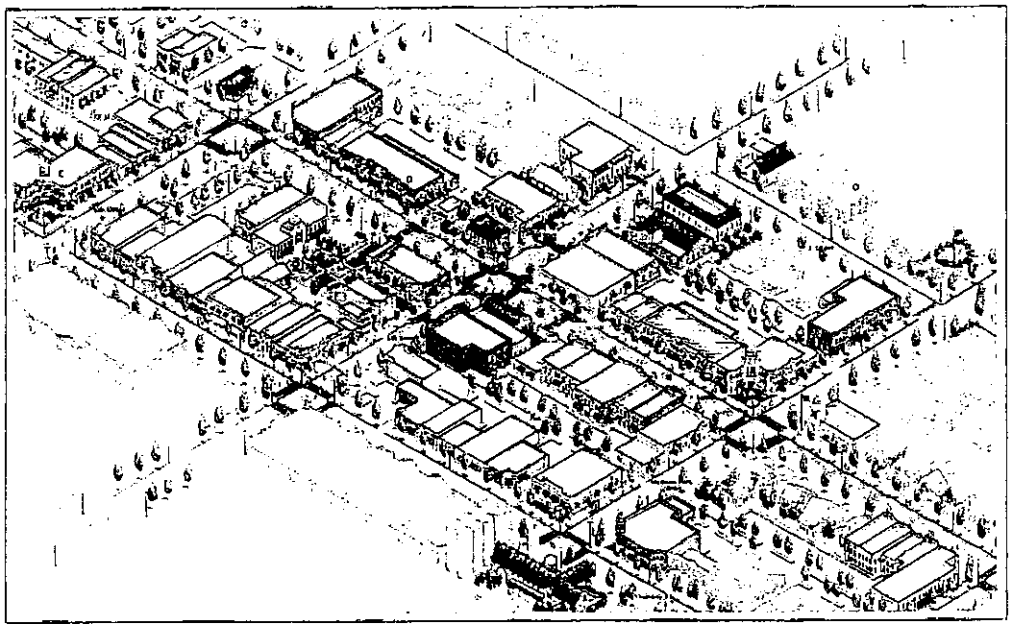
Lincoln Downtown Urban Design Plan



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1. Introduction and Background for Planning

"The sense of place that a town can give is important for those who live beyond the town. A well-defined center can give coherence to a whole countryside."

—William H. Whyte

1. Introduction and Background for Planning

1.1. PURPOSE OF THE PLAN

The Downtown Urban Design Plan is intended to be a comprehensive master planning tool to guide the physical development of the downtown. The Downtown Urban Design Plan will be adopted as a Area Plan consistent with current zoning and development standards. The plan provides a vision for the future (20 year time frame) of the core commercial district of the community. It will serve as a specific physical blueprint of downtown land use and circulation, by defining specific design concepts of public improvements such as parks, landscaped areas, pedestrian facilities, streetlighting, public parking, street tree selection, and civic buildings. This Plan will also be an action oriented guidance package which will contain specific program elements to enable the City to implement design concepts. The purpose of the Downtown Urban Design Plan is to create a new and revitalized downtown environment that is appropriate for the historical and economic context of the community. As a practical and market based plan, it provides realistic goals and objectives, and a feasible implementation program.

The Downtown Urban Design Plan is considered an Area Plan within the framework of the City's General Plan, and conforms to the recently adopted Public Facilities Element of the General Plan. The current design review and permit processing procedure will be used to carry out the Implementation Program.

In conclusion, the primary purpose for the Downtown Urban Design Plan is basically threefold:

- **To create a land use plan which responds to citizen's input and the recommendations of the various studies that have already been conducted in order to create a viable plan for the growth of downtown, and**
- **To set forth the physical design plan, guidelines and criteria which will guide the physical form and growth of the downtown in a manner aimed at creating a pleasing and enjoyable environment, thereby fostering the continued use of, and investment in, the downtown area, and**
- **To the extent feasible, to ensure an effective linkage between the downtown and the City's future civic center.**

1.2. SUMMARY OF OTHER DOWNTOWN PLANNING EFFORTS

Planning Context

The City of Lincoln, established in 1859, has enjoyed the stability of a diversified economic base that has enabled it to endure as a remote, small town. However, increasing pressure for growth extending outward from the Sacramento metropolitan area has resulted in plans for substantial expansion of the existing City limits. In late 1987, proposals to annex approximately 3,000 acres to the City were submitted, representing a 72% increase in the land area of the corporate City limits. These annexations were proposed on the southern end of the City

representing a virtual doubling in the City's size. In addition, a proposed bypass alignment for Highway 65 is proposed to be constructed west of the existing downtown. Out of concern for the future downtown, the Lincoln Economic Development Committee, created by the City's Redevelopment Agenc , initiated the idea of developing a downtown plan in 1989. This idea was set aside in favor of pursuing other projects.

The City then embarked upon a series of planning studies conducted in conjunction with the areas being considered for annexation. These studies included the General Plan Update and the preparation of a comprehensive Public Facilities Element (PFE). This element focused on defining desired levels of service for the City's "quality of life". As a key component of the PFE, a separate study was conducted that analyzed the impacts of the proposed annexations on the existing downtown (Williams-Kuebelbeck Study [WKS]). The WKS, in its analysis of the impacts and the growth potential for the downtown, again recommended the need to prepare a downtown plan.

The WKS indicated that the proximity of the cities of Roseville and Rocklin (both offering significantly greater opportunities for comparison shopping goods) substantially affected the ability of downtown Lincoln to compete for retail growth. Therefore, downtown Lincoln is envisioned to have primarily a neighborhood convenience shopping and specialty retail focus. The WKS also suggests that office development opportunities exist in downtown Lincoln for small scale professional office users and public agency/institutional office expansion. In addition, multi-family housing development which might include housing for low to moderate income families and senior citizens, should also be encouraged in the downtown study area.

The WKS study suggested that it will be the injection of public investment in the downtown that will help to stimulate further office and residential growth which will, in turn, stimulate the additional growth in the convenience retail and specialty retail sectors. The study recommends maintaining the civic center facility core within the downtown.

Civic Center Selection Study

Having developed the above information concerning the level of public facilities that would be required for a Civic Center, the firm of Vanir Construction Management was placed under contract to further refine the data and determine suitable sites for a new Civic Center. This analysis looked at both the building square footage and land requirements needed for the Civic Center at two different growth stages: 1) through the year 2010; and, 2) full build out of the City.

The total program for the Civic Center facility included the requirements for city administrative departments, police, fire and library. The results of this study may be summarized as follows:

Table One: Civic Center Space Needed 1990-2010

Facility	Square Feet	Acreage
Phase One		
Public Safety	29,100	2.2
Administration Offices	15,340	1.2
Phase Two		
Community Center	19,000	1.0
Library	18,900	1.0
Totals:	**82,340**	**5.4**

* Total includes requirements for parking, access, and circulation.

Having developed this information, the study reviewed the available locations within the City. As a result of their review, the consultant selected eight potential candidate sites based upon several factors such as size, accessibility, utilities, and others. Following further review of each site the field was narrowed to three by Vanir. The Council then directed a Blue Ribbon Committee to review the selection process and confirm or recommend another site.

1.3. OVERVIEW OF CONCERNS AND PLANNING ISSUES

McBean Park

McBean Park has a special place in the heart of Lincoln's citizens and is of historical significance for the community. The Park is intensely utilized by several community groups and is the primary recreation and open space resource for the City of Lincoln. McBean Park is the site of public swimming facilities, the annual Holy Ghost Festival, Rifle Club, Little League, a locally significant athletic stadium, the historic Hemphill residence, and the Pavilion community center facility. The park has an attractive natural setting adjoining Auburn Ravine. Until recently, McBean Park was the only substantial recreational facility available in Lincoln. A new City Park, Joiner Park is currently under construction and the Eastlake annexation proposal promises to provide for dedication of additional acres creating an Auburn Ravine / McBean Park Open Space network.

Existing City Hall and Police Facilities

City staff now operate within deficient and overcrowded buildings and facilities. At present, the City requires 21,000 square feet of space. Of particular concern is the outdated and

crowded downtown public safety building. Regardless of other components of the proposed new Civic Center, the City must proceed with development of a new public safety facility for the Police Department. This facility would have central dispatch, prisoner cells, and a service and vehicle storage yard. Although it is not critical that the public safety building be located in the downtown, it is preferred. It is considered critical to the downtown's viability that daily government functions remain in the City center.

Highway 65 Bypass

The City's General Plan reflects a proposal to re-route existing through traffic around the downtown. A significant portion of that traffic is trucks. A westerly by-pass has been proposed which would allow through traffic to avoid the intersection of State Route 65 and State Route 193 (McBean Park Drive). The total impact of the realignment upon the downtown is unknown. The Downtown Urban Design Plan is intended to protect the economic interests of downtown in the long range.

Parking, Traffic, Circulation, and Pedestrian Access

The Downtown Development Plan must provide a physical design which provides for auto and pedestrian access. The development of off street public parking will be analyzed and programmed for the over-all urban parking plan. Pedestrian environments will receive special design attention — provision of sidewalk, cross-walk, and public plazas will be a key objective of the urban design program. Pedestrian "scale" will be considered in recommendations for roadway profile, width, and design speed. Bus and transit system needs will be anticipated in streetscaping proposals.

