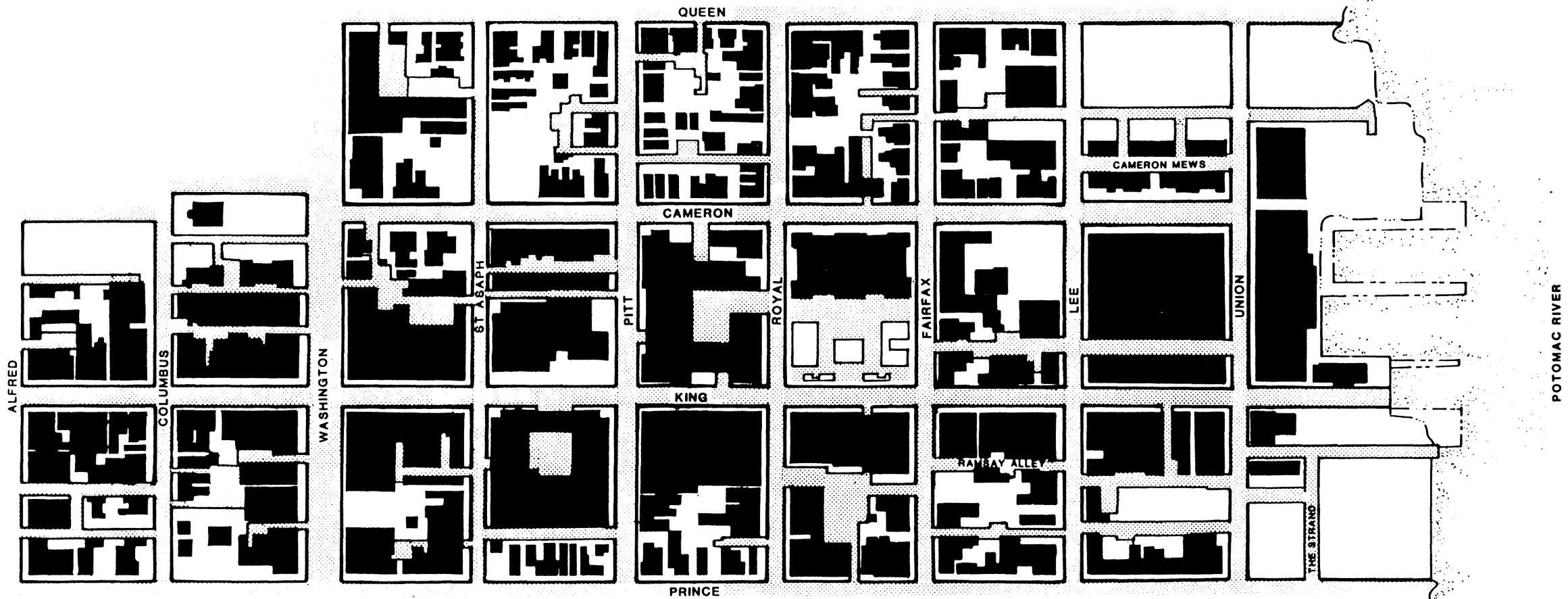
The most important criteria for choosing this study site is that the alleys there show potential for fitting in with the city's walking plan. Spreiregan (1971) recognized that Alexandria needs a walking plan. In his Urban Design Study undertaken for the city, he stated that in downtown areas, sidewalks are the main walking system.[5] He felt, however, that in setting up a walking plan alleys should not be ignored, and that pedestrian circulation through the block should be encouraged. His study was adopted as an element of the City's Consolidated Master Plan in November 1974. This means that the idea of better utilizing this under-utilized urban space was already planted in the planners' minds ten years ago.

The first phase of the City's walking plan has been designed, though as of yet it exists only on paper. The plan has been published in a 1984 brochure entitled, Alexandria Waterfront Design Plan, and demonstrates how Alexandria's Potomac River waterfront can develop in the future. It proposes a continuous promenade along the river's edge and calls for a "waterfront core" at the end of King Street. This core will be an area of "sunlit urban parks and plazas."[6]

A glance back at the map in figure 1.1 reveals that the study area contains a number of alleys entering onto this central activity area. The alley spaces, therefore, provide a unique opportunity to be used as a visual and physical pedestrian linkage between Old Town and the future Alexandria Waterfront District.

figure 1.3   PROPOSED ALEXANDRIA WATERFRONT   CORE
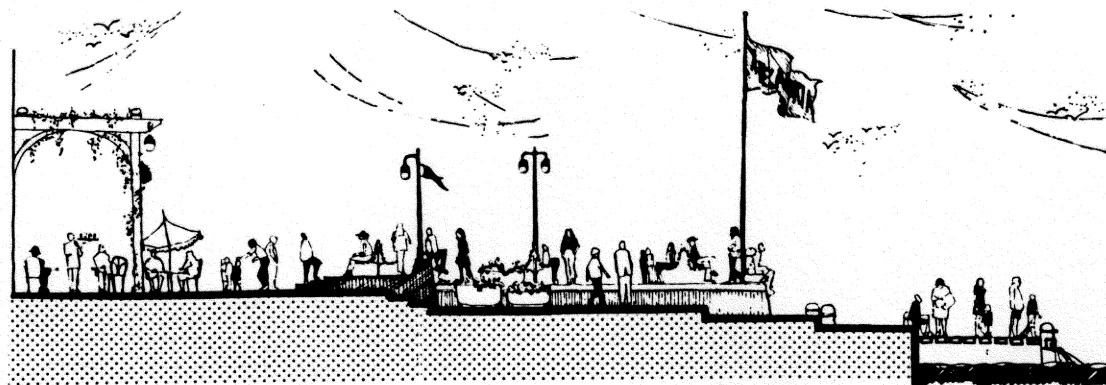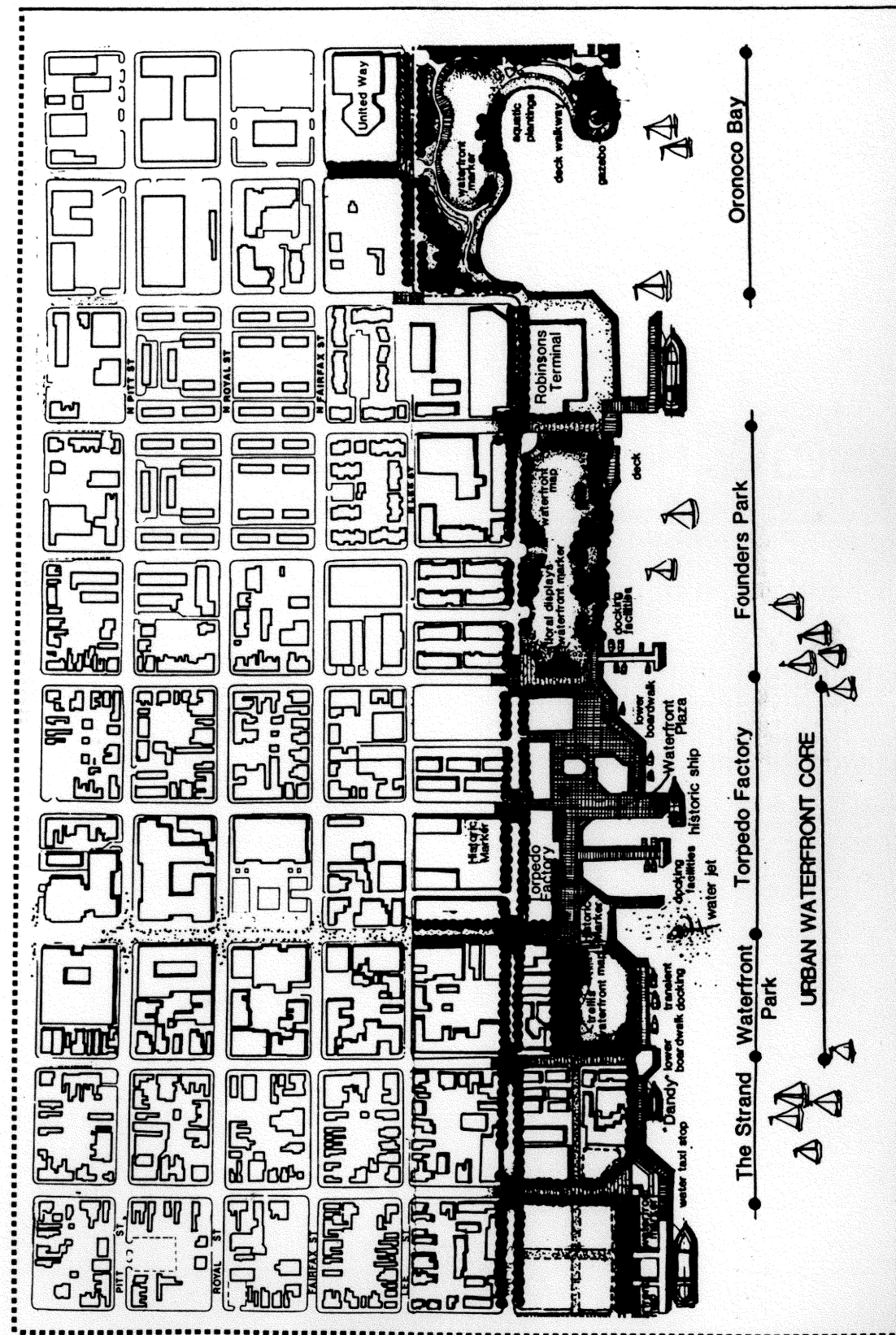
(Alexandria Waterfront Design Plan)

figure 1.4   PROPOSED ALEXANDRIA WATERFRONT DESIGN

(Alexandria Waterfront Design Plan)

Further, the study site is in the heart of the Old Town tourist section according to the Walking Tour Guide distributed by the Department of Tourism, and is shown as being in the central business district in the Old Town Zoning Use Digest. Although the central business district presently contains a high mix of land uses, a study of the Long Range Land Use Map of Alexandria reveals that the study area from Cameron Street south to Prince Street is projected to become solely commercial. With so much change expected in this area, it seems ripe for an increase in pedestrian byways in the form of redeveloped alleys.

The site is representative for a number of important reasons. The Proposed Public Alley map (figure 1.2) reveals that eight general alley configurations exist in the city. The study site contains at least one of each of the forms which are shown in figure 1.5.

In addition, the study area contains each of the common land uses in the city according to the Planning Department's 1984 Land Use Map. (At the time of the study, a 1985 map was not yet available.) These uses are: commercial, institutional and municipal, open or vacant space, residential, and industrial.(figure 1.6)

The study area is also a site which contained a number of historically significant alleys. Bertha Doughterty, an historian and resident of Alexandria studied seven alleys of historical significance in the city. She wrote that "of particular importance were Market Alley, Shinbone Alley, and Printers' Alley." [7] Market and Shinbone Alleys functioned as outdoor market areas in the center of town. They eventually disappeared to make room for the growing municipal buildings surrounding them.

Printers' Alley was the first newspaper row in the country and even claimed the first daily newspaper in the United States. It is no longer used for this function, for its width was designed for horses and today a truck can just barely squeeze through. In fact, the site where the first daily newspaper building stood is now an empty space about half way down the alley. This aspect of the site will offer an opportunity to look at how the disappearance of an alley affects a site and in what ways "new," refurbished alleys differ from "old" alleys.

figure 1.5 OLD TOWN ALLEY CONFIGURATIONS

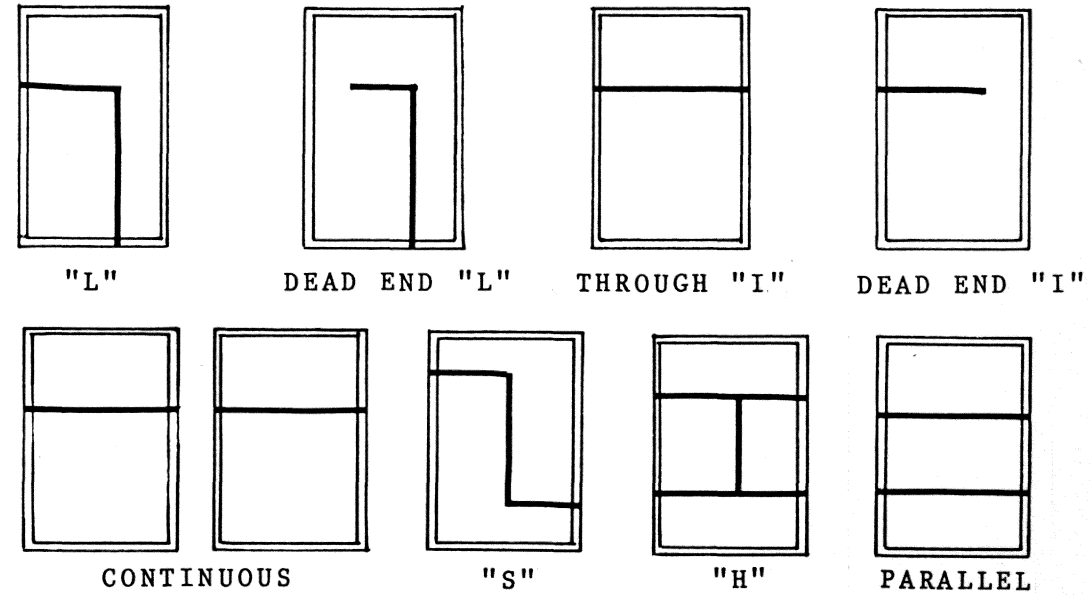"L"   DEAD END "L"   THROUGH "I"   DEAD END "I"
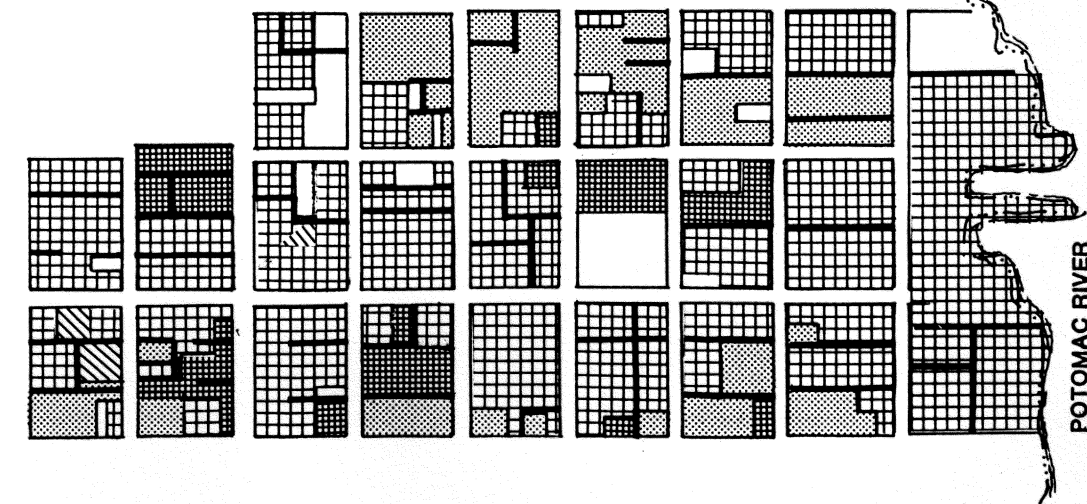
CONTINUOUS   "S"   "H"   PARALLEL

figure 1.6 STUDY SITE: LAND USE MAP
(Land Use Map of Alexandria)

Legend

Commercial

Institutional/Municipal

Residential

Industrial

Vacant/Open Space

POTOMAC RIVER

THE PROCESS

First, an up-to-date map of the alleys in the study area was produced (figure 1.2). Then, a map and history of Alexandria's growth and development was created by using maps dating from the city's founding in 1749 through the present, in combination with historic literature on the city. (All sources have been cited in the bibliography.) Once the city growth and development history was drawn together, the growth and development of the alleys was studied in order to discover how alley and city development coincided.

Sanborn fire insurance maps, found at the Alexandria Archaeology Department were the primary sources consulted. The first such map was prepared for Alexandria in 1885, and then ten more were prepared at various intervals over the following years through 1959. These maps proved to have the most accurate historical data for the plotting of buildings, walls, and other structures in the city, as well as all access to the buildings. One other map was also found to have important information. It was a map created by Miller and Woolls and is based on their 1980 title search. It reproduces alley and lot lines as they existed in 1798 and can be seen in figure 2.6.

Using the Sanborn maps and Miller and Woolls' map, the alleys were investigated from two different perspectives. First, each block was studied separately to discover how individual alleys grew or changed over the years. Then, comparisons of the alley systems (the circulation network created by the alleys in the entire study site) were compared with the Alexandria growth and development scenario created in a previous step. This provided insights as to how and why the alleys developed, and how these spaces function in the city.

The next task was to research the literature on urban pedestrian spaces and paths in order to gain an understanding of the design characteristics that attract people to, or deter them from these spaces. Four authors were found to have the best sources on the subject because their findings were based on research designed to discover public preference. These sources are: The Language of the Cities by Fran Hosken, Townscape by Gordon Cullen, The Image of the City by Kevin Lynch, and The Social Life of Small Urban Spaces by William Whyte.

Hosken writes that "by learning to see better and more clearly what surrounds us here and now, we shall also learn to see into the future and to see with the eyes of our imagination."[8] The purpose of his book is to supply some tools for seeing the urban world.

Cullen describes "townscape" as "the art which can transform a group of three or four buildings from a meaningless muddle into a meaningful composition."[9] His book looks at the composition of towns by breaking down their parts. It offers a method to restructure towns in a more effective way.

Lynch surmises that the "urban landscape, among other roles, is something to be seen, remembered and delighted in."[10] He studied the look of cities, and whether that look is important. He feels that by understanding what gives an image, a planner can make that image more vivid and memorable. His study found that the key was to first structure and identify the environment.

Whyte wonders what draws people to urban spaces and what keeps them out. He recognized that "the city's small spaces have a major impact on the quality of life."[11] His book, therefore, is a biproduct of first hand observation of how small spaces function.

The information provided by these authors was reviewed and edited to create a list of design variables which became a guide by which to identify and judge the alley environment. Using this guide, the elements which structure these spaces in the study site were examined. To do this, the alleys were photographed-the details of their floor, ceiling, and walls and their overall layout- to learn how each part comes together as a whole. These parts were then judged according to the guide to discover their potential for contributing to the creation of attractive, memorable pedestrian ways.

Then, the land uses adjacent to the alleys were recorded in the field and the alleys were photo-documented. This task was designed to discover how land use affects alley use today. From this study, an alley typology was discovered which offered insights to alley open space potential.

The findings put forth during this process were then brought together in the form of design proposals. The proposals serve as an example of how the information gathered in a study such as this can be used to create unique and attractive pedestrian spaces. They recognize land uses which compete with pedestrian use for the alley spaces and suggest methods to deal with this conflict.

Finally, a design example is provided which looks into the open space potential of a particular alley in Old Town. The design shows how this potential use can be achieved by implementing the design proposals.

Growth and Development in Old Town

In order to understand the circumstances that brought the alleys into being, a history of their development had to be found. Lynch, for example, wrote that "a good path , a memorable path has a unique image, and to make this image workable, the first requirement is to learn to identify the space to discover its distinction from other spaces."[12] Today, according to Spreiregan (1971), Old Town's major pedestrian circulation is its sidewalks. The alleys are a circulation subnetwork. This chapter follows the development and growth of street/sidewalk circulation and explains how it has differed or coincided with alley development.

Alleys developed and were used somewhat differently in different cities. In Washington, D.C., for example, they began as rear access for the streetside houses, but developed to become slum enclaves. For Old Town there is another story. The literature on Old Town's alleys is scarce, and therefore for this study, the history of their growth had to be pieced together from historic maps and literature.
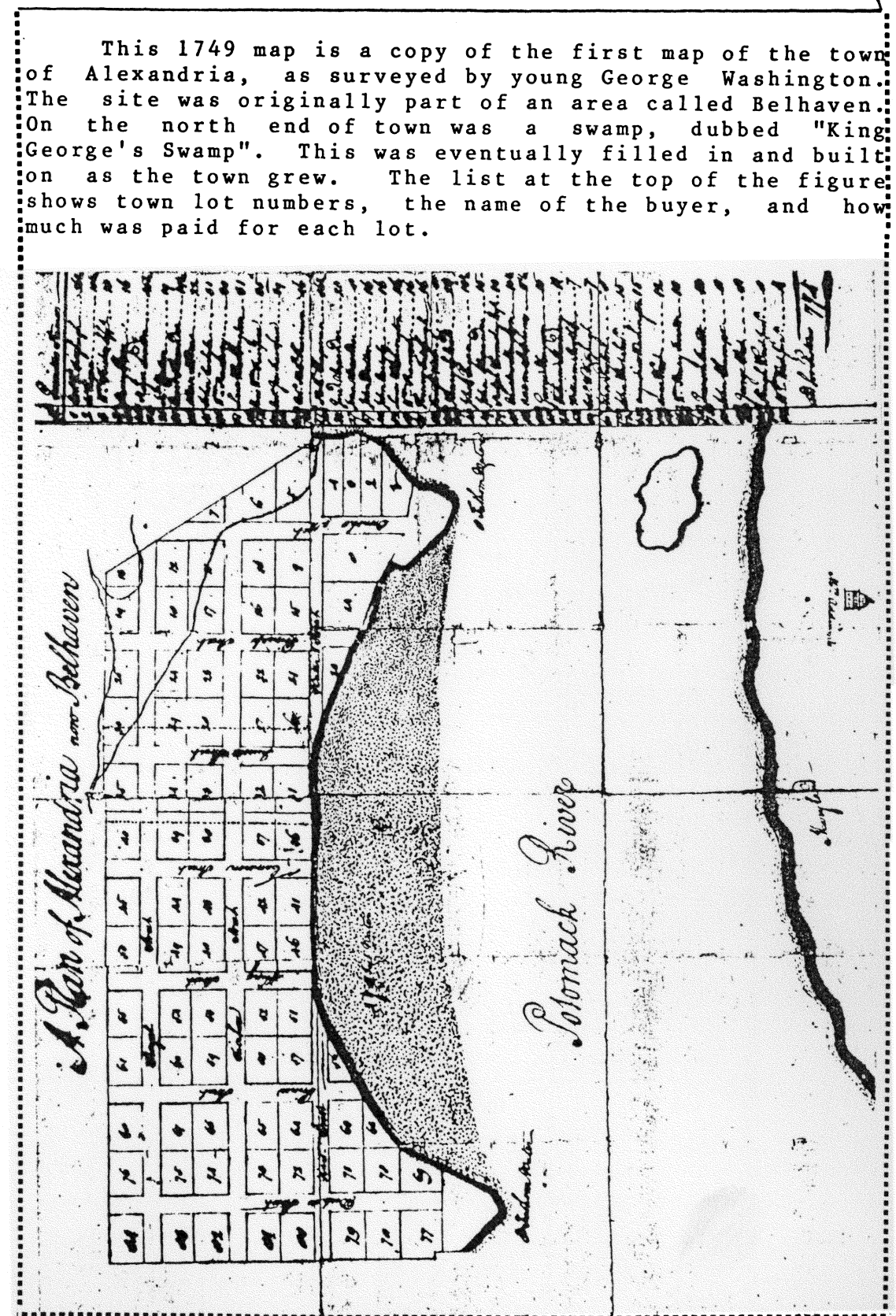
THE STORY

Alexandria was a planned town founded in 1749 to function as a seaport on the Potomac River. A site between Lumley Point and Middle Point was chosen and a rectangular grid pattern of blocks, each subdivided into four rectangular plats was laid out according to the "Anglo way of town planning of the day."[13] The Alexandria town plan created 84 half-acre lots with the specification that each house on the lot have at least a 20 foot square footprint. The trustees for the new town also decided that the streets were to be 50 feet across from curb to curb, and that the sidewalks on either side should be nine feet wide. The houses were built right up to the edge of the sidewalks along the lot lines, leaving leftover space on the block interiors.

The most valuable lots were on the waterfront and those purchasing them would be among the most influential citizens in the city. As early as 1751 access to the waterfront was also made at the northern and southern extremities of the town. This was important because this doubled the town's deep water reach into the Potomac.

