

SMALL TOWN CENTRAL BUSINESS DISTRICT
PHYSICAL DESIGN GUIDE;

As Applied to Cherryvale, Kansas.

by

CHUNG-TSIANG CHANG

B. Arch., Kansas State University, 1971

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Major Professor

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INTRODUCTION

Our society is geared for progress. The by-product of progress is the continuing need for change, though not always for the better. For the sake of change, remains of our past become obsolete and often fall into oblivion. It is therefore equally important to preserve the better values of the past, some of which may still be effectively used today.

The most prominent evidence of our past is the man-made environment. These evidences are important because they represent historical events as well as man's handy work. The purpose of this study is to establish a workable method to restore older buildings and necessary settings. This setting is in Cherryvale, Kansas.

Small cities in Kansas have been declining in the past two decades. As the decline accelerated, efforts to reverse this trend became more intense in recent years. Perhaps due in part to the energy crisis in 1973, people became more aware of the fact that the endless change at the expense of our natural resources is no longer the best method to improve our quality of life, and that we should learn to make better use of our existing natural and manmade resources. Coupled with the prevailing nostalgic trend in the country, restoration of C.B.D. and other physical amenities of small cities will aid tremendously in the revitalization process.

Every student of planning, academicians or practitioners is aware that every planning effort is a process. Depending on the

condition within which each planning process is executed, some processes are rigid while others are open to more options. It is the author's position that because there is no simple answer to the revitalization of a small city, it will require relentless effort on the part of each city's inhabitants to plan, promote, redevelop, and develop in order to channel the revitalization process in the right direction. Throughout this continuing effort, professional consultation in varying disciplines will be needed at various points in the process. Consultation in physical design is definitely a needed service.

The author's purpose in writing this thesis is to minimize the fear for the unknown in building restoration, and to suggest a direction in which restoration may be achieved. This thesis is, therefore, written to provide the methodology in the area of physical design for the revitalization process using Cherryvale as an example which is applicable for most small towns. Physical redevelopment must interface with economic revitalization and subsequent population growth. Because this is a process, the author does not believe that a "Master Plan" for a redeveloped C.B.D. is practical. "Master Plan" represents the end product that depends on many related variables before it may be realized. The author will attempt in this thesis to identify a workable physical redevelopment process that interfaces with other revitalization activities. Within the physical development process itself, restoration of existing buildings along with beautification of the setting, will each play an important role. The emphasis on revitalizing the C.B.D. is significant in that it is the core of

the city, and as such reflects the vitality of the city itself.

The city of Cherryvale is used for this study because it has been fortunate in recent years in not demolishing most of the old buildings. The availability of old buildings, in combination with a rich history and strong community leadership make Cherryvale a likely place for revitalization, and is the main reason why Kansas State University Center for Community Planning Services selected Cherryvale for preliminary planning in 1971. This thesis is a follow-through of the 1971 effort.

Cherryvale is located in the northwestern part of Montgomery County, in southeastern region of Kansas. Southeastern Kansas is part of the Ozarks Region, a region that is in need of economic development. Cherryvale is no exception to this regional condition. The population of the city peaked out in the 1920's, and the average age of its present residents is relatively high.

In the preliminary study by Kansas State University Center for Community Planning Services, activities included gathering of basic data and continuing planning and design consultations. Through this effort, it was established that:

1. Most of the commercial buildings in the C.B.D. are still in the original state, allowing restoration work to better reflect the original motif.
2. Business district deterioration appears to go hand in hand with economic decline.
3. The type of architecture and the setting is exactly the atmosphere sought by promoters of the Disneyland, where millions of dollars had been spent to recreate

the same. This is an asset that the city should restore and preserve.

4. While a design solution for the C.B.D. cannot by itself ensure success in the revitalization of downtown, it is nevertheless an important ingredient in making the total process a success.
5. The C.B.D. is the most important image-giving resource of the city. Success in the physical improvement of C.B.D. reflects the positive attitude of the community, which would in turn encourage potential industries, businesses, and shoppers to invest and shop in the city.
6. If business activities were to increase, younger people of the community would be attracted to remain in the city. Increased business activities will further attract more people to move to the city.

It is through the above set of preliminary conclusions that it was decided; a design study to improve Cherryvale C.B.D. will be beneficial to the overall revitalization effort of the city.

HISTORY

Although this study does not deal with the history of Cherryvale, a brief look at the history aids in understanding the development of the city. Many interesting anecdotes combined in making this a unique city. All the information in this section is taken from CHERRYVALE CENTENNIAL,¹ published in 1971 for the city's centennial celebration.

The earliest record available on Cherryvale was dated in 1868, the year Norris P. Morgan settled in a farm near Cherryvale as is known today. By 1871, the record shows twenty-seven land holders in the same vicinity. The city of Cherryvale itself came into existence because of the railroad. (Figure 1) It was in 1871 when Santa Fe Railroad designated a site for the City. By 1879, the Frisco Railroad reached Cherryvale where it crossed the already existing Santa Fe line. The Memphis Railroad Company extended its line from Parsons to Cherryvale, and Santa Fe line was extended to Coffeyville. By 1886, up to nine trains brought 160 cars of freights out of the city on a given day. It was later noted in the CHERRYVALE EVENING CLARION in 1899 that "Cherryvale has 28 trains carrying passengers in and out six different directions every 24 hours..." The sudden growth of cities before the turn of the century due to the railroad industry was a trend not unique to Cherryvale. Periphery developments

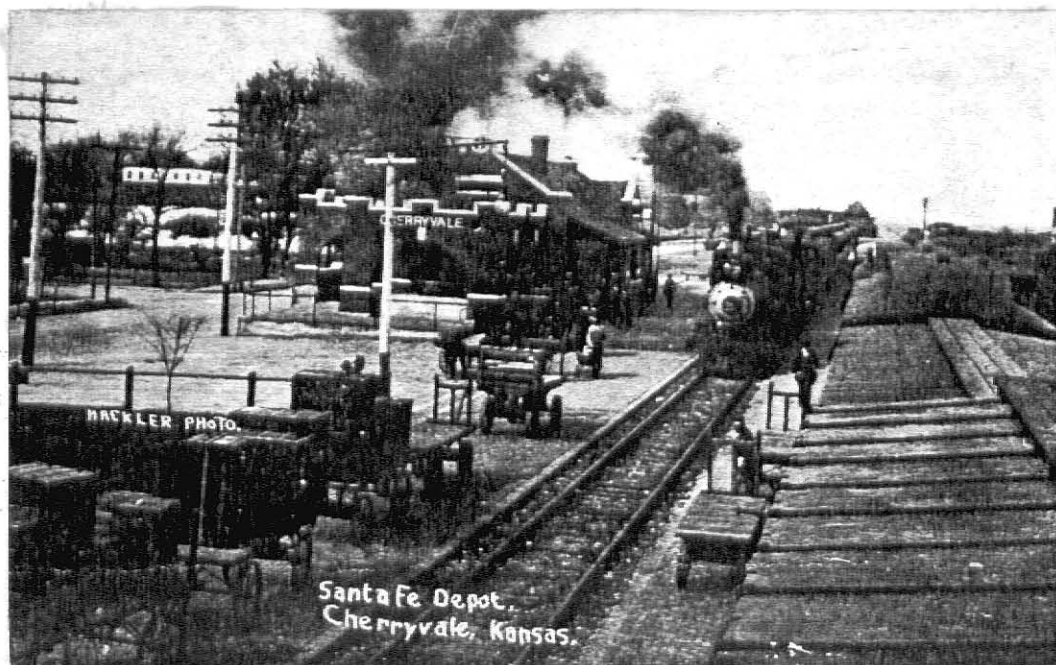
¹Cherryvale Centennial "A New Century Beckons," 1971

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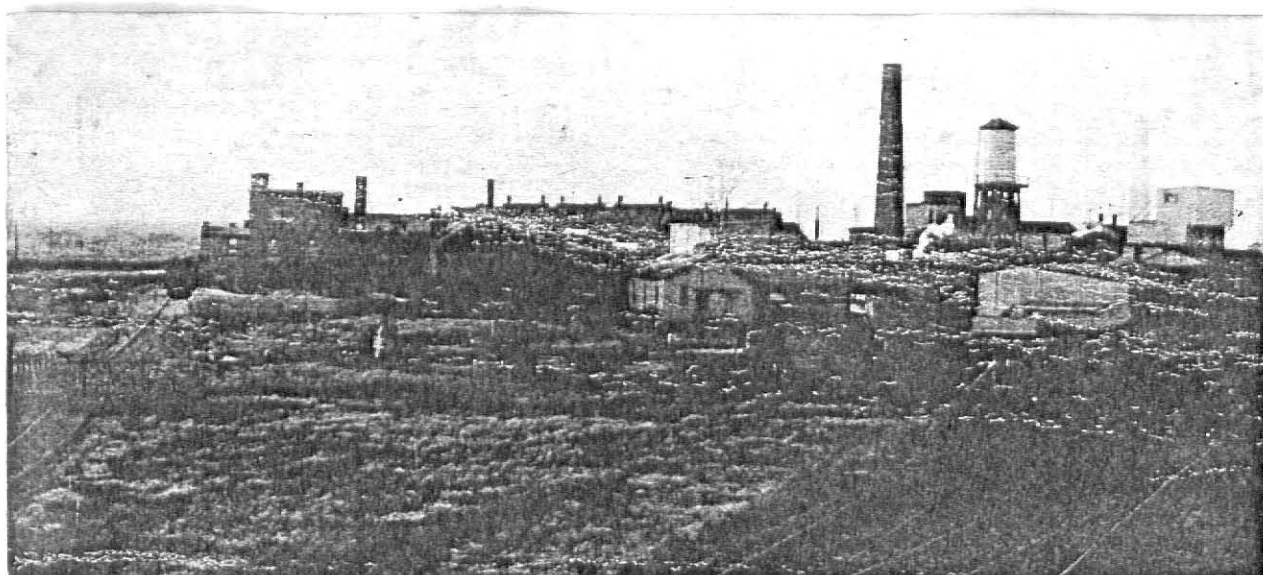
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CHERRYVALE SANTA FE DEPOT

Figure 1



ZINC SMELTER

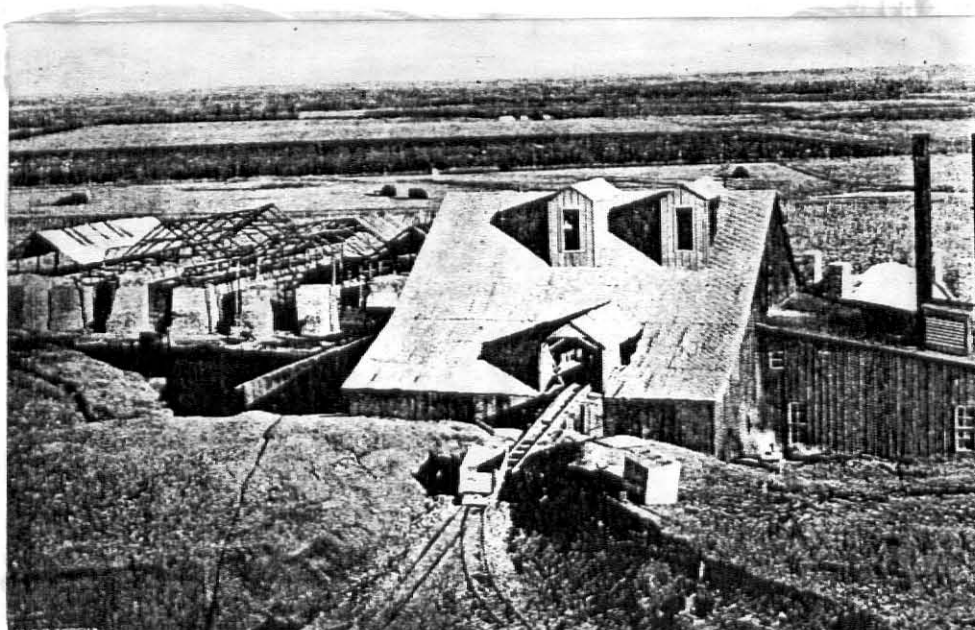
Figure 2

due to the railroad were consistent with the pattern at that time.

Although the railroad was the catalyst for the early growth of the city, natural resources and subsequent industries made up the chemistry for the continuing growth after the turn of the century. Other than the agricultural activities, natural resources included abundance of natural gas for industrial uses, and shale mounds for bricks. With excellent shipping facilities offered by the railroad, these combined to give the city economic base needed to perpetuate growth.

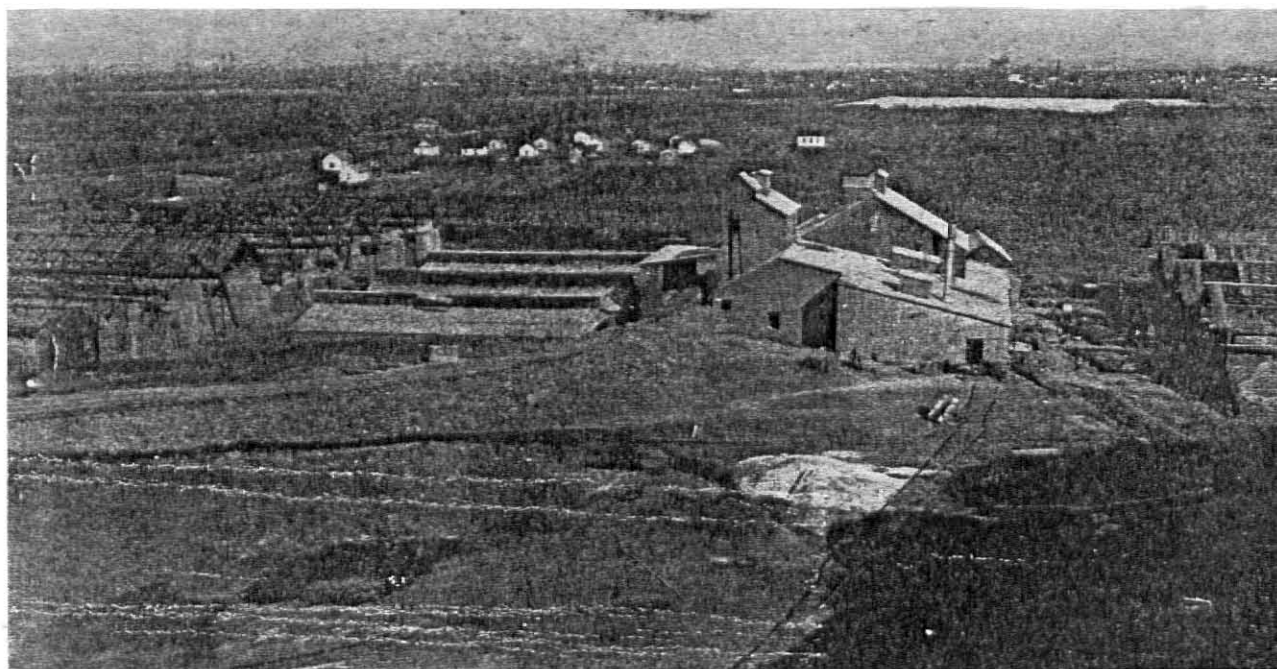
Due to the large resources of natural gas in the area, a zinc smelter was established in 1898 at the cost of \$350,000 (Figure 2). It was at that time known as the largest zinc smelter in the world, and employed 458 people. This smelter was founded by S. C. Edgar, whose name the company carried for over 30 years. This operation was so busy that in the first eight years, the plant maintained day and night operation. At various stages of the plant's existence, it was owned by the U.S. Steel Corporation, The American Steel and Wire Company, and National Zinc Company. After the local boom, the major zinc operators moved south to Oklahoma, diminishing the importance of this industry in Cherryvale.

Even as the boom for the zinc industry was taking place, the shale mounds in the vicinity along with the availability of natural gas brought in brick yards. The first full plant was erected in 1897 (Figure 3). Subsequently, three plants were in operation north of town (Figure 4). By 1930, the com-



UNION BRICK AND GAS COMPANY

Figure 3



COFFEYVILLE VITRIFIED BRICK AND TILE
COMPANY OF CHERRYVALE

Figure 4

petition of concrete as the major building material cut down the demand for brick, and these plants were closed.

Zinc and brick were two major industries that made Cherryvale a prosperous town. Several minor industries included a glass factory, a creamery, a stone mill, a barrel factory, a bicycle factory, a planing mill, a marble works, and a sugar refinery.

All the industrial activities of Cherryvale began the downward slide after the 1920's, at which time the population was known to reach a peak of more than 7,000. Although such a claim cannot be substantiated, it is considerably more than 2,605 people in 1970. The decline has reached the bottom, and therefore, potential industries may be attracted to the city to stimulate growth.

ASSUMPTIONS AND GOALS

In order to develop a viable plan, assumptions need to be made to recognize given conditions that will continue to affect the design. Beyond making a set of assumptions, goals are set as a framework for the design to revitalize Cherryvale C.B.D. and as a planning tool to ensure optimum achievement. Whereas goals should ideally be absolute, it may be revised in accordance to changes in priority. Furthermore, goals need to be dealt with because it is a strong communication tool.

Assumptions:

The assumptions made here deal mainly with conditions that affect physical planning, and are stated as follows:

1. Cherryvale will continue to have the high quality of leadership necessary to effectuate physical development.
2. The promotional efforts on the part of the community to attract new industries will be effective, and Cherryvale will again experience significant growth.
3. The community is in agreement that C.B.D. is the primary image giving resource of the community, and will support the renovation of C.B.D.
4. The community will seek local, State, and/or Federal funds in planning and implementation of public improvements such as streets, sidewalks, and utilities.
5. Building owners are willing to participate in the C.B.D. renovation program.

6. Public Improvements Proposals, Ozarks Region-Kansas Ozarks, as prepared by Kansas State University Center for Community Planning Services made proposals for public improvements. These proposals will be implemented.

Goals:

Based on the assumptions, design goals are set:

1. To restore older buildings in C.B.D. so that they may again be effectively used for anticipated higher level of commercial activities.
2. To improve the streetscape for the purpose of creating a pleasant space for pedestrians and cars, and for the purpose of creating a setting to compliment the buildings.
3. To provide a strong image for the C.B.D. encouraging more commercial activities.
4. To establish a method that may be used as a tool in the restoration process.
5. To encourage and promote economic growth for the city.
6. To establish through design an overall scale and architectural theme.
7. To preserve historically and/or architecturally significant buildings.
8. To provide visitors and residents with usable physical amenities.

As previously stated, goals are used to ensure direction and optimum achievement. Priorities change with time, however, and periodic updating of the goals will be necessary.

REGIONAL PERSPECTIVE

Montgomery County, a part of the Southeast Region of Kansas has been an area of population decline in recent years. Cherryvale is no exception to this regional trend. The reason for this decline is out-migration due to the lack of economic base. Between 1960-65, for example, the excess of births over deaths in Southeast Kansas was 744, yet the net population loss was 2,255. Further indication of out-migration is the higher percentage of older people in the county. In 1960, the median age of population in Montgomery County was 34.65, compared to 29.8 for the State Of Kansas. Also, in 1960, 24.7 percent of the families in the county had children under 6 years of age, compared to 30.7 percent for the State of Kansas. The higher percent of people in this area in the older age group is further indicated by 33.8 percent of the population older than 50 years of age, compared to 25.2 percent in the State of Kansas.²

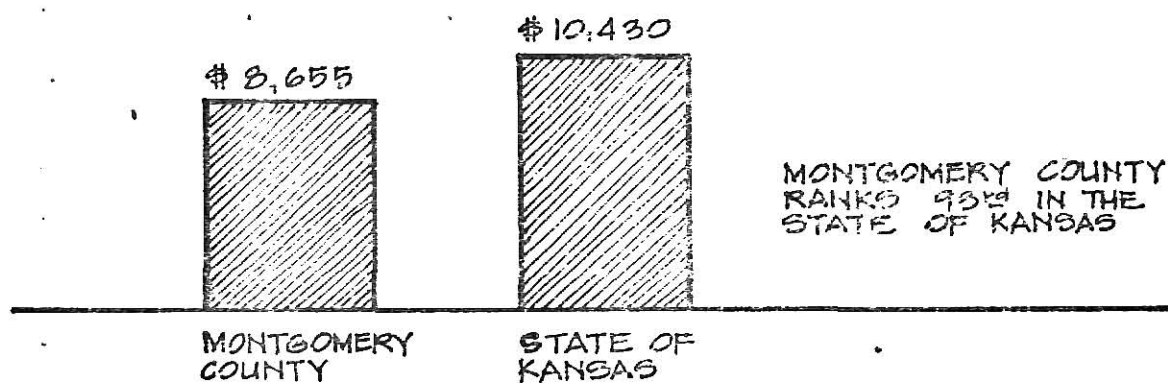
The economic decline causing out-migration is indicated in sales and income as compared between the Region and the State. Figure 5 shows a low per capita income, ranking 95th in the State of Kansas. This is partly explained by the drop in retail trades (Figure 6). This condition typically affects Cherryvale, and points to the need to increase

²Southeast Kansas, Region of Progress: Fact Book. Page 92
Prepared by Kansas Department of Economic Development.