City Image and "Old Town" Design Themes

The Redevelopment Element of the General Plan recognizes the need to establish an Old Town design theme to set the tone for commercial development in the central City. As the entire community grows and develops, the need for a distinct new City image is emerging.

To date, the City of Lincoln has identified the following urban design issues and concerns:

- ❑ **Remove blighting influences in the downtown area: old signs, abandoned structures, and overhead power lines.**
- ❑ **Renovate and develop public properties including sidewalk, streets, parking lots, alleys, and entry ways through the use of urban design.**
- ❑ **Renovate private properties with a heavy emphasis on building facades.**
- ❑ **Seek formal designation for historical sites. Preserve historically important buildings.**
- ❑ **Entryways: There is a need to create distinctive public entryways on Route 65 and Route 193.**
- ❑ **Industrial Buffers: Mitigation of residential and industrial land use conflicts are a major concern of the community.**

An extensive historical building inventory will be developed — focusing on structures now listed by the Historical Society's Downtown History Walk. Architectural styles and traditions of downtown buildings will be identified for use in developing a practical and flexible set of standards. Attention will be paid to materials prevalent during these historic periods — brick masonry, tile and terra cotta. The use of granite and brick accents in street and pedestrian areas will also be examined.

2. Community Goals, Objectives, and Vision Statement

"Downtown is the heart of a city. It is a place of importance and vibrancy that reflects a community's heritage and gives direction to the future."

2. Community Goals and Objectives / Vision Statement

2.1. CITIZEN PARTICIPATION AND WORKSHOP PROCESS

Citizen input is very important in shaping the premise upon which the Downtown Urban Design Plan is prepared. The public's viewpoints and perceptions are critical in tempering the technical analyses and establishing a balanced approach to the planning effort.

In order to maximize public involvement in this Downtown planning effort, a series of public participation techniques were utilized. The first of these was a written questionnaire circulated throughout the community, published in the local paper, and made available at the annual Fourth of July Celebration. A citizen's photo survey was also conducted. This involved the participation of approximately twelve (12) residents of Lincoln photographing the visual images of Lincoln (particularly downtown) that they "Like" and "Don't like". The result is a photo record of the resident's perception of strengths and weaknesses, and key character elements of the City's image.

The last participation technique utilized involved public workshops where presentations were made and the public was invited to comment on and participated in the planning process. There were three workshops conducted specifically on the downtown plan. In a parallel process three additional workshops were conducted on the Civic Center Master Planning effort by the Civic Center Architects and the City.

A schedule and summary of the workshops, along with additional information on the questionnaire and photo survey, is contained within the Technical Appendix of this Plan.

The following Vision Statement and Community Goals and Objectives were derived from this participation process.

2.2. VISION FOR DOWNTOWN LINCOLN

A downtown is the heart of a city. It is a place of importance and vibrancy that reflects a community's heritage and gives direction to the future. Downtown is the place in town to gather, it's the place visitors see, and is a place of civic pride. The purpose of the Urban Design Plan is to reestablish the significance of downtown and to enhance the community's sense of pride toward downtown Lincoln.

Preservation of the downtown as the center of Lincoln socially, culturally, economically and visually are paramount to this plan. Downtown will become the focus of community activity. Pedestrians will stroll along interesting storefronts, cafes and restaurants. People will naturally want to gather and meet downtown as well as shop and live there. This will be a place for a parade, a street market, or just to get a cup of coffee with a friend.

Diversity of the downtown core is important to creating a vital city center. Downtown will function as the City's core, an employment center, and a residential neighborhood with retail commercial activities focused on convenience shopping needs of surrounding neighborhoods. Specialty retail will also be provided for the tourist and special festivals and activities. Pedestrians will be attracted to the pleasant sidewalks and attractive storefronts. Restoration of historic buildings, construction of new buildings, creation of pedestrian plazas with landmarks and streetscape improvements will all contribute to defining the downtown as a place.

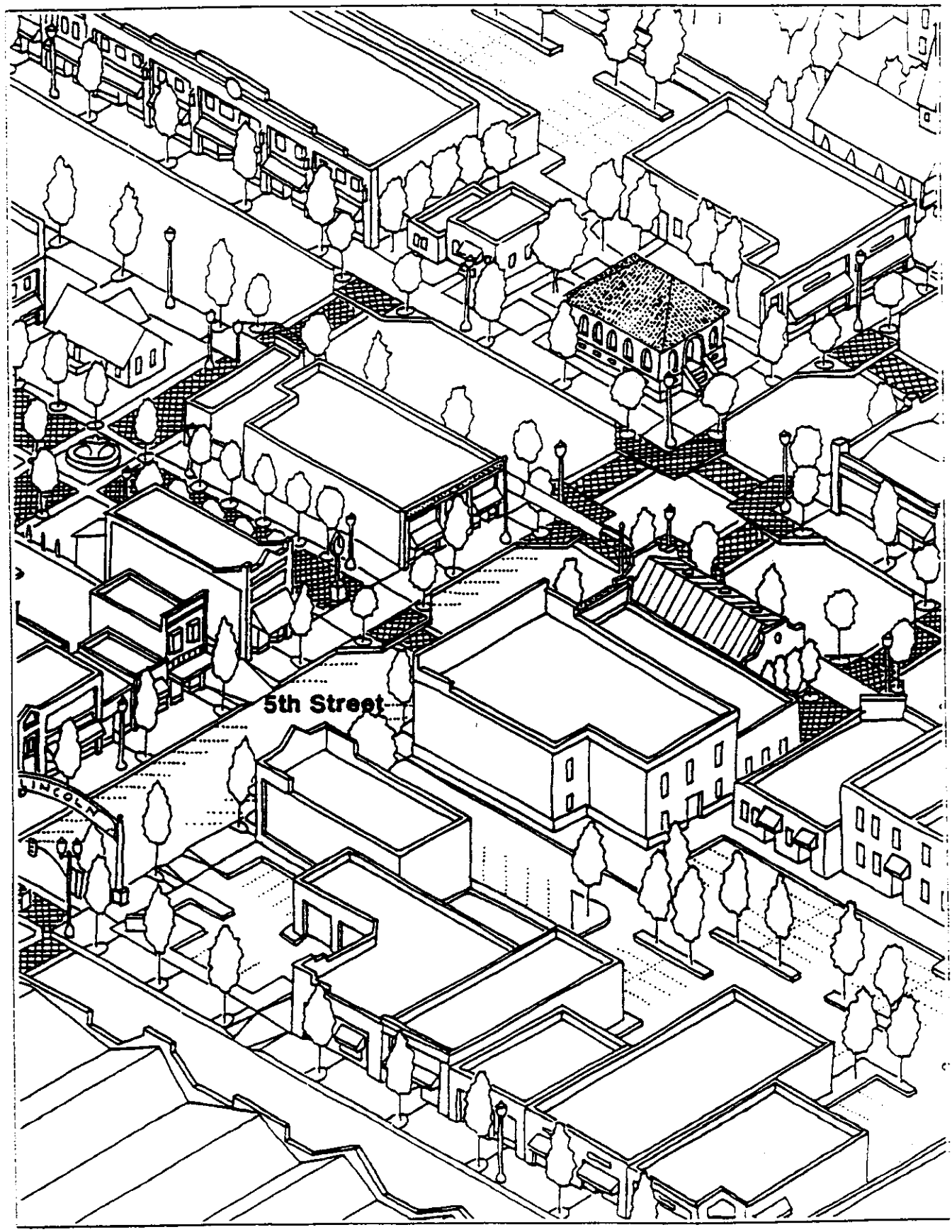


Figure 1

2.3. APPROVED GOALS AND OBJECTIVES

GOAL #1: CONSISTENCY WITH THE GENERAL PLAN, PUBLIC FACILITIES ELEMENT, AND EXISTING REDEVELOPMENT AGENCY GOALS

OBJECTIVES:

- ❑ **Elimination of deficiencies within the redevelopment area.**
- ❑ **Assembly of small parcels into parcels suitable for modern development.**
- ❑ **Redevelopment of areas now improperly utilized.**
- ❑ **Strengthening the existing retail and commercial areas.**
- ❑ **Expanding the economic base of the community.**
- ❑ **Provision of adequate parking.**
- ❑ **Establishment of design criteria and standards.**
- ❑ **Rehabilitation and preservation of historic structures.**
- ❑ **Expansion of low and moderate income housing.**

GOAL #2: CREATE A UNIQUE, VIBRANT, AND MULTI-DIMENSIONAL ENVIRONMENT IN THE DOWNTOWN

OBJECTIVES:

- ❑ **Encourage a variety of development in the downtown district in order to create an active downtown neighborhood which supports activity during both day and night.**
- ❑ **Concentrate Multi-Family/Mixed Use development in and close to downtown.**
- ❑ **Develop an architectural character compatible with historic district.**
- ❑ **Provide night-time activity, entertainment, food, theaters.**
- ❑ **Provide housing within close proximity of the downtown.**

GOAL #3: PROVIDE FOR A PHYSICAL AND SOCIO-ECONOMIC LINKAGE BETWEEN DOWNTOWN ACTIVITY CENTERS

OBJECTIVES:

- ❑ **Join key nodes, districts, and activity centers with a cohesive system of interrelated physical linkages.**
- ❑ **Maximize linkage opportunities (full integration into downtown district).**

- ❑ Develop a cohesive streetscaping system.
- ❑ Create landmarks at key focal points.
- ❑ Delineate auto corridors and pedestrian pathways.