Wheat, corn, beans, and peas from the Shenandoah Valley and other points west were the major exports. Because of the importance of this trade, the Virginia legislation ruled in 1772 to upkeep the roads westward to access the trade. (Today, these roads are Route 7 and the Little River Turnpike and they are still main roads leading west out of Alexandria. This roadway heierarchy is represented in figure 2.2.) By the time these roads were improved, the town boundaries had already tripled in size. (See figure 2.3.)

figure 2.1 1749 MAP OF ALEXANDRIA
(A Plan of Alexandria, Now Belhaven)

This 1749 map is a copy of the first map of the town of Alexandria, as surveyed by young George Washington. The site was originally part of an area called Belhaven. On the north end of town was a swamp, dubbed "King George's Swamp". This was eventually filled in and built on as the town grew. The list at the top of the figure shows town lot numbers, the name of the buyer, and how much was paid for each lot.

After the American Revolution, unlike many other Tidewater ports, Alexandria was left relatively untouched, leaving it in a good position to resume trade. Growth boomed and because of this there was a push to develop the waterfront and, once again, the town boundaries were enlarged. This time the land was taken from the Potomac. By 1790, as much as 400 feet of fill land was added to some areas of frontage. The filling continued and by 1845 included the area shown in figure 2.3.

The golden years of Alexandria's seaport continued through 1810 with the waterfront and roads west being dominant features in the town. In fact, until the late 1790's, routes north and south through the town were not considered as important. Hunting Creek bounded the town on the south, and the Potomac River to the northeast. However, in 1798, the Washington, D.C. boundary lines were created and D.C. began to grow in size and importance. Plans to create Potomac River bridges connecting Alexandria to Georgetown and D.C. began to become reality. In addition, the first regular communication with Georgetown, upriver, began with a regular packet line running on the Potomac twice each day.

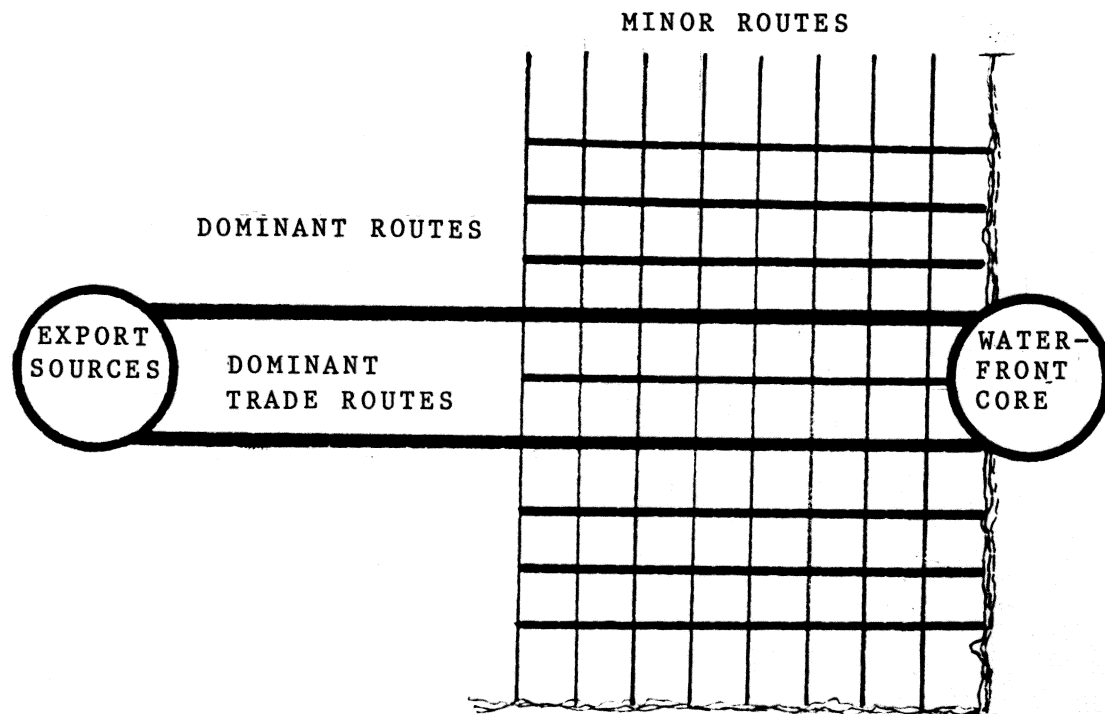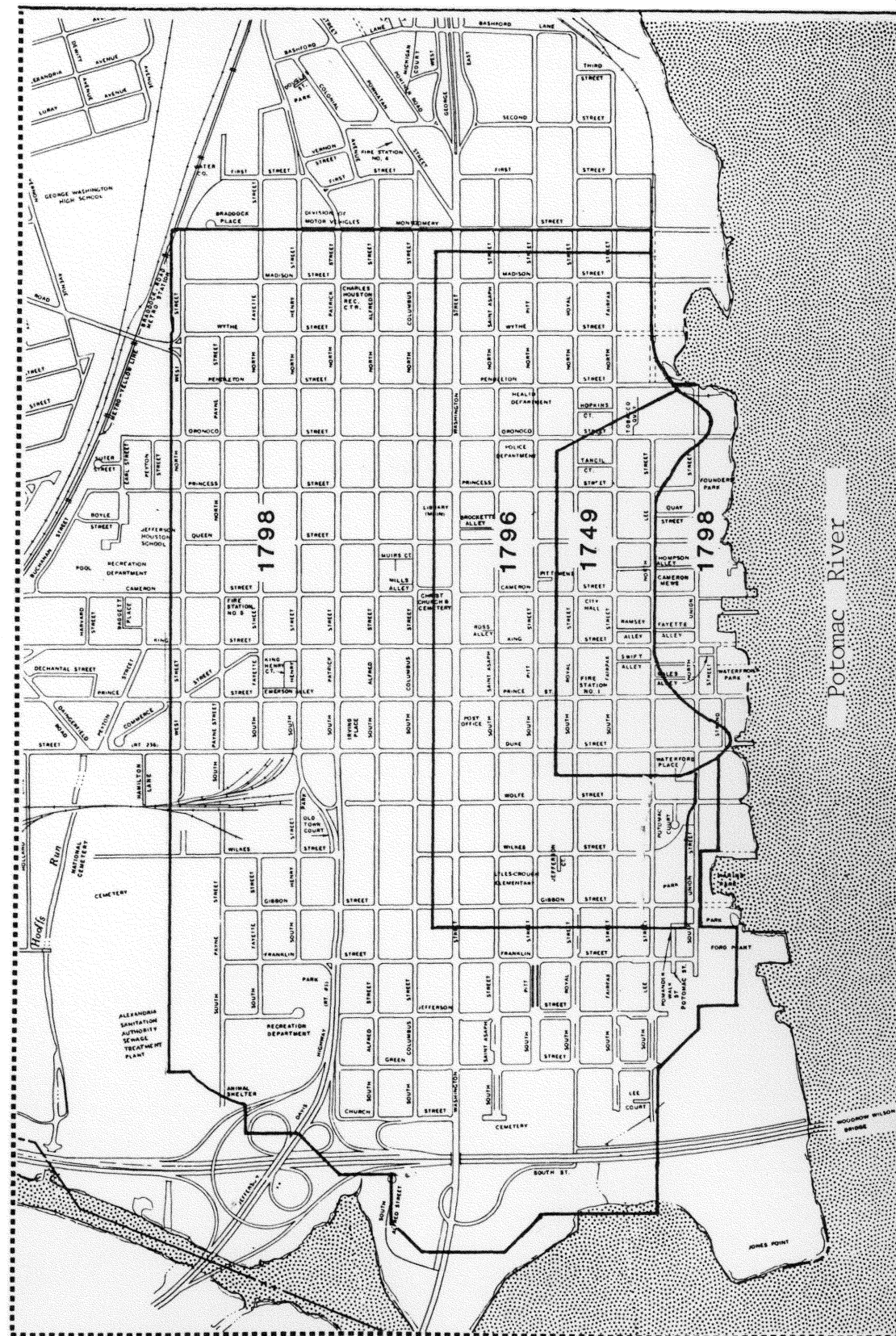figure 2.2 ALEXANDRIA: ROADWAY CIRCULATION

figure 2.3 ALEXANDRIA: ANNEXATION MAP

Meanwhile, alleys began to develop as the town grew. No provision had been made in the town plan for alleys and how they might connect, so individual landowners created them as needed to access the block interiors. These spaces actually served as secondary roads for servicing homes and businesses and accessing stables and sheds on the rear of the properties. When they were paved it was done with cobbles or with oyster shells from the fisheries along the waterfront.

The alleys honeycombed the town and hummed with activity. One of these alleys, Market Alley, ran right through Market Square. This square, shown in figures 2.4 and 2.5, was located on two lots in the heart of the city which had been given for this purpose by Charles S. Alexander, for whose family Alexandria was named. For more than two hundred years the square was the heart of the city, until the municipal buildings nearby grew and took over the space.

Shinbone alley was a common route into and out of the Market Square. It very likely got its name from a small silver coin, the levy, which was often used like a one cent coin. This coin would be cut into 4 parts with each part worth one quarter of a levy. These pieces were dropped or cut their way through pockets and would lie between the alley cobblestones ready to scrape up the shins of anyone unfortunate enough to fall there.

Ramsay Alley is a narrow, cobblestoned alley which in 1751 was cut through the spreading estate of William Ramsey, the founder of Alexandria, and its first Mayor. The alley was given to the city and was the first one it owned outside of the Market Square.

The Title Search and Real Estate maps shown previously shed light on several interesting points of alley location. Because of the importance of the waterfront and of western trade routes to the waterfront, the dominant circulation through the town during the alleys' formative years was east/west. The 1798 map shows that all through the block alleys also ran east-west, echoing the dominance of the road system. Most alleys then, as well as now, are entered from the north/south oriented roads - those which were less dominant during the formative years of the alleys. In fact, most alleys lost between 1798 and 1885 were those which were not through-the-block and running north/south.

figure 2.4 MARKET SQUARE
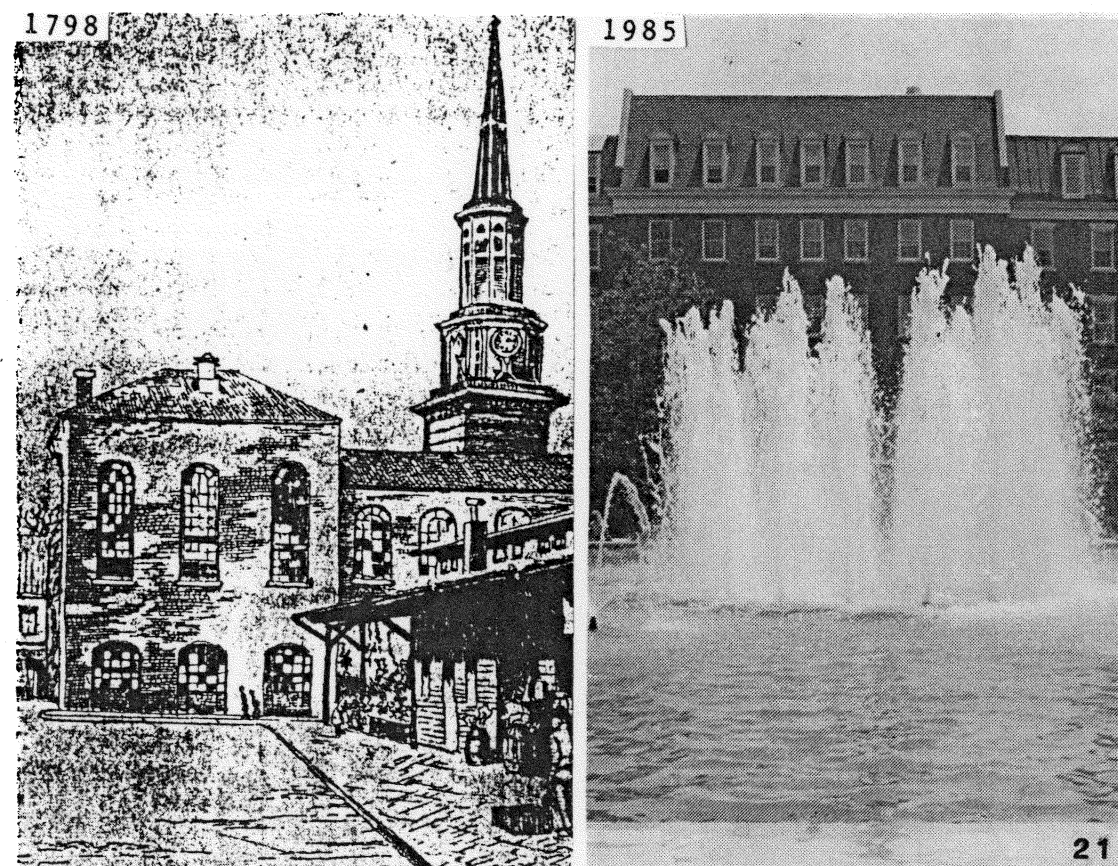(Antiques Journal, April, 1959)
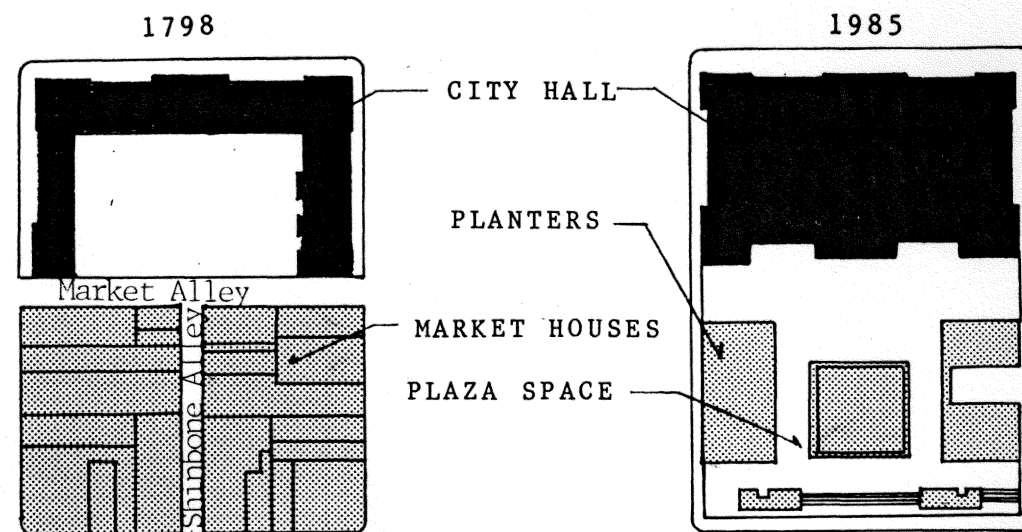

figure 2.5 MARKET SQUARE

figure 2.6 STUDY SITE ALLEYS, 1798
(Title Search for Alexandria)

By 1798, many of the alleys that exist today in the
eastern portion of the study site were already present.
(See figures 2.6 and 2.7) Note that although the town
had developed beyond this point, the Miller and Woolls
Title Search map includes only the blocks from the
Potomac westward to Pitt Street, so does not include the
entire study site.

In 1798, infill of the   Potomac River had not yet
begun, and therefore Water Street was the street running
along the river edge. (After the Civil War, Water Street
was re-named Lee Street.) An elaborate network of alleys
already existed at this time.
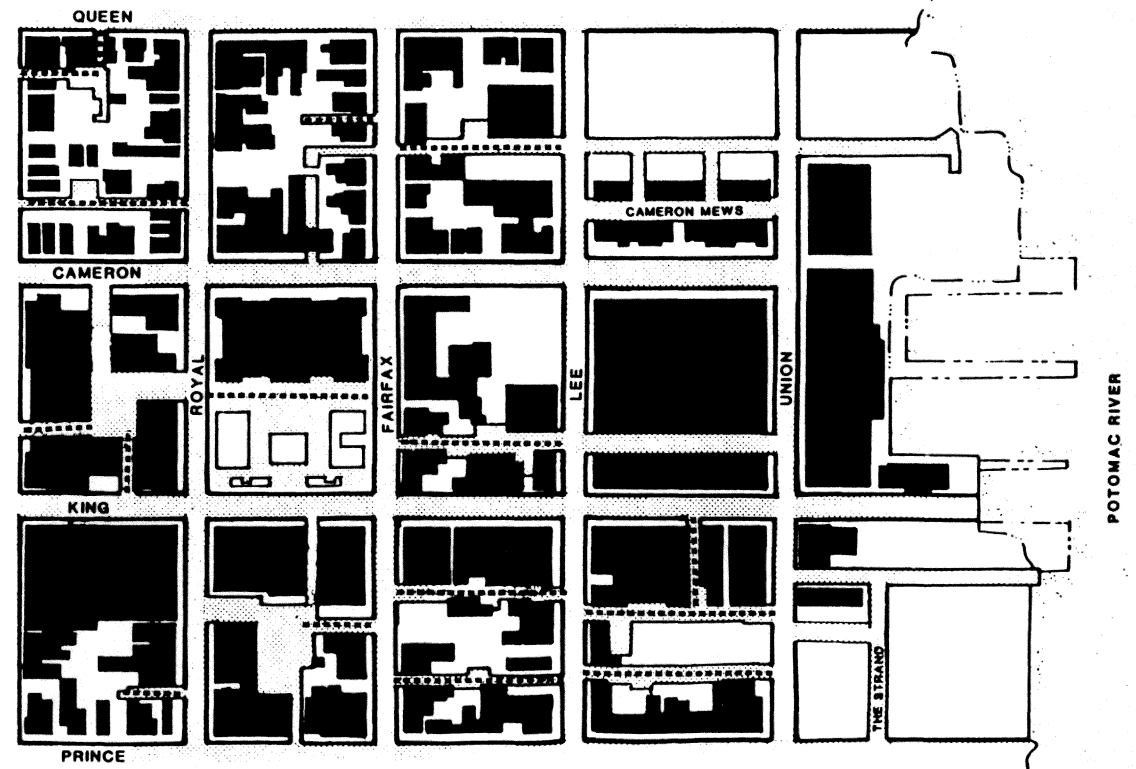
LEGEND

•••••• ALLEYS EXISTING IN 1798

figure 2.7 STUDY SITE ALLEYS 1985

By filling into the Potomac River, two more blocks
were added to the city. Many alleys that exist today
were already present in 1798.

LEGEND

•••••• ALLEYS EXISTING SINCE 1798

12

Humbleton and Van Lindingham (1975) wrote that individual property owners began to create alleys through the blocks, behind their homes to allow rear access for servicing homes and businesses.[14] The blocks developed with homes butting up against the sidewalks leaving leftover space in the rear. The back of the lots housed servant's quarters, equipment sheds, and stables for the horses. The alleys were for servants and laborers - the lower end of the social ladder. These places were the dirty, working side of the block. The streets out front were for show and the more genteel labors.

After 1810 the dominance of the waterfront began to decline for a number of reasons. Several epidemics were brought over on the ships which docked in Alexandria from England, Spain, the West Indies and Portugal. Further, a causeway was built across the Potomac, and there was a blockade of the Chesapeake Bay, at the mouth of the Potomac by Britain during the war of 1812. But, the biggest blow to the water transportation and commerce was the development of the railroads through Alexandria between 1851 and 1855. A large station was built on Wolfe Street and Alexandria's railroad days had begun.

The railroads weren't the only large contributing factor to the seaport's decline, though. The Civil War came and the Union army's "scorched earth" policy made deserts of wheat and grain fields. Alexandria's export sources had been devastated. By 1865, then, other ports, particularly the Port of Baltimore, Maryland, had begun to assert influence over Alexandria. Heavy siltation had made the Potomac less navigable over the years, decreasing the port's deepwater reach. The port of Baltimore was much wider, with a much greater deep water reach, allowing it to accommodate a higher volume of port activity. Alexandria never regained its once flourishing position as a seaport.

Despite its shortcomings, Alexandria now offered advantages for manufacturing companies. In the 1880's property prices were very low, so industries began to move in. The Sanborn maps show that through these years of decline and up through 1937, the alley configurations changed very little and there was little change in the footprints of the structures surrounding them. However, between that date and the present, many alleys did change. That is, they were straightened, widened, re-designed for purely pedestrian use, or disappeared.

There are several factors which led up to this occurrence. By 1920, cars had become more reliable and were becoming a part of family and community life. Around the same time, an interest by Alexandria residents in the restoration of the old town began. This interest eventually led to the creation of the Old and Historic District in 1946. This district is subjected to specific ordinances designed to preserve the character of Old Town. In 1959, an historic building survey was conducted and in the 1960's, Old Town was declared a state and national landmark by the National Park Service. Figure 2.8 shows the boundaries of the historic district, but the restrictive ordinances also apply to all century-old buildings outside the district as well.

By 1943 Alexandria had gained a new importance as a sight-seeing attraction. Historic preservation had become an integral part of city planning, and along with it came an increased interest in promoting tourism and attracting businesses. In fact, Old Town Alexandria was once again becoming a prestigious place for office and retail businesses while the city worked to move the industries back out to other areas. In addition, a walking tour guide of the area was developed to encourage visitors to see the Old Town on foot. The tour brings the visitor past historic homes and taverns and other points of interest.

The City of Alexandria began to attract more residents and businesses for other reasons as well. After World War II National Airport and the Pentagon were constructed by the Federal Government. This contributed to an increase in population in Washington and its surrounding suburbs. This growth affected Alexandria and its population doubled between 1940 and 1943. With this growth, Alexandria began to realize that it would be necessary to provide certain amenities for its residents and the Recreation Department was created. Further, in 1944, a Long Range Recreation Plan was created for the City. The plan explained that the City would not attract and hold "desirable types" of residents unless it took steps to ensure greater attractiveness through recreation and park development. It recommended the development of four major parks, neighborhood playgrounds, swimming pools, and the aquisition of buildings for indoor activities.