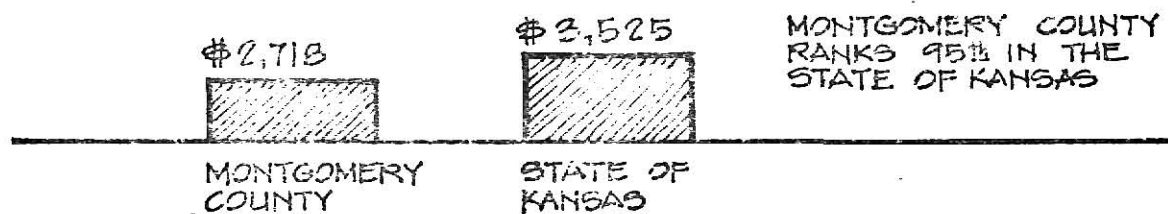
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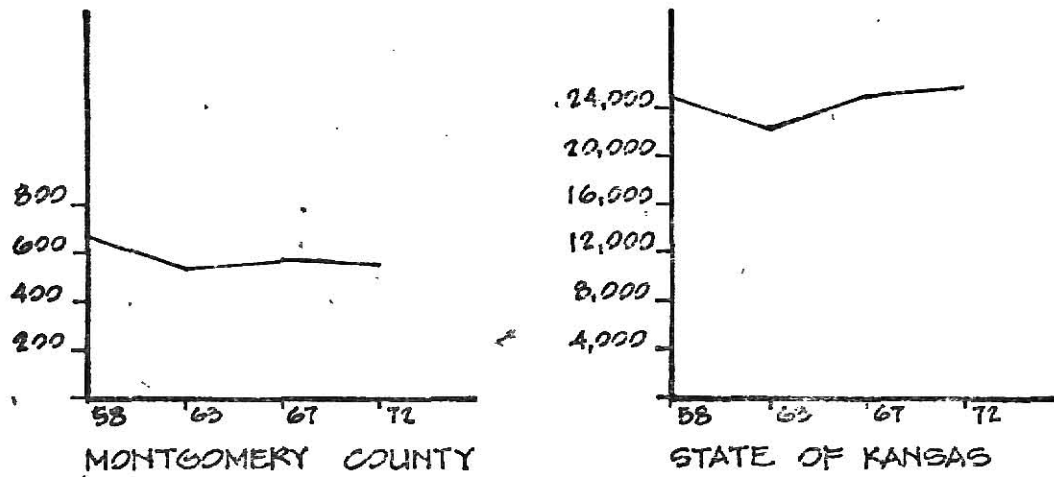


AVERAGE ADJUSTED GROSS
INCOME PER STATE INCOME
TAX RETURN

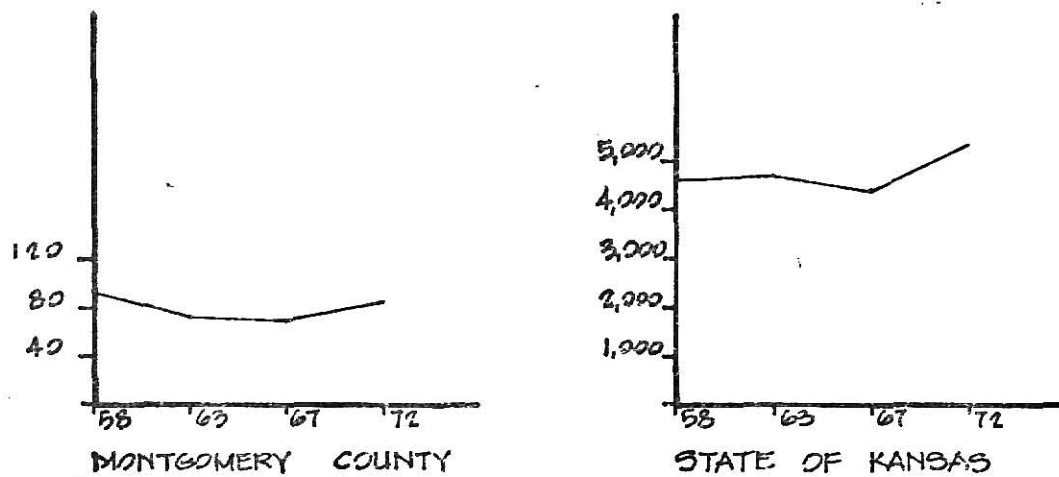


AVERAGE ADJUSTED GROSS
PER CAPITA INCOME

Figure 5



NUMBER OF RETAIL ESTABLISHMENTS



NUMBER OF WHOLESALE ESTABLISHMENTS

Figure 6

employment opportunities through manufacturing and periphery activities.

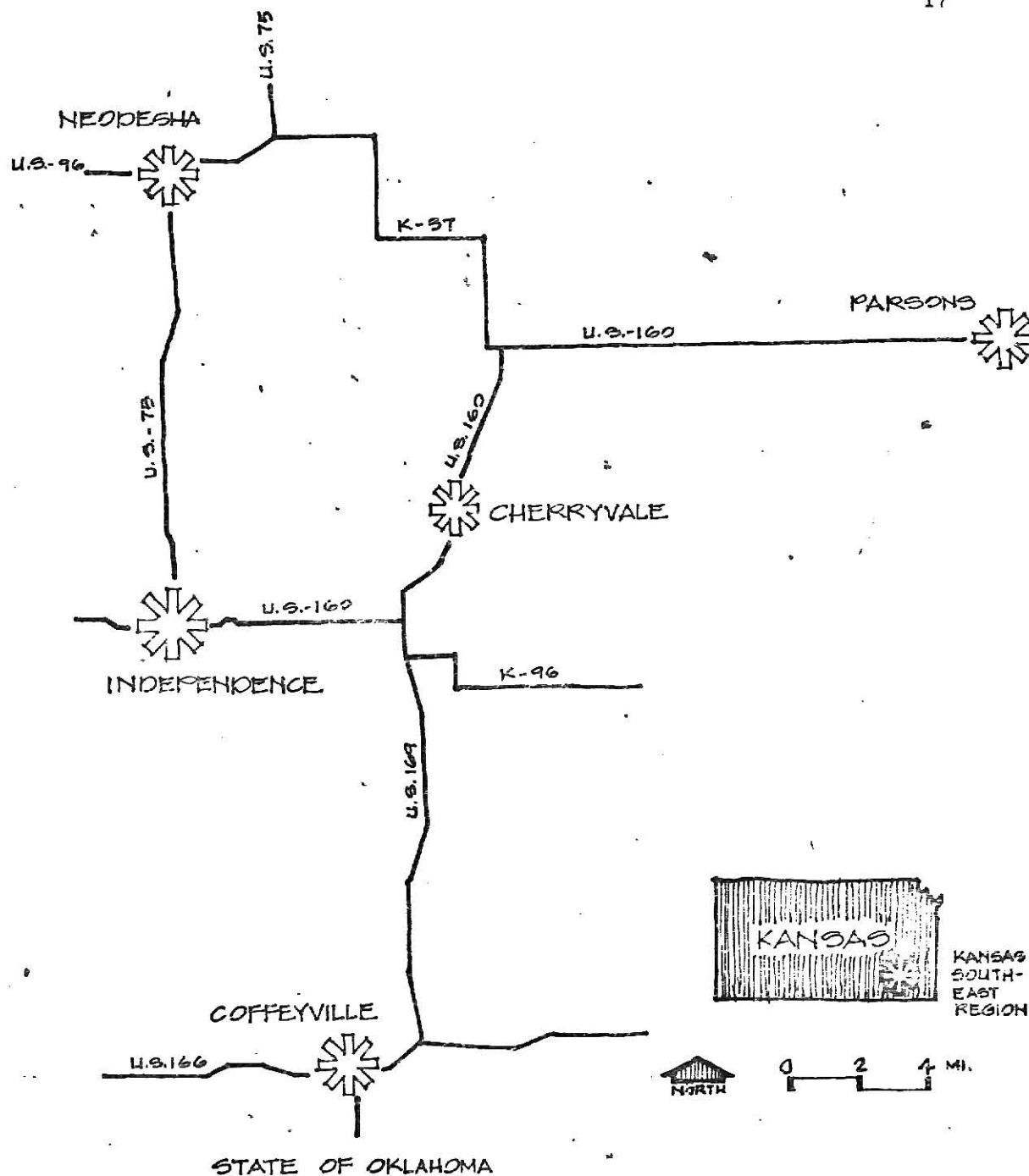
Promotional effort to attract new industries to Cherryvale is continuing today. This effort is realistic: Cherryvale is within 30 miles of Neodesha, Parsons, Coffeyville, and Independence (Figure 7). All four cities are larger than Cherryvale, providing adequate support facilities and convenient supplies to new industries. The City is also located at the junction of Highway 169 and 160, easily accessible from most cities. As discussed previously, Cherryvale was founded because of the railroad. Today, Atchison, Topeka and Santa Fe Railroad and San Francisco Railroad cross the City, providing adequate shipping facilities. Kansas Water Resources Board also shows a proposed site east of the city to be called the Big Hill Dam³, increasing potential recreational resources.

The most unique amenity of this Region is the natural feature. Montgomery County lies in a physiographic unit known as the "Osage Cuestas".⁴ The rolling topography and wooded area combine to make this a naturally beautiful area.

Cherryvale is located at a conveniently accessible area, near to cities for needed services and specialty goods, with easily available shipping facilities, in a naturally beautiful

³Southeast Kansas, Region of Progress: Fact Book, Page 30
Prepared by Kansas Department of Economic Development, 1967.

⁴Southeast Kansas, Region of Progress: Fact Book, Page 1.
Prepared by Kansas Department of Economic Development, 1967.



VICINITY MAP
CHERRYVALE, KANSAS Figure 7

setting, and potential recreational resources east of the city. These amenities make Cherryvale an attractive City in which to live, therefore a likely place for prospective manufacturing activities.

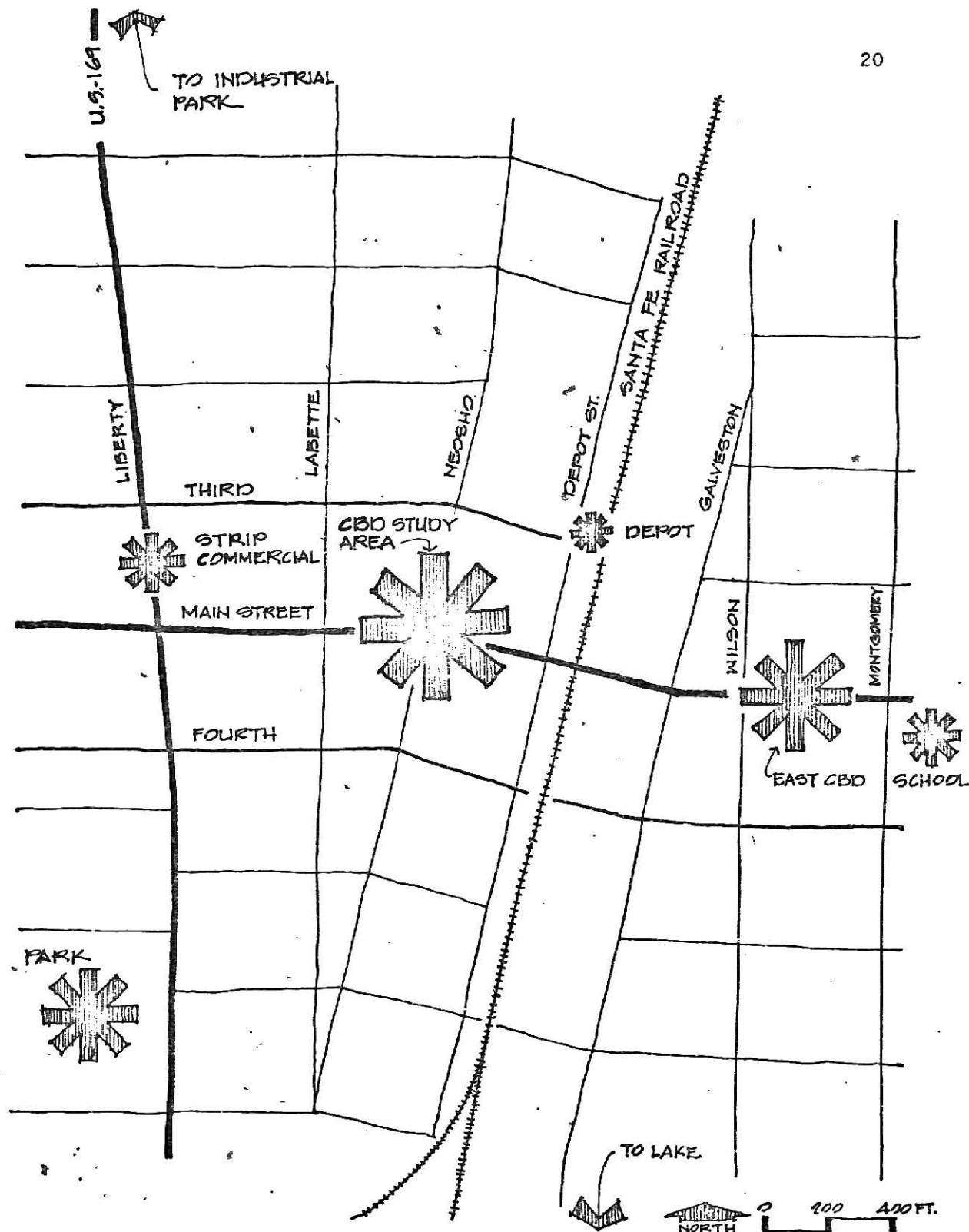
CHERRYVALE TODAY

The City of Cherryvale is classified as a second class city. The 1970 Census of Population put the population at 2,609, which was a drop of 6.3 percent from the 1960 Census. The Census also shows 993 households in the City for 1970, a drop of 5.0 percent from 1960. The median age of the residents is 40.0, more than 10 years above the median age of the State population.⁵ These statistics point to the declining population of the city, and that most of the decline is due to the loss of young people, leaving a larger percent of older people in the city.

The City is today a quiet place in which to live. The setting gives the image of a residential town. Main Street, the major street of the City, is still as wide as it was when the town prospered. It is desolate now, with marginal business activities to fulfill basic community needs. As shown on the Vicinity map in Figure 8, new highway related businesses are located along Highway 169, on the west end of Main Street. The population decline slowed the strip commercial along Highway 169 and is a blessing in disguise. Should the City again prosper, the City has the opportunity to limit unsightly commercial development along the highway, and concentrate new developments in the C.B.D.

Typical of cities experiencing economic decline, the school enrollment has dropped in recent years. As a consequence, the

⁵Kansas, Census of Population, 1970. U. S. Department of Commerce.



VICINITY MAP
CHERRYVALE C.B.D. Figure 8

physical plant of the schools in Cherryvale, headquarters of Unified School District 447, require upgrading. As it turned out, a new high school was built in 1975. Based on the 1970 Census of Population, there were 351 female and 295 male persons in the school age. Furthermore, 94 girls and 88 boys are in the pre-school age.⁶ The schools need to be improved both for the purpose of maintaining high quality of education and to ensure prospective residents of good schools for the children.

At this time, the City owns a 5-acre park and a 25-acre lake. Adequate playfields in the park, boat ramp and fishing for the lake make up the outdoor recreational facilities. The City Library and the Auditorium provide further opportunities for leisure living. These are important amenities, and require improvements to attract more use.

An industrial park was recently established northwest of the city along Highway 169. Presently, a fiberglass and a furniture factory occupy the park. A stationery manufacturing plant currently is located east of the railroad tract and north of Main Street. Another source of employment is a vehicle wheels manufacturer one block north of Main Street. These industries prove that manufacturing activities can profitably operate out of Cherryvale. The industrial park should be a good inducement to new industries to the City.

In summary, Cherryvale does have adequate amenities to allow growth. It has a new High School with an old but ade-

⁶Kansas, Census of Population, 1970. U.S. Department of Commerce.

quate City Library and an Auditorium at the Junior High School for cultural enrichments. The City Park and the City Lake provide facilities for outdoor recreation. The industrial park is not only a facility to provide industrial growth, but is an indication that the city is making a serious effort to encourage such activities.

A brief visual analysis is helpful in identifying problems and potentials in the physical environment, at the same time inventorying man made natural elements forming the environment. This information contributes to the development and implementation of design concepts that help to achieve design goals set in the previous chapter.

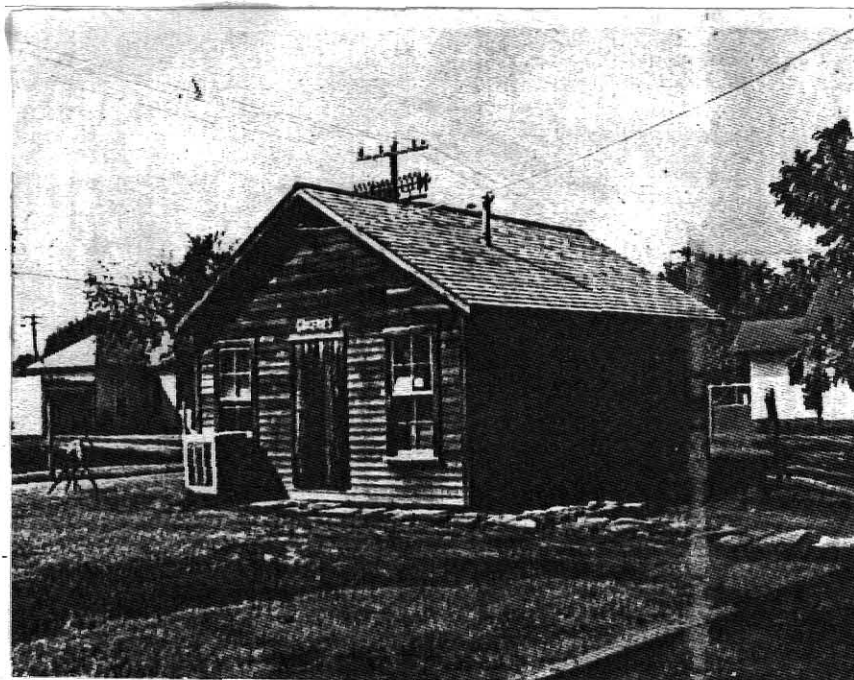
The most important design goal is the improvement of C.B.D. image. These C.B.D. physical elements are assessed in the next chapter. Periphery to the C.B.D. are some prominent physical features that add to the charm and the uniqueness of the town. These elements in Cherryvale, and identified in this chapter exemplify similar elements found in other small towns in Kansas.

Unique physical features are located in three general areas. On the first area, the Opera House and the Bender Museum (Figure 9 and 10) are located on opposite sides of Neosho Street just south of Main Street. The Opera House is in reasonably good condition, and embellishment may be accomplished by converting the overhang into a deck with ornamental railings and brackets. Along with the original and authentic state of Bender Museum across Neosho Street, this area has the potential of becoming a key activity generator.



OPERA HOUSE

Figure 9



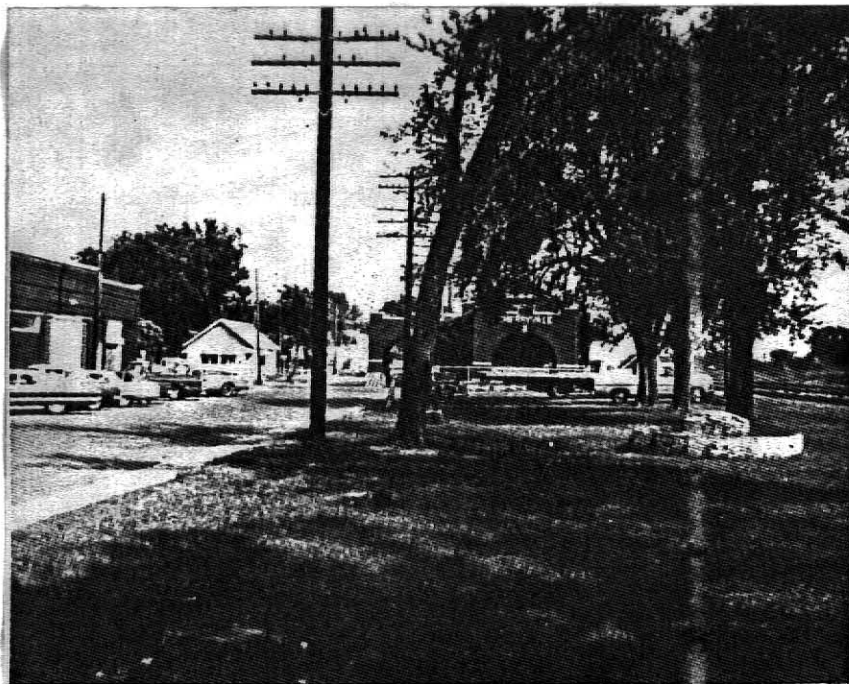
BENDER MUSEUM

Figure 10

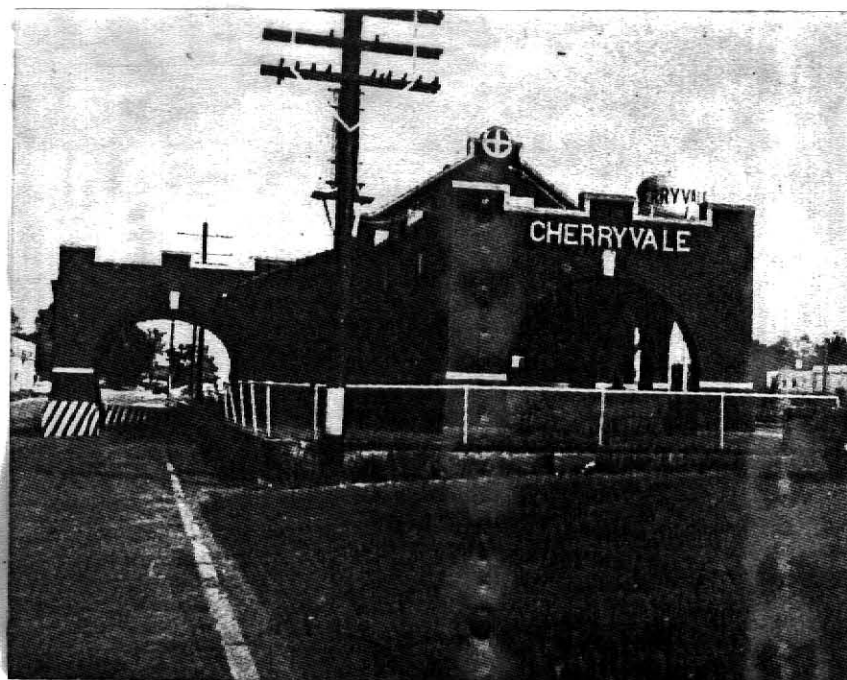
The second area of visual interest is the Santa Fe Depot and the sea of brick paving and grass area along the railroad track and along the appropriately named Depot Street leading to the Depot (Figure 11 and 12). The Depot structure is in excellent condition and only minor restoration work is necessary to provide for the re-use of this Depot, perhaps as a specialized restaurant. Fountains, plant materials, light fixtures, and outdoor furniture will contribute to a much more attractive setting complementing the Depot.