GOAL #4: PRESERVE AND ENHANCE THE HISTORIC AND SMALL TOWN CHARACTER OF LINCOLN

OBJECTIVES:

- ❑ Restore historic building facades, storefronts.
- ❑ Create guidelines for new building construction and signage which provide for continuity in building massing and architectural character.
- ❑ Expand historic streetscaping theme.
- ❑ Emphasize historical significance of Gladding-McBean Plant.
- ❑ Preserve/improve surrounding single family residential.
- ❑ Reinforce street environment of large canopy trees.
- ❑ Recognize Railroad influence in generalized architectural themes.
- ❑ Reinforce Architectural character/terra cotta history.
- ❑ Replicate the existing historic grid street pattern in future development within the downtown.

GOAL #5: CREATE A DOWNTOWN ENVIRONMENT THAT IS SAFE, ATTRACTIVE, AND CONVENIENT FOR PEDESTRIANS

OBJECTIVES:

- ❑ Complete the sidewalk system in the downtown core.
- ❑ Respond to climate factors (sun, wind, shade, temperature).
- ❑ Provide a system of pedestrian places/spaces.
- ❑ Encourage 1st Floor retail and restaurants.
- ❑ Increase street lighting and parking lot illumination.
- ❑ Improve alleyways as store entries and walkways.
- ❑ Provide bikeways and improve bus-stop locations.
- ❑ Improve pedestrian signage and street furniture.
- ❑ Provide pedestrian scale to buildings.

- ❑ Minimize auto use by providing walking opportunities from downtown residences.

GOAL #6: PROMOTE THE ECONOMIC SUCCESS OF DOWNTOWN BUSINESSES

OBJECTIVES:

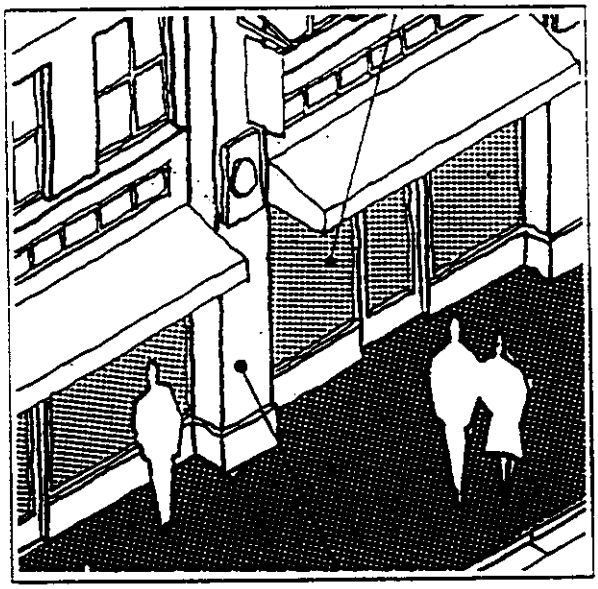
- ❑ Make the plan economically feasible, reflecting the findings of the Williams-Kuebelbeck Study (WKS) and promote a successful business environment for merchants and property owners.
- ❑ Provide realistic and cost effective design proposals/programs/projects.
- ❑ Provide appropriate areas for economic expansions/conversion through Land Use Planning and Zoning.
- ❑ Encourage mixed uses throughout downtown districts where appropriate and feasible.
- ❑ Accommodate projections for growth of retail, office and residential as defined in the WKS Market Study.
- ❑ Identify funding sources and programs for financing downtown improvements and revitalization.

GOAL #7: ELIMINATE VISUAL BLIGHT IN THE DOWNTOWN

OBJECTIVES:

- ❑ Encourage the elimination of unsightly and deteriorating conditions (unscreened storage, abandoned buildings, litter, etc.) within the downtown.
- ❑ Identify structures for rehabilitation or re-use.
- ❑ Increase the amount of landscaped areas througnout the downtown.
- ❑ Integrate Gladding-McBean Plant into downtown environment.
- ❑ Develop a facade and storefront revitalization program.
- ❑ Provide landscape buffers along industrial/residential/commercial interfaces.

3. Social, Cultural, and Economic



"If Americans would widen their walking radius by only two hundred feet, there could be a revolution in U.S. land use."

—William H. Whyte

3. Social, Cultural, and Economic Factors

3.1. INTRODUCTION / SUMMARY OF EXISTING CONDITIONS AND PLANNING ISSUES

Socio-Economic Trends

The City of Lincoln is a progressive community that has recently experienced a significant increase in population and housing growth. Much of this growth is related to the extensive development that has occurred in Sacramento and Placer Counties over the past decade. Roseville, only 10 miles south, has emerged as a significant industrial employment center. Lincoln is in the path of growth as evidenced by the three large scale residential projects now proposed along its southerly sphere — Eastlake, Placer Ranch and Lincoln Crossing. These three planned communities have the capacity to hold 8,000 residential units and a new population of approximately 21,000 people. Forecasted growth indicates a long range population target of over 40,000 persons. Lincoln is expected to reach a population of 20,000 over the next twenty year planning horizon of the Downtown Development Plan.

Lincoln has a strong economic development potential. The economic base of the City is predominantly building material manufacturing and supply. Gladding McBean, a leading supplier of clay pipe and ceramic building materials, is the largest employer, and is located adjacent to the north end of downtown Lincoln. A light industrial park is located near the existing airport.

Highway 65, which runs north-south through the downtown, links Marysville and Roseville. Highway 193, running east-west through downtown, links Lincoln with the Sierra Foothills community of Auburn. Highway 65 is a major trucking route through downtown. Caltrans and the City have sought to develop a Highway 65 by-pass around the westerly edge of the City. This route is not fully funded and will probably not be built until 1995-2000. The City General Plan, however, recognizes the generalized right-of-way line.

Historical Context

Lincoln was founded in 1859 as a local railway center and incorporated as a City in 1890. The settlement of Lincoln began as a ranching operation which received a major population influx in the California Gold Rush of 1849. Gold was found in Auburn Ravine and three mining towns formed the antecedents of Lincoln —Gold Hill, Oro City, and Virginia. During the Civil War era, Lincoln became a bustling rail terminal and stagecoach depot. A brief copper rush added to the mining tradition of the town. In the 1820's, a coal field was located and coal mining operations were instituted.

Coal mining operations lead to the discovery of a unique and high quality clay. Clay was so predominate that coal mine shafts were collapsing. In 1877, Charles Gladding, Peter McBean, and George Chambers founded California Clay Manufacturing and purchased a site

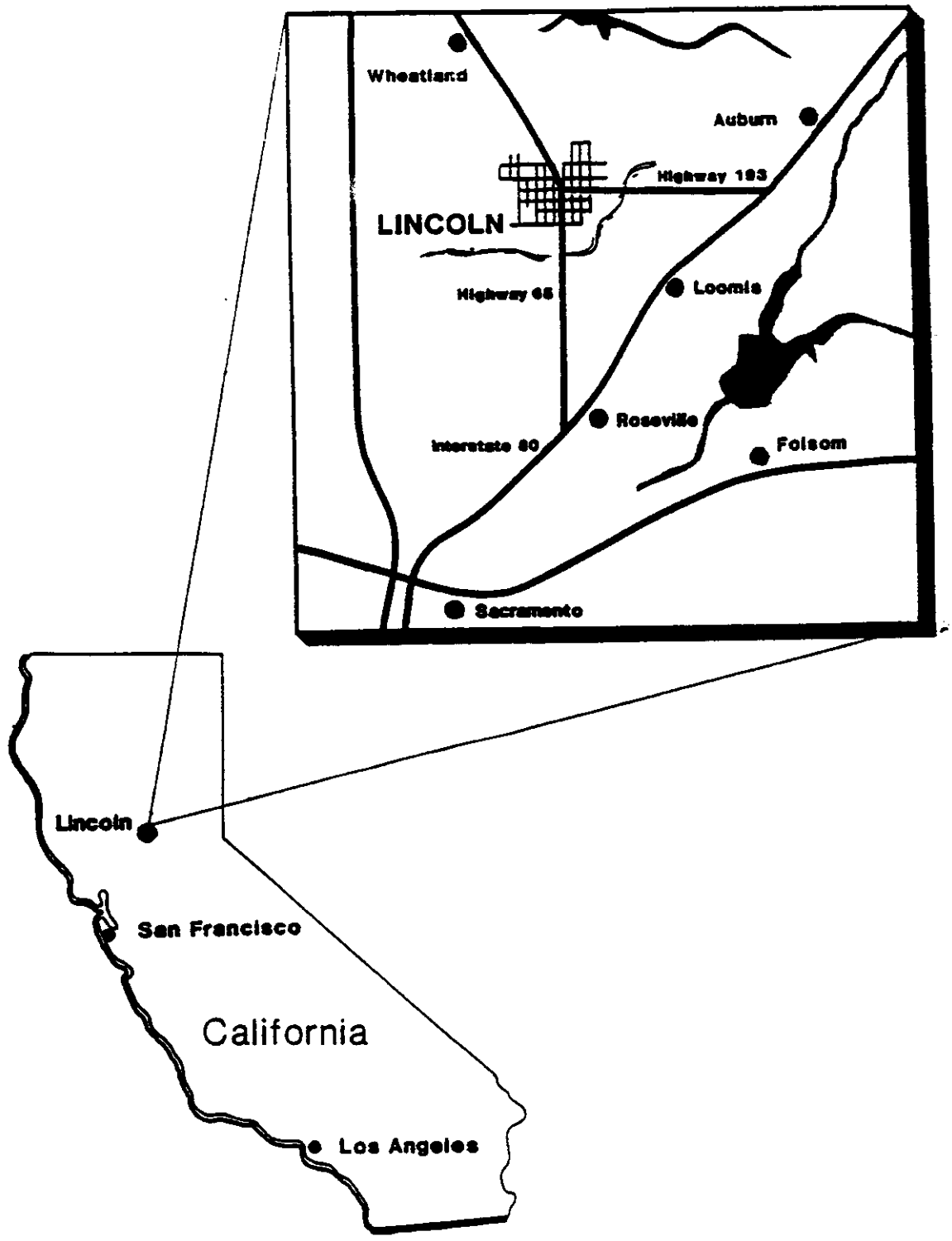

Wheatland
Auburn
Highway 193
LINCOLN
Highway 65
Loomis
Roseville
Interstate 80
Folsom
Sacramento
Lincoln
San Francisco
California
Los Angeles

Figure 2

in Lincoln. Architectural terra cotta was a major product of the operation from 1880 to 1910. Prominent building projects utilized Gladding McBean terra cotta. By 1890, the population has grown to over 1,000 and marble and granite quarries were developed.