Prior to this phase of the city's growth, alley configurations changed very little and when they did, it was often only slight. However, after this time, changes became much more profound. The width required by the auto made some alleys obsolete. Printer's alley, once lined with newspaper and other printing businesses, is now only barely wide enough for a truck to squeeze through. In other cases, the razing and remodeling of
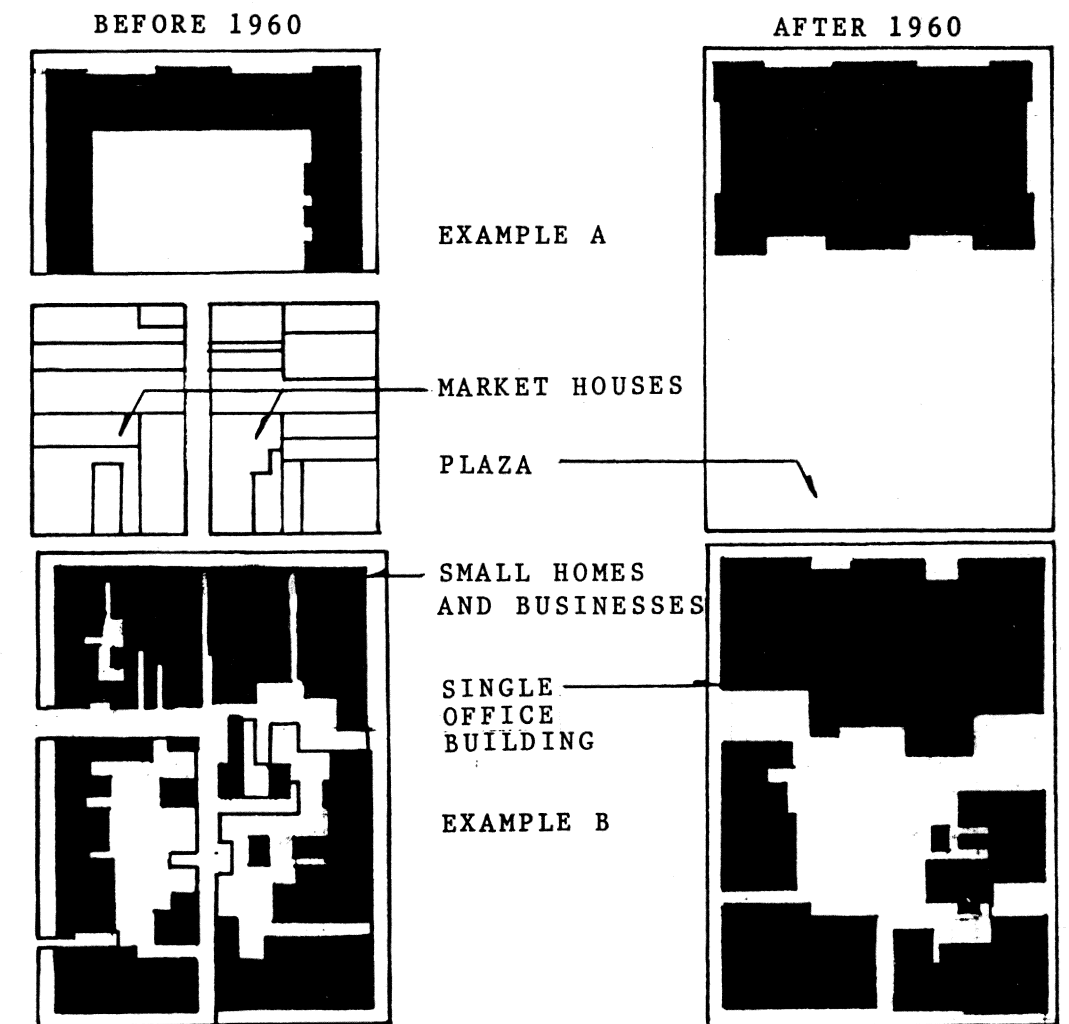
figure 2.8 HISTORIC OLD TOWN: DISTRICT BOUNDARY
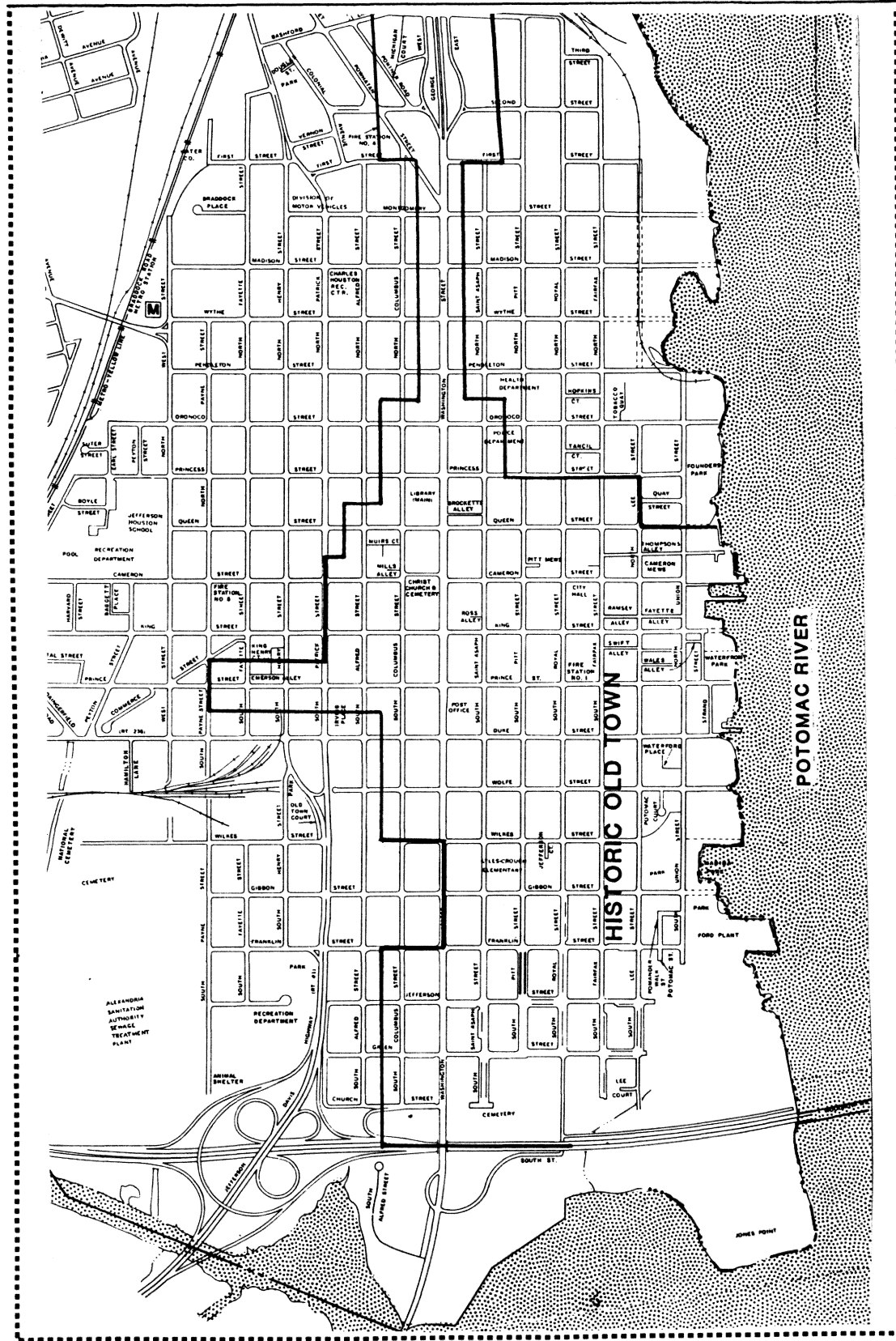
buildings lining the alleys have led to the remodeling of the alleys. The Sanborn maps and the Real Estate Assessment map show that beginning in the 1960's, groups of small buildings began to disappear to make room for new, large office buildings and townhouse complexes. These new complexes cover half blocks or even whole blocks. As a result, their associated alleys were repaved, removed, became plazas, or became entrances to parking lots designed to accommodate the cars of the building employees.

For example, the municipal buildings in Market Square were enlarged and the old Market houses were removed. In their place is a plaza which is the site of a large square pool with a fountain. Across the street another office building was also constructed. This building, as well as the City Hall, each take up half a block. Although the new buildings are constructed of brick, and are no more than 4 storys tall, they are still quite different from what they replaced.

figure 2.9 BLOCK GROWTH AND CHANGE EXAMPLES

BEFORE 1960   AFTER 1960

EXAMPLE A

MARKET HOUSES

PLAZA

SMALL HOMES AND BUSINESSES

SINGLE OFFICE BUILDING

EXAMPLE B

By 1971, Alexandria began a push toward a comprehensive image. Spreiregan (1971) presented his urban design study, completed, at the city's request, for the Planning Advisory Committee. The study was based on the idea that the town and its parts are an intimate and complex combination of pieces. Views of them and from them are important, and therefore each area should have its own identifiable character. Old Town was perceived as a distinct district by Spreiregan. He recommended that traffic be "kept as a servant" in this area and "not allowed to become master". He wanted to see the district become more amenable to pedestrian circulation by better using its open space assets including sidewalks and "through-the-block passages".[15] His study was adopted as part of Alexandria's 1970-1980 Comprehensive Land Use Plan.

This aspect of Spreiregan's recommendations has not been implemented, however. The auto remains master, a trend begun in the 1920's with the coming of age of the auto. In fact, between 1975 and 1977 an alley study which recommended that ccertain alleys be made public, was conducted by the Department of Environment Services (generally meaning paved with asphalt.) Once paved, the owners with property along the alleys were to understand that the alleys would then be public rather than private property. While a few of those alleys proposed for public use were paved, many others met with opposition from adjacent landowners who wanted to keep the "back yard" look to the spaces, or didn't want these spaces subjected to parking regulations or rights-of-way.

As a result of this obstacle to their plans, the City has become quite defensive when the subject of alleys is discussed. The problem seems to lie in the City's haphazard approach to making the alleys public. Sources in the Department of Environmental Services state that the main reason for paving the alleys is to include them as part of their sanitation routes. The large sanitation trucks used for trash pick-up require a certain alley width and paving them improves the driving conditions.

The attempts at controlling architectural and design features and pedestrian circulation in the old district have not extended to the city's back ways, its alleys. Spreiregan saw the potential these spaces have to become a viable part of the city's open space system, but there is still no comprehensive plan by which to accomplish this.

A plan for the alleys can be developed to give them a unified image. This plan would take into account the conflicting alley uses and demonstrate how they can all work together as a meaningful whole. They can be developed and made public in a unique way which reinforces their positive characteristics.

Guidelines to Evaluating Paths

It is important for purposes of preserving or enhancing alley potential as viable outdoor space, to understand how the characteristics compoing them work to make them either attractive or forboding spaces. In order to develop a guide by which to judge this, the existing literature on urban spaces and paths was searched to discover the factors contributing to successful spaces.

The search found four appropriate sources, which have been cited in chapter one. Basically, each author sought to find and define important design variables such as sun and lighting, seating, or scale. The guidelines given by each author contributed to the creation of the list and descriptions shown below. The items in this list were use as a basis from which to describe and define alleys, and thereby evaluate alley characteristics.

EVALUATION GUIDELINES

UNIQUENESS

City open spaces work best when they intensify the city's own unique surroundings and strengths. A memorable, successful path reinforces the unique characteristics of the area it passes through – that is, the characteristics that set it off from other paths.

CONTINUITY

This refers to the basic organization of the space. When a certain order and unity of form, or forms, is used to create a harmony of all the parts, the path becomes easy to follow and to distinguish from other paths. This can include the continuous use of a certain planting type, building facade, setback, lighting, detail, or a certain characteristic width.

NETWORK

A path should have clear origins and destinations, tying together different attractions in the city. When a path serves as an interconnecting network, and is perceived as such by the pedestrian, it is more easily definable.

DIRECTIONS DISTINGUISHABLE

The pedestrian should be able to differentiate his position along a path by ensuring that one direction is distinguishable from the other. Some variables which insure this are a change in gradient, an important building on a visual axis, signs, house numbers, or a sudden narrowing or widening of the path.

PROXIMITY TO SPECIAL FEATURES

When a path is in close proximity to an abundance of special features and attractions such as historic sites, parks, or shopping, it can easily become an important link between them.

ATTRACTIONS WITHIN

Certain factors draw people to a space. These include food, bathrooms, sitting, sun, and triangulation, and are explained below.

Food- A good space addresses the care and feeding of the pedestrian. Food is a necessary item which entices people into a space.

Sitting- The most successful urban spaces offer an abundant variety of sitting spaces. For this success it is important that the seating be organized so that it offers a choice of sitting "up front", "in back", in the sun, in shade, and at various height levels. Whyte (1980) found that people will distribute themselves quite evenly around a variety of heights ranging from one foot to three feet, and that a seat width of 30 inches seems to be quite attractive, although 36 inches is even better. He also found that benches don't work as well as moveable chairs, low walls, or low, casual steps. High steps are also attractive for sitting, but can give the negative impression that the space is separate from the circulation flow.

Sun and Lighting- Light and shadow define our visual environment. Light makes the environment clear while dark makes it less clear. The orientation of a space to daytime lighting (the sun) has an important effect on its visual appearance. It also affects the warmth of a space. For, the sun is attractive not only for its light, but also for the warmth it provides.

Triangulation- This is a process by which an external factor inspires two strangers to interact. The factor stimulating this can be a street character acting in an odd way, a group of musicians, or a sculpture that appears at a site for a number of days and then disappears again. Strangers experiencing the phenomenon together are very likely to comment on it to the person next to them.

TREES

Trees provide shade, functioning to allow a variety of sun and shade within a site. They also add a living component to the environment. As they change with the seasons, they change the appearance of the space they are in. In addition, they can also serve as buffers against winter winds and street noises, and can have the added effect of giving a human scale to a setting.

SCALE

This deals with the relationship of width to height and how well this works for a particular space. When something is "out of scale" it means that it is too large or small compared to other objects around it. The pedestrian judges scale by comparing an element to something of a familiar size such as a tree, a window, brick sizes and patterns, and so on. The design and organization of a building facade becomes important in an urban setting, then.

VARIETY AND INCIDENCE

The pedestrian needs variety in detail to catch and hold his or her interest. A walk along a path should bring the pedestrian through a series of surprises by infusing a mixture of static and active spaces, open and closed spaces, and sunny and shaded spaces.

Incidence is a design characteristic which adds an element to the space which may delight and surprise the viewer. This may be a church steeple, a strong color, an archway, or other sudden changes.

HAZARDS

A successful space is free of hazards or deterrents to the public. These include trash, unkempt plantings or fences, dark passages, offensive smells, high winds, or spaces subjected to extremes of heat or cold.

A deterrent may also be stepped entries of more than two steps high into an enclosed space. The steps separate the space visually and physically, as do high shrub plantings which do not allow a view in or out.

Restrictive signs such as "no dogs", "no walking on the grass", "no one after 6:00 p.m.", "employees only", and so on can also turn people away from a place. Some of these restrictive signs are designed to keep out "undesirables" including bums, tramps, and other street people. However, it should be remembered that these people generally prefer empty spaces, rather than inhabited ones in the main flow of traffic. The best way to handle undesirables is to make the space desirable to everyone else. A space that tries to be restrictive, too often only succeeds in restricting all. Finally, confusion causers such as branching paths which give confusing directions, or an item blocking the view of the destination should also be avoided.

Based on these guidelines, the alleys in the study area have been examined and evaluated to discover how they, in their own unique way, have characteristics which contribute in a positive or negative sense to the creation of attractive and memorable pedestrian paths. To accomplish this, each alley in the study site was assigned a number, which was recorded on the site map, and then each was photographed. The results of the evaluation follow.

EVALUATION OF THE STUDY SITE ALLEYS

UNIQUENESS

Alleys are back yards and back ways, forming a skeleton echoing the street circulation. The strict street-side regulations of building setback and sidewalk and street width do not apply to the alleys. They developed in Alexandria in a mix and match way to serve as rear access to the streetside houses. They became an important part in the circulation of the city, and a number of them have historical significance.

CONTINUITY

Certain design features occur repeatedly in the alleys. These include brick buildings of similar heights, brick walls and wood and iron fences around back yards, gate entries into back yards, ivy-covered walls, varied rooflines, chimneys, trees behind fences and walls spreading over the alley space, lighting on walls near gates and back doors, or a certain width of no less than 3 feet and no more than 20 feet.

figure 3.1

IVY-COVERED WALLS   **GATE ENTRIES**
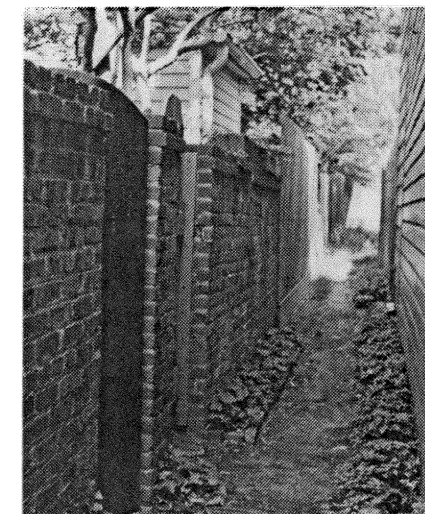
NETWORK

Some alleys interconnect from block to block while others do not. However, they do run parallel with the street grid, so that there is no odd branching to the paths.

DIRECTIONS DISTINGUISHABLE

From Fairfax Street eastward, the gradient slopes down to the Potomac. In some cases, an important building is on the visual axis. In other cases, an alley may widen at one point, or is entered through an archway. Very few signs exist in the alley and only a few alleys are named.

PROXIMITY TO SPECIAL FEATURES

The alleys are in the heart of Old Town's historic district, so that they enter onto and pass through many attractions and historically significant sites in Old Town, including those shown below.

figure 3.3 OLD TOWN: SPECIAL FEATURES
(Walking Tour Guide)

figure 3.2

IMPORTANT BUILDING   ARCHWAY ENTRY
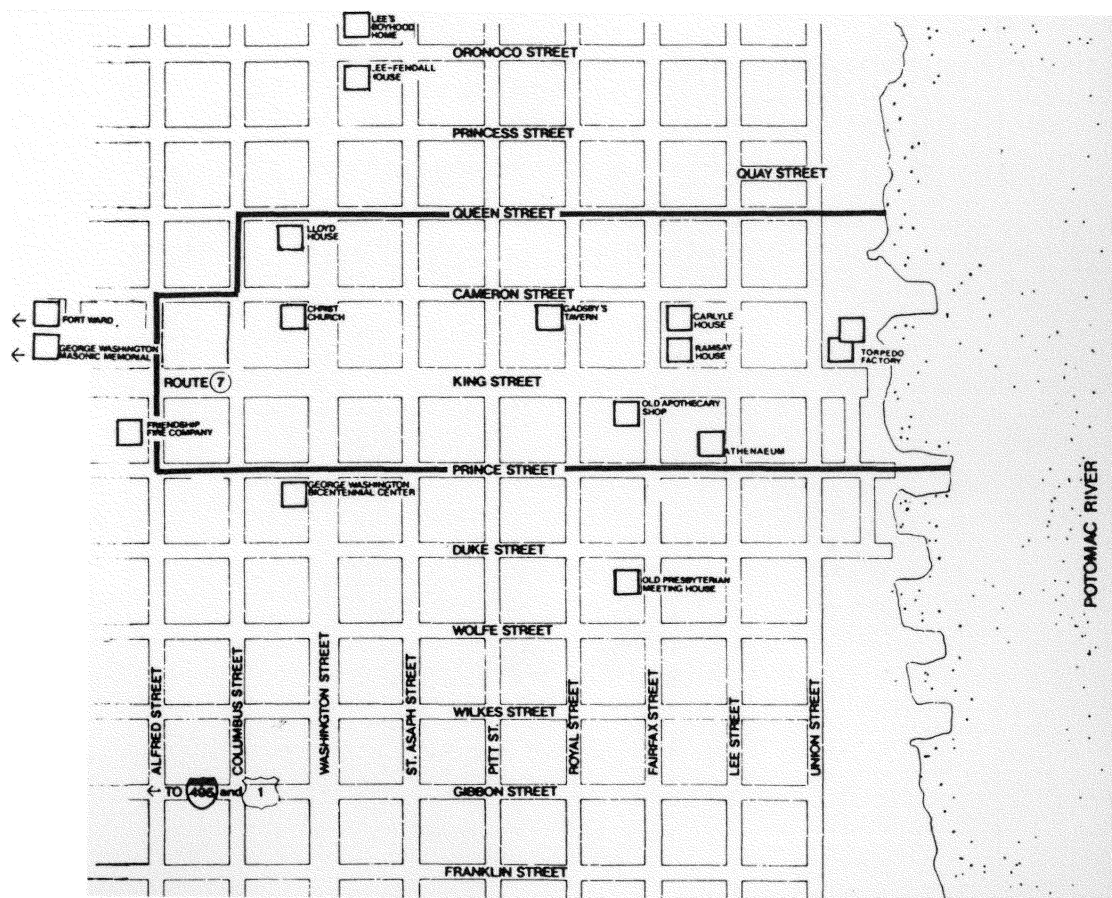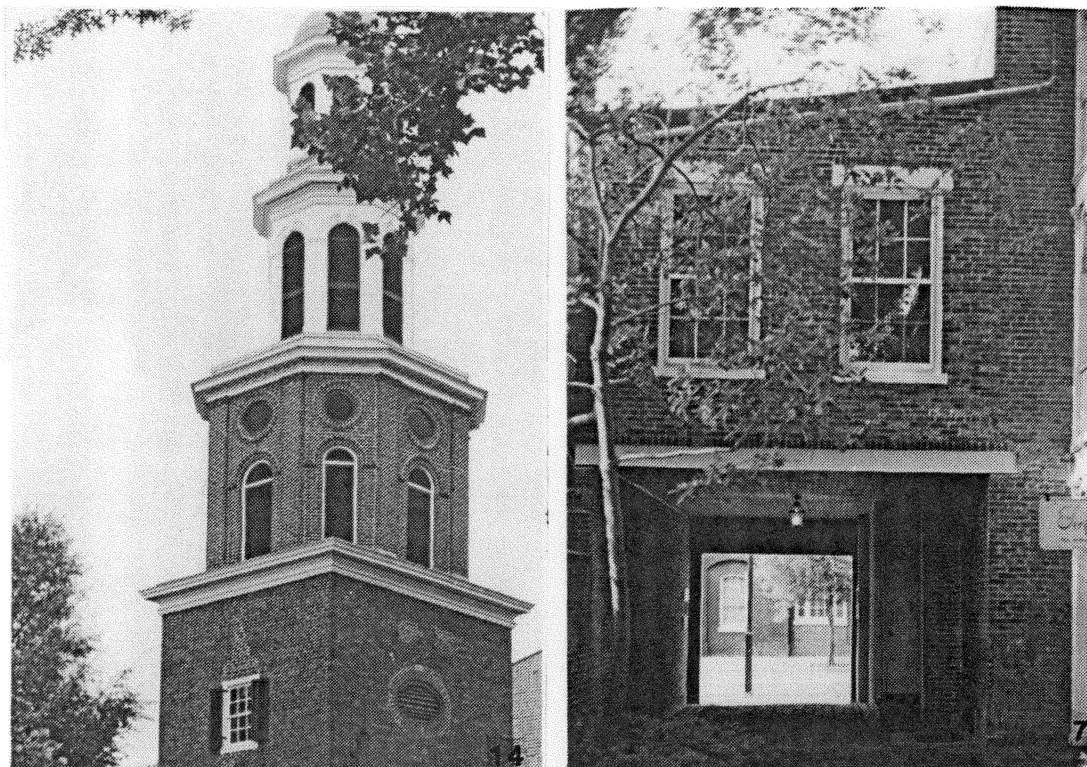
ATTRACTIONS WITHIN

The "old" alleys provide interest by their own quaint character. However, it is rare to find other attractions such as stores or restaurants fronting on these alleys. The new spaces have seating in the form of benches, and have stores or homes fronting on them. The stores attract pedestrians into the space. Occasionally a restaurant with associated outdoor cafe can also be found. The alleys associated with new residences provide seating but also have high, stepped entries or gates into them, which is not a welcome sign to the public.

SUN AND LIGHTING

The building height limits set by the city of Alexandria have an important effect on the shading of the alleyways. The alleys are more narrow than the streets so that the buildings shade the alleys more than they do the streets.

In addition, because they are narrow, tree branches spread easily across the spaces, providing shade. As a result, some alley spaces have no direct sunlight entering into them.