The third general location with both historical and physical interests is located further north along the track. This contains Old Frisco Depot and the Wayside Inn (Figures 13 and 14). During the boom period at the turn of the century, railroad users found accommodations at the Wayside Inn. Frisco Depot is very typical of similar structures built around the country, with extended overhangs designed to accommodate waiting passengers. These structures should be preserved for future re-use.

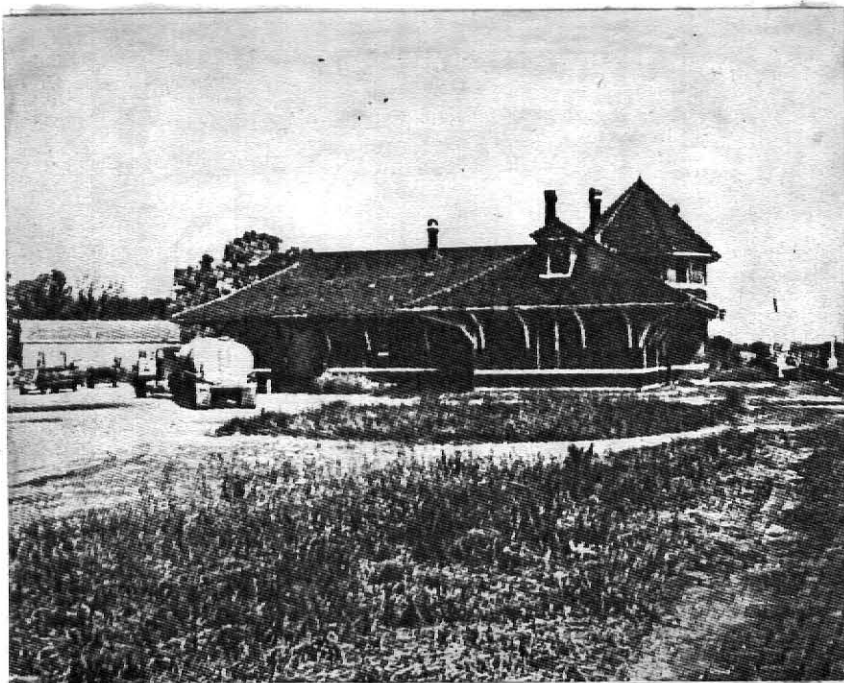
These various types of unique physical features may be identified in most small towns. Once identified, these features should be capitalized for the benefit of residents and visitors, and make up the identifiable image of the town itself.



PARK AT SANTA FE DEPOT
Figure 11



SANTA FE DEPOT
Figure 12



OLD FRISCO DEPOT
Figure 13



WAYSIDE INN
Figure 14

CHERRYVALE C.B.D.

Cherryvale C.B.D. is a "front street" downtown lining east-west along Main Street (Figure 8). It starts one block east of Highway 169 and the bulk of the buildings line the street for four blocks, bisected in the middle by the railroad tracks. The east half of C.B.D. is desolate, with a high rate of vacancy, and most of the commercial buildings are badly in need of repair. Most of the current commercial activities are located west of the railroad tracks.

Main Street is wide, with a 100' right-of-way. The actual street width is 65'. The reason for this width is due to inter-urban tracks that used to be aligned along the center of the street (Figure 15 and 16). The tracks have since been removed. The width of the street, in combination with low volume of vehicular traffic, gives Main Street the appearance of emptiness. Landscape treatment is needed to break down the barren and cold space.

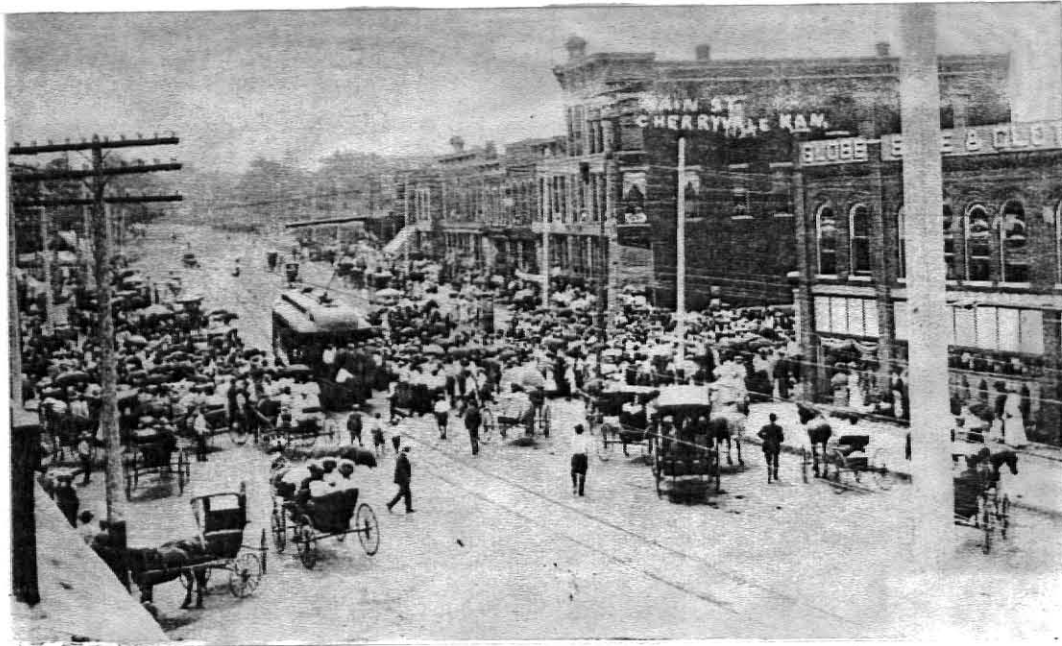
Most of the buildings between Highway 169 and the railroad tracks are in fair condition and maintains the original character as shown in Figures 17 and 18. Fortunately, no superficial modernization with metal treatment has taken place, allowing the opportunity to restore the buildings to the original architectural character. A building conditions survey was made in 1971 by Kansas State University Center for Community Planning Services and showed that most of the commercial buildings east of the railroad track are in poor condition, and are not feasible



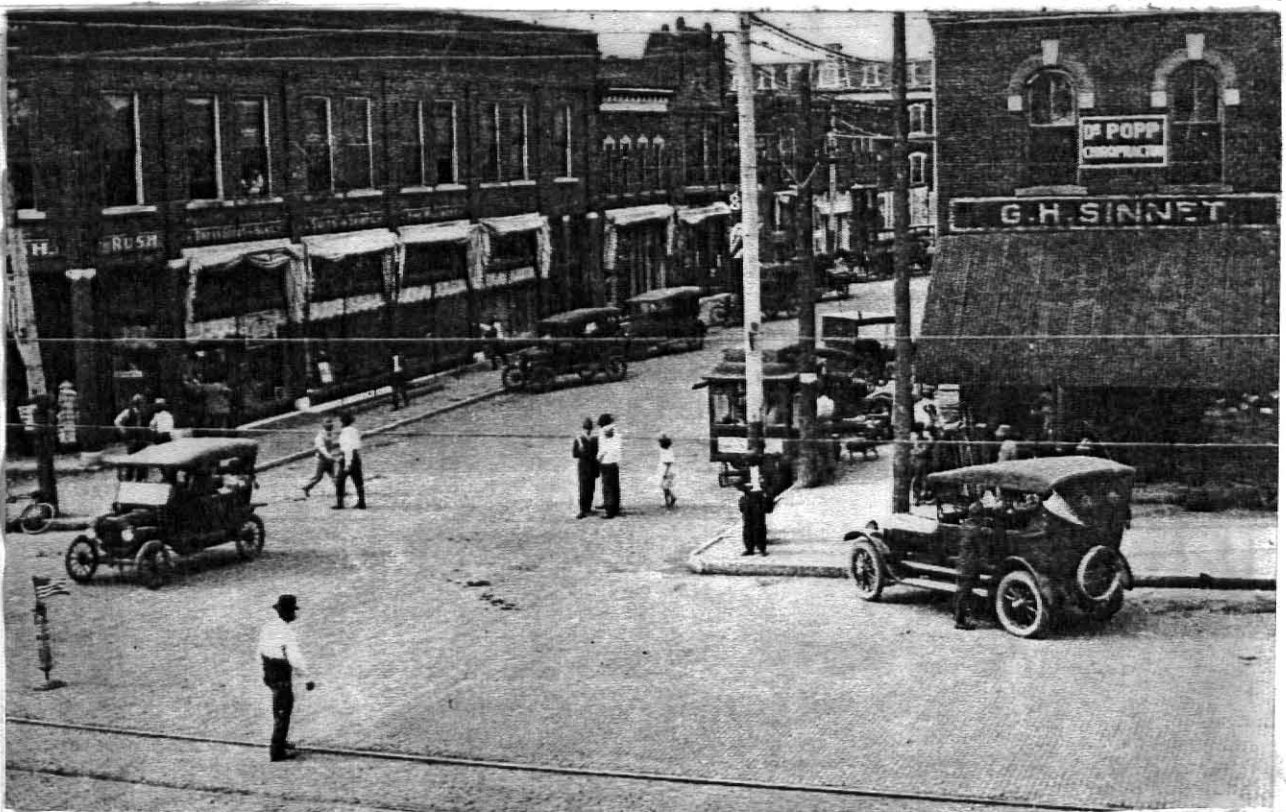
Construction of Union Electric Interurban
Figure 15



Cherryvale Main Street-Looking East
Figure 16



Main Street, Cherryvale
Figure 17



Looking North at the Corner of Neosho and Main Street
Figure 18

The buildings west of the tracks, because of higher percentage of occupancy, are in restorable condition. Despite higher level of occupancy, second stories of these buildings are mostly vacant, leaving upper levels of the storefronts with the empty appearance. The upper level of a storefront is an important image-giving element of a store. Upper level design treatment is therefore very important. Another important feature of the commercial buildings is the storefront on the lower level. In most cases, a storefront covers only a small portion on the lower level of a building, often losing its identity. Attempts to reinforce the identity of each store include the use of signs. Signs tend to be overbearing, with one cancelling another in effectiveness, defeating the original purpose. This problem of store identity may be solved through design. By making each lower level of the storefront unique by means of color scheme, design elements, and subtle sign systems, identities of these stores may be achieved without polluting Main Street with unsightly signs.

The following chapters are devoted to methods that may be applied in restoration and beautification of most small town C.B.D. in general, using in particular Cherryvale C.B.D. as an example. Whereas methods and processes recommended are not the only ones available, the author strongly feels that through research and field application, these methods have proven to achieve highly satisfactory end products.

BUILDING RESTORATION

In upgrading the condition of a building, the approach taken may be that of complete restoration, partial restoration, reconstruction, or remodeling that may completely change the character of the original building design. Buildings to be restored may be categorized in several ways. First type includes those that have been remodeled so completely that the original architectural characteristics are no longer restorable. The second type includes those that have been partially remodeled, but still provide enough original characteristics to allow partial restoration. The third type are those buildings that have never been remodeled, leaving opportunity for authentic restoration. In Cherryvale, most buildings fall within the third category.

It is the author's position that the turn-of-the-century architectural character of buildings in Cherryvale C.B.D. is important for the purpose of creating a unique image and charm identifying the shopping district. Based on this premise, restoration and reconstruction should be emphasized for the exterior, whereas remodeling may be applicable for the building interiors, where some modification will be necessary for adaptive uses.

In approaching a restoration project, both the owner and the architect should clearly identify and define the scope and quality of work, thus requiring careful research into history

architectural style, and anticipated use for the building. In most cases, it is reasonable to assume that historical characters and events associated with a building are known, and may be traced back to a well defined period. This is important in that the physical identity of the building during which a significant event occurred in the history of the building may be the identity to be restored.

Three factors should be considered in any restoration project. First of all, if the architectural character is the primary consideration, elements that have been added on throughout the life of the structure found to be out of character must be removed, and the architectural integrity restored. Secondly, should the major reason for restoring a building point to relating the structure to persons and events of historical significance, the authenticity of anything that was visible during the period selected will be important. A careful reconstruction may be as valuable for the purpose of creating a setting to depict the historical events as is the restoration of the building itself. Finally, if a building is interesting enough to be restored for re-use, but is not necessarily a structure with rich architectural or historical values, then some degree of modification in the interior spaces will be necessary.

Although buildings with strong architectural and historical significance are key factors generating popular sentiments for restoration projects, suitable uses for such restored projects are frequently narrowed to museums or other non-profitable public activities. Unfortunately, each city may not

support more than a minimum number of museums. Restoration approach premised on architectural and/or historical values is a worthwhile and glamorous one, but is one that seldom happens. Restoration for the purpose of feasible re-use by cash-generating activities will be the bulk of the work in revitalizing a small town C.B.D.

When restoring an old building, the restoration architect should be sympathetic and sensitive to the original design. Attempts to add creative alterations to the original design often result in awkward combinations of old and new proportions and details; the very basic elements that determine the architectural style. The degree of authenticity depends largely on the architectural and historical significance. Such determination should be made through thorough studies, investigation, research, and evaluation. This is a very involved process, therefore, very time consuming.

Should the architect choose to prepare construction document for the restoration of a building, as is commonly practiced, he will find it necessary to specify special conditions in the documents allowing more flexibility for field decisions by the architect during construction. Unfortunately, the combination of added research time during preparation of the construction documents and added inspection time required during construction tend to increase costs incurred by the architect. Furthermore, because contractors need to anticipate known conditions requiring the architect's decisions during construction, projected cost by the contractor may also be high. Based

on the author's involvement in restoration projects, the following steps have proven to be extremely useful:

1. After determining the authentic architectural character, thoroughly research the construction methods used to achieve such characteristics.
2. Investigate and separate the identity of the original structure from elements added on but foreign to the architectural characteristics of the structure. Record these elements.
3. Prepare a demolition plan that graphically shows removal of add-on elements. It is important to be doubly sure that these elements are non-load bearing.
4. Along with the demolition plan, prepare specifications to ensure careful removal of add-on elements without damaging elements to be preserved.
5. Work closely with the demolition contractor selected for this phase of the contract to further ensure careful execution of specified work.
6. During and upon completion of work, further inspect revealed conditions to determine signs of structural fatigue, potential solutions to installing safe mechanical and electrical equipments, and solutions for required modifications to bring the structure up to local building code.
7. Based on cumulation of researched information, prepare plans and documents for restoration and/or

reconstruction of the structure.

8. During the construction phase, anticipate frequent on-site decisions requiring more than usual field or change orders.
9. During and upon completion of the construction phase, record and complete all changes in the plan due to on-site decisions. This will provide the owner with a set of "as-built" drawings, recorded for future references.
10. Prepare a maintenance schedule for the owner.

As related to the architect's professional responsibilities, the process above is consistent with accepted practices. The architect's responsibility is for the entire operation, which includes continuing research as well as architectural work. Such centralization of responsibility ensures continuity in the process and will prove economical to the owners or the sponsors in the long run.

Another way to cut down costs is by advising the owner to avoid negotiating a lump sum contract with a contractor. Contractors generally suspect too much unknown and tend to over-estimate to cover unknown costs. A lump sum contract is seldom equitable to either the owner or the contractor. The fact that no amount of drawings or specifications may adequately cover information sufficient for either competitive bidding or adequate advance estimate, strongly suggests that a contractor for the execution of a restoration project should be paid on the basis of actual expenditure of time and material to complete the project. This will place an added construction

management responsibility on the architect. Despite all the suggestions noted thus far to minimize costs, anticipated unit cost of restoration are nevertheless normally higher than most construction projects.

RESTORATION AND BUILDING CODE

According to most local building codes and ordinances, remodeling of more than 50 percent of a building will require complete compliance with the building code. On any restoration project, therefore, the need to comply with local building code frequently requires sacrifices in the authenticity of the finished work. Problems differ with each project, and the importance of architectural integrity should be carefully evaluated against hazards to public health and safety "...When an existing building is assigned new purpose or uses, it becomes the responsibility of the authorities to assure public that the structural and safety characteristics...are adequate for new uses."⁷ This may result in either architecturally compatible modifications or reasonable relaxation of the local building code.

In meeting Uniform Building Code some of the most serious problems are caused by modifications necessary to provide acceptable means of egress. Often, open stairways must be enclosed, additional flights added, stair winders removed, exits widened, and direction of door swings reversed outward.

Structural systems, even in good condition, may not meet the rigid live load requirements of the Uniform Building Code. The most common misconception concerning older structures is that they were over-designed, and would carry a heavier load than is required. In most cases, this is only partially true. It is

⁷National Trust for Historical Preservation; Giorgia Cavaglieri, Preservation and Building Codes. page 15.

very likely to find a weak link in the structural system. For example, a building may have been constructed with footings, masonry walls, and floor joists adequately sized and distributed to withstand 100 pounds per square foot of live load, yet it may be found that a girder supporting the joists may be adequate for no more than 50 pounds per square foot of live load. This points to two corrective measures: First, replace or reinforce the girder to increase its load capacity. Second, restrict the use of the building to those allowed under 50 PSF.

If a building is determined through research to have valuable historical and architectural significance, certain building code restrictions in relationship to proposed uses will require evaluation for possible reasonable relaxation of literal code application. "The necessity of conferences between building officials and design professionals...cannot be too strongly emphasized. Often, project architects are unaware...of the possibility of conferences with other city and state agencies having jurisdiction over safety, to arrive at mutual solutions."⁸ For this reason, local building officials should be invited to actively participate in the evaluation process, in which each code requirement should be evaluated for its intent rather than literal interpretation. This takes creative approach both on the part of the building officials and the owner and his architect. For example, if architectural integrity of a building with significant character

⁸National Trust for Historical Preservation, W. I. Kelly, Preservation and Building Code.

will be unreasonably sacrificed to meet a strict code requirement for enclosed and fire protected stairway, a reasonable compromise may be substituted with an automatic sprinkling system, plus smoke detection system that will automatically activate a well concealed mechanically operated ventilator. The two basic safety hazards of fire and smoke will thus be controlled and the architectural authenticity maintained. This egress problem is pointed out because it is most likely the first one to be confronted. Depending on the use, there are numerous code restrictions such as mechanical, electrical, minimum bathrooms, door widths, area of window openings, emergency accesses, and most recently provisions for the physically handicapped. Literally interpreted, some or parts of code restrictions may prove to be unreasonable. Selected code relaxation and reasonable substitution should be carefully evaluated. It is important to realize that the degree of latitude that may be exercised by a building official is considerably greater than is popularly credited by those in the design profession. Keep in mind that when given the proper conditions, most building officials prefer to be more imaginative in their interpretation of the building code. Too often the design profession views the building officialdom as its adversary. Much of this problem may be alleviated by frequent consultation, allowing ample time for the building officials to evaluate both the merits and disadvantages of a given problem. In most instances, building officials tend to emphasize literal application of the building code under two basic conditions: first,

if that part of the code has been historically proven as absolutely necessary, and that variation or relaxation would present unacceptable safety and health hazards. Second, if the designer does not properly consult with the building official before requesting for a building permit, forcing the official to make decisions without thoroughly understanding all the problems and evaluate possible solutions. Not much may be done to change the first condition, but the second condition is more open-ended requiring good communication and judgment both on the part of the designer and the building official.

PRESERVATION: PARTIAL RESTORATION

As is often the case, most people do not have the financial capability to completely restore a building. This is especially true in Cherryvale C.B.D., where retail activity level is relatively low. The fortunate consequence from this low level of retail activity is that most buildings built in the late 19th Century still maintain their original characteristics, without the superficial aluminum or other applied fake fronts. This set of conditions is true in many cities noted for historical preservation:

"Since affluence caused our wastefulness, one great source of architectural wealth is in cities that suffered financial reverses and simply could not afford the building booms that wiped out their earlier structures. Charleston, South Carolina, Savannah, Georgia, and Natchez, Mississippi were all fantastically wealthy prior to the Civil War and destitute afterward."⁹

The most viable alternative to total restoration is partial restoration or preservation. This alternative is important for several reasons:

1. Assuming a building is structurally sound, initial restoration efforts should be directed toward weather stripping for protecting the building and cosmetic treatment on the exterior for improved visual effect.
2. By initially working with treatments that will protect the building, the structure will be preserved for restoration efforts in the future.

⁹Deirdre Stanforth, Praeger Publishers, New York, Restored America, page 16.