Between 1890 and World War II, the community stabilized into an agricultural center and building products manufacturing center. In 1942, a military training facility and airport were built in Lincoln. Between 1942 and 1960, the population steadily grew to 3,197. The 1970's and 80's inaugurated the era of residential growth for the community. Rapid development began in 1985. Today, the community has become an important part of the Sacramento and regional economy.

Many buildings in the downtown, such as the 1883 Butterfield Store, are over 100 years old. Several historically significant architectural styles are found in existing downtown buildings.

Cultural Events

Downtown Lincoln has developed several important cultural and social events that are important to planning considerations.

These include the following key events and street-fairs:

- **Holy Ghost Association (Portuguese Festival)**
- **Lincoln Street Fair (held on 5th Street)**
- **4th of July Celebration (McBean Park)**
- **Concerts in the Park (McBean Park)**
- **Feats of Clay Exhibit (Art show at Gladding McBean Plant)**

These events have become significant community events and are an integral part of the socio-cultural role of Downtown Lincoln. Lincoln also has an active art community which is strongly represented by the downtown offices of the Lincoln Arts and Cultural Foundation. The rich artistic heritage of Lincoln has made existing tourist activity and the potential for increased tourism an important consideration for Downtown Lincoln. The above events are now drawing approximately 15,000 visitors each year. The retail, overnight accommodations, and restaurant demand of this growing economic sector cannot be ignored.

In addition to the above functions, Downtown Lincoln has the following social service functions and facilities — Women's Club, Chamber of Commerce, Veteran's Hall, Youth Center, Seniors Center, Municipal Auditorium, Post Office, and financial institutions.

Natural Environment

The City of Lincoln is located in Placer County, 27 miles north of Sacramento and encompasses 4000 acres. Lincoln lies on the eastern edge of the San Joaquin Valley at the base of the Sierra Nevada foothills. To the south and west of Lincoln the terrain is rolling grasslands and oak savannahs with scattered agricultural operations. North and east of Lincoln the Sierra Nevada foothills begin. These gentle slopes are oak covered and studded with rock outcroppings.

Lincoln is characteristically flat. A gentle slope runs southeast across town to the Auburn Ravine. No significant hills or peaks exist in Lincoln. Significant topo features include the Auburn Ravine channel, which forms the town's western and southern boundaries. Tailings and piles created from clay mining have formed jagged mounds of earth north of town. Lincoln is underlain by ancient volcanic flows and covered with sedimentary deposits. The area doesn't drain well, resulting in the formation of vernal pools, which remain wet through spring. A vast deposit of high quality clay lies north of town. This resource supplies Gladding McBean with clay for manufacturing clay building products. Areas of open farm and rangeland are located to the north and southwest of town.

Auburn Ravine is the primary waterway near the City of Lincoln. This perennial stream supports a significant riparian community of high habitat and scenic value. Markham Ravine traverses the northern edge of town. This annual stream doesn't support a riparian community, but pools are commonly found throughout the year. Ingram Slough and Orchard Creek are smaller streams south of town. Lincoln's climate is typical of the San Joaquin Valley. Summers are hot and dry with temperatures averaging from 80 degrees with extremes of 110 degrees. Rainfall is rare during the summer months. Winters are cool and wet with temperatures averaging 45 degrees and dipping into the 20's occasionally. Most of Lincoln's 22 inches of annual rain falls during this time. Prevailing winds are from the southwest.

3.2. ECONOMIC DEVELOPMENT STRATEGY

The Williams-Kuebelbeck Study (WKS) analyzed Lincoln's downtown economic potential and identified development potential for the twenty year planning period. The following section presents the highlights and findings of the WKS study. This economic analysis and strategy is the foundation of the land use program and design recommendations of the Downtown Development Plan. The following sections are excerpts directly from the Williams-Kuebelbeck Study of 1990.

Population and Housing Trends

The City of Lincoln has grown modestly during recent decades, but is now embarking on a major growth phase. This growth is a consequence of the steady and rapid expansion of the Sacramento metropolitan area. The same forces which brought rapid residential and commercial growth to Roseville, Rocklin and Folsom in the 1980's are approaching Lincoln in the 1990's. Specific plans have been advanced to annex and develop over 2,800 acres of unincorporated Placer County land south of the existing City limit. At projected rates of growth, the City will grow to almost 13,000 by the year 2000 and to over 22,000 in 2010. If

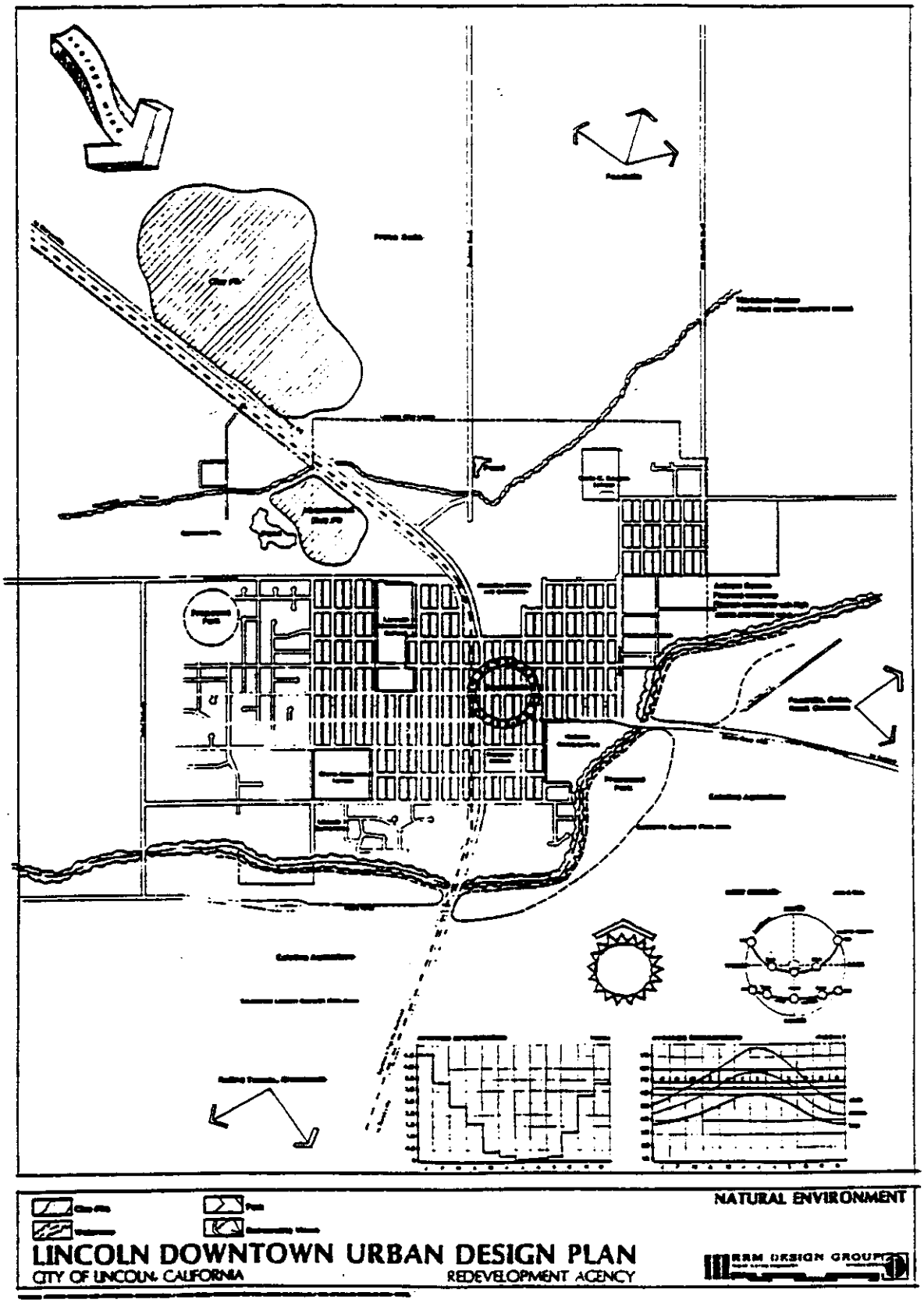

NATURAL ENVIRONMENT
LINCOLN DOWNTOWN URBAN DESIGN PLAN
CITY OF LINCOLN, CALIFORNIA
REDEVELOPMENT AGENCY
ERM DESIGN GROUP

Figure 3

residential development occurs as planned, the ultimate population could reach nearly 49,000 sometime in the next century. Based upon this population trend, the City of Lincoln may eventually be larger than the present size of the City of Davis (in Yolo County), with a 1989 estimated population of 44,000. The population growth rate is expected to be 5-6% per year during the twenty year planning period, five times greater than State averages.