Night lighting, where it exists, comes from lamps located at fence and wall entries, or at rear entrances to the buildings. This lighting occurs at odd intervals according to where entries occur, so that these intervals do not always allow for adequate light throughout the space.
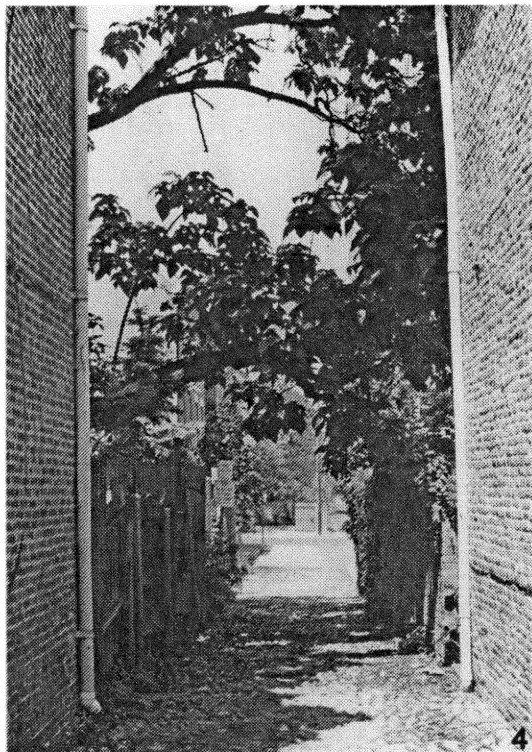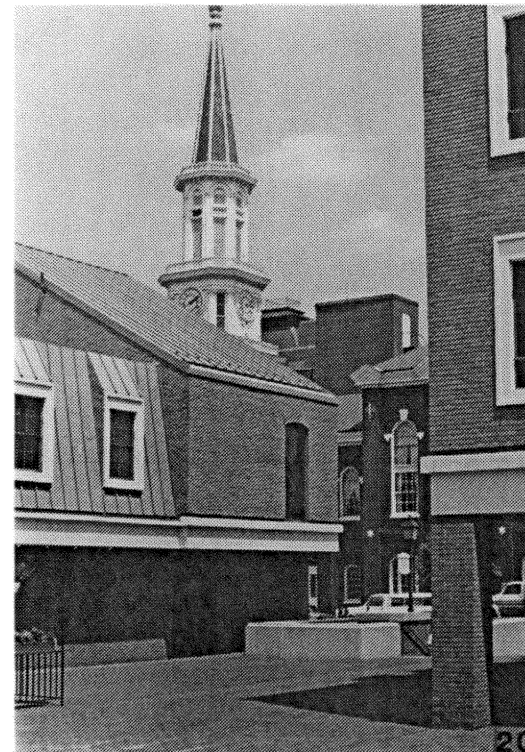
TRIANGULATION

Alley use is not particularly encouraged in the city right now. The alleys are quite static spaces rather than active ones. There are no street bands, outdoor art displays, or the like occurring in them.
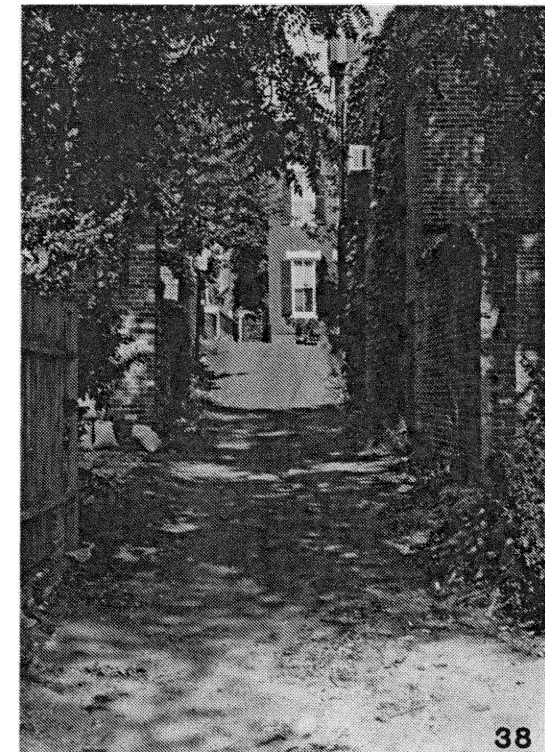
TREES

The older alleys are all shaded by mature trees. If there is one important fault they have, it is that they are sometimes too shaded. Most often, however, there is a variety of both sunlit and shaded areas along an alley.

figure 3.4

SUN AND SHADE   WALL BRACKET LAMP

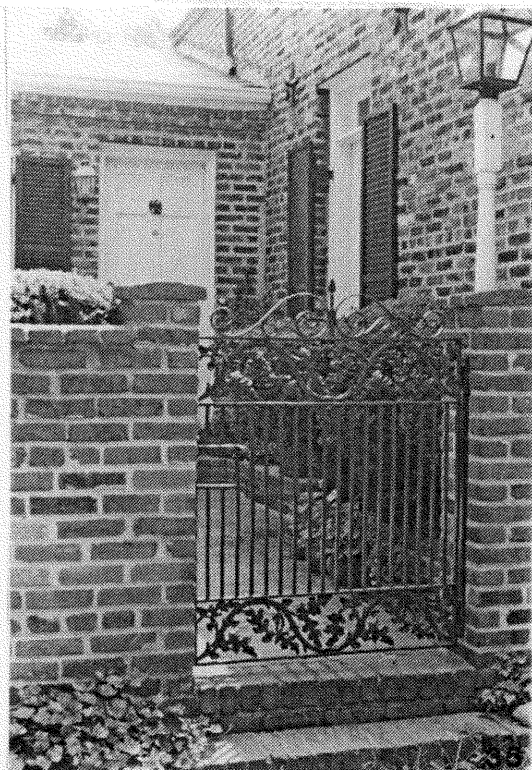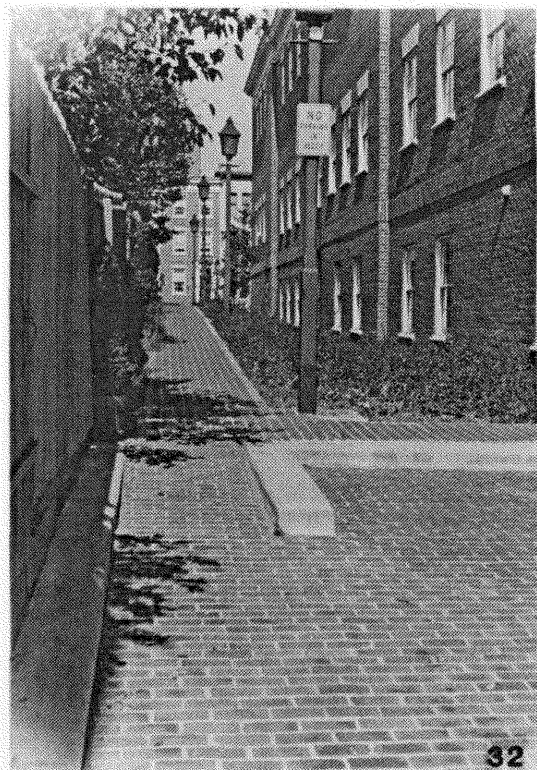figure 3.5
TREELESS PLAZA   SHADED ALLEY

SCALE

The Old Town district has specific building height requirements. The scale of these buildings is to be compatible on the street side of the blocks, but no specifications are made for the alley side.

For example, a building on the King Street side of a block may be four stories tall and stretch out over half the block, while the buildings fronting on Prince Street may be smaller residences. Where an alley runs between these two types of structures, each appears out of scale to the other.

VARIETY AND INCIDENCE

A number of interesting design details occur along or in the vista of alleys. These include: church steeples, flowering trees arching over the alley path, an archway entrance, an oval window, an oddly placed window or door, a varied roofline with chimneys, sunny nooks and shaded, narrow paths, a variety of walls and fences with assorted gates, ivy covering a wall and hiding the building, or a front entrance planted with flowers.
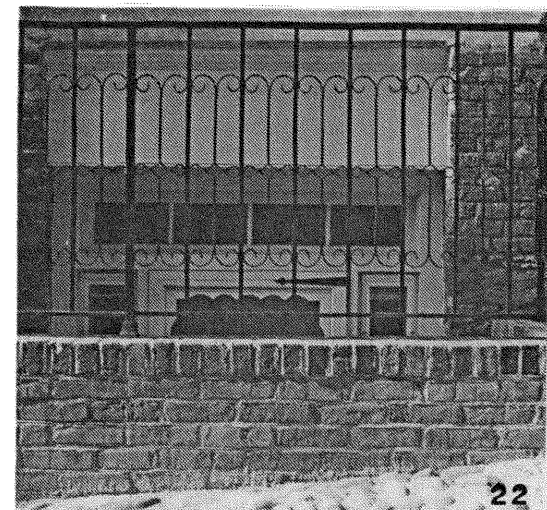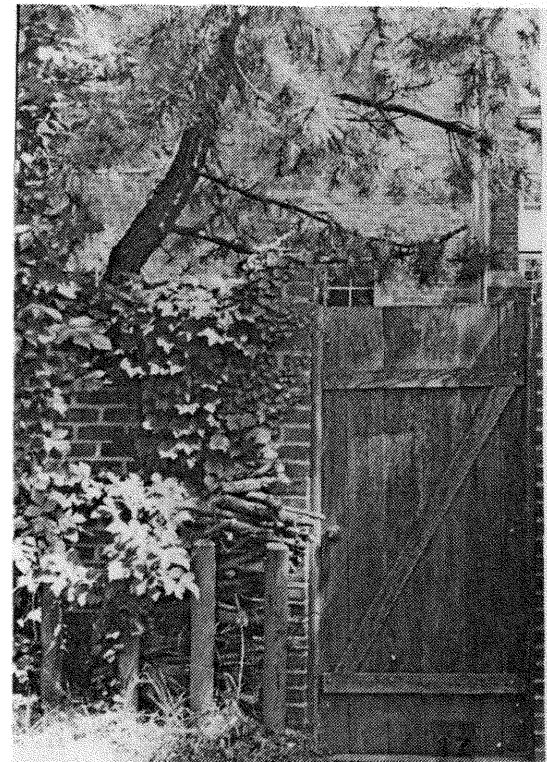
figure 3.7

ROOFLINES

ENTRY BELOW GRADE

ARCHWAY ENTRY
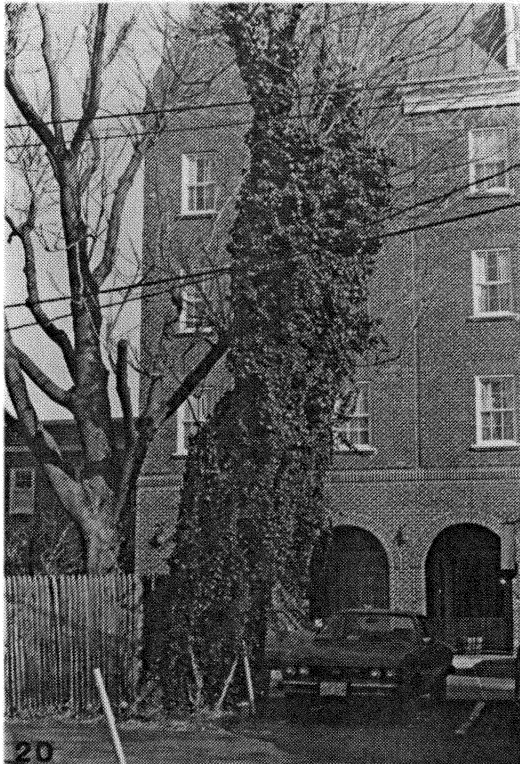
GATES, WALLS, AND IVY

figure 3.6

SMALL-SCALE RESIDENCES
FACE LARGER-SCALE OFFICE
BUILDING

RESIDENTIAL ALLEY-SIDE ENTRY

HAZARDS

The alleys have both negative and positive characteristics. Hazards include: dumpster refuges, unkempt plants, tangles of telephone lines, malodorous water, dark corners, high steps, dilapidated gates and fences, cars or delivery trucks blocking views of destinations, or closed vistas with nothing of note happening at the end.

figure 3.8
DEAD TREES AND A
TANGLE OF TELEPHONE LINES   DILAPIDATED FENCE
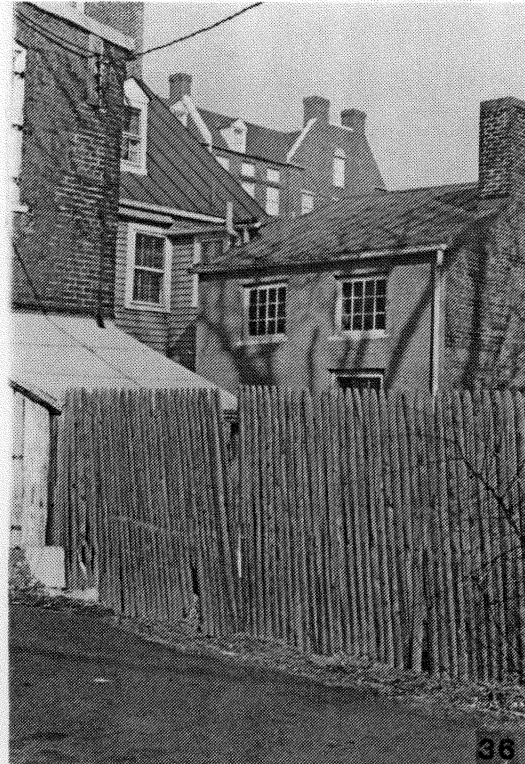
Alley Use/Land Use

Chapter three brought the study site alleys into clearer focus. It explained what makes them unique, and revealed the characteristics which make them attractive or forboding. The ground work has been laid, and it is now time to learn to judge the potential uses of these spaces. This chapter reveals how land uses affect their adjacent alley use. It presents an alley typology which was discovered in the process.

For this part of the study, a land use map was created through a site investigation, and then the alleys were photographed. The land uses and photographs were compared, and from the comparison it was found that there are six basic land use types which use their alley access in different ways. These are: Residential-A, Residential-B Commercial-A, Commercial-B, Commercial-R, Institutional, and Open Space, and are described in the map below.

The categories Residential A and B, and Commercial A and B, have a special meaning. According to the Alexandria Real Estate Assessment Map, the buildings along the alley were built between 1960 and 1985. During these 15 years approximately 16 new buildings went up in the study area. Generally, these new complexes take over entire blocks or half blocks. Prior to 1960 this sort of new development did not occur in the study area. Each land use uses its associated alley in a different way.

figure 4.1 STUDY SITE LAND USE MAP

LEGEND

RESIDENTIAL-A
BUILDINGS CONSTRUCTED BEFORE 1960

RESIDENTIAL-B
BUILDINGS CONSTRUCTED AFTER 1960

RETAIL-A
BUILDINGS CONSTRUCTED BEFORE 1960

RETAIL-B
BUILDINGS CONSTRUCTED AFTER 1960

RETAIL-R
RESTAURANTS

INSTITUTIONAL
CHURCHES, SCHOOLS, CITY GOVERNMENT BUILDINGS

OPEN
PARKS, VACANT LOTS, PARKING LOTS
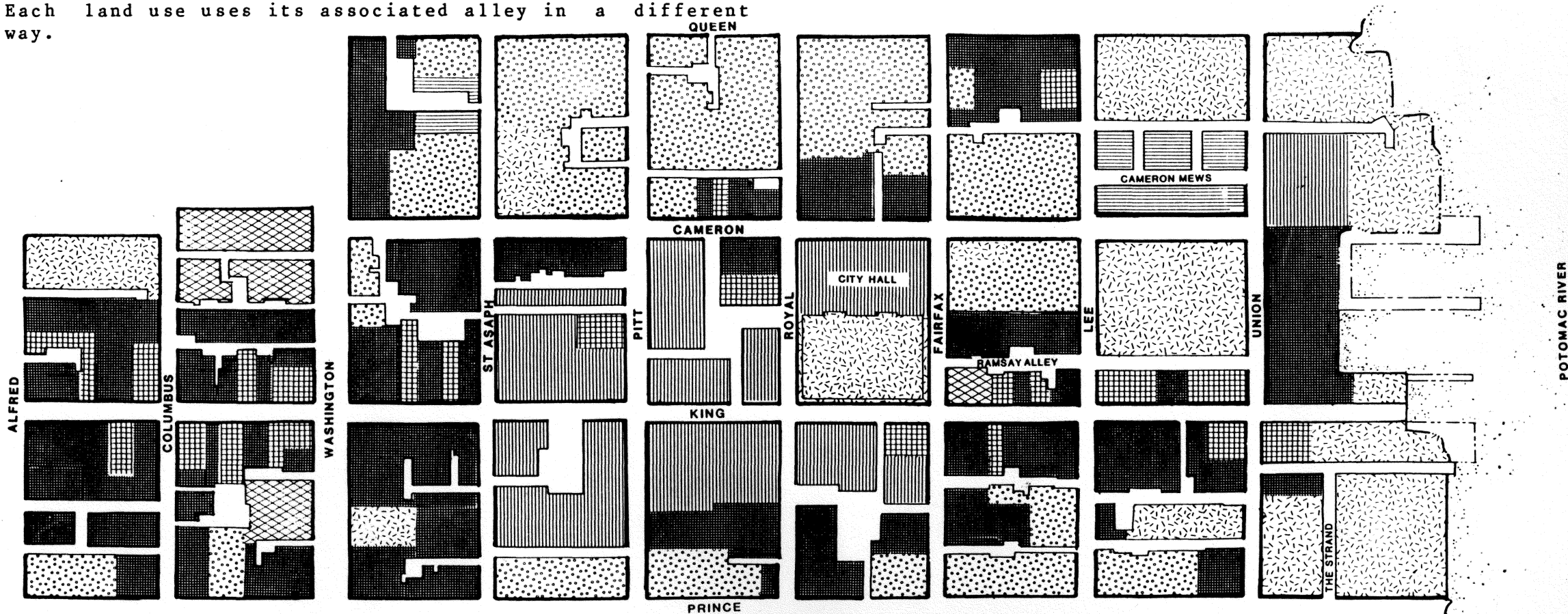
RESIDENTIAL-A

Here, the alley is a shared driveway to nooks designed for parking. Back yard walls and fences with their gate entries front onto the alleys. Individual trash cans are beside the gates when the alley is wide en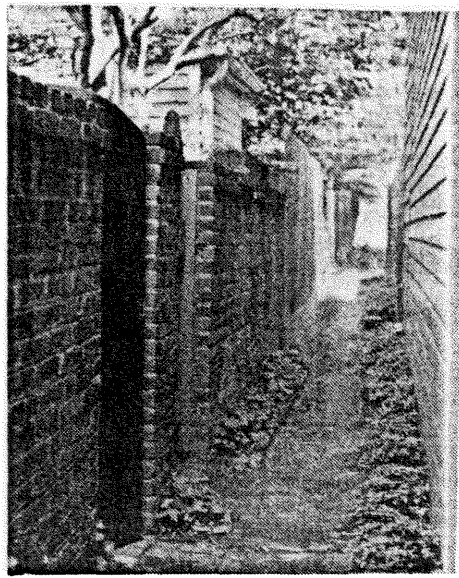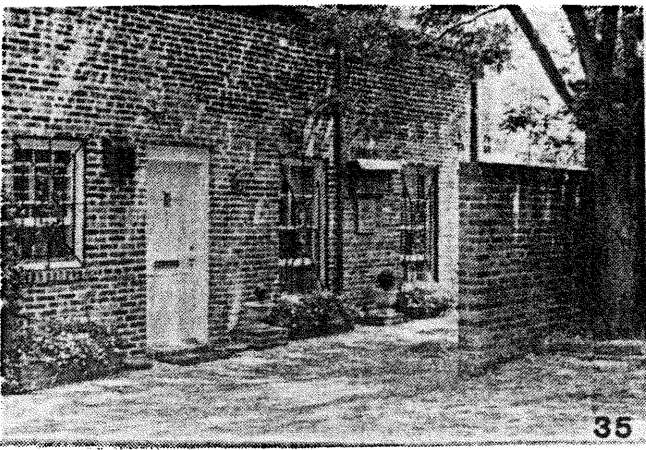ough to accommodate the sanitation trucks. These alleys become a part of the back yards with a variety of plantings lining the edges. Mature trees, with their branches hanging over the back walls and fences, shade the alley spaces.

figure 4.2

RESIDENTIAL-B

This land use yields refurbished, brick-paved alleys which are generally designed for pedestrian use only. Steps into the alley or a gate at the alley entrance serve to keep the auto out. The design of those in the study area puts the front entries on the alleys, or a second front entry on the alley. The alley becomes a semiprivate community space with new plantings set in brick planter areas.

figure 4.3
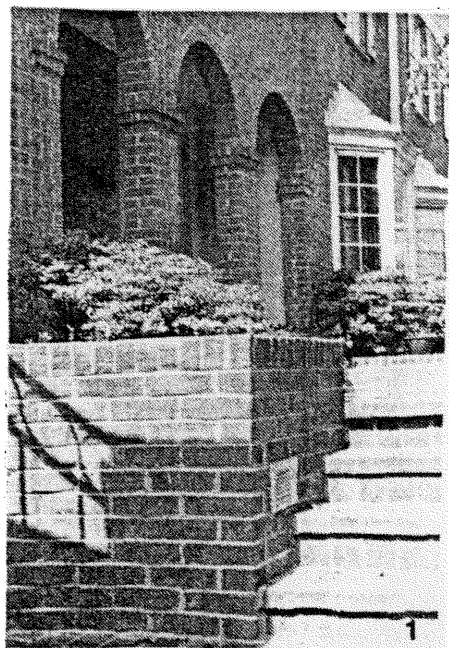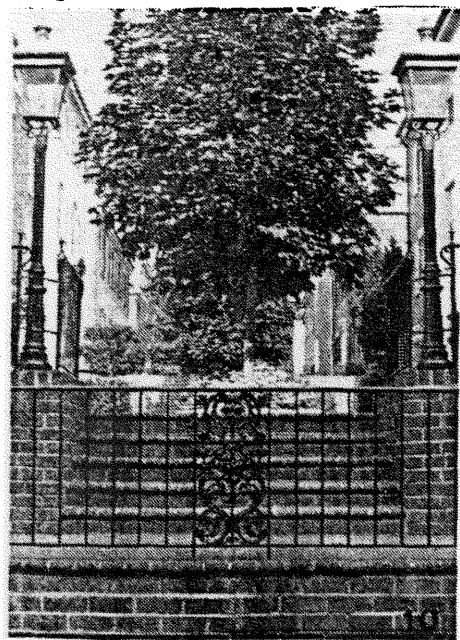
COMMERCIAL-A

The alleys adjacent to this land use become a delivery route. They are paved with asphalt, are straight and wide, and lined with metal delivery entrance doors. They also become a sanitation route with dumpsters scattered along the alley. Occasionally, however, a shop may front on the alley.

figure 4.4
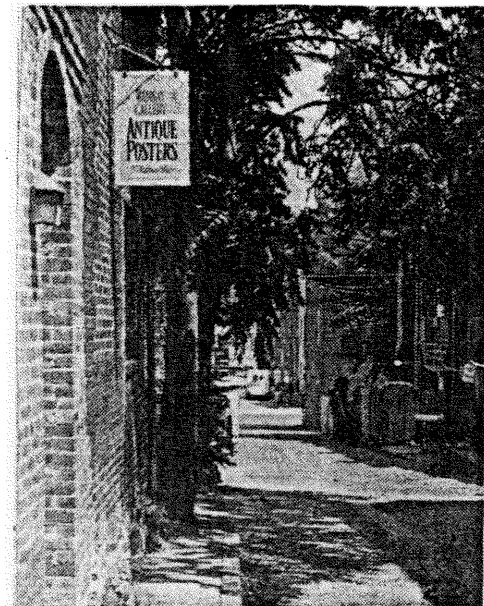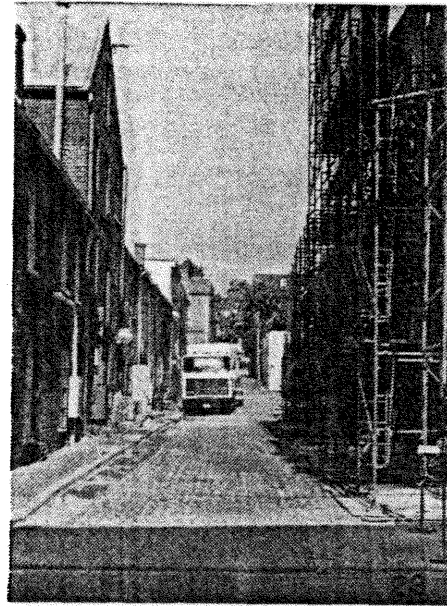
COMMERCIAL-B

Here, a new alley may be added to the block or an old alley is redesigned. The increased number of employees these uses introduce means there is an increased need for parking spaces. This is often supplied in the form of underground parking garages, but may also mean the addition of an open parking lot. The alleys tend to become pedestrian, and brick-paved with curbs or steps at the entries to keep automobiles out.