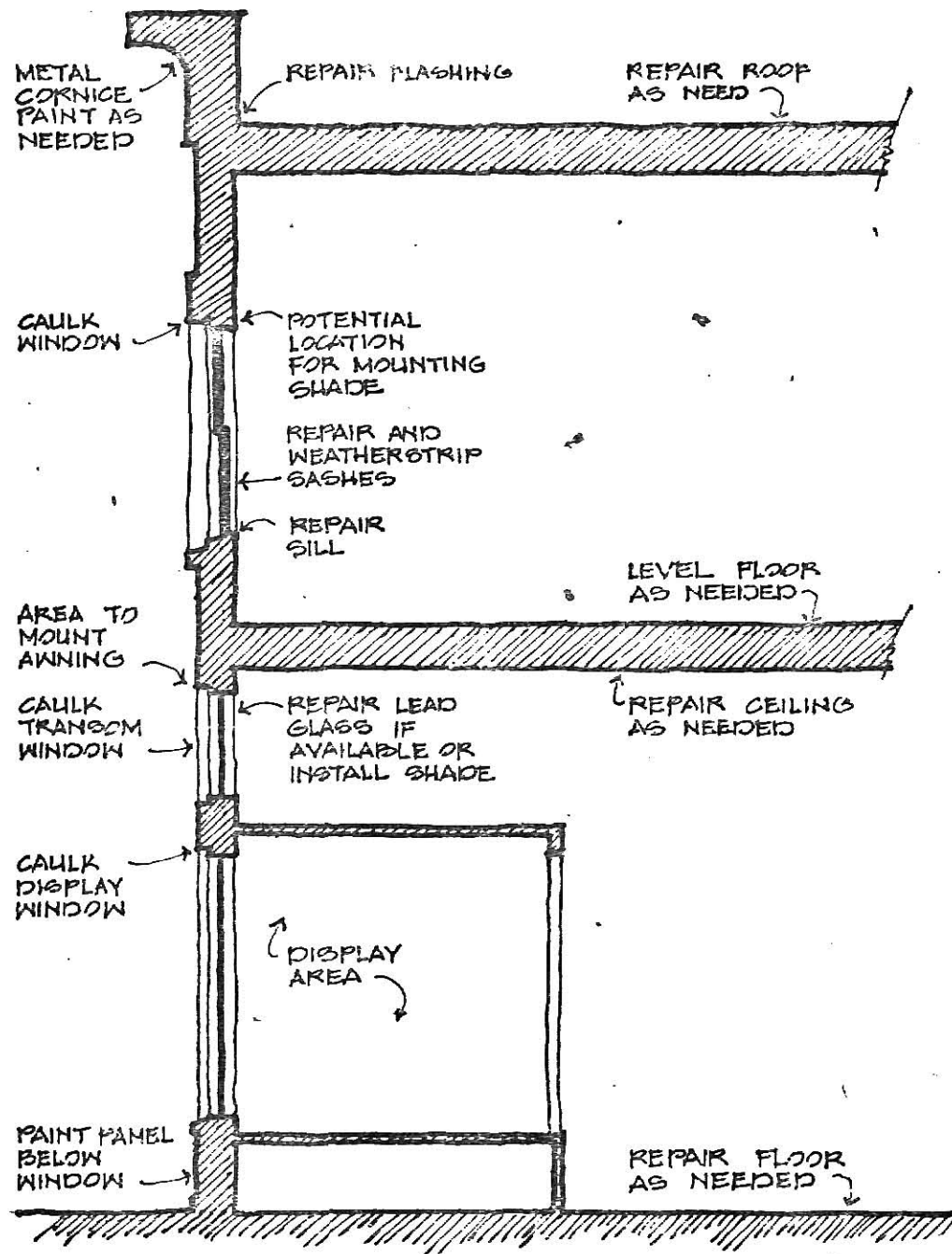
3. Should most of the owners and tenants invest in the modest cost for cosmetic treatment to the building exterior, the C.B.D. as a district will present a fresh attractive appearance, drawing potential shoppers.

Partial restoration is, therefore, important as a method to generate a C.B.D. rejuvenation process. It is unrealistic to expect immediate change in the retail characteristic by beautifying C.B.D. Through hard work and good leadership, new images for C.B.D. should be an important catalyst for the process. Simplified, this process includes two elements; increased sales attraction and eventual building restoration maintenance program and are illustrated in the following diagram. This approach requires a modest initial investment. Considering the potential to generate growth and activities, the possible result is well worth the gamble.

SCOPE OF WORK

As indicated in the earlier survey, the buildings in consideration have been found to be in good structural condition. Based on this survey, partial restoration should include the following scope of work as partially shown in Figure 19, and listed below by priority.

1. Moisture and Thermal Protection: This is the first step in the preservation of any building. Without this work, existing and improved interior substructures are vulnerable to water damage. Work involved includes the following:
 - a. Roof: Inspect the condition of the roof. (Build up roof in most instances.) Repair any damaged sub-roofs and recondition the roof. Replace and/or repair flashing as part of the roof and brick wall repair.
 - b. Repair or replace gutters and downspouts.
 - c. Windows and doors: Doors and windows must be reglazed, weatherstripped, and broken glass replaced. Most of the problems occur on the upper levels, where the spaces are generally not in use and neglected. Specifically, upper level windows require repair to the sills and sashes, the two areas most likely to collect moisture. After repairing these openings, exposed woodwork must be scraped and sanded, then primed and painted



TYPICAL STOREFRONT SECTION

Figure 19

for protection from further deterioration.

2. Recondition exterior brick wall surfaces: Based on a previous survey, the exterior brick walls are found to be in good condition, which means two things: The face brick section (exterior veneer) is still well tied to the structural brick; and that the mortar joints have not deteriorated beyond repair. The best method to recondition the brick may be accomplished through the following steps:
 - a. Replace or repair damaged face bricks.
 - b. Sandblast face brick. In doing so, extra caution should be exercised to prevent decomposing too much of the brick through over-blasting. Workmen should be cautioned to keep his equipment within tolerable pressure and far enough to achieve an even texture.
 - c. After sandblasting, should the cleaned brick surface be found to carry too much variation in the color, the brick may be lightly stained to achieve a uniform color.
 - d. Alternative to sandblasting is water blasting. Water blaster will effectively remove most grimes and paint, but will leave minimum damage to the glazed surface of the face brick. Even though some equipments are capable of building up a head pressure of 10,000 PSI, 6,500 PSI should be adequate

to clean off up to three layers of paint.

- e. Steam cleaning along with wire brushing is frequently used for removing dirt and grime accumulated over the years. This method is not effective for removing paint, but is useful in cleaning non-painted brick surface. For periodical maintenance purpose, this method is highly recommended.
- f. Muradic Acid and wire brushing may also be used for cleaning. This is especially applicable near industrial areas where smoke stains need to be removed.
- g. Tuck-pointing should take place after reconditioning the brick surface by any of the above methods. In tuck-pointing the face brick, an investigation should be made as to the type of brick and the mortar joints used. In most of the cases, dry-pressed bricks were used. Joints used in laying dry-pressed brick are only 1/8-inch as opposed to 3/8-inch. Because of this, a portable brick saw is recommended for cutting into the existing joint before repainting. (Blade widths are only 1/8-inch).
- h. After tuck-pointing, two coats of clear silicone sealer should be applied to protect the porous brick.

3. Recondition Exterior Stucco: Stucco surfaces are easily patched and painted. In patching stucco, the texture must be uniform with existing surfaces.

4. Replace hazardous space heaters. As noted in previous survey, many of the buildings are heated by non-vented space heaters. This type of heating system presents a health hazard by burning up oxygen in the building, exposing inhabitants to the danger of carbon monoxide poisoning. The first corrective step is to install a vent. Should it become financially feasible, a new forced air system is recommended to provide air handling flexibility for both temperature and humidity control.
5. Electrical System: Electrical system should be upgraded to meet the electrical code. In most cases the most important step is the replacement of the main circuit breaker panel to provide at least a 100 amp. capacity and to expand branch circuits. The second step is to provide boxes for all fixtures and switches. These are important improvements because most fires caused by faulty wiring are due to either overloading an improperly sized circuit or by sparks from loose wiring connections not protected by a metal box.
6. Upgrade plumbing: In most buildings plumbing systems are often inadequate due to old lines and equipment. Hot water heaters should have safety valves to prevent dangerous pressure build-up. Old lines are frequently plugged due to calcium build-up. As a general rule, cost may be minimized by initially replacing only the horizontal hot water lines where most build-up

tends to settle. Second most likely plugged lines are the horizontal cold water lines, including the supply line from the meter. Vertical lines are likely to be free from clogging.

7. Bathroom improvements: With the improvement of rough plumbing, the building is ready at any time for additional bathroom facilities. Most of these buildings are equipped with only one bathroom. Depending on the occupancy, some of the buildings will require separate facilities for men and women. Bathrooms should be redesigned to include good ventilation, conveniently located waste dispensing equipment, and easy to care for walls and floors.
8. Ceiling: In most of the existing buildings, old stamped metal ceilings are still in place, and are found to be in good condition. These ceilings should be preserved and reconditioned where possible. Repair methods include pounding each deformed metal back into shape, fill and smooth out the repaired surface with plaster, then paint the ceiling. Since the ceiling is seldom touched, such treatment should last a considerable long period of time. Unless it becomes absolutely necessary to provide a definite function such as providing room for a duct system, suspended ceilings should be avoided in order to maintain the original proportion of the space.

9. Walls: Treatment of wall surfaces varies from one building to another, depending on the condition of the existing wall and the desired effect. The following is a list of possible treatments:
- a. Should the lath and plaster wall system be found to be in good condition, the plaster should be patched.
 - b. If the plaster surface is found to have been damaged beyond repair, it should be removed and replaced with gypsum board, which will achieve essentially the original effect as the original surface.
 - c. An alternative to a finished surface is to remove all lath and plaster, including inlaid wood joints in the brick used to anchor wood lath. Exposed brick should be repointed and protected with a clear sealer. This method capitalizes on the charm and warmth of the brick wall.
 - d. A second alternative is to selectively replace plaster surface with paneled wood. This method is used to accent certain walls by contrasting texture and color. The use of simulated wood paneling will appear superficial, however, and is not recommended. These should be solid wood panels to be stained and varnished.

10. Floors: On the first floor, floor tiles may be given a new look by simple cleaning. Should the floor be worn out and require new surface, vinyl tiles on tempered masonite underlayment, carpet, or new wood flooring with required wood sleepers are all good alternatives. The choice of flooring and colors, however, should be carefully evaluated for its compatibility to wall finishes and color schemes.

It would be unrealistic to expect an owner to execute a restoration project in its entirety. For the best impact on C.B.D. and for the purpose of protecting each building, moisture protection and exterior treatments should be initially emphasized.

EXTERIOR DESIGN APPROACHES

The most important exterior improvement is the reconditioning of brick or stucco surfaces as described in the previous chapter. Beyond this, additional cosmetic treatments include window treatments, highlighting of ornamental details, and well coordinated graphics system. The purpose of this chapter is to propose conceptually alternate design themes for the C.B.D. that will capitalize on the charm of existing architecture, as well as design elements to complement and enhance the physical environment. The design treatments are listed as follows:

1. Basic Wall Treatment: The charm of an old storefront is first made up of the basic proportion of the building in combination with the windows and doors. (Figure 20) As stated by George Stephen relating to these elements: "The....group of elements could best be described as 'qualities', which results from the manipulation of the five primary elements of point, line, plane, mass, and space, and are of utmost importance in determining the general character and design character of the building. They are: proportion, solid-void relationship, scale, emphasis, directional emphasis, rhythm, effect of light and shade, and balance."¹⁰ It is therefore important to

¹⁰ Remodeling Old Houses Without Destroying Their Character;
George Stephen, February 23, 1974, Alfred A. Knopf, Inc.

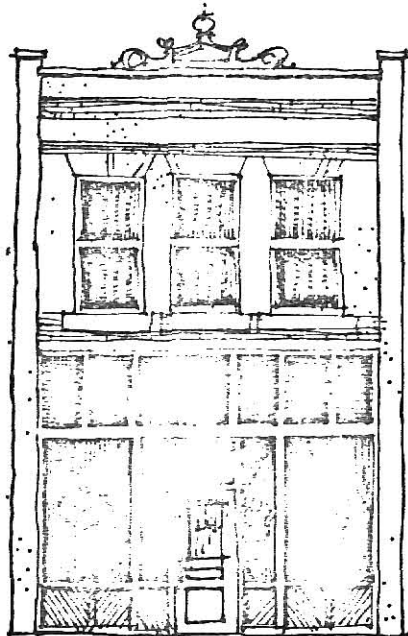


Figure 20

TYPICAL TURN-OF-THE-CENTURY STOREFRONT:

TYPICAL FACADE OF A STOREFRONT IS EMPHASIZED THROUGH VERTICALITY THAT RANGES FROM A 2 TO 3 PROPORTION TO A 1 TO 2 PROPORTION.

ANY PROPORTION THAT STRETCHES HORIZONTALLY PAST THIS PROPORTION

WILL IN ESSENCE ESTABLISH A SET OF RHYTHM MADE UP OF THE BASIC MODULE.

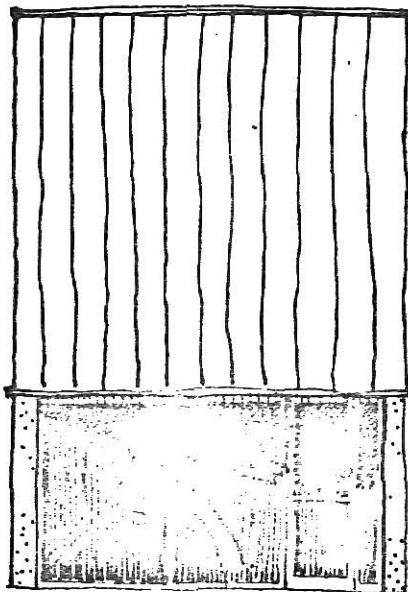
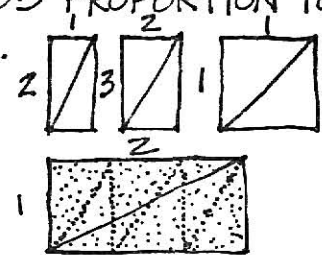


Figure 21

ALUMINUM STORE-FRONT ?

ATTEMPTS TO MODERNIZE A STOREFRONT COMPLETELY CONCEALS THE CHARM OF THE ORIGINAL DESIGN. FURTHERMORE, TREATMENTS SUCH AS ALUMINUM STORE-COVERS UP SECOND STOREY WINDOWS, IGNORING THE RE-USE OF UPPER LEVEL SPACES. ATTACHING ALUMINUM FACADE ADDS DEAD WEIGHT TO POTENTIALLY HAZARDOUS AND DETERIORATED WALLS.



Figure 22

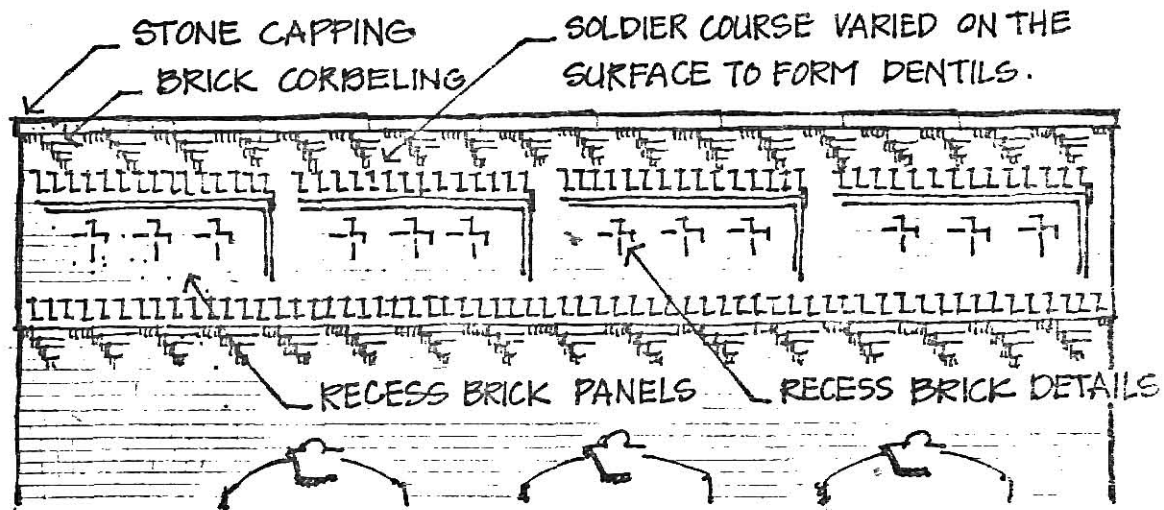
REMODELING ?

IF A BUILDING SHOULD BE UPGRADED, DON'T WASTE THE INVESTMENT IN THE WRONG PLACES.

emphasize the integrity of the building structure by not covering the wall surface (Figure 21 and 22) either partially or in its entirety with wall covering foreign to the original structure. This emphasis is particularly directed against the use of aluminum store fronts. Frequently, in efforts to create a new look, aluminum surface has been used to completely cover the building to create a "new look". In some cases, only the lower level front is given this treatment. In either case, the basic building design has been bastardized beyond recognition. Aluminum fronts also add weight on masonry walls that may still require repair. In essence, covering a problem does not solve the problem. Furthermore, such treatment makes second level floor spaces non-usable.

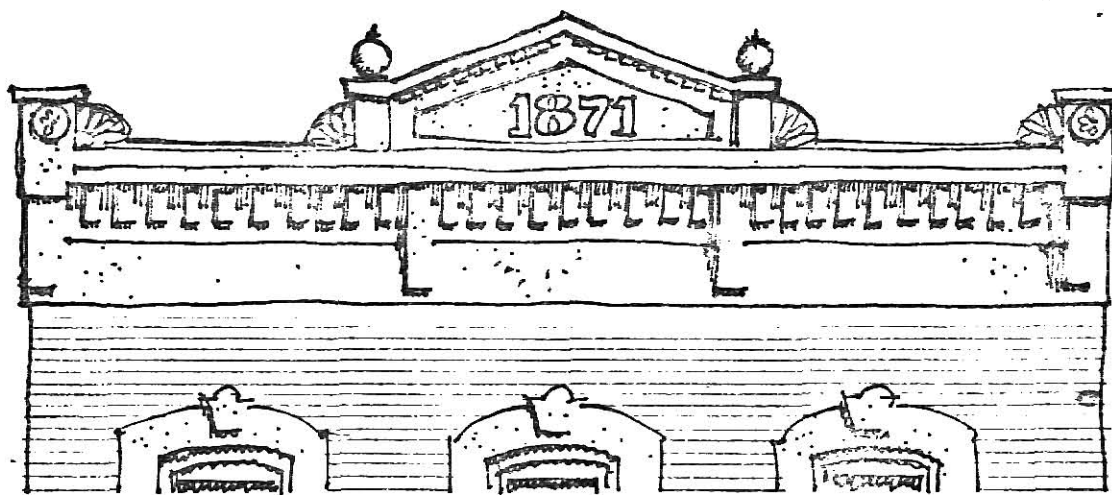
2. Enhancement of exterior wall surfaces: The enhancement of exterior wall surfaces may be accomplished by the use of reliefs on wall surfaces, color accent, light fixtures and sign systems.

- a. Accent of brick coursing: One of the most common treatments on exterior brick surfaces is the indentation and cobbling of brick work. The beauty of this treatment is achieved by creating relief with the uniform brick texture to break up the flat surface and to crown the parapet wall as shown in Figure 23. This kind of accent is effectively brought out by deeply



THE RELIEVES IN THE BRICK WORK ARE EMBELLISHED BY THE FORMATION OF SHADOW PATTERNS.

Figure 23



APPLIED METAL CORNICES FABRICATED OUT OF ZINC COATED SHEET METAL ARE FREQUENTLY USED TO CROWN THE PARAPET WALL. THESE CORNICES ARE RICH IN DETAILS WITH ACCENTUATED BRACKETS. APPLIED COLOR ACCENT IS STRONGLY RECOMMENDED.

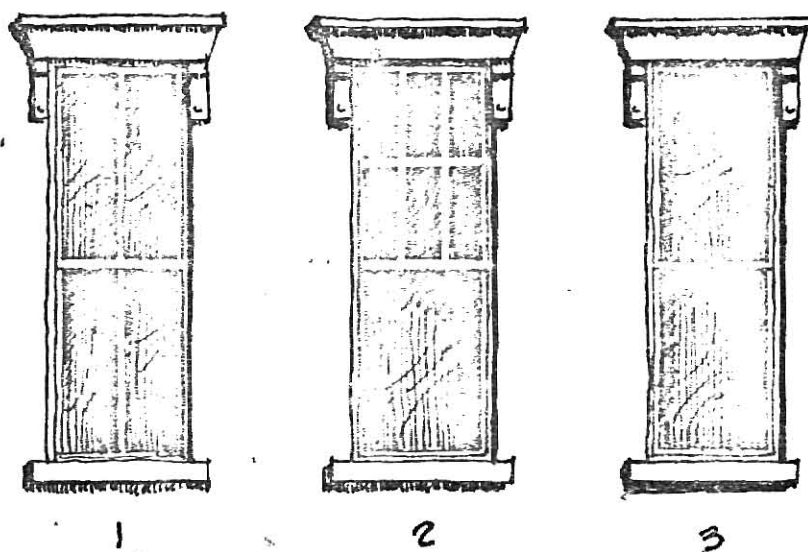
Figure 24

casted shadows requiring no variation in the color for accent details and relief areas. Considering the natural beauty of brick, these details should not be superficially accented by applied colors. If the condition of the brick is found to be poor, however, paint may be used as the very last alternative.

- b. Metal cornices: As shown in Figure 24, applied metal cornices are used on some buildings to crown the storefront parapet wall. These cornices are mostly fabricated out of zinc coated sheet metal rich in detail and require painting for both protection and color accent. Fabricated metal is one of the elements on the building where color should be applied to accent or compliment the brick surface.
- 3. Windows and doors: The building mass would be visually boring without fenestration. In these old storefronts, double hung sash windows on the upper level, the fixed display windows, and the entry doors on the street level should be capitalized both to compliment and enhance the appearance.
 - a. Upper level windows: The upper level windows are attractive, other than the function, by cutting down the massiveness of the building establishing a series of well proportioned visual rhythm. Windows on the upper level are double hung windows with stone headers and sills. The most prominent characteristic of

the nineteenth century window design is in its verticality (Figures 25 and 26). This characteristic is due in part to the construction technology of the period, where flat headers on windows and doors were constructed with limited spans, and is also due in part to the higher ceiling. Wider windows would have arches to transfer the masonry dead load (Figures 27 and 28). Another reason is due to the lower quality of glass made during that period, limiting the size of window panes. In addition to the basic narrow vertical windows, other treatments include muntins, generally vertical, to cut down the effective widths of the panes. In any case, the window proportion should not be altered in the restoration work. Other than repairing and painting the windows, color shades in the windows will help accent the appearance of the building.

- b. Display Windows and Entry Door: The lower level fenestration serves a uniquely different set of functions, including identification, advertisement, and inviting entrance for potential customers. Within the combined fenestration of display windows and doors, important elements include the transom, proportion in the use of muntins for the display windows and the use of doors.