The location and pattern of projected development will be significantly different from current trends. Located predominantly south and west of the current City limits, and across Auburn Ravine, new development will not, for the most part, be knit into the traditional city grid, but will rather conform to a curvilinear suburban pattern with a few dominant arterials connecting residential areas to Highway 65 (the major north-south corridor) south of the downtown area. Also, significant in the proposed plans is the development of new commercial areas within the new residential areas, and a re-routing of Highway 65 (G Street through Lincoln) to a new alignment to the west of downtown.

There are a total of 345 potential units on land which is approved or tentatively approved for subdivision and development. Of these, site development has begun on approximately 226 lots. It is expected that these units will be built within the next one to two years.

Similar to the rapid population growth forecasted for the City, housing demand is expected to triple from 1990 to the year 2010. The present housing demand is projected to range from 1,000 units between 1990-1995 to 2,050 units between the years 2005 and 2010. Opportunities for the addition of more housing are limited within the study area, which is largely built out and zoned for commercial uses. There are opportunities, however, for development on currently vacant lots, or in the future on redeveloped parcels. Because of the location, size, and context of downtown parcels, it is likely that future housing development would be higher density than typical single family development.

Given the historic trend of decreasing affordability of single family homes and the full occupancy of both assisted and market-rate apartments in the City, opportunities exist for the development of affordable housing in the downtown area. Proposed projects in specific plan areas include multi-family units, but these will not be built until after 1995. According to the WKS study, just to maintain the current 23 percent share of multi-family units in Lincoln, approximately 300 multi-family units would have to be built during the next five years alone to keep pace with planned single family development.

Retailing Trends

The downtown presently holds 116,400 square feet of retail space. Future (twenty year) demand is forecast for another 44,000 square feet.

As in most small towns, consumers in Lincoln have historically travelled to larger market centers for many purchases, while shopping locally for daily and convenience goods. This is particularly true since World War II, with widespread auto ownership and the development of large regional malls. The growth of the Sacramento area in recent decades, particularly Roseville and I-80 corridor, has brought more and better comparison shopping opportunities

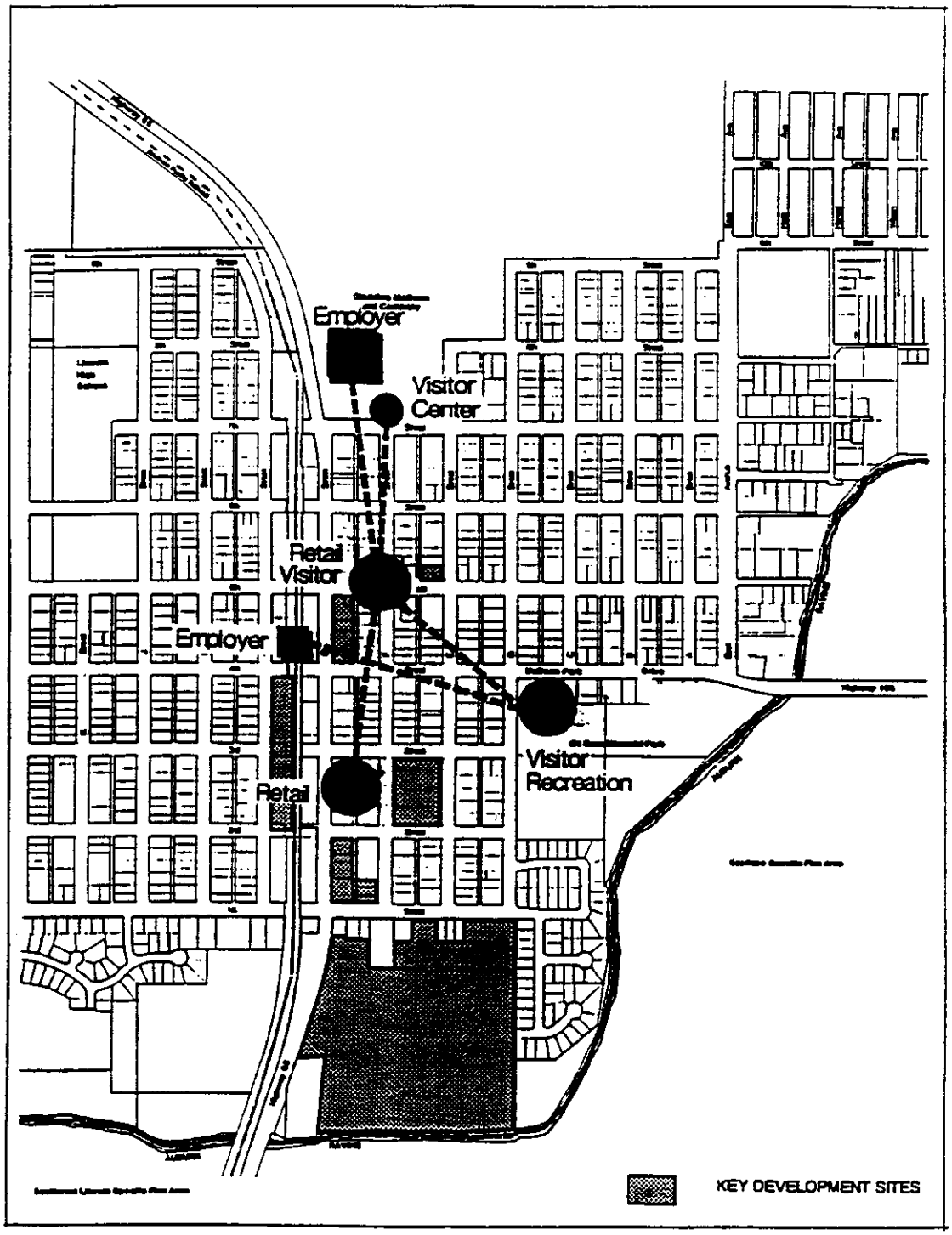

Employer
Visitor Center
Retail Visitor
Employer
Retail
Visitor Recreation
KEY DEVELOPMENT SITES
ECONOMIC ENVIRONMENT
LINCOLN DOWNTOWN URBAN DESIGN PLAN
CITY OF LINCOLN, CALIFORNIA
REDEVELOPMENT AGENCY
HRM DESIGN GROUP

Figure 4

Roseville and I-80 corridor, has brought more and better comparison shopping opportunities closer to city residents. However, Downtown Lincoln's relative isolation from other cities, and lack of local competition, has maintained a vitality to its role as purveyor of everyday goods and services to local residents.

Downtown Lincoln can expect to profit, however, from the increased population and income of Lincoln residents in the specific plan areas, particularly if public and private efforts help to maintain and improve the environment of downtown. Retail sectors in which many small city downtowns have found relative success include restaurants and specialty goods and services. These establishments can take advantage of the uniqueness of the downtown environment and can help make it a destination for all city residents. Current trends of strong restaurant sales should continue, and can improve if augmented with more mid-scale eating establishments. Downtown Lincoln should also be able to improve its role as a neighborhood shopping center to nearby residents and downtown employees.

Summary of Findings

In summary, downtown Lincoln faces rapidly changing conditions that present it with both challenges and opportunities. Downtown Lincoln is located away from the areas of Lincoln projected to grow most quickly, and will thus remain most convenient to existing residents. However, new Lincoln residents will add significantly to local disposable income, and downtown Lincoln is expected to participate in the enhanced retailing opportunities which will be demanded by new residents. Downtown Lincoln is expected to offer development opportunities for professional office space and specialized housing.

The significant findings pertaining to downtown Lincoln's economic role within the greater context of the city and proposed specific plans areas are highlighted as follows:

- **Downtown is envisioned to be a neighborhood shopping hub to nearby residents and downtown employees and a specialty center for goods and restaurants.**
- **Downtown Lincoln will not be able to compete with the Cities of Roseville or Rocklin for comparison shopping goods typically found in regional shopping malls.**
- **Office development opportunities exist in downtown Lincoln for small scale professional office users and public / institutional agencies.**
- **Multi-family housing development opportunities exist in downtown Lincoln for low / moderate income families and senior citizens.**

Based upon market demand projections to the year 2010, downtown Lincoln is estimated to be able to capture the following market segments, square footages or residential units.

Retail Development	**44,000 square feet**
Office Development	**49,000 square feet**
Residential Development	**100 - 200 units**

Downtown Lincoln's retail role within the broader context of the city and proposed specific plan areas is envisioned to be one of the neighborhood shopping hubs to nearby residents and downtown employees and a specialty center for goods and restaurants not available within the city. The target business types envisioned to be captured by the 44,000 square feet are neighborhood and convenience retail goods and services, specialty retail and restaurants. The daily convenience goods and services would serve the adjacent neighborhoods and downtown businesses. Such goods and services include, but are not limited to: food, drugs and toiletries, packaged liquor, shoe repair and bakery goods. While serving the immediate neighborhoods, mid-scale restaurants and specialty retail goods could also attract customers from outside the central core and take advantage of downtown's historical and architectural charm. A sample of specialty goods and shops include: stationery and cards, antiques and collectibles, pet store and supplies, camera store, and a fabric yardage shop. However, primary emphasis should be placed upon neighborhood and convenience retail goods.