figure 4.5
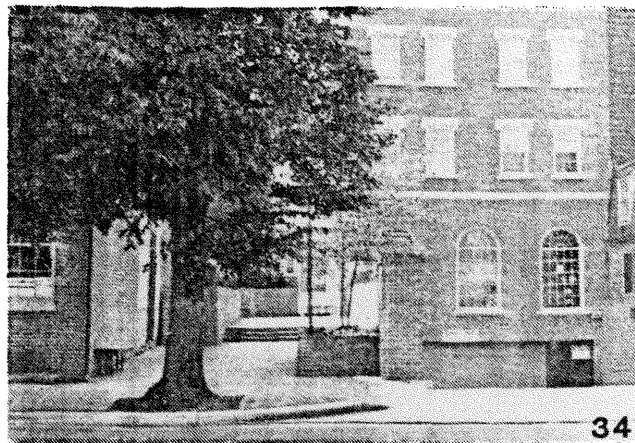
COMMERCIAL-R

The alley becomes a sanitation route here. Behind each restaurant are several assorted trash receptacles giving off the odor of rotting foods. Sometimes a wet trickle of malodorous fluid can be seen making its way down the center of the alley. Only seldom will a restaurant front rather than back onto the alley.

figure 4.6
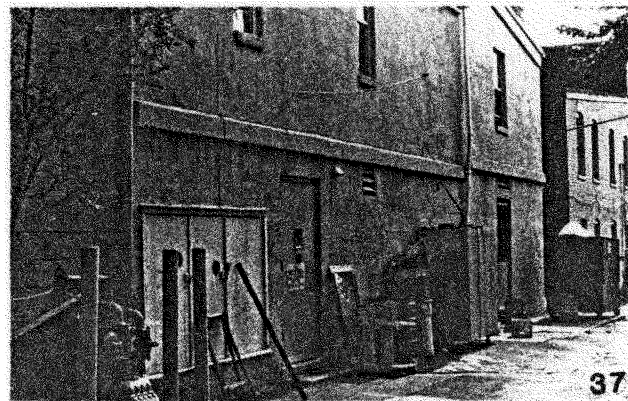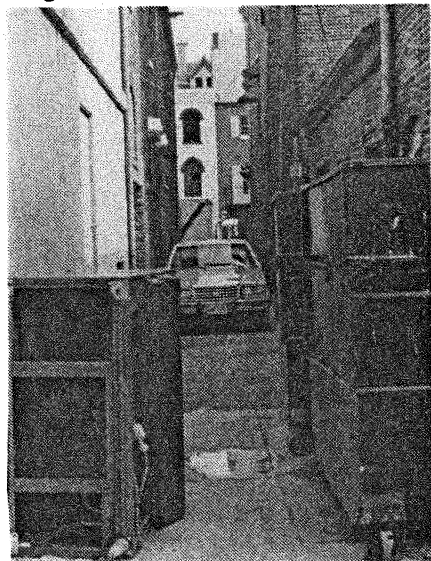
INSTITUTIONAL

On occasion, a church in the study area is associated with a green, shaded church yard with an alley, or pedestrian way running through.

figure 4.7
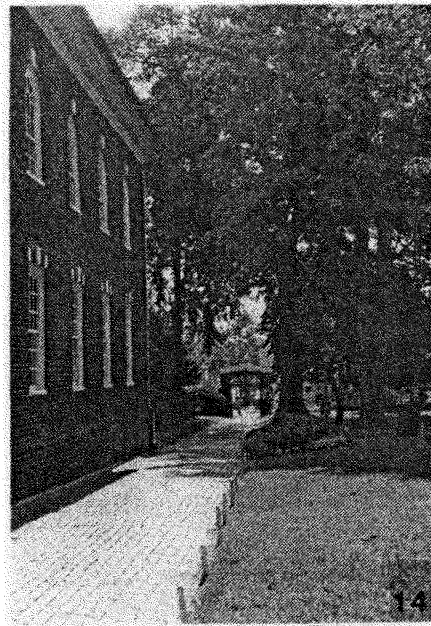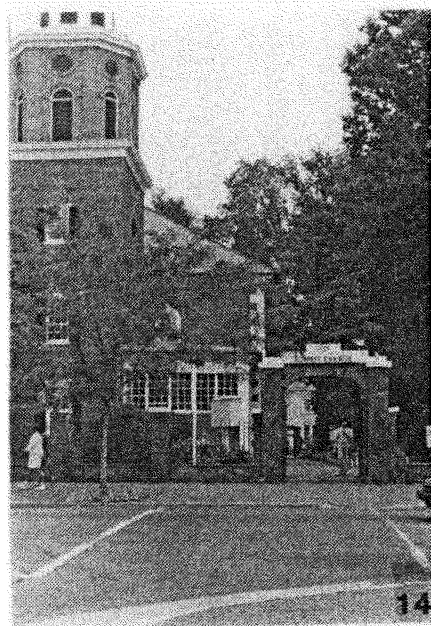
OPEN SPACE

Where the open space is a parking lot, the alley may become the access to the lot. In other cases, where the open space is a park or empty lot, the alley is simply used as a passage through the block.

figure 4.8
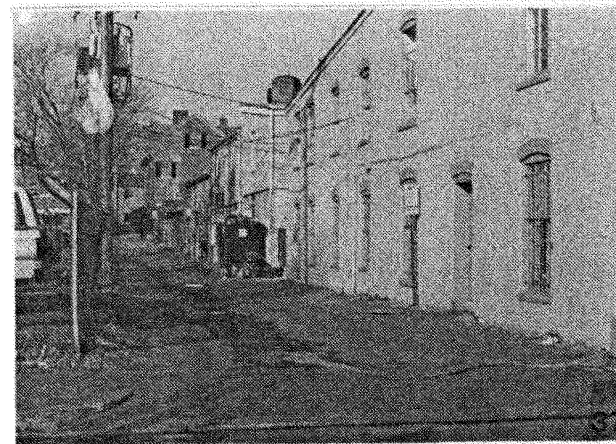
Knowing the ways these alleys are used offers insights to their potential use. The alleys are used in the following ways:

a) Private places (residential).
b) Stopping places (retail plazas and arcades).
c) Building extensions (office plazas and courtyards).
d) Passages (along open lots, and parking lots).
e) Destinations (market square).
f) Service (parking lots or nooks, sanitation routes for restaurants and retail).

However, current use does not necessarily dictate potential use. Other factors-the design characteristics discussed in chapter three-must enter in. For example, the alley in figure 4.4 certainly can remain a service alley, but is this its fullest potential? A study of appendix a reveals that the alley is a direct passage to the Market Square, on one side and into an alley in the adjacent block. The three form a passage from the town center to the Torpedo Factory crafts studios on Union Street, which is a major attraction in the town.

This alley also already has a richness of design, offering a variety of plant materials, detail in walls, fences, and gates, cobblestone paving, and has two retail shops fronting on the alley. Therefore, it has greater potential to become a stopping place with additional shops entering onto it, as an alternative route to the sidewalks.

Another alley is currently used in a service capacity as a parking lot, interior to the block. The space created by the alley is quite substantial in this old town where space is becoming a rare commodity. What if this space was used as an extension of the office buildings around it- a sitting space, and a visually pleasing space where the building employees could lunch on a sunny afternoon, or look out onto on a cold, grey one? The space offers sun and openness. It shows off an interesting variety of rooflines and older buildings. Along its northern side, runs an arcade with shops and restaurants, and a number of the surrounding structures have their main entry on the alley side.

On the other hand, some alleys may already be all they should or can be at this time. The churchyard shown in figure 4.7 takes good advantage of the open space it contains, while the service alley shown below may offer no special potential to become anything but what it currently is. It is important, then to study the special opportunities offered by each individual alley space.

An important sidelight to this information is that the demands that the various land uses have on alley use present a number of conflicts to pedestrian use. Delivery and trash trucks block views and passage. Dumpsters are unsightly and disorganized. Parking lots are not wonderful, quaint spaces to walk through, and homeowners who consider their alley spaces private may have no desire to make them public in the fashion the city has been allowing. The following chapter offers a basis on which to make design decisions which deal with these conflicts, where an alley's use is changed.

One basic conclusion which can be drawn from the observations made in the previous chapters is that there is a noticeable difference between the old alleys-those which have remained relatively unchanged since their creation, and new alleys-those refurbished or newly designed since the 1960's when new buildings grew up around them. These new alleys seem to bear little resemblance to what they once were. They tend to become brick-paved, pedestrian malls or plazas with gates or steps closing the entrances off from the auto. These alleys become new fronts for the buildings lining them. The buildings form a repetitious straight line along the alley edge. On the other hand, the old alleys are shaded, backyard spaces revealing the backs of buildings and their associated backyard gates, fences, and walls. They are sometimes paved with asphalt, and other times with cobbles or crushed shells. The buildings are at varied setbacks from the centerline of the alley.

There is a richness in the composition of plantings and structural elements in the older alleys which should be continued as alleys are redeveloped. While the previous chapter looked at what alleys can become, here it is shown gow the findings can be put to use by creating design proposals for the walls, ceiling, and floor of the alley spaces in Old Town Alexandria, Virginia. It is important to note that every alley should not be designed the same, according to a predetermined standard. The design proposals in this chapter are simply a pallet of design characteristics for designing them.

To be valid, these proposals must recognize five important points:

1. They must reinforce and intensify the unique characteristics and strengths of the alley paths and their surroundings-historic Old Town.

2. They must deal with uses found to be in conflict with pedestrian use in a way which recognizes that these uses are necessary but reduces the conflict between them.

3. They must develop a way to eliminate hazards and factors elliciting a negative public response.

4. They should address the issue of how these spaces can become a continuous path which is easily definable, and distinguished from other paths in the area.

5. They must identify the features and activities which attract people into an urban space, and respond by explaining how these elements can be introduced or intensified.

PROPOSALS

CONTINUOUS NETWORK

The area used in this study is ripe for alley redesign as pedestrian by-ways. Many alleys in the site has the potential for improvement. They run between, and connect many points of interest in the heart of the tourist and business district of Old Town.

The alley paths must have an order and unity of form or forms if they are to be percieved as part of a network which ties together different attractions in the city. When the paths are percieved as such by the pedestrian, they are more easily defineable.

Care should be taken to ensure that alleyways which have already been redesigned are also continuous with the whole. It is not realistic to completely redesign these spaces. Most simply need the addition of plant materials and walls and fences, and to have the alleys named and the names posted. (These, and other design factors will be explained in greater detail as this chapter progresses.) However, as buildings around these alleys are razed, built, or redesigned, the proposals should be adhered to more strictly.

To be seen as a network, the alley paths need not connect one block to the next. They may simply connect to a sidewalk which may connect to another sidewalk, which may connect to another alley path. In this way, they become a part of the network of pedestrian paths. Some of the most interesting alleys in the study site have their origin (entry) and destination (attraction) within a single block.

However, where possible, a circulation system can be created. For example, in the portion of the study site shown below, an interconnecting system already exists. Provision can be made in other cases to connect other alleys through. An idea can be taken from a characteristic already existing in other alley areas. An archway through a building or between a building can be provided. It can add incidence to the path which will surprise and delight the pedestrian. The width of this archway need be no wider than 3.5 feet. (This is the width required to allow a person in a wheelchair to maneuver the space.)

Design Proposals

figure 5.1 AN ARCHWAY ENTRY
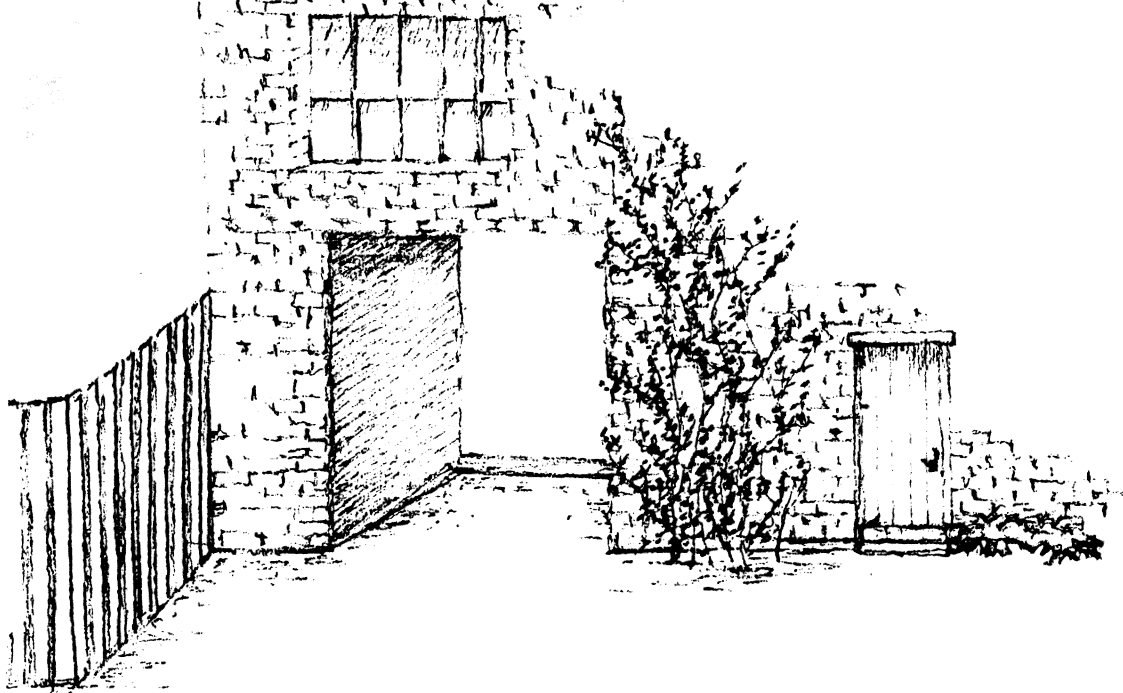
Entries- The entry to each redesigned alley should say welcome. This can occur in several ways. Post alley names at entries. Include a listing of shops, historic buildings, and so on. Gates or steps at entries should be avoided. They say "stay away" to the public.

figure 5.2 ENTRY SIGNS

RAMSAY ALLEY

OLD TOWN ANTIQUES
PORTSIDE EATERY
POTOMAC ICE CREAM
ALEXANDRIA BOUTIQUE
HISTORIC CRAFTERS

RAMSAY ALLEY

SPATIAL QUALITY

The alley spaces have a characteristic spacial quality which must be maintained and intensified.

The Edge - Use variations in building setbacks and fence and wall setbacks. This provides a rhythm and variety of spaces, visually opening and closing the linear alley space.

Width - The width of the visual axis should be no more than 15 feet, corresponding to the maximum width of the alleys currently in the area. This standard is considerably narrower than that of the surrounding streets. This factor will contribute to their being easily distinguished from the streets.

ARCHITECTURAL FORM

A general consistency in architectural form and style should be provided. The design of major alterations should be compatible in scale, materials, detailing, and color, with adjacent buildings. The alterations should not impair views, or the amount of sunlight and natural ventilation entering the alley space.

Rooflines - Varied rooflines provide visual interest and relief. Along the streetscape the rooflines are nearly symmetrical, with the facades generally lining up neatly at a specified distance from the street. Out back, however, are the back wings of the houses at varied heights and varied distances from the center line of the alleys. This characteristic is unique to the back, and adds an interesting visual variety for the pedestrian. (See figure 5.3.)

Building Heights - The building height limits established by the city of Alexandria play an important role in the shading and sunlighting of the alleys. For an alley running along a north/south axis, due to the position of the sun, the currently established heights are suitable for allowing a high amount of light into the alley throughout the year. For east/west alleys the established heights along the south side of each alley should be held to 50 feet. This will ensure that a high amount of sunlight is allowed to enter the alley during the summer. (See appendix b for further explanation.)

Vary heights of the buildings across the facade if the building is over 60 feet long. These variations reduce the visual impact of large building masses.

figure 5.3
ROOFLINES
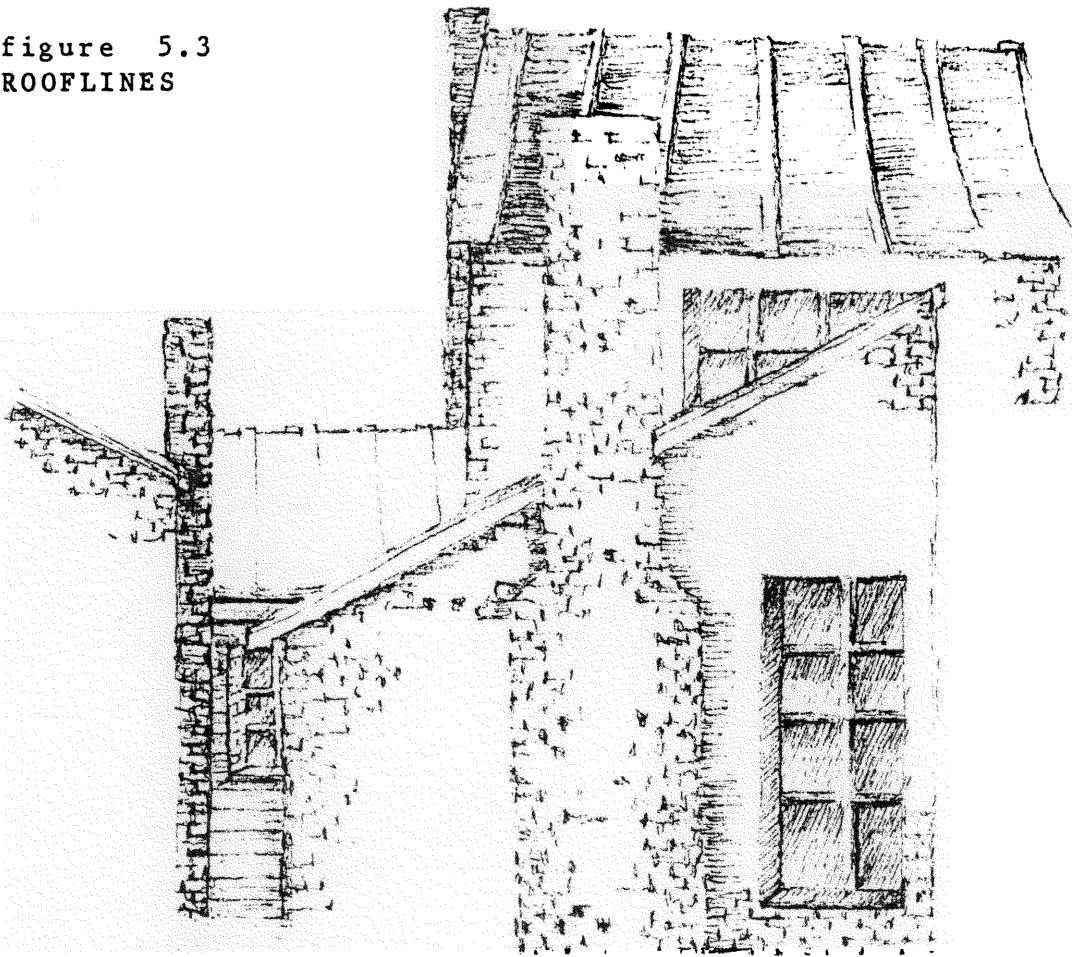
Facades/Detailing- The design and organization of building facades is one of the important variables in providing scale clues to the pedestrian in an urban setting.

Materials-
 Limit the number of siding materials on an individual building.
 Brick selections using subtle color blends are recommended. Avoid mixing strongly contrasting colors of brick which produce a checkerboard look.
 Use wood in natural tones or white.

Windows- Windows add scale to a building. They should be placed at even, not irregular intervals to moderate blank building elevations where they are visible from the alleys.

Doors- Since the alley is becoming more important, the details should intensify this. Doors should be front doors, not rear, metal delivery entrance doors.

VARIETY AND INCIDENCE

These are design characteristics which add an element which can delight and surprise the pedestrian.

Variety- The alley path should take the pedestrian from sunny spaces to shaded spaces, from active spaces to static ones. For example, part way through the block, an alley may open up onto a populated, sunny alley-side cafe. Farther down, or in an interconnecting alley path, a park-like setting may be tucked into a shaded nook.

Incidence- A walk through Old Town's alleys offers many design details which can delight the pedestrian. These include ivy-covered walls, archways cut through buildings, walls and fences, church steeples, and more. (See figure 3.1.) Where possible, these elements should be preserved and integrated into the design of new buildings lining the alley.

SITE FURNISHINGS

All site furniture should be designed to be compatible with each other and the project architecture. This helps to unify by repeating forms, materials, and colors.

Fences and Walls- Careful consideration should be given to the basic fencing and wall concept and the manner in which it is executed. Fences and walls along the alleys surround back yard spaces. These back yard spaces should be retained. For, these spaces offer a special opportunity to become rear gardens. Alexandria has developed with its yard spaces in the rear. Back yards can be as appealing as fronts when they become rear gardens. The back has a special interest, too, and need not be designed in the same way as the street fronts are to be interesting. Alexandria was set up with its fronts on display and its backs for service, but making the alleys a viable outdoor space offers an opportunity for the landowners to find new pride in their back yards, exposing them and displaying them to the public. This can be accomplished by giving special attention to garden areas.

The degree of "openness" of fences and walls depends on their use. Where more privacy is desired, use the total screen effect with a solid wall or fence. Where more exposure is welcomed, allow visual access while preventing circulation access by changing the type of fence. Remember that solid fences, which may be desirable for achieving privacy, may also provide unwanted shadows, or loss of ventilation and views. (See figures 5.4 and 5.5.)