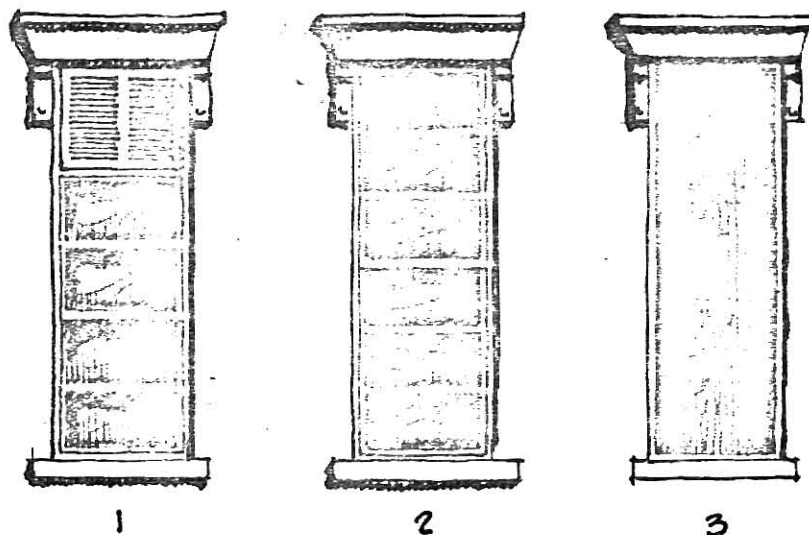


TYPICAL VERTICAL DOUBLE-HUNG WINDOWS:

1. CENTER MUNTINS ARE MOST COMMONLY ENCOUNTERED.
2. UPPER SASH IS FREQUENTLY DIVIDED INTO SEVERAL VERTICALLY PROPORTIONED LIGHTS
3. WHEN THE WINDOW IS NARROW AND VERTICAL, MUNTINS MAY NOT BE NECESSARY.

TYPICAL UPPER LEVEL WINDOWS

Figure 25

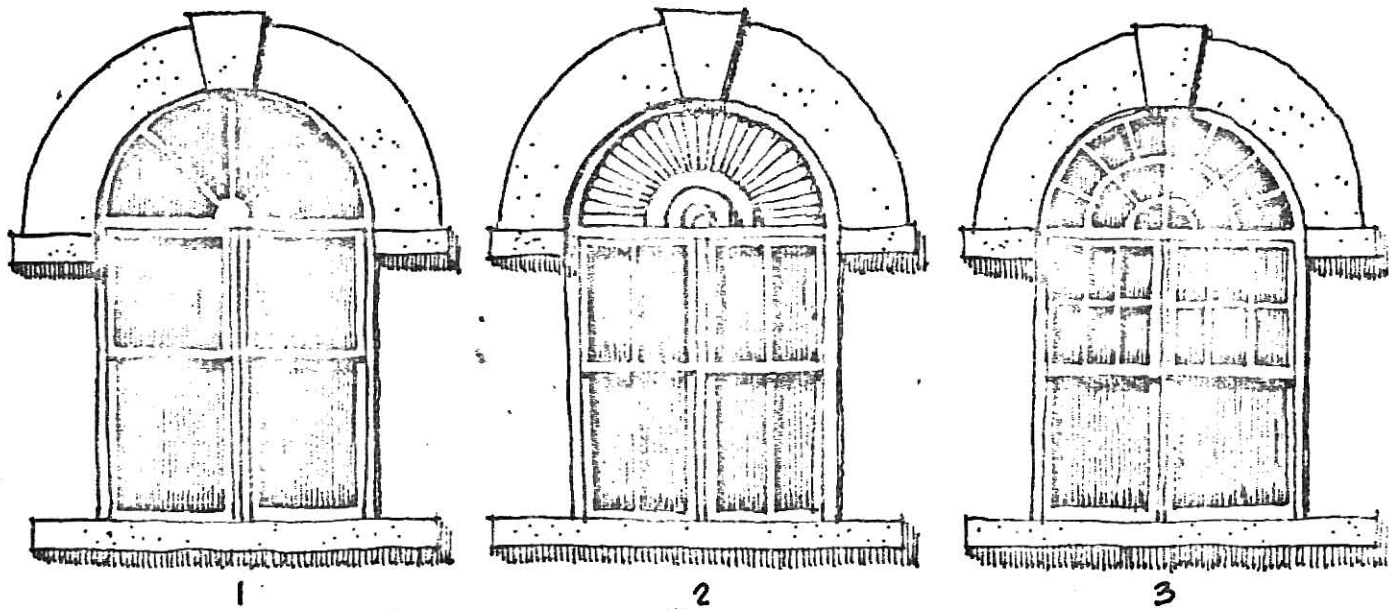


REMODELING THAT MAY CHANGE THE CHARACTER

1. LOWERING THE WINDOW DISTORTS PROPORTION.
2. HORIZONTAL LINES DISTORT THE VERTICALITY.
3. FIXED GLASS LEAVES OUT DESCRIPTIVENESS OF THE WINDOW, AND IS INCOMPATIBLE WITH THE DETAIL RICH WINDOW

INAPPROPRIATE WINDOW REMODELING

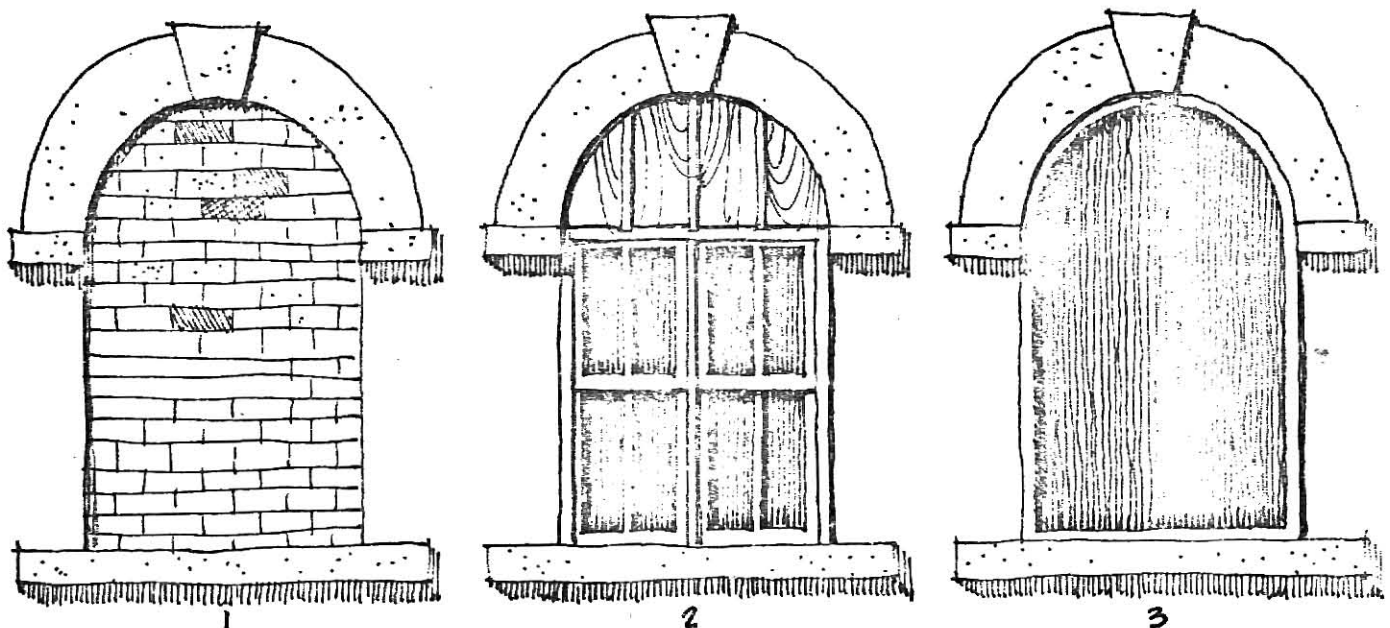
Figure 26



1. SIMPLE DOUBLE WINDOWS VISUALLY TIED WITH SEMI-CIRCULAR LIGHT.
2. FIXED OPAQUE PANELS SHOULD BE COMPATIBLE WITH THE FORM.
3. MUNTIN DIVISIONS IN THE ARCHED AREA SHOULD BE COMPATIBLE TO THE SASH

TYPICAL ARCHED WINDOWS

Figure 27

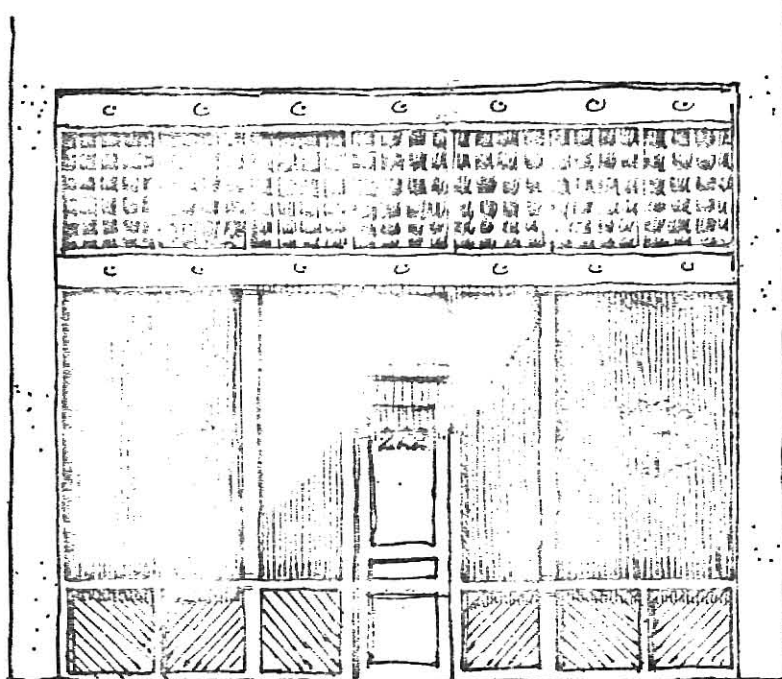


1. BRICKING-IN WINDOWS VISUALLY DESTROY FENESTRATION.
2. INCOMPATIBLE PANEL IN THE ARCHED AREA.
3. FIXED GLASS IS OUT OF CHARACTER.

INAPPROPRIATE ARCHED WINDOW TREATMENT

Figure 28

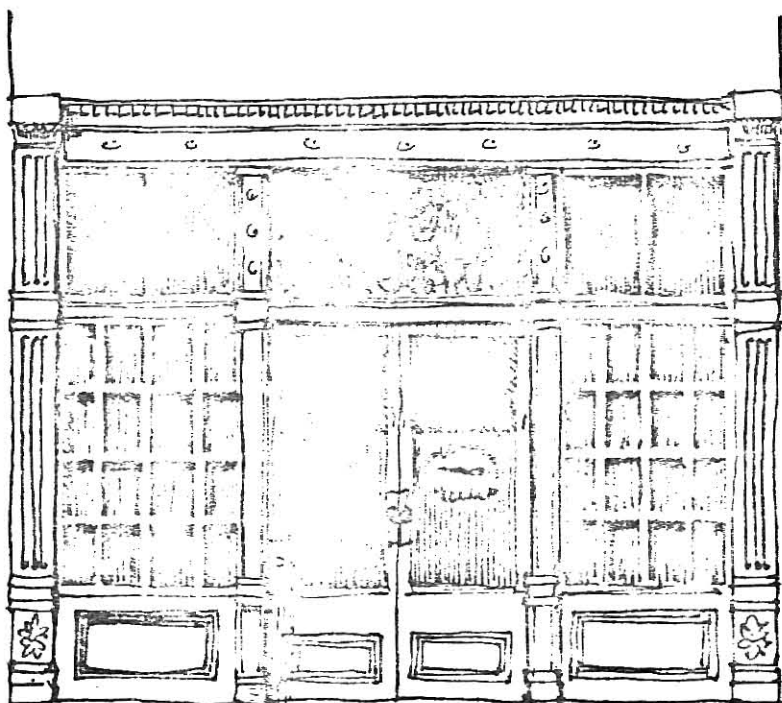
The use of color is an important method to bring attraction to the storefront. The choice of color scheme may be either complementary or analogous, but it is important to grey the colors so that the combination of colors may better blend together. In picking out colors, it is also necessary to be cautious in trying to duplicate the original colors of the building. Keep in mind that the choice of paint colors at the turn of the century was quite limited by technology, and that very little variation was available at that time. With the greater spectrum of colors to choose from today, the designer may exercise greater options to achieve the ultimate appearance. There are also several ways to make display windows more attractive and in keeping with the architecture of the period (Figures 29 and 30). These include the use of muntins, well proportioned panels below the windows, or well designed signs on the windows. The transoms have often been covered up over the years with boards. Sometimes, these boards cover original leaded glass in the transom. These windows should be restored to their original condition. Furthermore, transom windows are



TYPICAL STOREFRONT IS GENERALLY SPANNED BY A BEAM AND DECORATED WITH ROSETTES. LEADED GLASS IS COMMONLY FOUND IN THE TRANSOM. DOOR AND WINDOW PROPORTIONS COMPLEMENT EACH OTHER, PARTICULARLY IN THE BOTTOM PANELS.

TYPICAL STOREFRONT WITH RECESSED ENTRY DOOR

Figure 29



MORE ORNAMENTAL DETAILS ARE ACHIEVED BY THE USE OF CAST-IRON COLUMNS RICH IN DETAILS. DISPLAY WINDOWS MAY EMPLOY VERTICALLY PROPORTIONED MUNTIN DIVIDED LIGHTS.

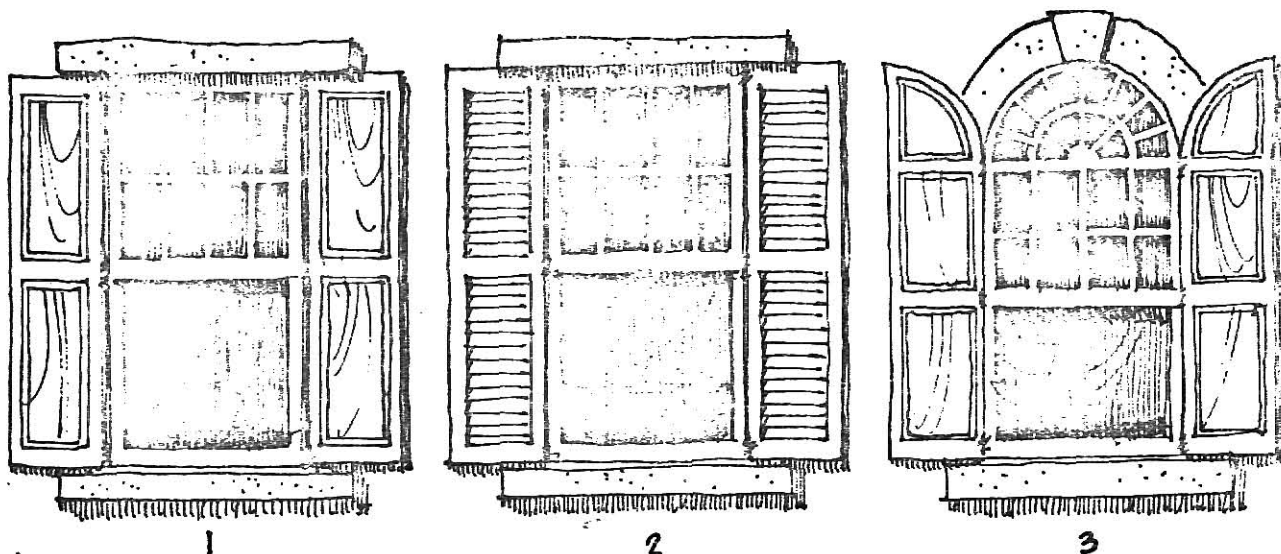
TYPICAL STOREFRONT WITH FLUSHED ENTRY DOOR

Figure 30

important in achieving the correct proportion in the relationship between the tall building mass and the lower level fenestration, yet at the same time providing human scale of 8' = 0" entrance and display windows below the transom height. This combination of entrance height and transom window provides the necessary charm that is an important part of the building character.

4. Applied embellishments: The basic proportion and detail on the windows, headers, and sills contribute to the overall charm of the building. These elements may be further embellished, however, by applied embellishments, which include the following:

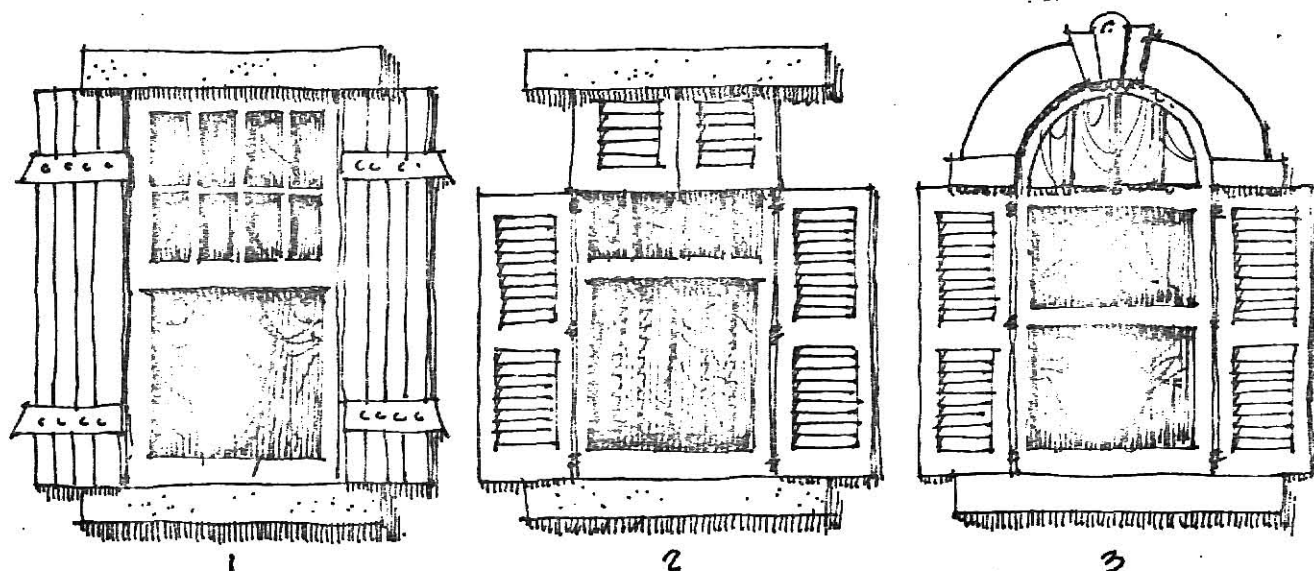
- a. Shutters: Many of the windows were originally designed with operable shutters. Over the years, with use of climate control inside buildings, shutters are no longer in use. In recent years, people are beginning to recognize the visual beauty of shutters as dress-up elements. In essence, the application of shutters contribute to the visual quality in two ways: First, shutters add accent and color to facades. Secondly, the shutters will effectively frame and enhance the windows. In selecting shutters, it is extremely important to use the correct style and proportion that 'fits' each series of windows (Figures 31 and 32). Vertical and diagonal



1. PANELED SHUTTERS PROPORTIONED TO COMPLIMENT SASHES.
2. LOUVERED SHUTTERS PROPORTIONED TO COMPLIMENT SASHES.
3. PANELED SHUTTERS PROPORTIONED TO COMPLIMENT SASHES AND ARCHED AREAS.

EXAMPLES OF APPLIED SHUTTERS

Figure 31



1. SHUTTER OUT OF CHARACTER.
2. PROPORTION OF WINDOW DETRACTED BY DIVIDED SHUTTERS.
3. SHUTTERS SHOULD COMPLIMENT THE ENTIRE WINDOW, NOT JUST A PORTION.

INAPPROPRIATE SHUTTERS APPLICATION

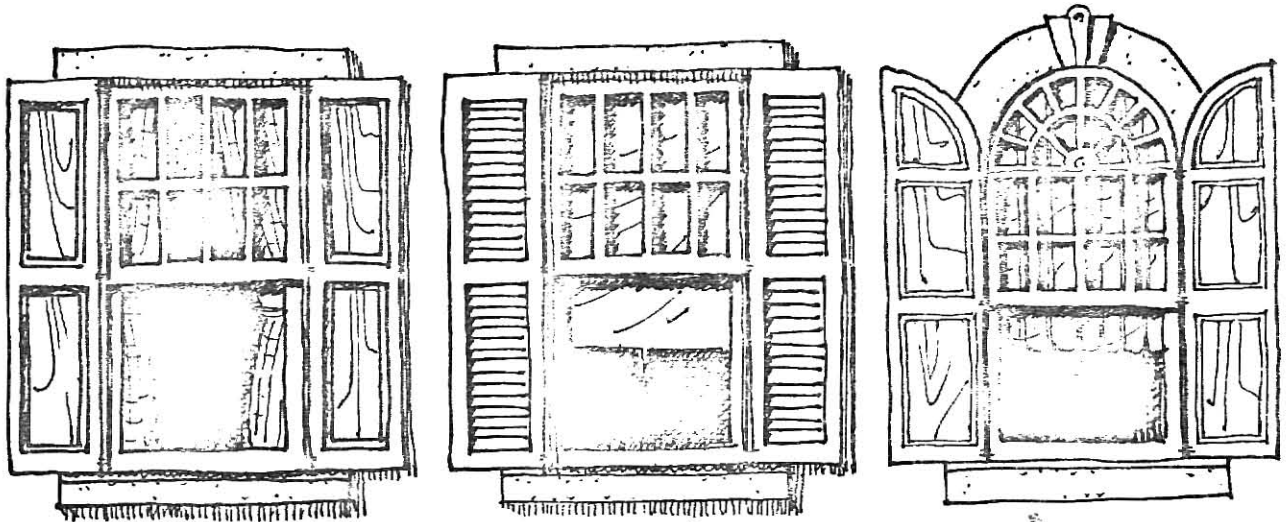
Figure 32

shutters are out of character, and should be avoided. Shutters should also appear to fit the windows: each side of the shutter should be half the width of the window.

b. Shades: The use of colorful shades behind the windows is an effective application to accent the windows (Figure 33). Since the second floor is seldom used, the shade should be drawn about two-thirds of the way down, but never all the way down. This will give the appearance that the second floor is being used, yet taking maximum advantage of the colorful effect from the shade.

c. Awning: If a facade is oriented toward the west or south, the use of canvas awnings is recommended (Figures 34 and 35). Over the years, aluminum awnings became available on the market and have been widely used. Despite its functional effectiveness and durability, aluminum awnings are visually too rigid and are out of character with storefronts under discussion. Canvas awnings add color and visually 'soften' the facade. Furthermore, the strong shadows cast by awnings create contrast that accents the facade.