The private office development potential of 49,000 square feet will attract tenants form multiple professions who in turn will provide additional market support for retail goods and services within the downtown area during daily business hours. Both professional and service oriented office users such as medical, financial, insurance, real estate, and legal professions are envisioned for the study area. In addition to private facility office space demand will increase with the growth of the city. The development of city office space will reinforce the demand for further office and retail development.

Redevelopment emphasis of the study area should first be placed on new office and residential development. With the current limited availability of office space, the projected growth of office demand and the dearth of proposed projects in the near future, office development has an opportunity to gain a foothold in redeveloping the downtown core. The development of new private office and public facility space will bring forth investment and redevelopment activity into the downtown area and expand the downtown employment base. The accommodation of more employees in the central core will stimulate activity and increase the demand for retail goods and services during weekly business hours. In addition to employee expenditures, it is anticipated that business and civic clients will also make expenditures when visiting downtown. The development of additional public facility space, particularly for the City of Lincoln, if feasible, should occur around the existing civic and financial hub and will send a message to both downtown land owners and the development community that the public sector is committed to remaining downtown.

3.3. HISTORICAL PRESERVATION AND ENHANCEMENT

The City of Lincoln has a rich and varied historical context for planning. Preservation of historical buildings and established cultural events are vital to the community. A major emphasis of the Urban Design Element of the Downtown Urban Design Plan will be to identify key historical and cultural resources and identify strategies and design parameters that will preserve and enhance these important elements of the City.

Downtown Lincoln has over 171 buildings of local historical significance. Approximately 42 of these buildings are located in the downtown core area and have special historical importance to the community. (1989 Historic Resources Survey by Lincoln Arts and Cultural Foundation).

The following historical architectural styles can be found in the downtown area:

COMMERCIAL:		
	Romanesque	**1860-1900**
	Neo-Classic	**1910 - 1920**
	Renaissance Revival (Second)	**1910 - 1920**
	Spanish Colonial (Revival)	**1920 - 1930**
RESIDENTIAL:		
	Italianate	**1880 - 1890**
	Queen Anne	**1880 - 1900**
	Bungalow	**1890 - 1900**
	Tudor Revival	**1920 - 1930**
	Spanish Colonial	**1930 - 1940**
	Craftsman Cottage	**1930's**

Lincoln's architectural themes span several historic periods and therefore cannot be pinpointed to a single focus.

The following development opportunities exist in the historic character of downtown buildings:

- ❑ **The community has a good potential to expand downtown cultural events: Farmers Markets, History Tours, and Craft Fairs.**
- ❑ **People gathering events such as Feats of Clay, Summer Street Fair, and the Holy Ghost Association Festival are in place and draw local tourists and visitors to the downtown area.**
- ❑ **Downtown buildings are rich in architectural detail and represent a variety of important design movements and building styles.**

- **The Gladding-McBean plant represents an artisan tradition that provides a proud heritage for the community. The terra cotta products produced by the plant can be show-cased. Terra cotta images can provide attractive design elements in both building renovations and public squares and parks.**

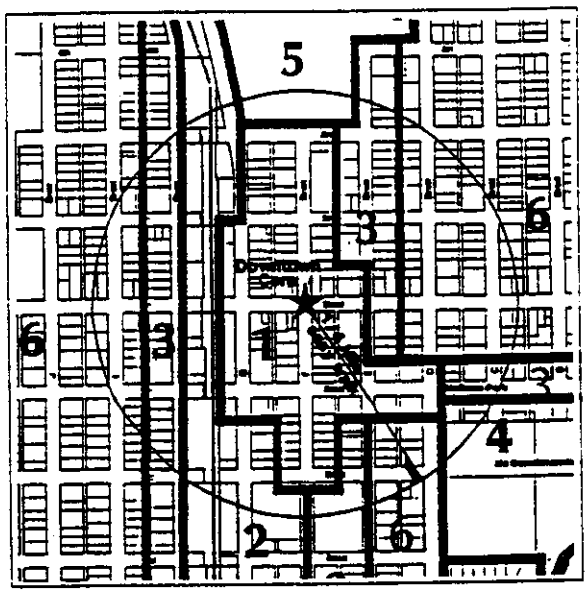
- **Tourism could be enhanced and become an important economic development aspect of the downtown with business opportunities for hotel, bed and breakfasts, restaurants, and gift shop trade.**

Most of Lincoln's key historic buildings are located within a four block area surrounding Beermann Plaza. The area centered around 5th, F and G Streets is the original downtown core and the oldest remaining buildings can be found there.

The IOOF Building, the Beermann Building, the Emmada Building, the Woman's Club, the Library, the original City Hall building, the Veterans building, and several other important historic structures are clustered along 5th Street between McBean Park Drive and 6th Street, and between G Street and E Street. This historic district forms the traditional heart of Downtown Lincoln. The newly constructed Beermann Plaza emerges as a key historic focal point and public gathering place for the community.

Other historic structures are found in McBean Park and linking these groupings of historic architecture is a critical objective of the Downtown Urban Design Plan Design Guidelines (see Section 7.0).

4. Land Use



"Downtowns work best when they are compact. It is remarkable indeed how many have a core no more than four blocks square."

—William H. Whyte

4. Land Use

4.1. SUMMARY OF EXISTING CONDITIONS AND PLANNING ISSUES

Introduction:

The purpose of the following section is to provide an inventory of existing land use patterns, conflicts, compatibilities, and overall conditions. This information will be utilized to formulate design strategies for strengthening desirable land use patterns and mitigate conflict situations. The recommended land use pattern for future development will focus upon maintaining commercial vitality in the downtown, addressing linkages of land use focal points, and assuring proper integration of the proposed Civic Center.

Existing Land Use Patterns

Downtown is generally located in a 1/2 mile ring around the intersection of State Route 65 and State Route 193. State Route 65 is the north-south spine and State Route 193 is the east-west arm. This "T" shape circulation pattern has established the present land use pattern found in Lincoln today. Commercial development has grown north and south along State Route 65 following the strip commercial center pattern of auto-oriented and historical zoning patterns of most western U.S. cities. Rainbow Market Shopping Center has created a key commercial focus at 3rd Street and State Route 65, establishing a strong physical image of suburban form on the southerly periphery of the Downtown. Civic land uses — the library, public safety and social services — have tended to locate on a small segment of 5th Street between G and E Streets. This area is the location of the original commercial center and represents Lincoln's traditional "Main Street". The City's newest improvement downtown, Beermann Plaza, is located here at 5th and F Streets.

The historic "Old Town" has emerged in the blocks surrounding this Main Street environment. Land use form in this area is of a mixed use nature, with retail stores on first floors and professional offices located on second stories. This area has the vast majority of two-story construction.

A major rail line runs parallel to State Route 65, one block to the west. Industrial and heavy commercial land uses have followed the rail and are primarily located on the west side of State Route 65, with the exception of the enormous area occupied by Gladding McBean along the northern edge of the downtown, east of State Route 65.

To the south and east of the "Old Town" area, are low density single family residential neighborhoods developed along a traditional grid street network. McBean Park is located two blocks to the southeast of the 5th and F Street intersection. Auburn Ravine, on the southeast edge of McBean Park, forms a natural riparian edge to the downtown. The Park is ringed by single family housing on McBean Park Drive and D Street. Multiple family development is very limited. Professional office uses are focused on 5th Street, along F Street, and on McBean Park Drive.

The downtown is primarily built out, however, several large vacant parcels are scattered throughout this area. These sites are key opportunities for future development in the downtown. The largest site is located south of First Street, north of the Auburn Ravine. Another important site is found east of Rainbow Market, between 2nd and 3rd Streets.

Existing General Plan and Zoning Patterns

Land use and zoning designations may have to be revised to address the specific recommendations of the Downtown Urban Design Plan. Business/ Professional and commercial land use designations are already established on the western portion of the McBean Park Drive and on the block between McBean Park Drive and 5th, and D and E Streets. The Commercial land use designation and zoning may be extended along McBean Park Drive.

The existing Land Use Element of the General Plan is consistent with the existing land use pattern. The Community Commercial designation dominates a fifteen block area between 7th Street on the north, E Street on the east, 1st Street to the south, and H Street to the west. Business and professional office designations generally run along the eastern edge of this Community Commercial core. A significant cluster of medium and high density residential exists along the southeastern edge of the Gladding McBean Plant site. Another area of multifamily exists at 6th and East Streets. It should be noted that multifamily projects are permitted by CUP in all commercial zoning districts. Residential Planned Development overlays the large vacant site between 1st Street and the Auburn Ravine. Low Density Residential designations surround the downtown core area and McBean Park. Neighborhood commercial nodes are located at East Avenue and McBean Park Drive and 7th Street and East Avenue.

4.2. KEY NODES AND LINKAGE PATTERNS

A node is an area or place of importance where people tend to gather. Nodes can be public gathering places (i.e. a park or plaza) or commercial activity centers. Nodes typically also function as points of reference within a community. Nodes, or key land use activity centers, are critical component of any downtown. Downtown Lincoln has several shopping and employment concentrations that are important in terms of physical linkages and should be recognized by the Plan.