Chain link fencing and barbed wire fences are not acceptable. They are incompatible with the prevailing construction materials in these spaces. Compatible fence materials are natural woods in natural tones, or wrought iron painted black or white. Walls should be of brick, or a combination of wrought iron and brick.

figure 5.4   PRIVACY FENCE
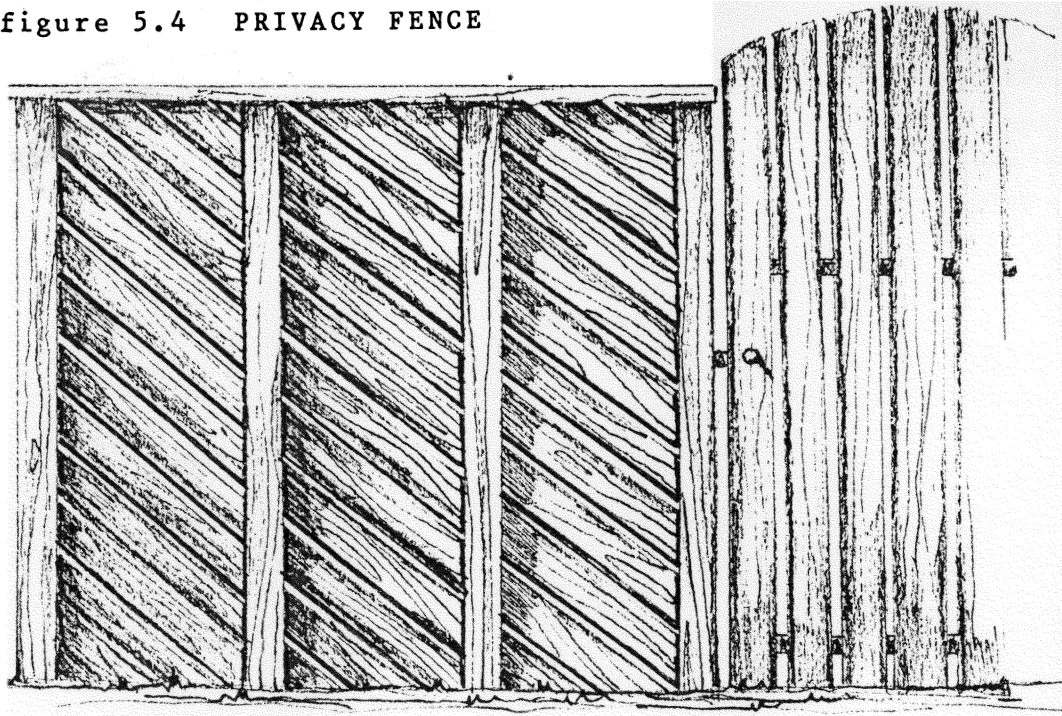
Seating- A variety of seating must be made available. This means a variety of heights and styles as well as allowing the option to sit in the sun or in the shade. The sitting areas can appear either incidental, or purposeful. That is, it may be a low wall which is integrated as part of walls and fences, ledges, or steps. On the other hand, it can be chairs and benches. Benches must be made of durable material and secured in place. Care must be taken to tuck benches and chairs into nooks and alcoves so that it does not disturb the character of the visual axis. These nooks and alcoves can be outdoor cafes, or small park-like spaces. By tucking this type of seating into nooks or rear gardens, it will not interfere with circulation.

figure 5.6   CAFE SEATING

figure 5.5 OPEN FENCE WALL
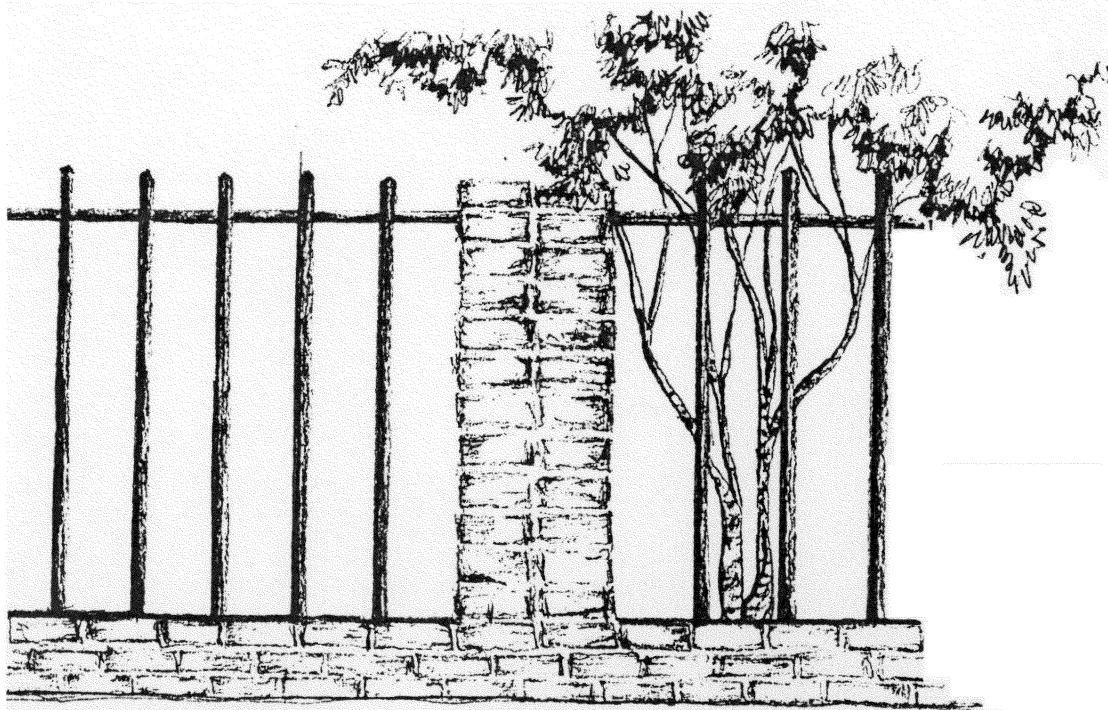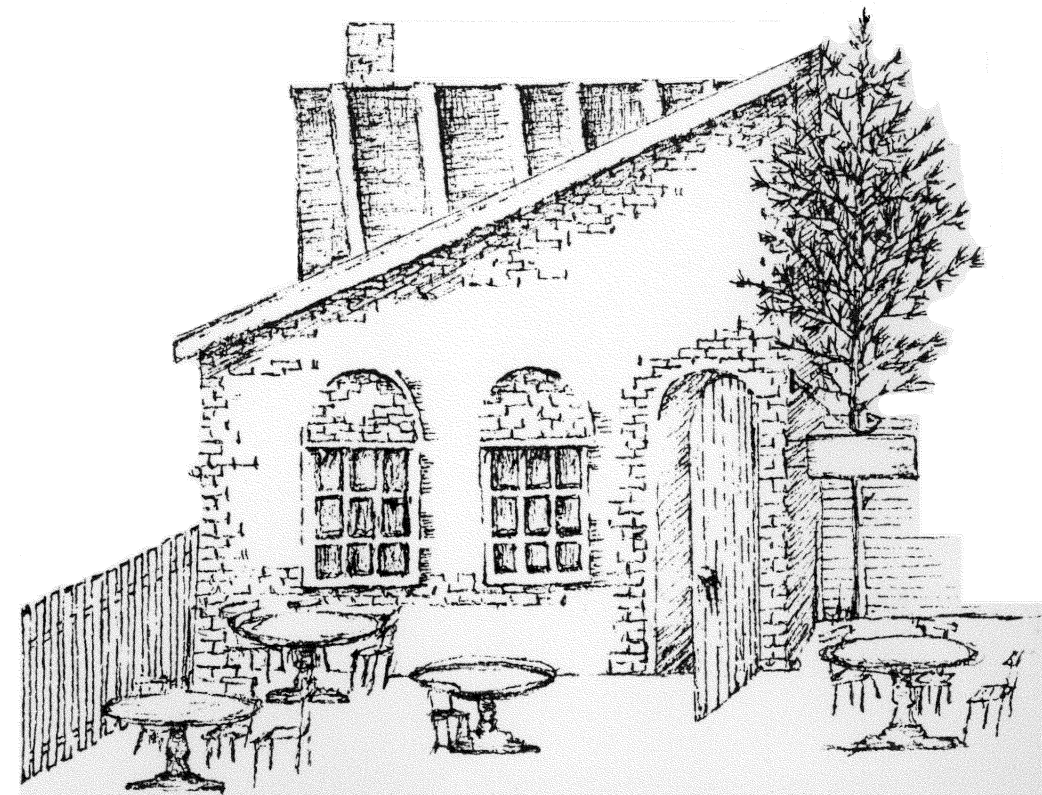
Dumpsters and Trash Receptacles- Dumpsters should be located for easy access by service trucks, and to conveniently serve the residents. The dumpsters should be screened on all four sides by fencing or walls with landscaping introduced to minimize the visual impact.

Residential trash receptacles should be screened from view behind walls, fences, or evergreen plantings. All trash servicing should be centralized at the dumpster locations near alley entries.

Adequate and well-defined trash receptacles must be provided for the public to aid in keeping the spaces free of litter.

Landscaping for these areas should be integrated into the overall landscape scheme of the alley space. Fencing and walls should be compatible, and plantings should be continuous with existing landscaping.

figure 5.7   TRASH RECEPTACLE AREAS
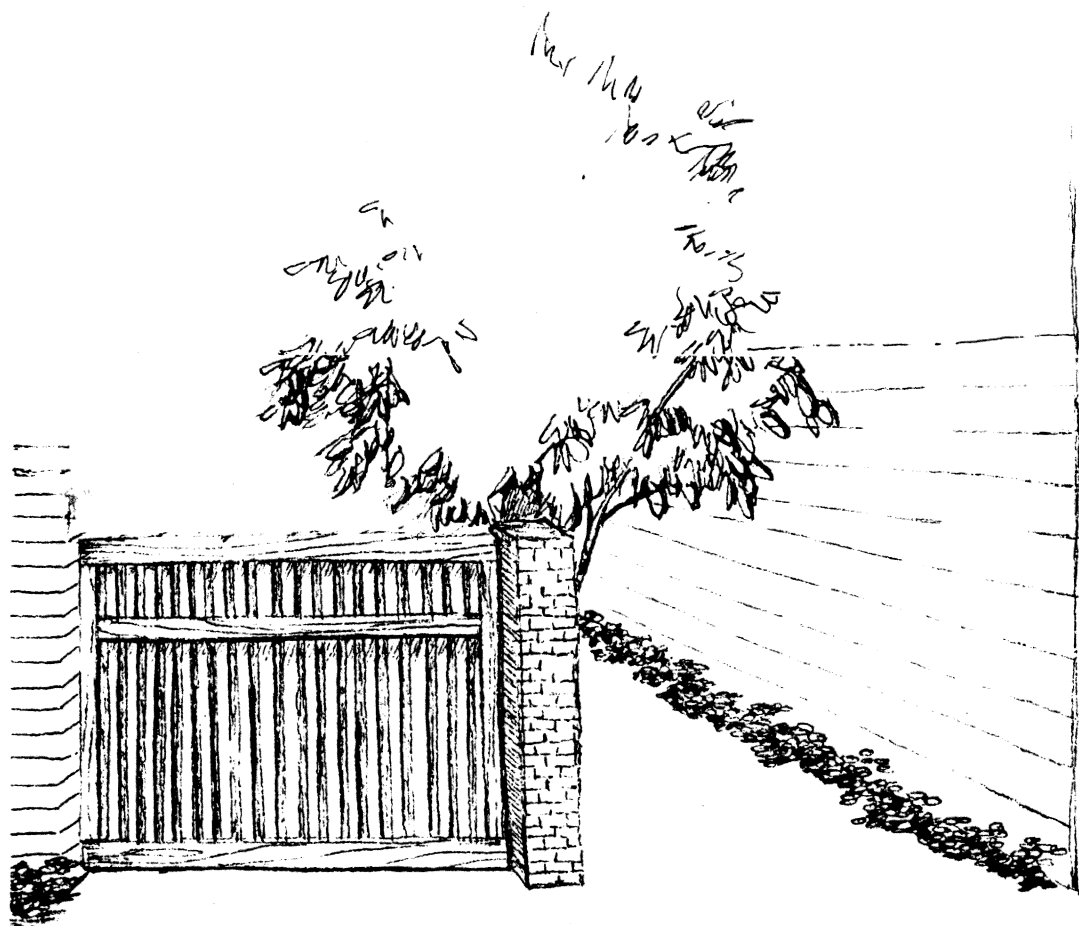
Exterior Lighting- Lighting fixtures should be compatible with the style currently found in the alleys. For order and continuity, and to remain in character, lighting should be mounted on walls and fences next to gates, or on the sides of buildings at back doors. Lighting should illuminate alley name sign, unit numbers, shop and restaurant signs, and points of interest. It should also illuminate the alley floor. This requires a minimum spacing of 25 feet between fixtures.

figure 5.8 LIGHTING
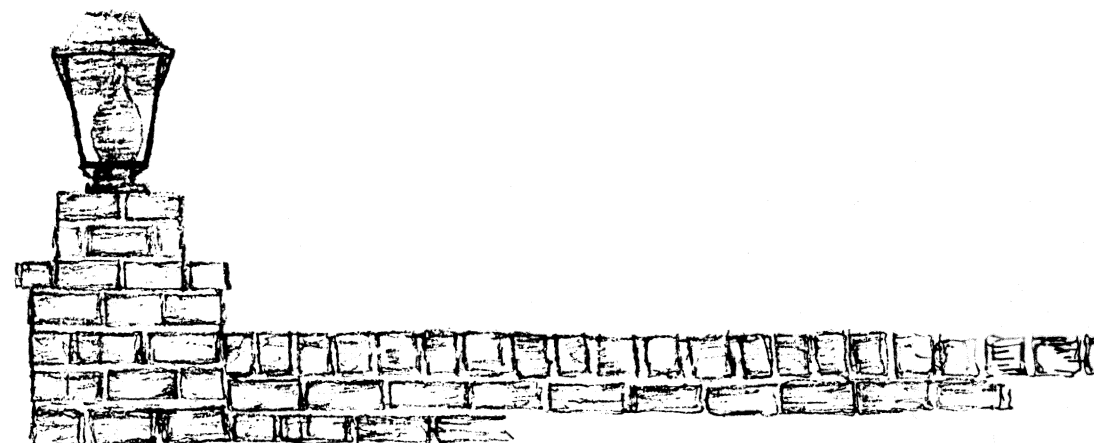
Utility Lines- Overhead utility lines crossing through the visual axis of the alley should be avoided. Where there is no choice, special attention should be given to landscape screening. Wires can be disguised from view by planting low trees beneath them to screen the view from the pedestrian.

figure 5.9 SCREEN VIEWS OF UTILITY LINES
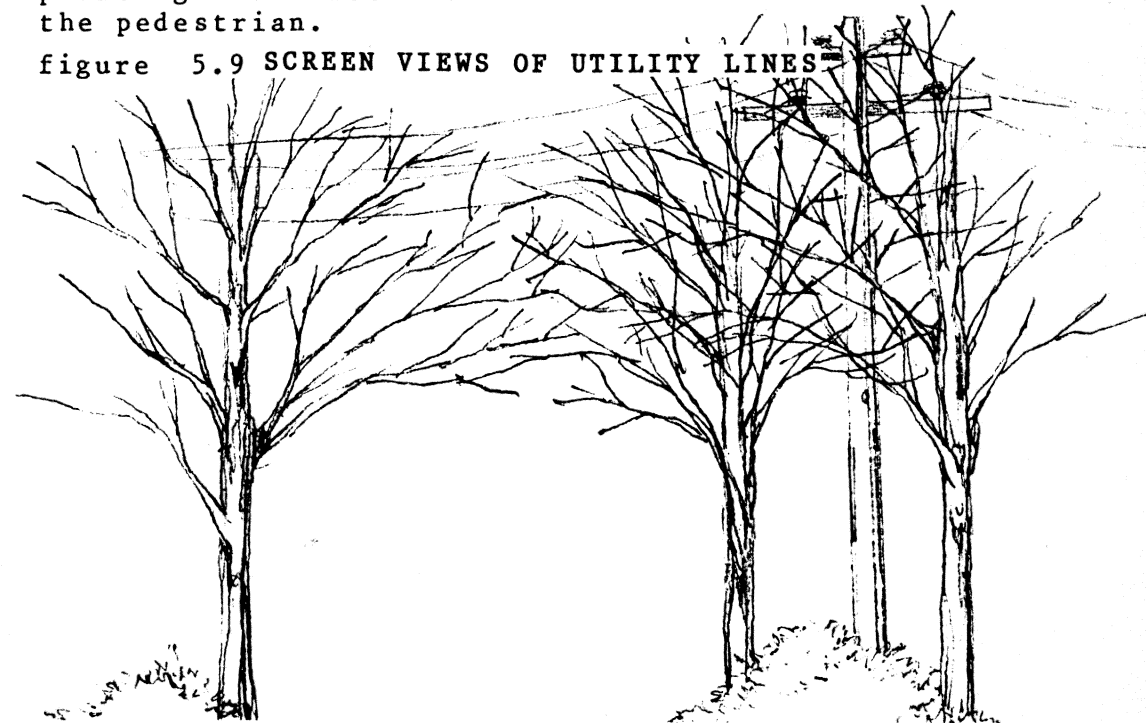
LANDSCAPE STANDARDS

<u>Plantings</u>- Retaining existing quality vegetation can be the best method for landscaping these areas. It saves money by reducing the amount of new plantings needed, and properly preserved mature trees add greatly to the value of the site. New plants should supplement the existing plantings, not replace it.

The plant material to be used can be classified into three major categories:

1. Overhead Canopy Trees-major shade trees which serve as the primary unifying element for the community.

2. Intermediate Focus Trees- provide an understory to the major trees. Serve as accents, screens, or to define spaces.

3. Ground Plane Plantings- shrubs, groundcovers, and climbing vines, which define minor spaces, provide an accent of color and variety, tie tree plantings and architectural elements together.

<u>Canopy Trees</u>- Canopy trees are an important design element in the space. For, in any planting composition, there should be a predominant material, against which the accent plantings can be played to add any needed contrast.

<u>Intermediate Trees</u>- The relative location of intermediate trees should vary from lot to lot, but those offering an interesting flower or fruit should be used as accents at building or garden entries, or relating to the architecture of the space. Conifers work well as a screen or buffer planting between private and public spaces.

<u>Shrubs, Groundcovers, Vines</u>- Shrubs and ground covers, in combination with intermediate trees, are essential elements in creating pleasing visual experiences. Plant material should be combined in simple masses of shrubbery and groundcover.

Trees must be placed in such a way that allows for a variety of sunlit and shaded areas. The use of flowering trees, shrubs, and vines, as well as annuals and perennials to add color, should be stressed.

figure 5.10 PLANT MATERIAL CATEGORIES

Canopy Tree   Evergreen Tree   Shrub   Groundcover
        Intermediate Tree
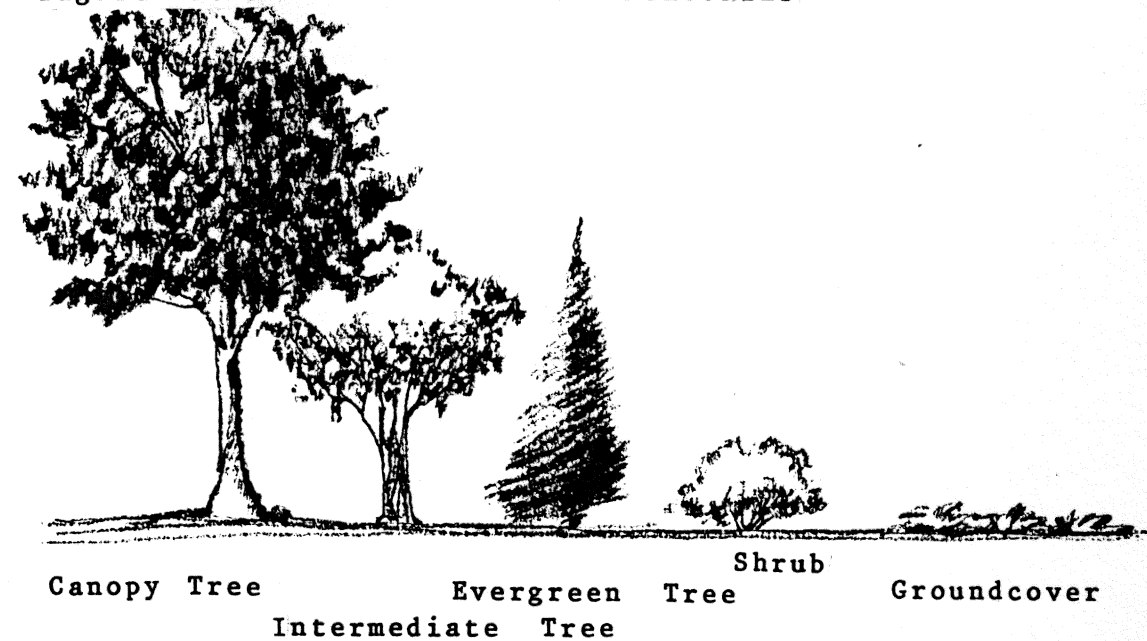
Crisp, raised or level planters should be avoided as they are out of character with the space. Plantings should occur more casually with trees spreading into the space from behind walls and fences, or tucked into nooks. Vines climb over walls. More precisely, the edging elements which can already be found in alley sites can be used.

figure 5.11 ALLEY PLANTINGS

Trees Behind Fences
Vines
Edge Plants
Gardens Behind Fences
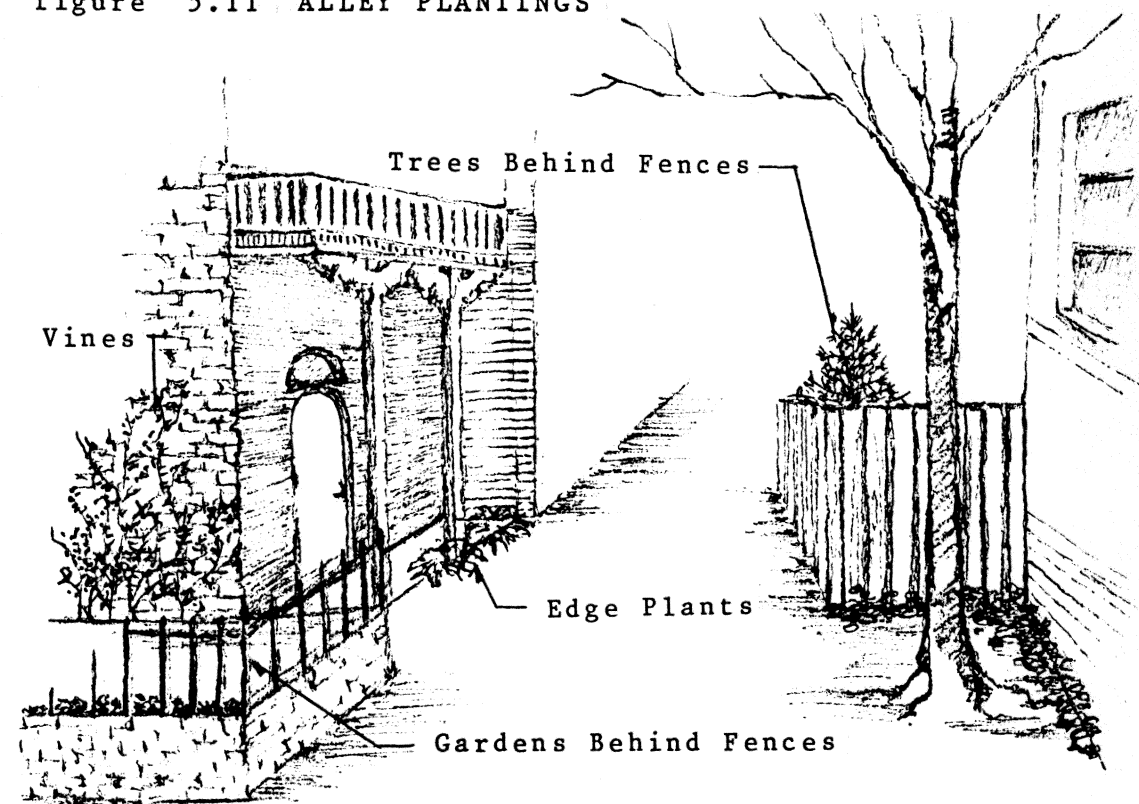
Focal Points- Important focal points such as buildings of historical significance, architectural interest, or landscape interest (the Torpedo Factory, clock towers, the Potomac River) should be highlighted by allowing visual clearance for them. This can be accomplished in two ways. First, roof lines may be staggered, opening up the view. Second, trees may be placed so that they frame the focal point rather than screening it. Larger trees may be placed at a distance from the center line of the visual axis, so that their spread does not block the view. Where the focal point is high, low trees and plantings can frame the view.

SIGNAGE

The style of the signage must be compatible with the standards set on the street fronts. The signs should be permanent in appearance. The number of signs should be limited to those required. That is, unit numbers, alley names, points of interest, or shop/restaurant/office names.

Alley Names- Naming the alleys and posting the names in a visible place at alley entries is a step toward giving the spaces a new credibility. Some Alexandria alleys are already named. Their names have been taken from the use of the buildings around them, (Printer's Alley was lined with printing shops, Market Alley ran through Market Square) from the original owner of the land they passed through, (Ramsay Alley, Wales Alley) or for some other characteristic of the alley, (Sharpshin Alley was so named for the number of scraped shins it caused.)

Unit Numbers- Unit numbers should be posted on the alley side as well as the street side of buildings to provide the pedestrian with a clue of direction. This also serves to give the space more importance.

Points of Interest- Points of historic interest along the alley route should be recognized with signage or a written history of a particular alley where appropriate.

PARKING

Three categories of parking have been found. These are: open lot, underground lot and parking garages, and private residential.

Open Lot- Here, the lot abutts an alley. The character of this site is discontinuous with that of the whole and care should be taken to screen this view. Rather than the edge remaining one of car bumpers, walls and fences should be introduced. Trees can be planted to spread out from behind the walls, over the alley space. Along the street, a more open screen can be created, so that from the roadway (the view seen from the car) the parking area is still visible.

Underground Parking and Parking Garages-Currently, underground parking entrances are placed next to existing alleys. It is a distraction from the alley entrance. By using signage, and plantings designed to frame the alley entry, the alley attracts visual attention from the underground entrance.

Residential Parking- This can be provided in much the same fashion that it presently occurs. Residents have created nooks in the walls and fences which serve for parking.

ATTRACTIONS

Certain factors serve to draw people to a space. These include food, bathrooms, triangulation, and other people.

Food- Outdoor cafes can find space here, as can nooks for specialty food tables as part of outdoor shows, etc. Restaurant fronting on the street side can also be spread to the backs by the use of balcony overlooks into the alley space.

Bathrooms- Restaurants can cooperate by providing alley-side facilities. They can also be provided as separate architectural elements tucked into alcoves, or behind garden walls. Their form should be compatible with existing architecture.