5. Fixtures and Signs: Light fixtures and signs are add-on elements to the building that serve two extremely important functions: illumination and identification. It needs to be pointed out that most

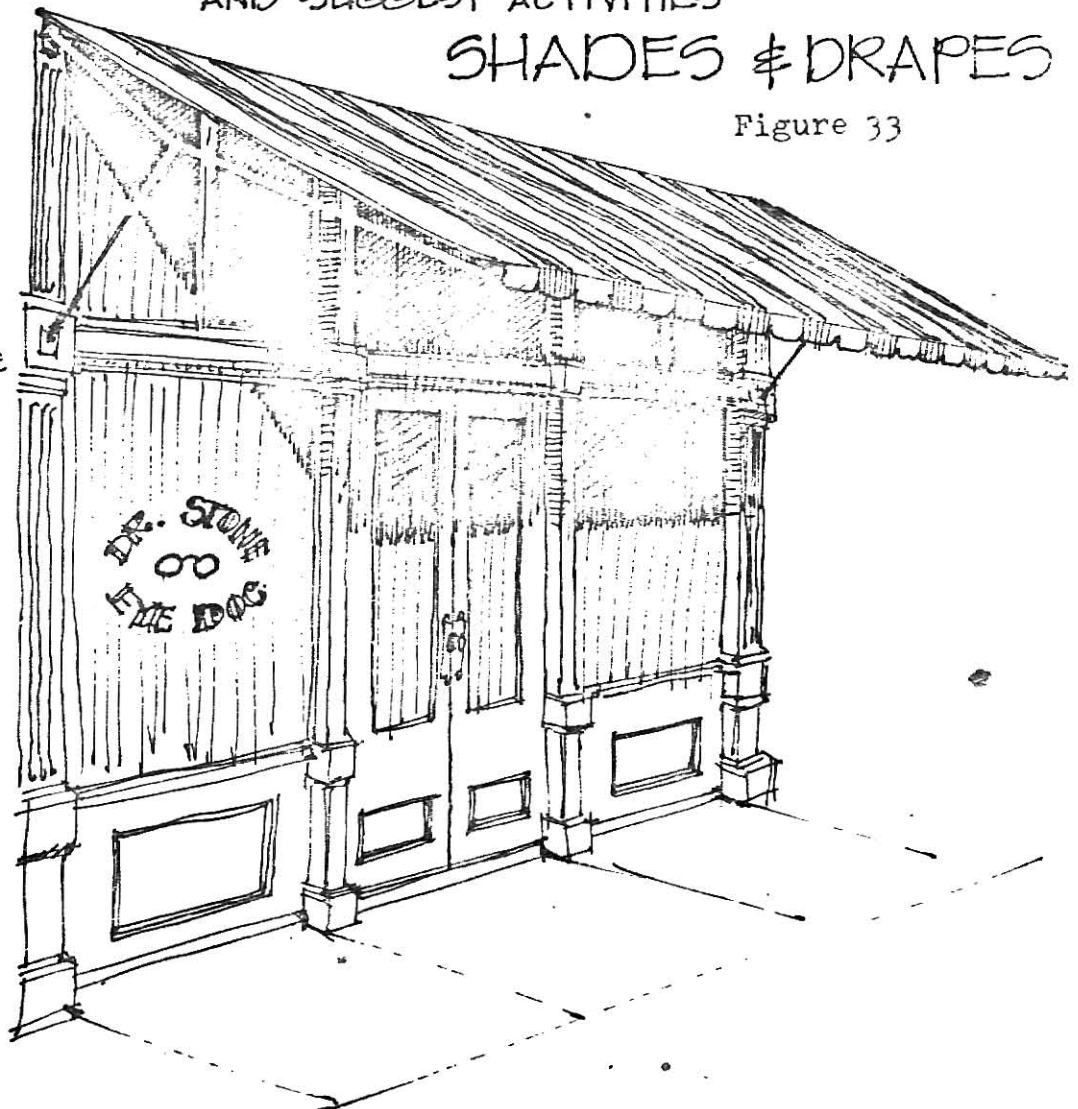


DRAPES AND SHADES ACCENT WINDOWS
AND SUGGEST ACTIVITIES

SHADES & DRAPES

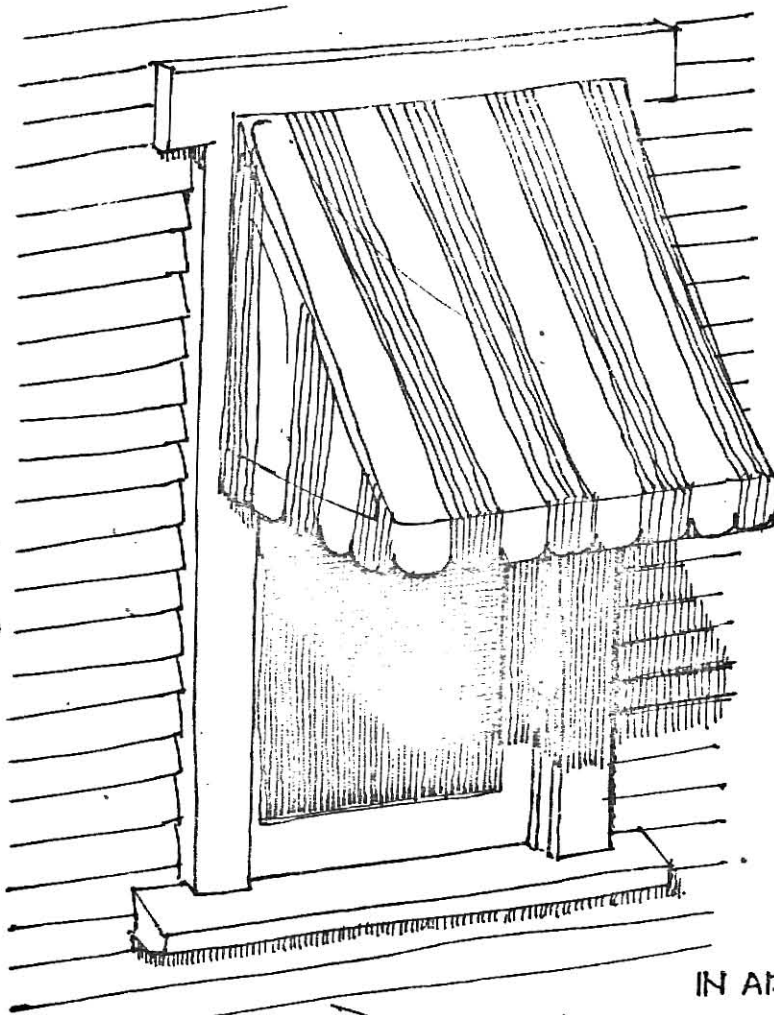
Figure 33

AWNINGS
PROVIDE SHADE
FROM THE
SUN, ACCENT
THE STORE-
FRONT BY
ITS COLORS,
AND VISUALLY
SOFTENS
THE BUILDING
ENTRANCE.

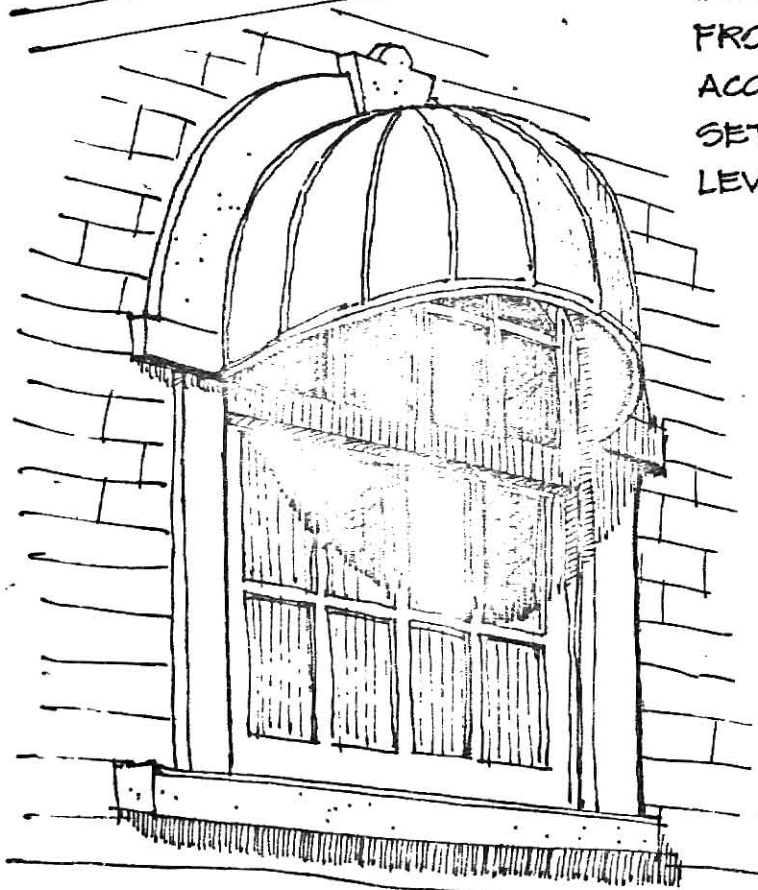


STOREFRONT AWNING

Figure 34



IN ADDITION TO SHADING
FROM DIRECT SUN, AWNINGS
ACCENT THE RHYTHM
SET BY THE UPPER
LEVEL WINDOWS.



.TYPICAL WINDOW AWNINGS

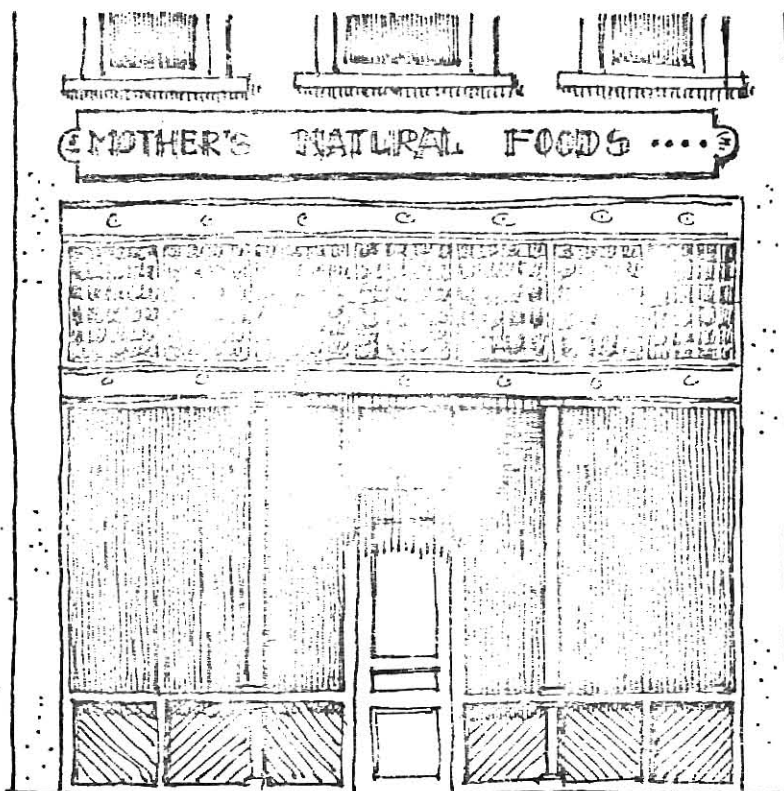
Figure 35

storefronts are generally similar in proportion and details, leaving the use of color scheme on doors and windows as identification elements. This is not adequate, and the method of identification through the use of signs is necessary. Light fixtures are needed for illumination and accenting part of the building at night. These fixtures should be well designed and strategically located to both achieve maximum illumination and the cosmetic charm highlighting the exterior walls both at night and in the daytime. The purpose of this chapter is to explore signs placements and types of light fixtures that will best achieve the functional purpose and at the same time visually embellish the building.

- a. Signs: When well proportionally designed signs can be effective for communicating general information, direction, and advertisement on the storefronts, there are several strategic locations where signs may be located. One of the poor sign locations commonly seen is the cantilever sign out-stretched from the building. This location disrupts the basic geometry of the building. Furthermore, when each of most of the storefronts hangs a cantilevered sign, these signs create a clutter and the effectiveness of each sign is

is diminished. The most appropriate location for identification signs on a storefront is directly above the transom (Figure 36). Any sign above the transom should be more appropriate if the total framework of the sign were within the same proportion of the transom. Smaller framework may be appropriate if it were carefully proportioned to compliment the narrow horizontal area above the transom. Another good location for a sign is on the vertical pilaster beside the lower level window (Figure 38), in many cases, below a well placed light fixture. A third location may be advertising signs on the display windows and doors themselves (Figure 37). If the display windows were to be treated with muntins, however, such signs would not be possible. If attractively designed, any of the signs, or a combination of these various signs, would add enormously to the character of the storefront.

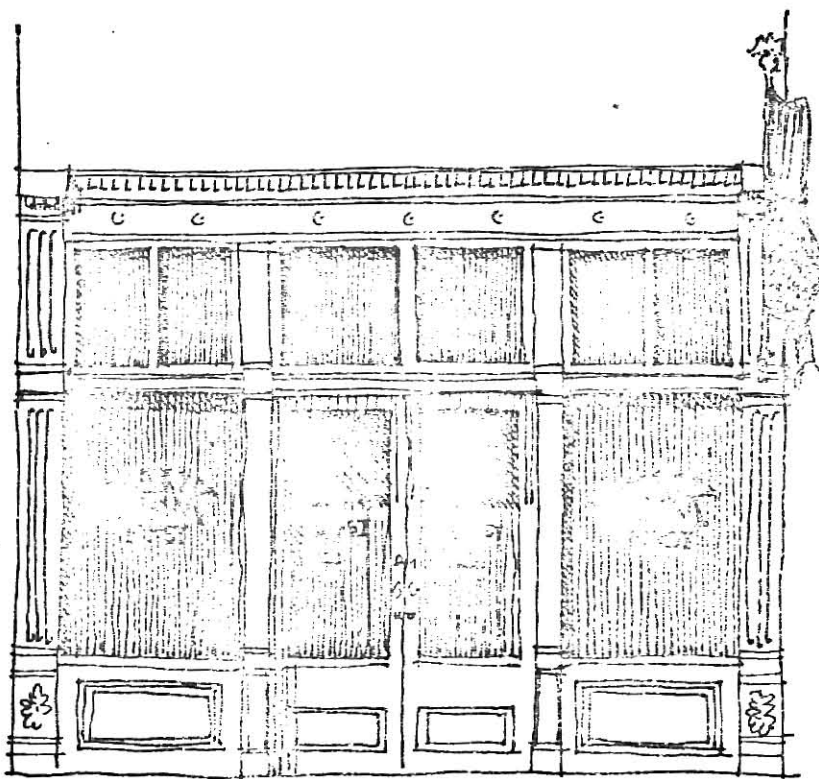
6. Light Fixtures: For the purpose of complimenting both the C.B.D. setting and the character of the buildings, the choice of fixtures and choice of location are important. Although the use of period fixtures would best compliment the building character (Figure 39), choice of more contemporary fixtures



SIGN SHOULD 'FIT'
ABOVE THE TRANSOM,
AND SHOULD COM-
PLIMENT THE WIDTH
OF STOREFRONT AND
UPPER WINDOWS.
SIGN WILL BE VISIBLE
EVEN IF AWNINGS
WERE USED.

APPLICATION OF SIGN ABOVE TRANSOM

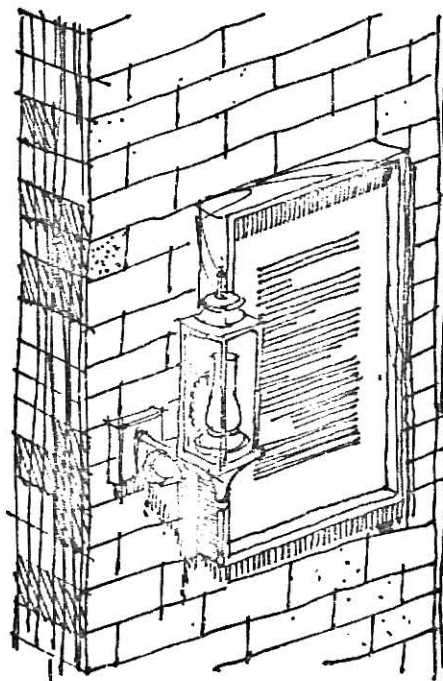
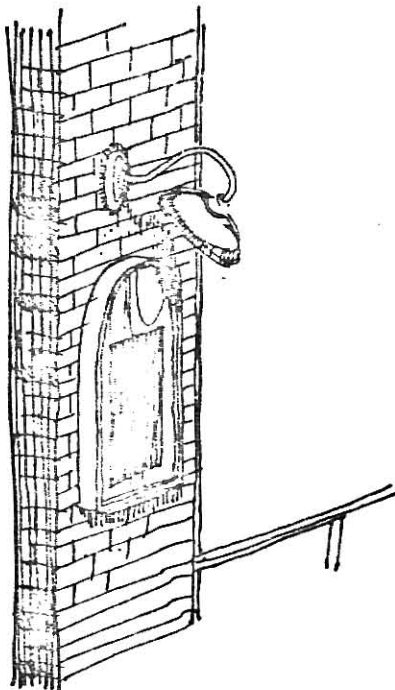
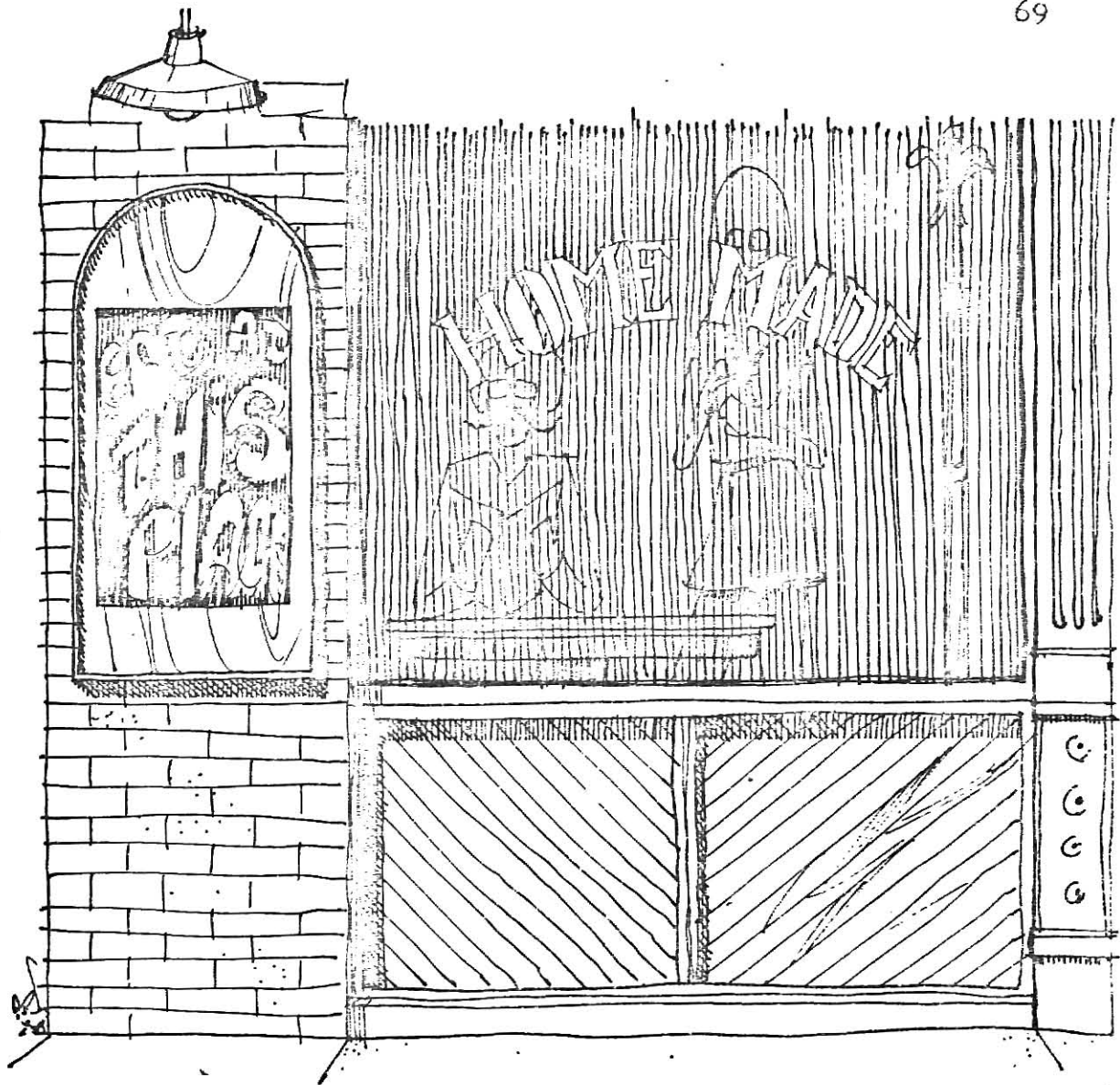
Figure 36



SIGNS MAY BE
EFFECTIVELY
PAINTED BEHIND
DISPLAY WINDOWS.