The key nodes in downtown Lincoln are as follows:

- **5th Street and F Street Intersection /Beermann Plaza**
- **Gladding-McBean Plant**
- **Rainbow Market**
- **McBean Park**

The above activity centers create a unique urban form for the downtown. The current influence of these nodes is a positive one that should be reinforced. The triangular shape of the land use patterns for downtown and the location of these nodes begins to suggest a network

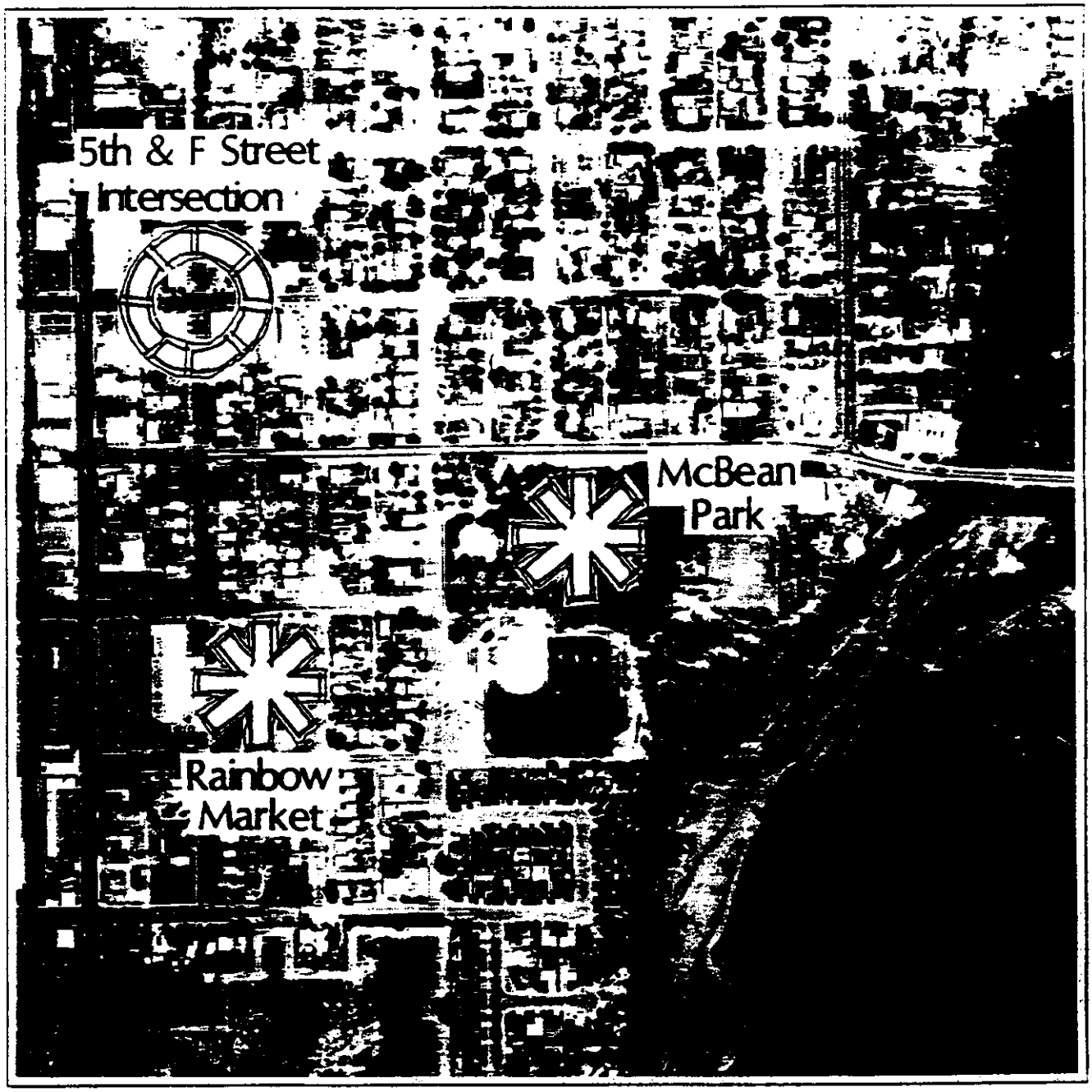


Figure 5

of physical linkages which can be strengthened through use of corresponding streetscaping, sidewalk, and plaza improvements.

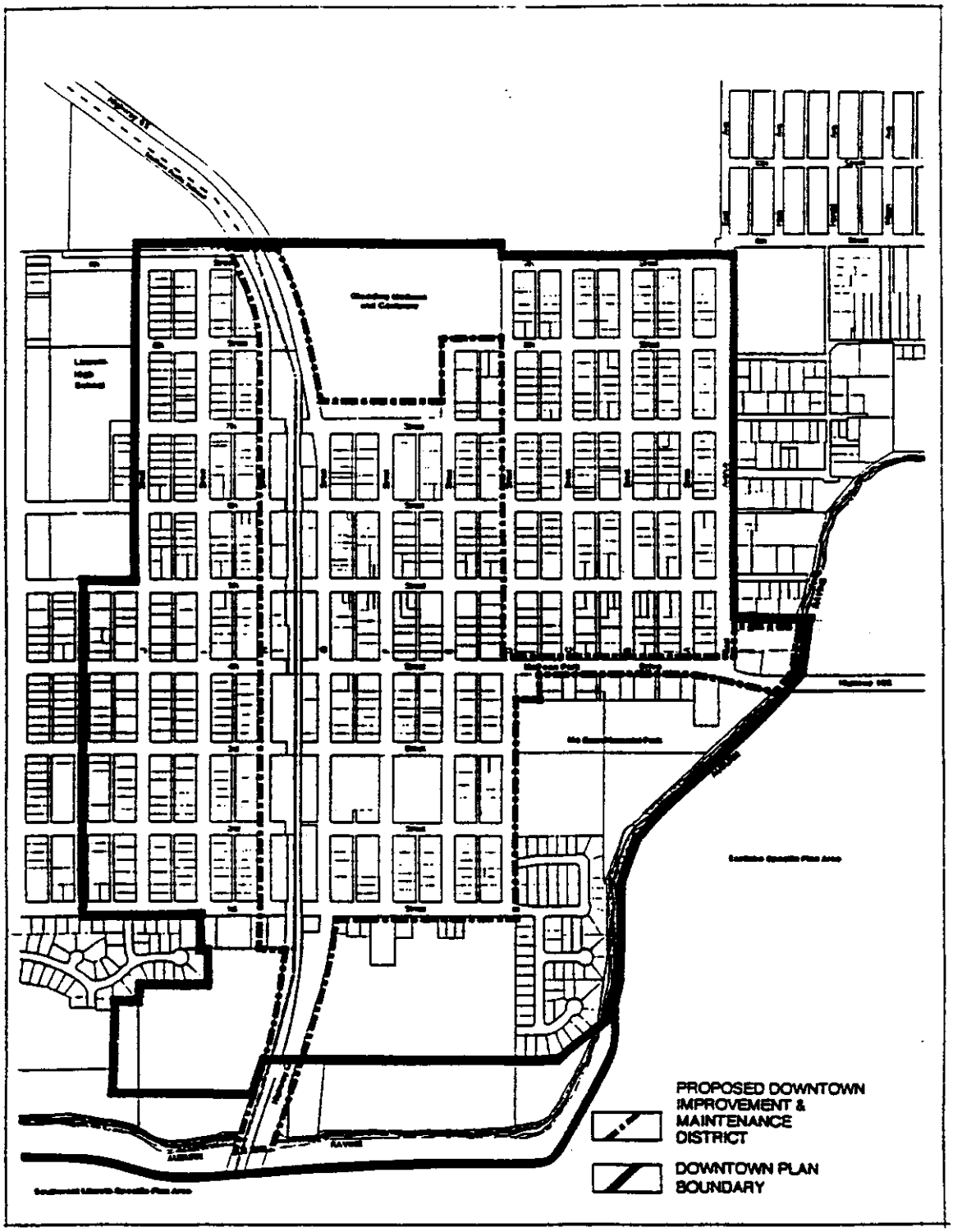
4.3. DOWNTOWN DEFINITION AND DISTRICTING CONCEPT

Downtown Planning Area Boundaries

Based upon the Citizen's workshop process, existing established land uses, and the need to address linkages, a geographic definition of Downtown Lincoln has emerged. Two public perceptions exist regrading the geographic coverage of Downtown. One is the perception of the traditional and historic commercial core, the other is a "new" downtown. The "new" downtown is moving southerly and now terminates around Rainbow Market. McBean Park is also perceived by the public as having an important relationship to the downtown. It is important to recognize McBean Park's relationship and importance to the Downtown in the Downtown Urban Design Plan.

For the purpose of the Downtown Urban Design Plan, and overall Plan Area boundary was determined to be generally 9th Street to the north, East Avenue to the East, Auburn Ravine to the South and K Street to the West. This represents the larger area of influence. However, within this boundary, a primary planning area was focusing more on the established land use and circulation patterns that have developed along the State Route 65 and State Route 193 corridors with the corresponding nodes described above.

Within these planning area boundaries there are distinct "districts" that reflect both existing and proposed land uses and physical character.