Triangulation- Activities such as makeshift plays, street musicians, or arts and crafts displays can be a third factor which attracts people to these spaces, and further, impells them to interact. The alley paths can be a place where this sort of activity takes place without interfering with auto circulation.

People- People attract people. When a space is attractive it will begin to build up a clientele. As more people are attracted, they attract more people.

AN ALLEY DESIGN EXAMPLE

The alley space chosen to demonstrate how these proposals might be used is in the block south of the City Hall, shown in figure 5.12.   This space is a valuable commodity in that it is a relatively large area in Old Town. It is sunny and open, but the building edges create a rhythm and variety of smaller spaces along the perifery of the larger space.

figure 5.12   Alley Location

CAMERON MEWS

ROYAL   FAIRFAX   LEE   UNION   POTOMAC RIVER
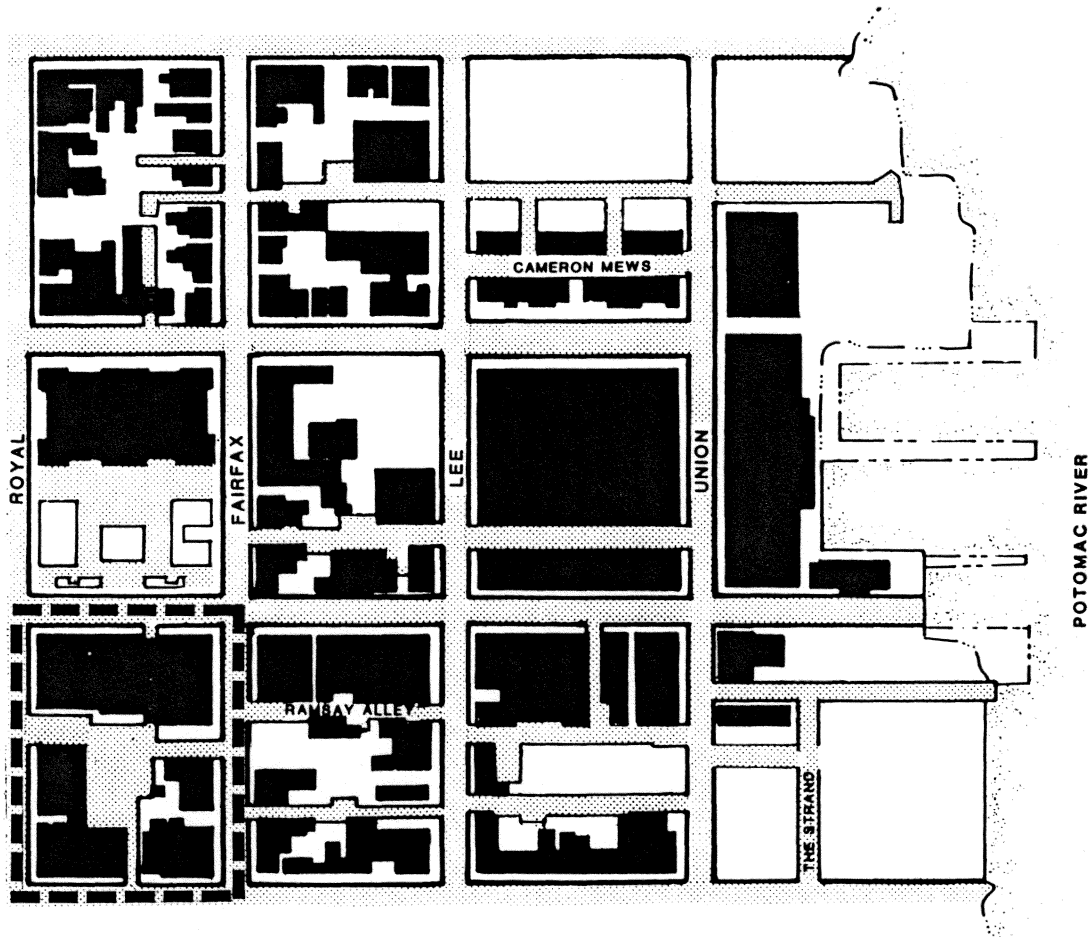
RAMSAY ALLEY

THE STRAND

Figure 5.13 represents the current configuration of the block. Accesses on all four sides of the block enter into a central open space. This open space is used as a service alley. That is, it is paved with asphalt and is used for parking, and for sanitation servicing. Vehicles enter from the Royal and Prince Street accesses, while the King and Fairfax Street accesses are brick-paved and pedestrian only with steps where the alley paths meet the sidewalk. However, the Royal and Prince Street vehicular accesses also have separate pedestrian entrys directly adjacent to them.

The alley's King Street access is opposite the Market Square and City Hall buildings, a block which is considered the center of Old Town.   This access enters into a pedestrian arcade through a four story office building.   The arcade is lined with shops and a restaurant. This pathway meets another arcade which runs along the south side of the building.   Here, however, the arcade is merely a one storey brick cover over a brick walk.   This portion of the arcade has no shops or restaurants entering onto it. The Royal Street and Fairfax Street accesses have benches and planters where they meet the sidewalk. Adjacent to the Fairfax Street access is an underground parking entrance.

In the center of the space are two rather large, but dead trees. To the east of those trees is a brick-enclosed dumpster area.   Just south of that is a brick carport with a room above it. Behind this structure is a landscaped alley-side entry to the older office and retail buildings on the east side of the block.   The residential garden area in the south-east corner is screened by a privacy fence.   A narrow pedestrian path adjacent to the vehicular access from Prince Street serves as a passage to the gate into the residential garden area.

The fire station, opposite the residences has one small door on its east side, and another on its north. The fire trucks enter and exit only on the street side of the building, but the open space behind is used by fire station employees for parking.

The older office and retail buildings just to the north of the fire station have an unkempt wood fence associated with them. It is broken in places , and leaning in others.

There are several land uses on the block, including: residential-a (older residences), commercial-a (older retail), commercial-b (new retail and offices), and institutional/municipal (the fire station).   In general, the older, smaller buildings in the southern half of the block have a distinctly more human scale that the larger,

figure 5.13 Existing Alley Layout

LEGEND

○▶ ALLEY VEHICULAR ACCESS   ○▶ ALLEY PEDESTRIAN ACCESS   ○▶ BUILDING ACCESS

COMMERCIAL-B/COMMERCIAL-R

arcade through building

arcade

COMMERCIAL-A

metal bollard with chain

dead trees

asphalt

garage

walled garden

brick walk

3 steps bench

walled dumpster area

COMMERCIAL-A

INSTITUTIONAL

RESIDENTIAL-A

sidewalk with 3' handrail
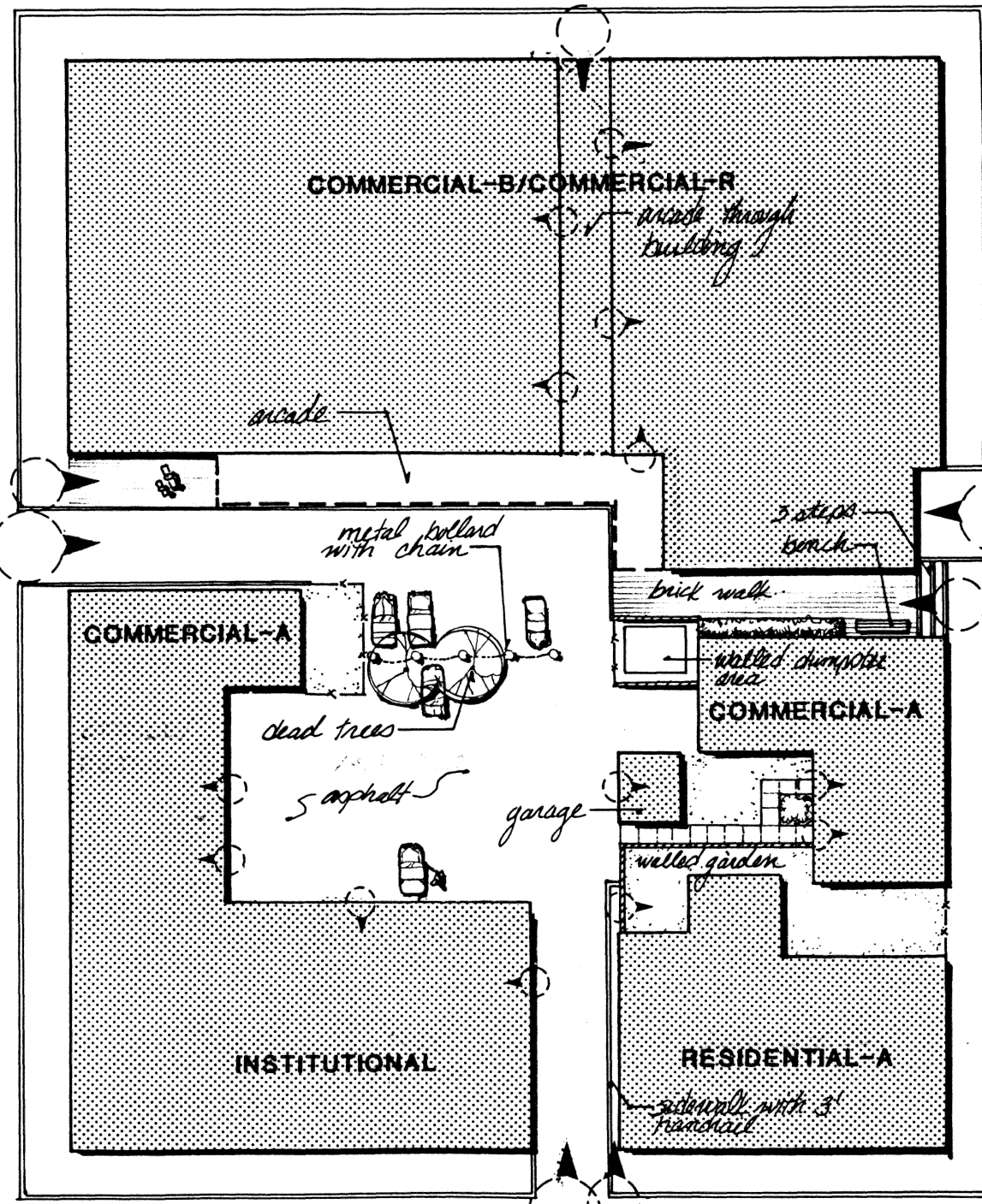
more imposing four story office building on the north side. The smaller buildings offer a variety in rooflines and architectural form which is missing in the large office building. As a result, the large building becomes a dominant, but inconsistent feature in the wite.

After looking at current use and design characteristics of this space, it appears that the space has the potential to become much more than it is. Its location near the heart of Old Town, its existing shops and restaurants, and its large central open space give it the potential to become a stopping/shopping place along the perifery of the central space, while the central open area can become an outdoor extension of the buildings around it. A green courtyard can be created, with shopping and restaurants around its perifery in a park-like setting rather than a parking lot setting. It might be a place for those in the surrounding buildings to look out onto on gray days, and to sit in on sunny ones. At the same time it need not compete with the large open Market Square in the adjacent block. Instead, by infusing appropriate design proposals, it may become a more intimite, shaded, and green space.

However, in creating a proposed scheme for what this site can become, the constraints, or negative characteristics of the site must also be accounted for. The series of alley spaces in this block contain a variety of conflicting uses; pedestrian and auto, private and public, shopping and sanitary servicing. The site also has a variety of building styles; old and small with human scale and rich variety in detail, and large with less richness of design. (See figure 5.14.)

A number of hazards are also present. It has inadequate night-time lighting, dead trees, and an unkempt fence. Further, It has a tangle of telephone and electrical wires overhead and is completely paved with asphalt.

A portion of the site has a good theme started which has not been carried through as well as it might. That is, brick-paved walks through the block have no strong terminus to which they might lead. They also do not have enough activities occurring along them to attract attention. In summary, this alley represents an underutilization of a potential urban open space asset.

By highlighting and adding to the characteristics which contribute a richness to the space, and by eliminating or playing down the negative characteristics, the following design shows one example of what the space might become.

figure 5.14   Proposed Alley Design

additional shops
colorful awning

COMMERCIAL-B/COMMERCIAL-B

arcade

colorful awning

additional shops

COMMERCIAL-A

cafe area

green space

COMMERCIAL-A

café

gardens

parking

INSTITUTIONAL

RESIDENTIAL-A

figure 5.16   Section B-B

vine

additional shops

cafe area
add trees for scale

figure 5.15   Section A-A

brick sitting wall

green space

brick path

figure 5.17   Section C-C

colorful awning

alley name and shop directory

dumpster area

sanitation truck ramp

evergreen screen

In this example, the entries would be reinforced by using signage and colorful awnings or flowering trees. Attention could be focused inward by creating a cafe out of the carport near the center of the space, with an associated outdoor sitting area. The existing brick paved entries into this area could have store fronts lining the paths to entice the pedestrian along the path. The cafe could be surrounded on two sides by an intimate green space, complete with sitting walls and dappled shade from new trees planted around the space. The existing arcade pathway might join a new brick path, creating circulation into and around the central green space.

Along the west side of the green space, the edge of the new path would be defined by an irregular line of open brick and wrought iron fencing designed to enframe those buildings' entries from the rest of the space. Behind these walls might be colorful gardens, with trees spreading their branches out over the walk for shade.

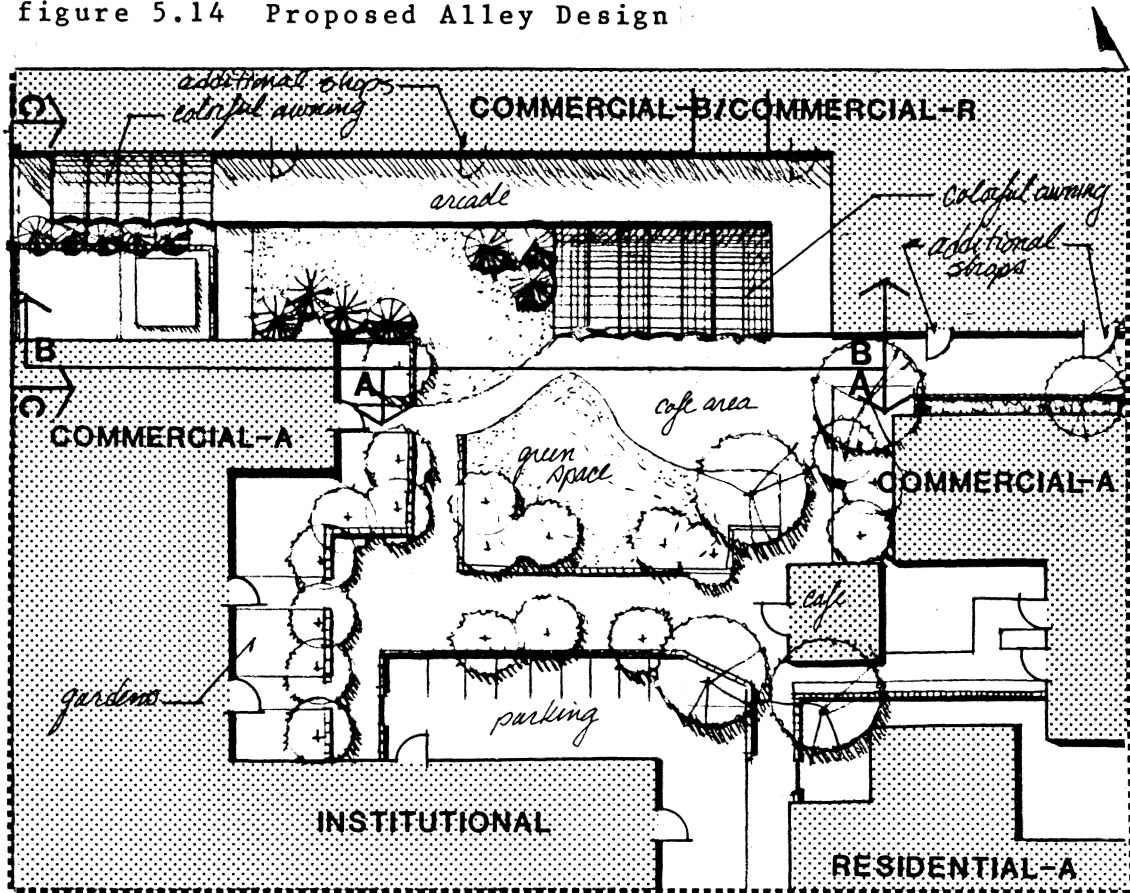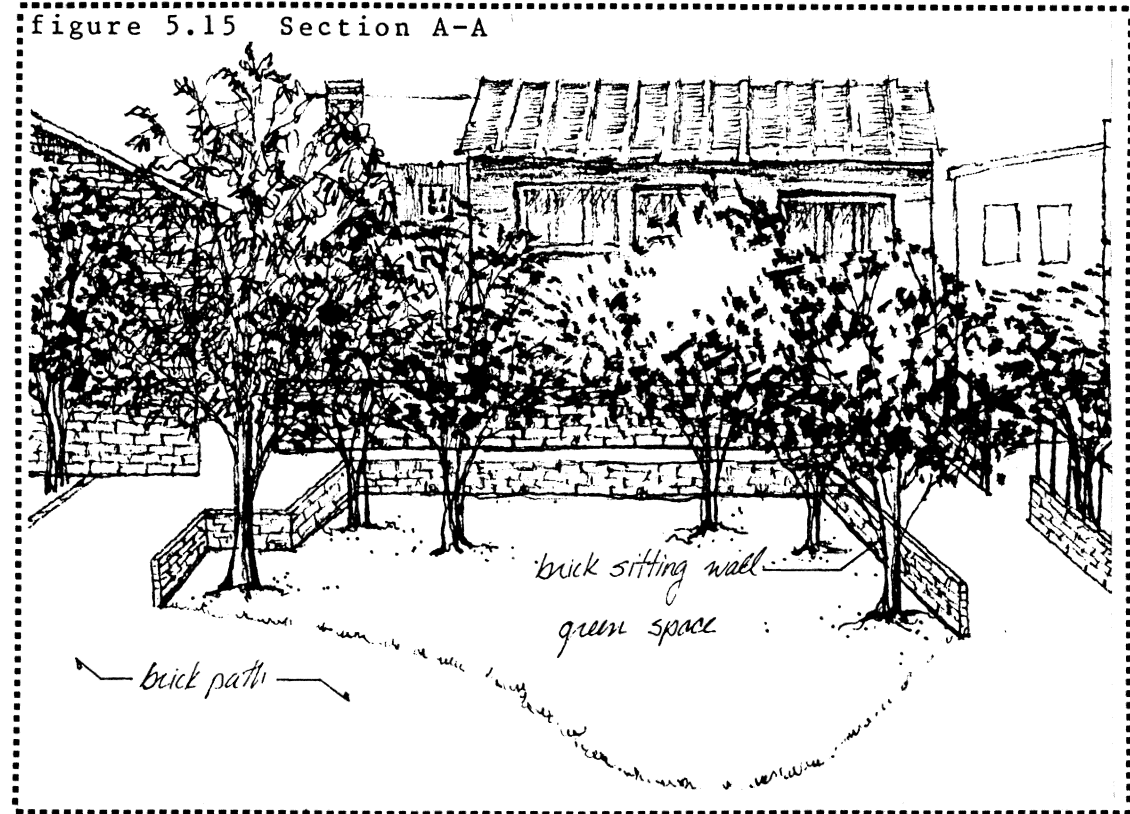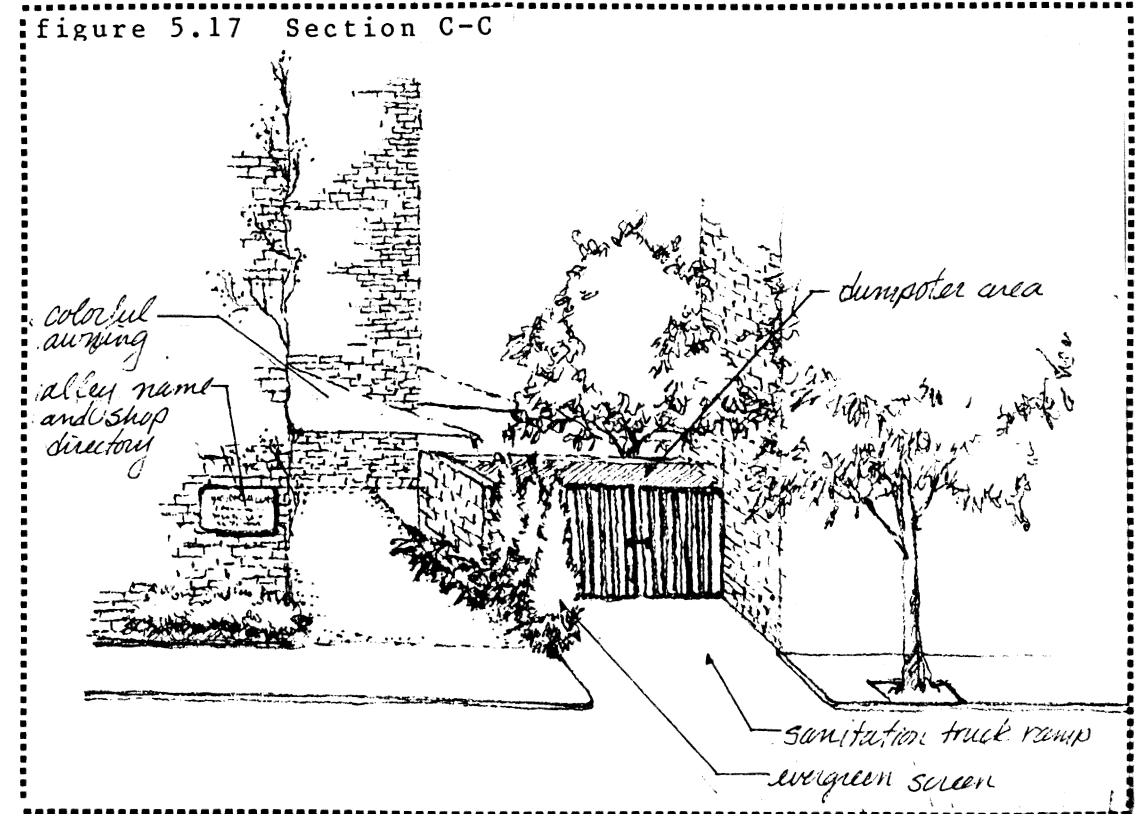A small amount of parking associated with the firehouse would remain, but could be visually separated by a closed brick wall or fence with a gate at one side opening into the green space. The same wall that separates the parking would also separate the relocated trash receptacle areas. Note that rather than one large dumpster area in the center of the space, this design proposes two smaller areas instead. The area next to the more public access off of Royal Street might be specified for paper products only while that at the farther corner might be for food refuse. These areas can be incorporated into the overall design by using walls or fences similar to those used in the site, and by screening them by adding plant materials integrated into the overall planting design of the site.

Lighting might be strategically placed on top of walls, or as bracket lights directly on building walls. Telephone wires can be placed underground, or their effect may be downplayed by keeping a low overhead canopy of trees to focus attention downward along the path rather than upward toward the lines. The new, four story building on the northern half of the block might be added to in a way that creates a stepped effect with an addition onto the covered walk on the alley side.