SIGNS ON DISPLAY WINDOWS

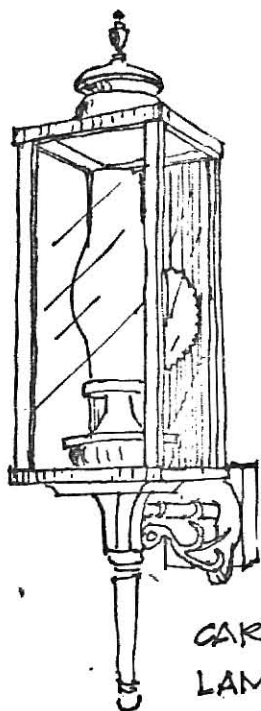
Figure 37



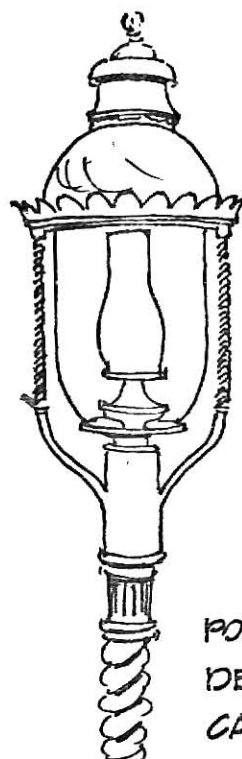
LIGHT FIXTURES WORK
WELL IN COMBINATION
WITH SIGNS

SIGNS & FIXTURES ON SIDE PILASTERS

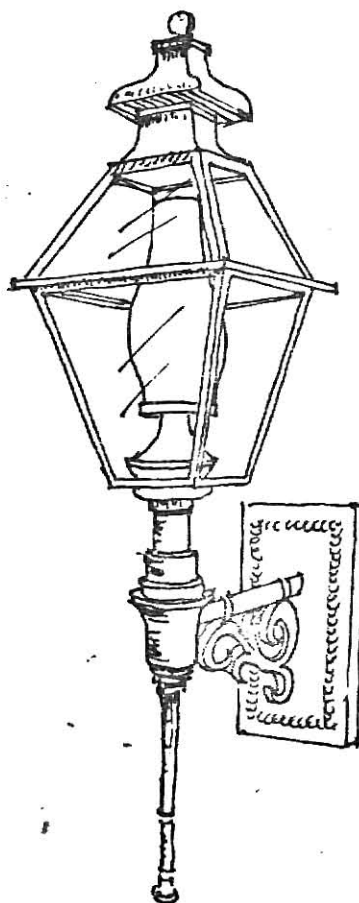
Figure 38



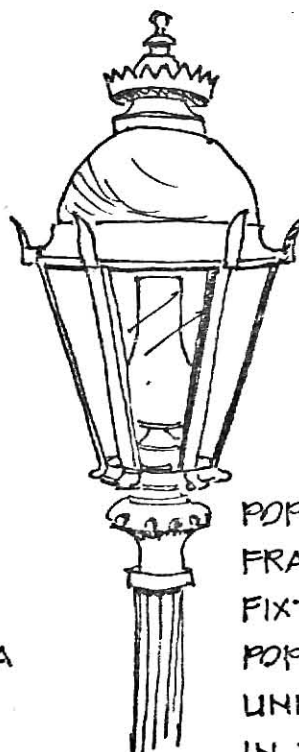
CARRIAGE
LAMP



POPULAR VICTORIAN
DESIGN, OFTEN
CALLED 'BOULEVARD'



COLONIAL
DESIGN,
POPULARIZED
IN PHILADELPHIA



POPULARIZED IN
FRANCE, THIS
FIXTURE WAS
POPULAR IN THE
UNITED STATES
IN THE LATE
19TH CENTURY

TYPES OF LIGHT FIXTURES

Figure 39

should not be ruled out. Light fixtures are expensive items, and temptation is great to install less expensive imitation fixtures from discount stores. Imitation fixtures are generally small, out of scale in relationship with the building, and miss the necessary ornamental details found in full scale fixtures. Cost may be higher, but is quite small in comparison with work for other elements in the building. There are two places on the storefront for light fixtures: on the pilasters and/or in front of the entry door.

7. Hardware: Often one of the details most likely to be overlooked, hardware on doors is a detail that literally puts the 'finishing touch' to the building. It would be unrealistically expensive to custom design hardware for a building. It is, therefore, recommended that a designer or owner carefully evaluate each hardware design. For the purpose of suggesting the style of hardware that compliments the architecture, the use of hardware should be consistent throughout the building. As a rule, period hardwares are typically large, ornamental, with brass or bronze finishes.

REAR ENTRANCES

Many urban design studies have been made for cities such as Manhattan, Topeka, and Dodge City for revitalizing C.B.D. In all these studies, the most important factor in the revitalization process points to the need for convenient parking downtown. The most commonly adopted design concept for solving this problem is clearing and improving parking lots behind the stores. In the case of Cherryvale where Main Street is wide, allowing the higher capacity angular parking, and where the business activity is relatively low, parking is not a problem at this time. Should the C.B.D. become successfully revitalized in the process, additional parking will be required behind the building. In this event, the visual quality of rear entrances becomes extremely important. Rear entrances are visually not overwhelmingly different from the front. Minor differences include the lack of ornamental details such as cornices and brick corbels, and because the roof slopes to the rear, each building appears to be lower, with downspouts attached to each side of the rear. Further clutters include utility lines and meters for telephone, electricity, gas and water supplies.

The basic technique for improvements to the rear facade of the building is the same as the method to be employed for the front of the building. The additional work needed would be methods to clean up the utility clutter.

1. Downspouts: Often unsightly at first because like all other parts of the building, downspouts are deteriorated

and require repair or replacement. Once repaired, the unique visual effect of downspouts should be capitalized by either color accented contrast or by blending with the facade. For example, if the wall is stucco with bieve finish, "earth-tone" brown color on the downspout would present a visually comfortable contrast, yet the same brown color may be effectively used to blend with the red brick. Another much more expensive method is to completely conceal the downspouts behind masonry walls. While employing either solution, the possibility of channeling the water directly into underground storm drain should always be explored.

2. Utility Services: Probably the most visually distracting elements in the rear entrance of the building are the service meters and overhead wires. Overhead wires may be buried underground, solving one problem. Since the electric and gas companies require that service meters be easily accessible from outside, meters may not be placed inside the building. On the outside, the gas meter needs to be just above grade level and the electric meter should be at eye level. One method to conceal the gas meter is by building a planter, using plant material as a screen. Another method is to build a recessed utility enclosure in the wall to store both the gas and electric

box. The utility enclosure should be made out of wood with color scheme and ornamentation to complement woodwork for the windows and door.

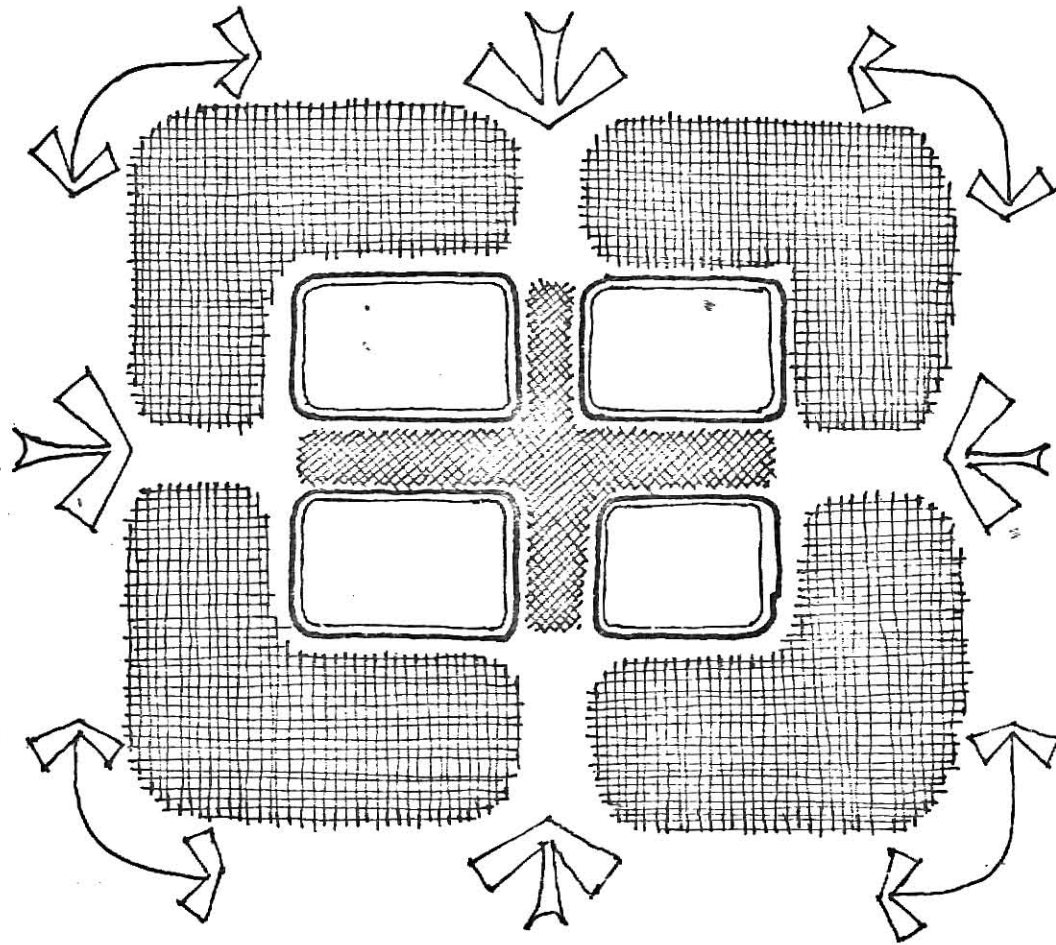
Beyond similar treatment for the walls, windows and doors as those recommended for the storefront, minor but useful variations in the design may be employed to make the rear facade identifiably different from the front, yet retaining a pleasant visual character easily related to the front. For example, texture and color of the wall should be the same as the front, as should the color scheme of the window and door trims. Variation may be designed for the details of the doors and transoms and in some instances, for the windows.

There are two philosophical reasons behind employing variation in the door design. First of all, the rear entrance is characteristically more utilitarian. Doors, for example, may be designed with massive dimensional lumber for sills, beaded siding for door panel, and large strapped hinges to accent the utilitarian character of the rear. The second reason for this unique approach to the door design is to make the rear door more visually prominent. The use of shutters, awnings, and colorful shades on the windows, should be applicable to the rear as well as the front. The combination of light fixtures and signs should be helpful for accenting the rear facade as an important entrance to the building.

ALTERNATIVES TO C.B.D. LANDSCAPING

Equally important to the restoration of the buildings in C.B.D. is the improvement of the setting; which includes streets, sidewalks, parking areas and the rear entrance areas. The harmony between the buildings and, in this case, the urban landscape is important. The landscape is a setting for the buildings, whereas the mass of buildings define landscaping areas, and is a backdrop for the landscape. In recent years, because of competition from shopping centers, attempts have been made in several cities to close the street and convert C.B.D. into a pedestrian shopping mall. The mall concept was implemented in Parsons, Kansas, where the vehicular traffic is completely eliminated from the shopping mall areas. With major vehicular circulation and parking resources channelled around the mall, this concept is a modification of a typical shopping center. A moderate variation of a mall concept was used in Kansas City, Kansas, where the street was pedestrian oriented, yet vehicular access was provided with a single lane in each direction. The basic concept of a shopping mall (Figure 40) provides several advantages:

1. Partial or complete separation of vehicular and pedestrian traffic: This separation allows shoppers to be more carefree and shop more leisurely in the mall area; a key ingredient in attracting intuitive buying.
2. Convenient peripheral access and parking: Once the shopping mall layout becomes familiar to shoppers,



-  SHOP AREAS
-  PEDESTRIAN MALL
-  VEHICULAR PARKING
-  VEHICULAR ACCESS
-  VEHICULAR CIRCULATION

THE MALL CONCEPT

- ▮ SEPARATION OF PEDESTRIAN AND VEHICULAR TRAFFIC
- ▮ EASY ACCESS TO VEHICULAR PARKING AREAS
- ▮ MORE CONDUCTIVE TO INTUITIVE BUYING

Figure 40

designated parking areas are easily identified. With well designed vehicular access, arrival to downtown shopping mall becomes a more pleasant experience. It is mentally less demanding to arrive at a parking lot conveniently located next to the shopping area than to drive in front of the store fighting the pedestrians while searching for a temporary parking space strung lineally down the street.

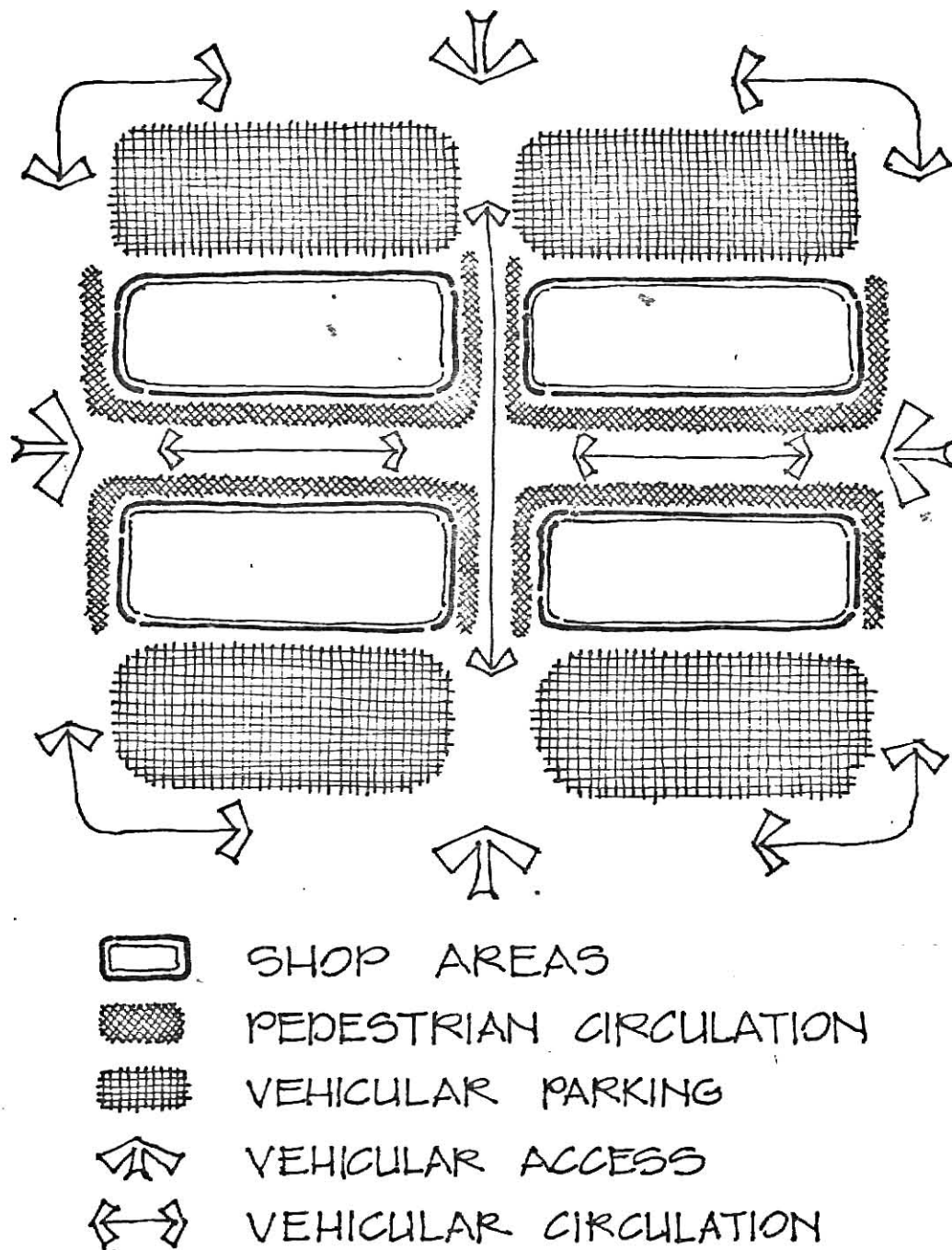
Whereas the potential advantages of the mall are attractive, the concept is not a cure-all. If a C.B.D. is suffering from shortage of business activity, a new mall design does not assure revitalization. Furthermore, there are some negative aspects to the mall concept that should be evaluated:

1. Development of a mall is a major financial commitment on the part of the city and the C.B.D. businesses. For this reason, the cost effectiveness of such an investment should be carefully analyzed. In the case of Cherryvale C.B.D. for example, such a massive initial investment would not be practical. A practical initial plan should emphasize better use of the present facilities by means of landscape improvements.
2. An ambitious mall design may be an attraction, but does not ensure higher levels of activity. Parsons, Kansas, for example, has an ambitiously designed downtown mall, but the mall appears desolate due to the lack of people.

3. An overly ambitious mall design often detracts from the charm of the turn-of-the-century setting. The mall at Kansas City, Kansas is an example of insertion of design and sculptural elements that are foreign to the setting that may otherwise be in a different setting. The setting should complement with, but not compete against the buildings.

A good alternative to the mall concept is to embellish the setting of a C.B.D. Cherryvale C.B.D. should avoid a total mall design, but emphasize urban landscaping (Figure 41) to complement the charm of the turn-of-the-century building for the following reasons:

1. The existing wide street is not conducive to a mall design. A total mall area would be too expansive of scale and overwhelm the buildings for which it serves.
2. Because of the low level of activities, Cherryvale C.B.D. would appear desolate with a pedestrian mall. By continuing to allow cars into the Main Street, activity is concentrated in the front shopping areas, and the appearance of activity will be more enticing to prospective shoppers.
3. Although a mall design is not recommended for Cherryvale C.B.D., landscaping will help improve the setting. Simple treatments such as the use of plant materials, period street light fixtures, choice of paving materials, and the use of curbing to better define parking areas



GRID-IRON IMPROVEMENT CONCEPT

- ≡ LOWER LEVEL OF INITIAL INVESTMENT.
- ≡ PRESENCE OF AUTOMOBILES REFLECTS ACTIVITIES.
- ≡ LANDSCAPE IMPROVEMENTS ENHANCE THE SETTING.
- ≡ SIMPLIFIED LANDSCAPE IMPROVEMENTS COMPLEMENT WITH, RATHER THAN COMPETE AGAINST THE BUILDINGS.

Figure 41

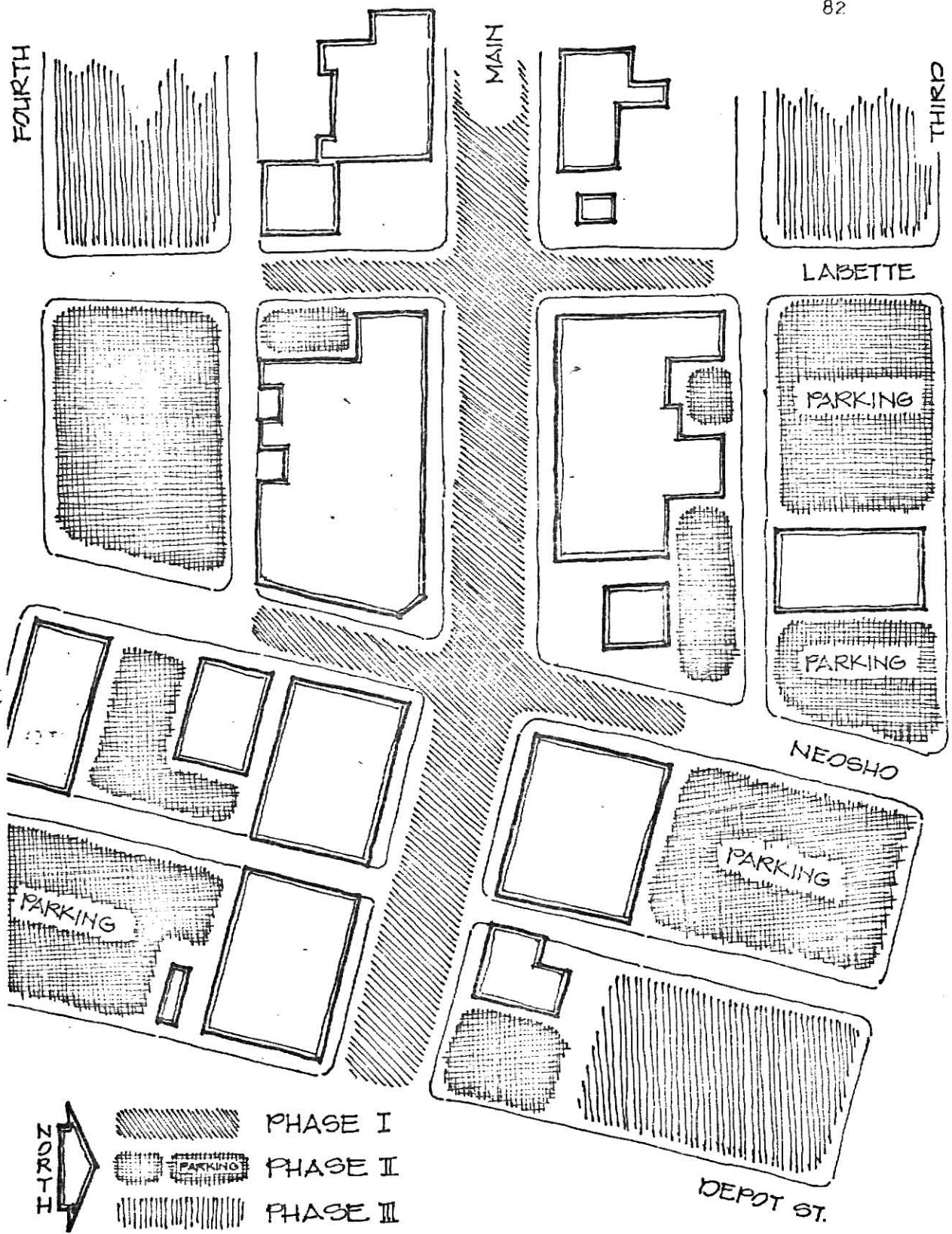
as well as pedestrian cross-walks will both functionally and aesthetically improve the C.B.D. setting.