The proposals offered a pallet of design elements with which to attract people into the space. They provided insights to dealing with conflicting land uses and alley uses. The result is an urban open space which is sensitive to the character of Old Town and of it's alleys.
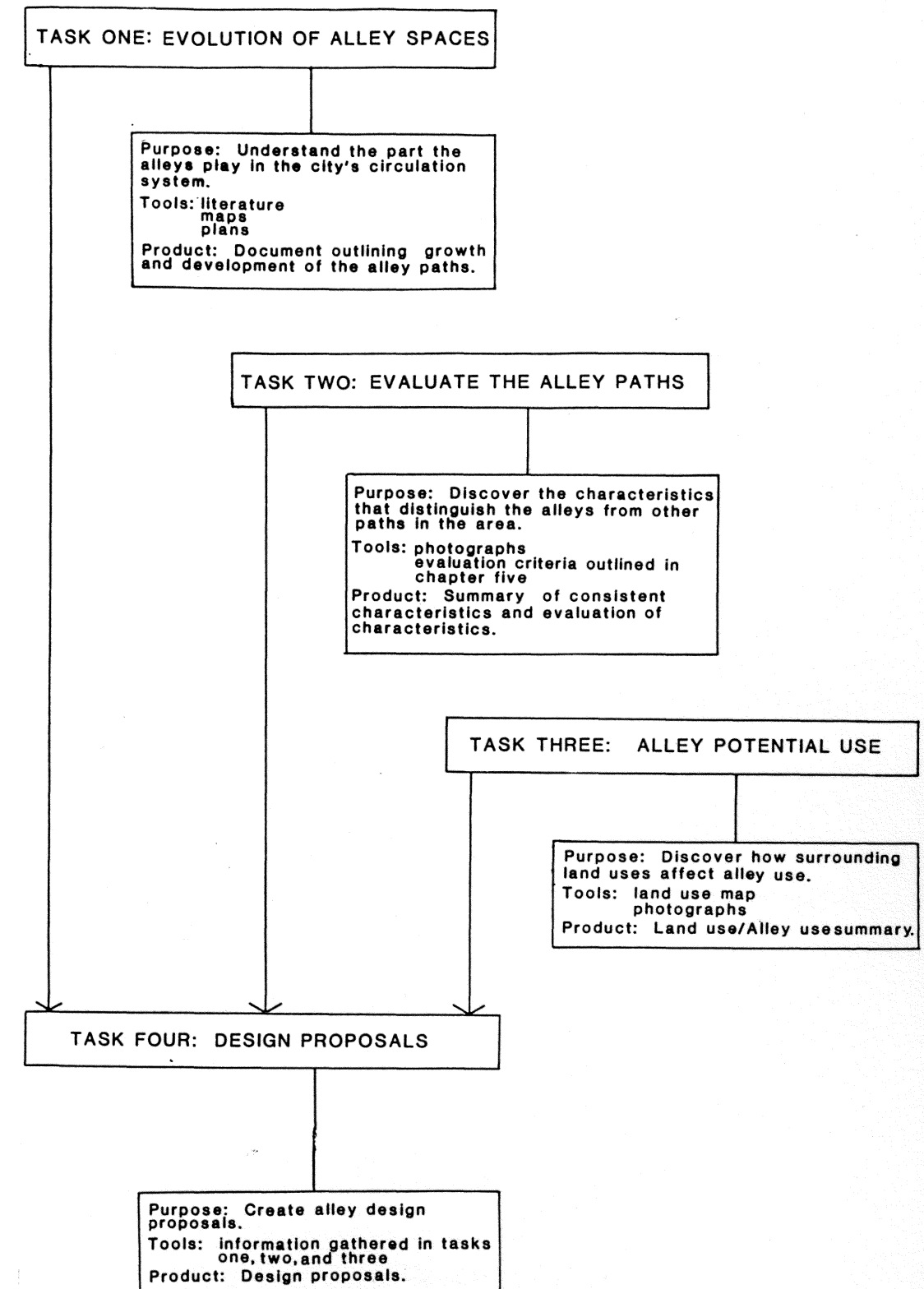
Summary

The procedure followed throughout this paper is a method for discovering the potential of alley spaces, and to understanding how this potential can be used. It serves as a means for developing design proposals to be implemented as public policy. The hope is that this will help to insure that alley potential for development as open space links in the city is realized without the loss of the unique character of the space.

However, this is only the first phase to implementation. For example, this study does not address the economics of establishing these spaces as viable pedestrian open space systems. That is, it does not explore who, exactly, owns them. In some cases the city owns the land and has complete jurisdiction over how it is to be used, but in other cases an individual actually owns the space, or several landholders may own different sections of the space. This leads to more questions. Are there, perhaps, only one or two individuals owning all of the private alleys in the site or are there many? In either case, should the city buy the land, or should a project to refurbish alleys be a joint venture between the public and private sector? If it is a joint venture, what kinds of incentives would be proper to ensure that the private sector follows the proposals as new development or renovations occur along the alleys?

In addition, this paper does not study crime frequency in alleys, and the part this might play in alley use and potential use. In Alexandria alleys occur throughout a wide variety of neighborhoods. Although many of the alleys in the heart of Old Town (the site of this study) are frequented by residents and non-residents as parking places, or pedestrian passages, this may not be the case in other areas. How the alleys are percieved by the public can have an important effect on the implementation of alley redesign.

There are many questions this study does not answer. However, it is a guide to laying the ground work to implementation and to bringing an awareness of how these under-used sites can become viable outdoor spaces. In order to design new open spaces in a way which is sensitive, reinforcing their distinctive characteristics and intensifying the surrounding area's strengths, the process outlined below and summarized on the following pages can be applied.

figure 6.1   PROCESS OUTLINE

TASK ONE: EVOLUTION OF ALLEY SPACES

Purpose: Understand the part the alleys play in the city's circulation system.
Tools: literature
         maps
         plans
Product: Document outlining growth and development of the alley paths.

TASK TWO: EVALUATE THE ALLEY PATHS

Purpose: Discover the characteristics that distinguish the alleys from other paths in the area.
Tools: photographs
         evaluation criteria outlined in chapter five
Product: Summary of consistent characteristics and evaluation of characteristics.

TASK THREE: ALLEY POTENTIAL USE

Purpose: Discover how surrounding land uses affect alley use.
Tools: land use map
         photographs
Product: Land use/Alley use summary.

TASK FOUR: DESIGN PROPOSALS

Purpose: Create alley design proposals.
Tools: information gathered in tasks one, two, and three
Product: Design proposals.

PROCESS GUIDELINES

TASK ONE: Evolution of the Alley Spaces

The public image of the alley spaces, their function, the ways they correspond to other circulation systems in the urban area, and the stories associated with them which add a life to the space, must first be discovered. This information allows the researcher to gain an insight to the characteristics which comprise the alleys and becomes a basis from which to begin to understand how this character can be best used to realize the alleys' full potential.

The Tools

Find a library which offers historic literature, maps, and plans of the city to be studied. Specifically, look for literature which explains the reason the town was founded, the directions the city grew, and the circulation paths that developed. Learn how the alleys in the area under study were developed and used in the past, and how they are evolving and being used in the present. If the library does not offer enough of the necessary information, more may be available at the city Planning Department, Transportation Department, Real Estate Assessment Department, or in the city archives.

In the study of Old Town, Sanborn fire insurance maps, found at the city library and at the city archives in the Archaeology Department, proved to be extremely useful. The nature of these maps dictates that they show all access to, and around each building in the city, so that the alleys are an important element in these maps. The Library of Congress holds copies of all of such maps made by the Sanborn Company and for a fee will provide photocopies.

Title searches, which may also be available at the city library, can be another good map source when the researcher is fortunate enough to find one from which a map has been created. These naos may show the alleys dating back to the city's first founding, rather than relying on Sanborn maps alone which may not provide early information.

TASK TWO: EVALUATE THE ALLEY PATHS

Now, the elements comprising the alley environment are observed, recorded, and evaluated for their potential to become viable open spaces. The purpose of this task is to discover the characteristics which are unique to this space, distinguishing it from other paths in the area.

The elements which create the "floor, walls, and ceiling" of the alleys should then be evaluated for their potential for creating an attractive pedestrian space. This evaluation should be based on the criteria outlined in chapter three of this paper. Use this criteria to make decisions concerning the ways in which positive alley characteristics can be reinforced to attract pedestrians to the space. Conversely, use them to find hazards which should be eliminated, or positive characteristics which must be infused.

The Tools

The camera is a valuable tool for this part of the study. Photographically record the alleys in detail and then study the printed shots to discover any consistencies in particular structural elements, plantings, or site furnishings which comprise the alley spaces in the chosen study area. For example, in chapter three of this paper, the "new" alleys (those redesigned or refurbished after 1960) shared similar characteristics, but they were different from the "old" alleys which shared their own set of similar characteristics. The photographs allowed a side-by-side comparison which is not as readily obvious in an alley-by-alley walking observation. Through the photographs, each detail can be studied, and generalizations made.

TASK THREE: ALLEY POTENTIAL USE

The researcher must know the land uses that exist along each alley in the area under study. The purpose here is to discover how various land uses need to use their alley access. An important point that must be understood is that using a land use map which merely shows generalizations of land use categories such as commercial, retail, and so on does not tell enough of the story.

For example, in the Alexandria study area, although a "commercial" designation on the city's land use plan includes shops, offices, restaurants and warehouses, each of these uses has special requirements on their adjacent alley. Even an "office" land use was not a simple category. The newer, larger office buildings put a far greater demand on available parking than the offices in the smaller, older buildings due to the number of workers each can hold. Once it is understood how the alley spaces are used, an alley typology can be drawn which reveals these spaces' potential uses. It also aids in understanding the potential use conflicts that might arise if a particular alley is redesigned for a particular use.

The Tools

Where an appropriate land use map is not available, one must be created. The creation of this map is an evolutionary process which goes hand in hand with the observation and recording of alley use. Find a Real Estate Assessment Map for the city. These maps define specific uses of each building, the year each was built or refurbished, and show any other structures on the property. With this map in hand, walk the study area and make a written and photo documentation of the various functions of the alleys.

Care should be taken to record the location of each photograph. The photos and written documentation can then be compared to the land use map to find consistencies in the ways the alleys serve the surrounding land uses. These consistant alley uses form an alley typology.

TASK FOUR: DESIGN PROPOSALS

Upon completion of the first three tasks, the characteristics comprising the alleys should be known well. It is at this point that the results of the previous tasks can be brought together to form design proposals for the alleys and land uses adjacent to them that might have an affect on their appearance.

The proposals should not be used simply as a formula to be applied to every and any space. Rather, they should be used in a way which best promotes the potential use of the individual alley space. For example, a service alley need not provide for seating, and a passage alley need not have shops. The design example in chapter five shows how the open space potential of an alley in the Old Town study area might join the design proposals to work together to create an effective alley open space.

The Tools

The design proposals are created by using the alley characteristics study from task two in combination with the alley use study from task three. Page 26 in chapter five outlines five important points which should be followed when creating these proposals. The design proposals then become the basis from which to redesign the alley spaces.

This paper has revealed the open space potential of the alleys in Old Town Alexandria. It has shown them to have the potential to become viable outdoor spaces linking activities and points of interest as an interesting alternative to the sidewalks. Alexandria is not the only American city with alleys or with an

interest to improve pedestrian circulation by making it more lively and exciting. The process used here to evaluate alley characteristics and to understand how these characteristics contribute to their potential open space use, can be a guide for others interested in using the unfulfilled potential of alley spaces. It should be understood that the design proposals here will not necessarily be those found elsewhere. Design proposals should be suited to the particular alleys under study.

Spreiregan (1971) wrote that "many small unused open spaces can be found in every city, and although many of them may be too small for conventional commercial or open space use, they may be quite suitable for other, innovative small-scale uses."[16] The process described here can be used in any city with a desire to explore the potential of their underused outdoor spaces. City spaces which are unique and memorable can add a vitality to a city, offering an alternative to the sidewalks. All urban open spaces should not be the same, following standard design proposals. In knowing a space as individual design becomes more imaginative, and in understanding the variables necessary to create successful pedestrian ways, design becomes more attractive.

LEGEND

▨ **RESIDENTIAL-A**
BUILDINGS CONSTRUCTED BEFORE 1960

▤ **RESIDENTIAL-B**
BUILDINGS CONSTRUCTED AFTER 1960

▦ **RETAIL-A**
BUILDINGS CONSTRUCTED BEFORE 1960

▥ **RETAIL-B**
BUILDINGS CONSTRUCTED AFTER 1960

▦ **RETAIL-R**
RESTAURANTS

▨ **INSTITUTIONAL**
CHURCHES, SCHOOLS, CITY GOVERNMENT BUILDINGS

▨ **OPEN**
PARKS, VACANT LOTS, PARKING LOTS

Every alley in the study site was numbered. As each was photographed during the course of the project, the photos were numbered to correspond to their location. Use the numbers displayed in the lower right corner of each photograph in this paper to discover the affect various land uses have on their associated alleys.
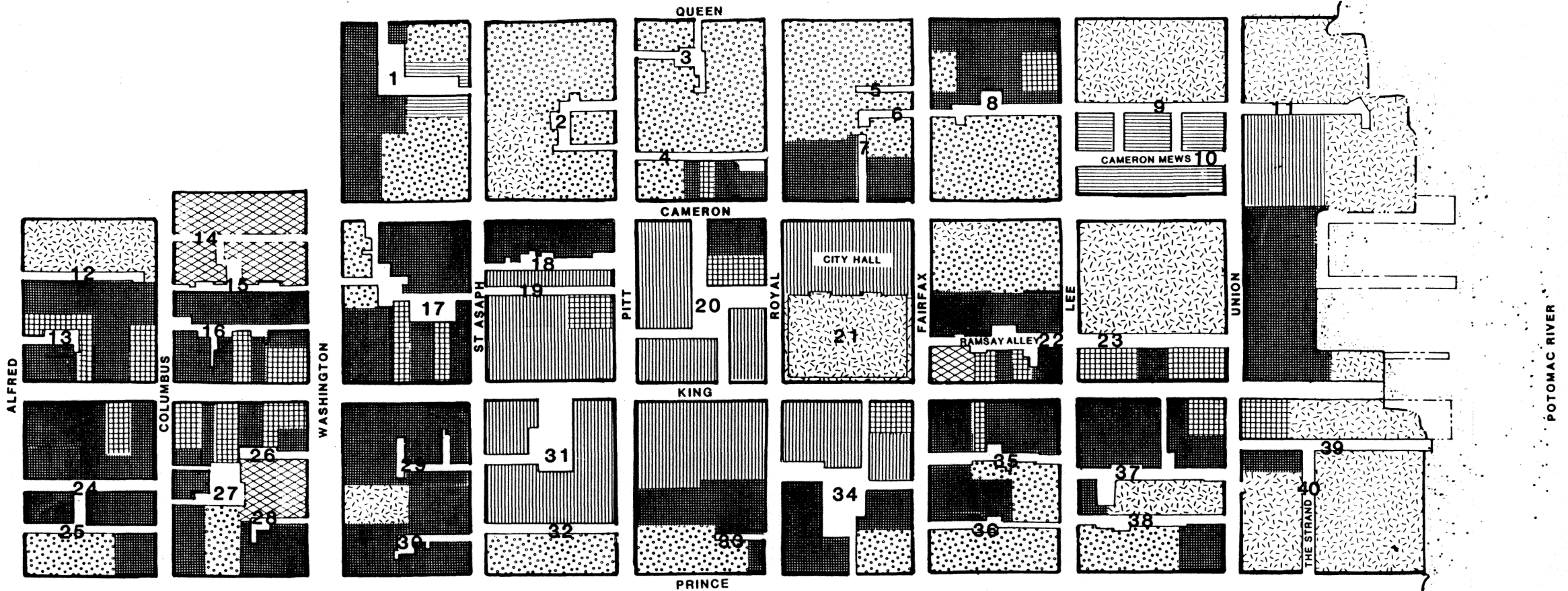
The Zoning Use Digest for the city of Alexandria dictates building height regulations for the land uses in the Old Town District. (For district boundaries, see figure 2.8.) These heights vary from 35 feet to 150 feet depending on the type of use, and the context of the building. To determine the effect these building heights have on sunlight into the alleys, a sun angle calculator, produced by the Libby Owens Ford Company in 1974, was used. The elements of this calculator are a series of overlayed charts which are used to determine the sun's effect on a particular structure, in a particular location, during a given time of year. It was developed as a time-saver to avoid time-consuming trigonometric calculations.

For the Old Town Alexandria study site, the solar angle calculations were made for each season of the year, and four different hours of each day. They were based on both the maximum allowed building height of 150, and the lowest height of 35 feet. They were also based on an alley width of 12 feet, which is the mean width of the alleys in the study site. Therefore, the conclusions are generalizations, and it is possible for an individual alley to have somewhat different requirements than those given in chapter five's design proposals.

The results of the calculations indicate that in an alley running along a north/south axis, which is lined by buildings of a maximum height of 150 feet, the sun streams directly down the alley during the late morning through about 4:00 in the afternoon. With only slight variation, this would be the case in all seasons of the year.
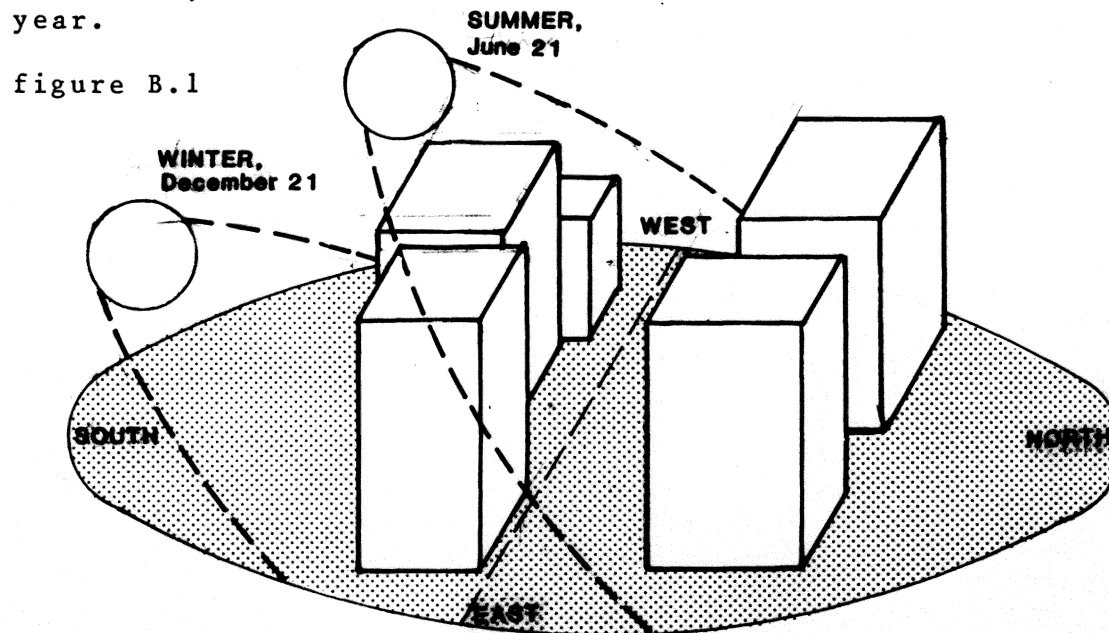
figure B.1

On the other hand, an alley along an east/west axis would be shaded most of the day, except for two to three hours in the early morning, and the same again in the late afternoon. Upon further investigation, it was discovered that in the Fall, Winter, and Spring, when the sun is low in the sky, the only way to allow any direct sunlight into the alleys would be to restrict surrounding structure heights to 12 feet, or approximately one story. However, in the summer, when the sun is higher in the sky, these structures can be 50 feet and still allow an adequate amount of sunlight into the alley space.

figure B.2

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FOOTNOTES

[1]August Heckscher, _Open Spaces: The Life of American Cities_ (New York, NY: Harper and Row Publishers, 1977) p.8.
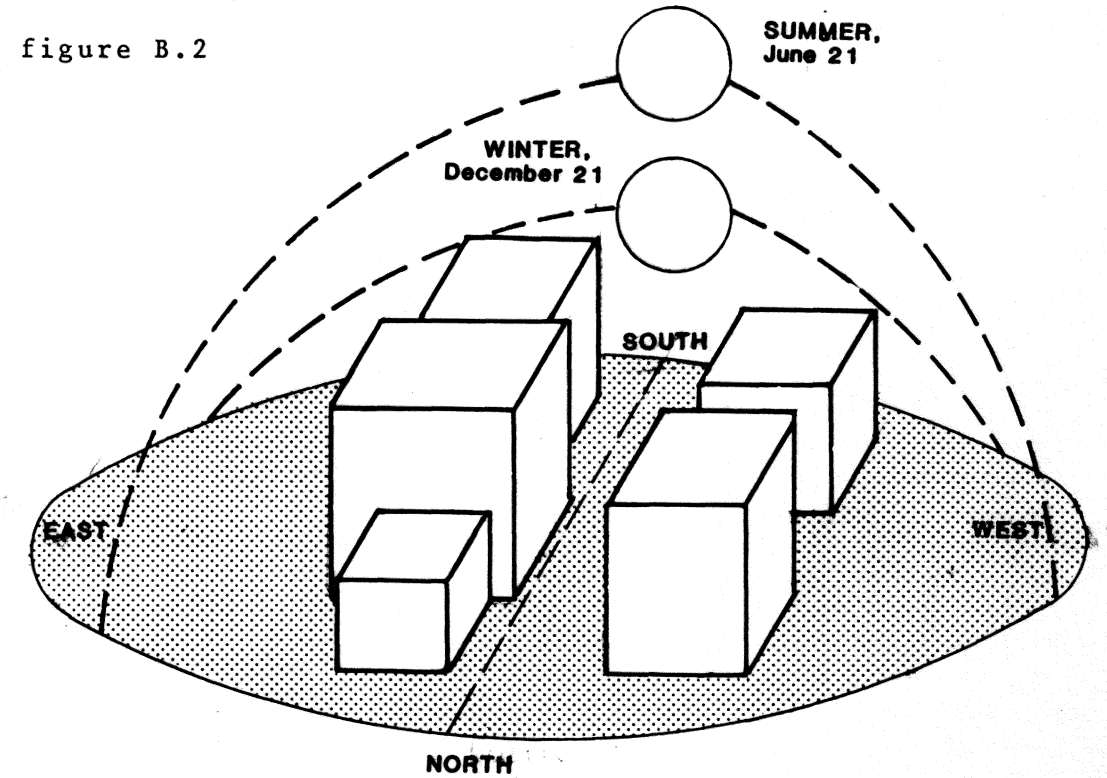
[2]Grady Clay, _Alleys: A Hidden Resource_ (Louisville, KY: By the Author, 1978), p. 8.

[3]Heckscher, _Open Spaces: The Life of American Cities_, p. 29.

[4]Interview with Larry Brown, Environmental Services Department, Alexandria, VA, August 1985.

[5]Paul D. Spreiregan, _An Urban Design Study for Alexandria_, (Alexandria, VA: Planning Advisory Committee, 1971), p. 21.

[6]Elliott Rhodeside, Faye Harwell, and Jeanette Behrends, _An Urban Design Study for Alexandria_, (Alexandria, VA: Department of Planning and Community Development, 1982).

[7]Bertha Dougherty, "Alleys of Old Alexandria," _Antiques Journal_, April 1959.

[8]Fran P. Hosken, _The Language of Cities_, (New York, NY: The MacMillan Company, 1968), p. 3.

Gordon Cullen, _Townscape_, (New York, NY: Reinhold Publishing Corporation, 1961), cover.

[10]Kevin Lynch, _The Image of the City_, (Cambridge, MA: Technology Press, 1960), p. 1.

[11]William Whyte, _The Social Life of Small Urban Spaces_, (Washington, D.C.: The Conservation Foundation, 1980), p. 7.

[12]Lynch, _The Image of the City_, p. 8.

[13]Interview with Steve Shephard, Archaeology Department, Alexandria, VA, July 1985.

[14]E. Humbleton and M. VanLindingham, _Alexandria, A Composite History_, (Alexandria, VA: Alexandria Library, 1975), p. 32.

[15]Spreiregan, _An Urban Design Study for Alexandria_, p. 21.

[16]Ibid., p. 25.

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   (<u>A</u> <u>Plan</u> <u>of</u> <u>Alexandria</u>, <u>Now</u> <u>Belhaven</u>)

6. Market Square, 1798................................p.11
   (<u>Antiques</u> <u>Journal</u>, April, 1959)

7. Study Site Alleys, 1798...........................p.12
   (<u>Title</u> <u>Search</u> <u>for</u> <u>Alexandria</u>)

8. Old Town: Special Features.......................p.18
   (<u>Walking</u> <u>Tour</u> <u>Guide</u>)

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