Due to the differences in trade area, types of sales and services, and the level of activities C.B.D. revitalization process is different for each city. Cherryvale is quite typical of small cities in Kansas, however, and the process shown here may apply to most other small cities. Based on previous assessments, the improvements for C.B.D. setting should emphasize embellishment of the streetscape for pedestrian uses without altering the functional provisions for vehicular traffic. Specific solutions to improve the streetscape and therefore create an environment more attractive to potential shoppers should be implemented in phases. The recommended phases for Cherryvale C.B.D. are arranged on the basis of initial and continuing visual and functional impact on the shopping district, with the implementation of subsequent phases contingent upon the success of each preceding phase. Assuming that most of the businesses in Cherryvale C.B.D. will improve their individual building with the methods recommended in previous chapters, the following series of design improvement phases (Figure 42) will effectively play an important part in visualizing the C.B.D. plan (Figure 43).

1. Phase I: The most immediate step is to improve Main Street; the pedestrian sidewalk, and the parking areas. Since the street is wide, plenty of space is available for a median strip and 45 de-

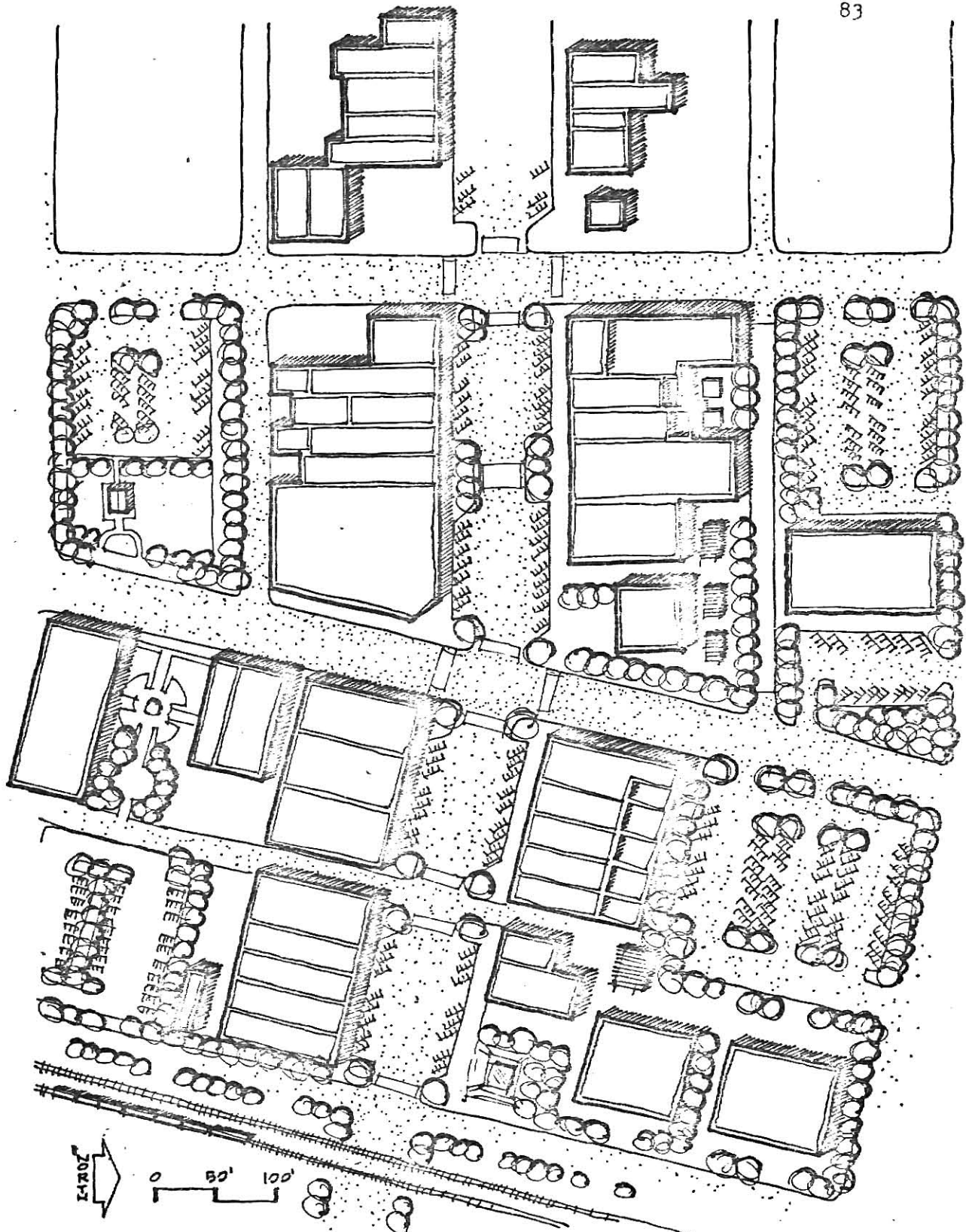
gree parking. Trees, public signs, trash cans, benches, and period lights will add to the charm of 'Main Street'.

2. Phase II: This phase may be implemented only if business activities increase to a point that increased vehicular access becomes necessary. Parking areas behind the buildings will be required. Landscape treatments on Main Street should be carried to the back.
3. Phase III: Should revitalization processes become even more successful, provisions should be made to allow better use of second level floor spaces for offices or additional sales areas. It is at this point that full restoration of each building becomes feasible.
4. Phase IV: In the unlikely event that activity level increases beyond full use of all existing C.B.D. floor spaces, new buildings should be planned. In this case, new buildings should be constructed on each adjacent side of, rather than stretching along, Main Street. This growth pattern will more fully utilize parking areas implemented in Phase II.



RECOMMENDED STAGING PLAN

Figure 42



CONCLUSION

The following conclusions are based on Cherryvale C.B.D. as a case study for revitalization. The same set of conclusions may not apply in its entirety to C.B.D.'s in other small cities, but if similarities of other C.B.D.'s were identified, the concepts explored in this thesis may be applicable in parts.

C.B.D. Revitalization:

Revitalization of C.B.D. is an involved process, and the success depends largely on promotional efforts to bring new businesses and industries into the community in order to keep young people from moving away. Physical solutions should be planned to interface with anticipated increases in sales and service activities. Assuming that initial effort in promoting growth is successful and that the increase in C.B.D. activities will occur gradually, physical redevelopment should accordingly be planned in phases. These phases should occur in two basic areas; buildings that are privately restored and streetscape that must be improved through public funding. Initially, buildings may be partially restored, and only the Main Street improved. As activities increase and financing of both private and public improvements become feasible, additional phases may be implemented.

Building Restoration:

A building may be upgraded in several ways; restoring, preserving, reconstructing, or remodeling. Definitions for these

four basic approaches are:

1. Restoration: complete repair of a building to bring it back to its original condition. In a restoration project, careful research will be necessary to ensure authenticity down to the minute detail.
2. Preservation: Partial or total restoration. Preservation concept places the emphasis on keeping a building from being deteriorated beyond repair.
3. Reconstruction: A building may have been modified or deteriorated over the years to the point where it needs to be partially or completely rebuilt to duplicate the original condition.
4. Remodel: complete or partial modification of the building design. More often than not, remodeling to provide spaces for re-use completely ignores the architectural integrity of a building. This approach is reasonable for remodeling buildings with no distinguishable architectural character.

Exterior Design

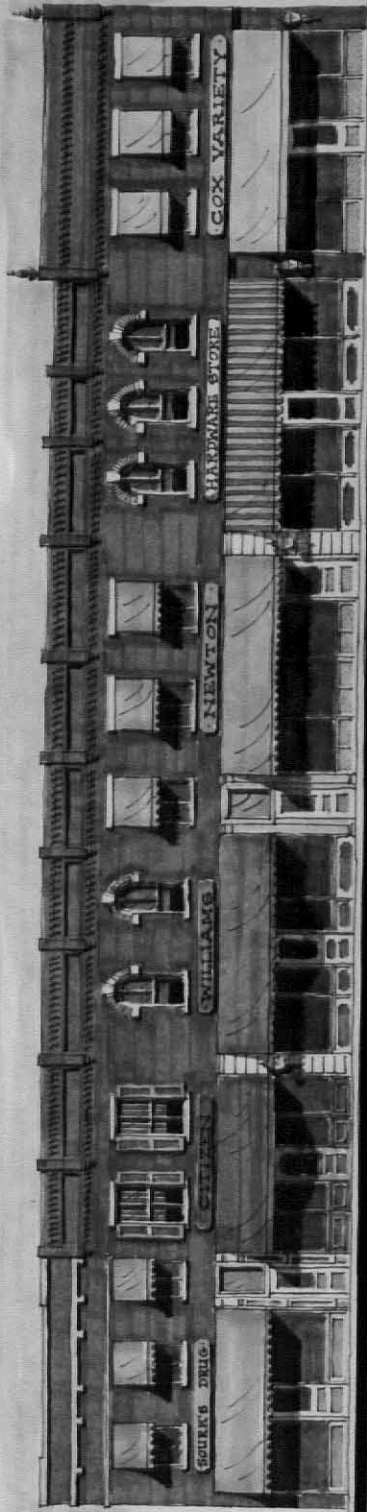
For the purpose of preserving the charm and image of small town C.B.D. the author feels strongly that exterior treatment of a building should be the first thing to take place, in essence partially restoring the building, preserving the building for complete restoration at a later date. The basic mass-and-void relationship within each building, pro-

portions, and details are the major elements determining the architectural character (Figure 44 and 45). These elements include the following:

1. Brick and cornice details: Bricks should be cleaned and sealed, whereas cornices may be color accented. Brick details complement the warmth and charm of natural brick, and cornices contrast and crown the parapet walls.
2. Windows and Doors: Windows should be restored to their original proportions. Verticality is the key to the appropriate proportion. Display windows should have lower panels. Floor to ceiling glass curtain wall is not acceptable.
3. Applied Embellishment: Methods to accent windows and doors include the use of shutters, shades and awnings. Other applications include the use of period light fixtures and signs.
4. Rear Entrances: The image displayed by the rear entrances should be as important as the front.

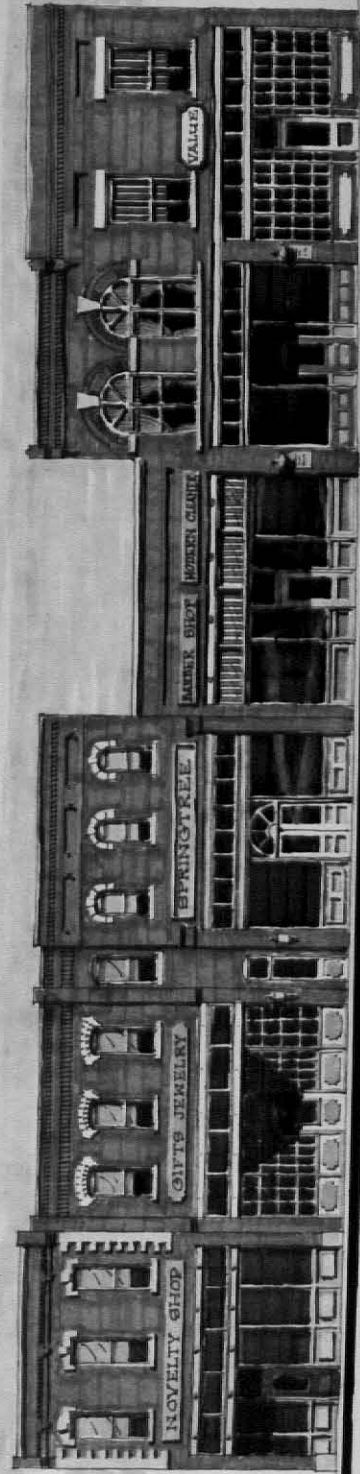
Landscape Improvements

Landscape improvements should be made to complement, but not to compete against the buildings. Simple treatment such as trees, paving patterns, light fixtures, and simple landscape furnitures such as trash containers and benches will go a long way to create a pleasant setting. Parking areas behind the buildings, and entry areas to the rear of the buildings should be given equally careful consideration.



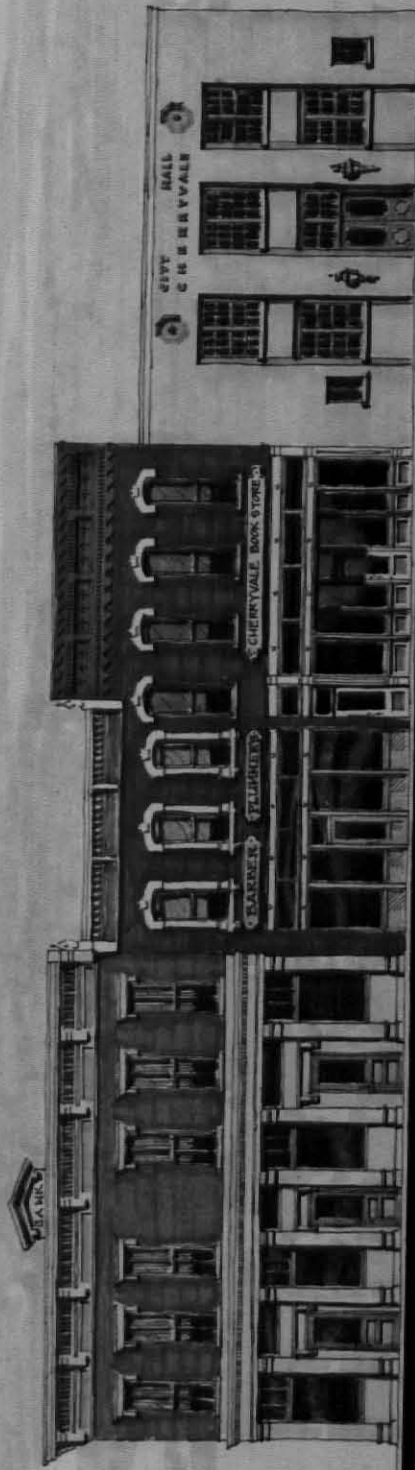
FRONT ELEVATION

NORTH ALONG MAIN & EAST OF NEOSHO



FRONT ELEVATION

SOUTH ALONG MAIN & WEST OF DEPOT ST.



FRONT ELEVATION

SOUTH ALONG MAIN & EAST OF NEOSHO



TYPICAL LANDSCAPE IMPROVEMENTS

Such improvements should be implemented in phases,
with Main Street having the highest priority.

APPENDIX

Recommendations made in this study should be applicable to most small town C.B.D.'s. Furthermore, these recommendations may also be effective when applied in parts, and in combination with other well thought out solutions.

The most likely stumbling block to the success of C.B.D. revitalization is the selection of a good implementation program. The implementation program is a process in itself, requiring careful planning and good judgment. Too often, local governmental units look to State and Federal grants as the catalyst, or in some unfortunate cases, as the final solution. State or Federal grants are generally attached with very restrictive guidelines, shutting off potential citizen enthusiasm. The success in an implementation program requires active participation from the grass roots.

Restoration of buildings and improvement of streetscapes are generally expensive undertakings. This does not have to be the case. More specifically, citizens should take an active part in investing their time and money in the revitalization of their own town. Restoration of a building, for example, may be achieved by citizens doing their own work wherever possible. These include cleaning, painting, refinishing, and in some instances, even undertaking more specialized items such as carpentry and masonry work under expert guidance. Such spare time investment cuts down overall costs and is a resource most people can afford. It is also one way to perpetuate pride in one's community.

Certain highly specialized works, supplies, and materials will require professional attention, inevitably running up some costs. Because cost estimates must take into consideration the condition under which the work must be carried out for each project, it is difficult to set up a guideline on costing that is applicable to all projects. For the purpose of comparisons, however, the following prevailing costs for specialized exterior work are listed that should help in establishing parameter costs:

A)	Waterblasting	\$.65 - \$1.10/ sq. ft.
B)	Sandblasting	\$.55 - \$.75/ sq. ft.
C)	Roof repair or reccovering	\$.25 - \$.55/ sq. ft.
D)	Tuckpointing	\$.45 - \$.85/ sq. ft.
E)	Silicone Sealing	\$.10 - \$.15/ sq. ft.
F)	Painting	\$.35 - \$.45/ sq. ft.
G)	Paving	\$2.25 - \$2.75/ sq. ft.
H)	Sign Painting (@ 32 sq. ft.)	\$150 - \$250 each
I)	Window repairs (average)	\$50 or more
J)	Shutters (Material only)	\$65 per pair
K)	Canvas Awning (upper window)	\$85 - \$110 each
L)	Canvas Awning (Lower window)	\$150 - \$350 each
M)	Ornamental Light fixtures (installed)	\$185 - \$450 each
N)	Repairing Metal Cornice	varies
O)	Repairing or Replacing stained glass	varies

Depending on the condition of a storefront and the design treatment needed, cost for storefront renovation may range from \$2,000 to \$25,000. However, it has been found that in most jobs,

the cost has been running between \$4,000 and \$7,000. It is important to keep in mind that most prevailing costs noted here are based on 1976 averages. Costs beyond 1976 should escalate at a rate of $3/4\%$ per month. It is also important to keep in mind that costs shown here should only be used for preliminary planning. Negotiation with different contractors may vary before a final cost is established.

Considering the range of costs between \$4,000 and \$7,000 for storefront renovation, it is no more than the cost of buying a new automobile. Improving the value of real estate and subsequently the C.B.D. is certainly a much better investment than that of a rapidly depreciating automobile.

BIBLIOGRAPHY

A. Books

- Asher, Benjamin, The American Builder's Companion, or A System of Architecture. New York: Dover Publications, Inc. (A Reprint of the 1827 Edition by R. P. and C. Williams).
- Bullock, Orin M. Jr., A.I.A., The Restoration Manual. Conn: Silvermine Publishers, Inc.
- Goodman, William I., and Freund, Eric C., Principles and Practices of Urban Planning. Washington, D. C.: The Preservation Press.
- National Trust for Historical Preservation, Historical Preservation Tomorrow. Williamsburg, Virginia.
- National Trust for Historical Preservation. Preservation and Building Codes. Washington D.C.: The Preservation Press.
- Ortner, Everett H., Back to the City, A Guide to Urban Preservation. New York: Brownsten Revival Committee of New York, Inc.
- Stanforth, Deirdre, Restored America. New York: Praeger Publishers, Inc.
- Stephen, George, Remodeling Old Houses Without Destroying Their Character. New York: Alfred A. Knopf, Inc.
- Uniform Building Code, 1973 Edition.
- Wolfe, Mr. R. and Shinn, R. D., Urban Design Within the Comprehensive Planning Process. Washington: University of Washington.
- Ziegler, Arthur P., Jr., and Adler, Leopold II, and Kidney, Walter C., Revolving Funds for Historical Preservation. Pennsylvania: Ober Park Associates, Inc.

B. Reports

- Center for Community and Regional Planning, Kansas State University. Sales Retention Study for Cherryvale, Kansas, (1973).
- Center for Community Planning Services, Kansas State University Public Investment Proposals, Ozarks Region-Kansas Ozarks (1970).

City of Charleston, S.C. Historical Preservation Plan (1974).

City of Cherryvale, Cherryvale Centennial (1971).

College of Business Administration, Kansas State University.
Management Horizons, Volume 6, No. 3 (1976).

Division of Municipal Affairs, State Office for Planning and
Programming. Iowa, A Place to Grow, (1971).

High Point, North Carolina, Planning and Zoning Commission.
Community Analysis (1967).

Kansas Department of Economic Development, Planning Division.
Fact Book, Southeast Kansas, Region-02. (1967).

Kansas Department of Economic Development. Regional Review
for Planning in Kansas, (1968).

Kansas Economic Development Commission. Southeast Kansas De-
velopment Plan, (1967).

Kansas State College of Pittsburg. Education Policies and
Facilities Supporting Structures, Region 02-Southeast
Kansas, (1966).

Lancaster, Texas Urban Renewal Agency. Town Square.

The Ozarks Regional Commission. Action Plan, (1971).

Southeast Kansas Regional Planning Committee. Preliminary
Report, (1967).

Sutker, Dr. Solomon, A Study of Manufacturing Occupations in
Southeast Kansas, (1958).

Urban Renewal Agency of the Wichita, Kansas Metropolitan
Area. Plan and Re-use Study for the City Building, Old
Library Building and Police Building, (1972).

Weisenburger, Ray B. and Kline, Thomas, Small Town Business
Area Physical Redevelopment, Science or Serendipity.

C. Picture Credit

City of Cherryvale. Cherryvale Centennial, (1971).

D. Manufacturer's Catalogue

Marle Company, Stamford, Connecticut. (Light Fixtures)

Welsback Lighting Products Company, Inc., Baltimore, Maryland.

SMALL TOWN CENTRAL BUSINESS DISTRICT
PHYSICAL DESIGN GUIDE:

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by

CHUNG-TSIANG CHANG

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AN ABSTRACT OF A MASTER'S THESIS

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In the past two decades, due to concentration of industrial activities in metropolitan areas, small towns suffered from economic and population decline. Subsequently, the Central Business Districts of these towns have been left to deteriorate. Reversing this trend will require efforts on the part of the community to promote new industries in order to increase activities in sales and services.

Assuming successful promotional activities will take place, physical revitalization of C.B.D. will be extremely important. The image and character of C.B.D. tends to express the vitality of the town. For this reason, a guide for physical redevelopment of small town C.B.D. is needed.

Through research of published materials and through careful evaluation of restoration projects, this study strongly suggests that the charm of the turn-of-the-century storefront architecture should be embellished, and that the landscaping for C.B.D. should compliment the architecture. In order to achieve these goals, design concepts, cosmetic applications, building restoration methods, and landscape treatments have been evaluated in substantial detail.

Central to this study is the fact that these buildings exist, portraying a unique architectural characteristic that is rapidly lost to this society, and that restoration process may take place in phases, requiring less initial investment.

This process is applicable to any small town C.B.D. For the purpose of putting the process in perspective, however, Cherryvale, Kansas is used as a case study.

In general, physical revitalization of C.B.D. is a viable process, and if well directed, can work very well in conjunction with economic development of a small town.