PROPOSED PLANNING BOUNDARIES

LINCOLN DOWNTOWN URBAN DESIGN PLAN
CITY OF LINCOLN, CALIFORNIA REDEVELOPMENT AGENCY

Figure 6

Districting Concept

There are six distinct districts within the Downtown Plan Area. Each has a functional and design theme. The following descriptions outline the social, cultural, and physical aspects of each individual district. These character statements provide the basis for the specific design guidelines which follow in the Urban Design section of this plan (see section 6.0).

Description of Downtown Districts

DISTRICT 1: OLD TOWN HISTORIC AREA

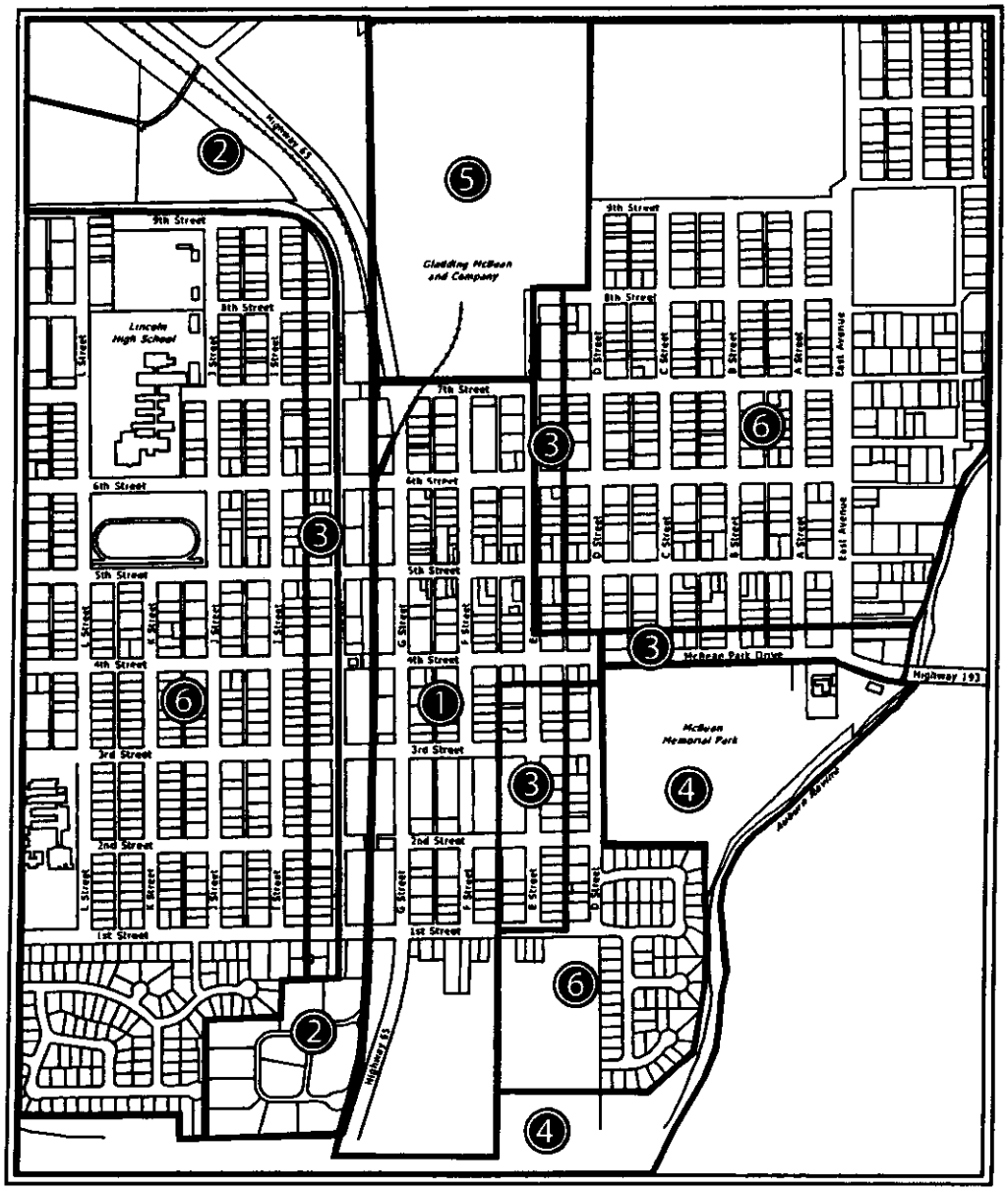
District 1 represents the historic marketplace center of the community. Mixed use land patterns and multi-story development have typified historic downtown districts. Community retail stores are predominate on the first floor of buildings, with professional offices and residential uses located on upper levels. All of Lincoln's historic buildings will be encompassed by this district. This District will remain a principle commercial focus for the City but will also take on an important role as an employment center, a visitors center, and a cultural center.

Residential land use, particularly in multi-family housing, will also be a significant part of Old Town's future. Restaurant, entertainment, and civic functions are essential to the land use program for District 1. Restoration, revitalization, and celebration of Lincoln's history will be encouraged in Old Town. A critical dimension of District 1 development will be the preservation of pedestrian scale and environments. District 1 will be a place where the sidewalk is a vibrant and exciting place. Street widths will be narrowed at intersections ("bulb-outs") to encourage easy pedestrian traffic. Sidewalk cafes, public plazas, and pedestrian walkways will create an exciting and colorful street atmosphere. District 1 will be the focus of community cultural activities — street fairs, farmers open air markets and public celebrations. The "main street" environment of a small, rural community will be retained and encouraged.

DISTRICT 2: HIGHWAY 65 CORRIDOR

District 2 must respond to the strong auto-oriented commercial land use pattern that has developed along Highway 65. District 2 will continue to be an area of suburban character and pedestrian circulation will not be as critical an element of the corridor's improvement program. The site development characteristics of the Rainbow Market provide a good prototype for future development of this area. Though an architectural theme, consistent with the City's small town character, will help to strengthen the visual and physical unity of the District two corridor. Single story projects on larger parcels will characterize the development fabric of District 2. Streetscaping will be less formal and public plaza elements will be limited to "gateways" or "landmark" areas. In response to the transportation focus of the corridor, a future transit center is recommended for this District. Typical of highway commercial zones, District 2 will accommodate gas stations, auto service, auto repair, fast food outlets, car dealerships, motels, restaurants, light manufacturing, wholesale services, and rail-related storage and transportation land uses. The District will accommodate the City's major truck route and railway operations. Heavier commercial activity will be appropriate in District 2.

DISTRICTING MAP



1. Historic Retail
2. Highway & Service Commercial
3. Transitional / Mixed Use
4. McBean Park
5. Gladding McBean Industrial
6. Fringe Residential

Lincoln Downtown Urban Design Plan

CITY OF LINCOLN, CALIFORNIA

REDEVELOPMENT AGENCY

RRM DESIGN GROUP

Gateways to the north and south will play a critical roll in the overall Urban Design for the downtown.

DISTRICT 3: TRANSITION ZONE

This District will be an area of land use change as the Downtown grows and expands. District 3 is envisioned as an appropriate transition zone for single family housing uses to convert to small offices, downtown homes, and multifamily residential development. Multi-family densities will not be as intensive as District 1, yet may be allowed to reach 12 to 18 units per acre under a Conditional Use permit process. This District provides for a linkage to McBean Park, bridging the area between the historic commercial area and McBean Park.

DISTRICT 4: MCBEAN PARK / AUBURN RAVINE

District 4 is primarily a recreation and open space District. McBean Park dominates this area with the riparian strip along Auburn Ravine playing a secondary recreational role. Cultural, recreational, civic, and social land use activities are the only permissible land uses within the Park District. The Civic Center may be located within the Park. Other civic functions may also be appropriate such as a terra cotta historical landmark, a public band-stand, an amphitheater, or a public library. McBean Park has always been and shall remain a recreational and cultural center. The stadium and pavilion may be upgraded or expanded. A wildlife refuge with museum may be created along the Ravine. All of these concepts are compatible in the proposed land use program of District 4.

DISTRICT 5: GLADDING MCBEAN INDUSTRIAL AREA

The Gladding McBean Industrial District recognizes the special role of the plant and provides for integrating industrial land uses into the Downtown Plan. The District guidelines will suggest design techniques to soften existing and potential land use conflicts. Because of the significance of Gladding-McBean, within or adjacent to District 5 is an ideal location to develop a permanent Visitors Center site (near F and 7th Streets).

DISTRICT 6: HISTORIC RESIDENTIAL GRID

In order to preserve the small town character of Lincoln and integrate historical neighborhoods into the Downtown Urban Design Plan, District 6, the Historic Residential Grid has been acknowledged. This grid neighborhood surrounds the commercial core and serves as a significant historic fringe to the downtown. Design concepts will focus on preserving and enhancing these older downtown neighborhoods.

4.4. OPPORTUNITY SITES AND RECOMMENDED PROJECT CONCEPTS

The Williams-Kuebelbeck Study and field observations have identified several key vacant properties with development potential.

These properties are depicted on the following map and are identified as follows:

- **Ristau / Feingold Property**
- **Rainbow Market Site**
- **5th Street and E Street**
- **7th Street and F Street**
- **Railroad Property, between H Street, 2nd and McBean Park Drive**

These five properties represent unique opportunities for new land uses in the Downtown. The Downtown Urban Design Plan recommends that these properties be utilized for a combination of public and private uses. The following land use concepts and projects are suggested for each of these sites.

Visitors Center

The Visitors Center concept is an important component of the overall Downtown Plan. The Visitors Center concept is an extension of the successful Feats of Clay event which is held annually. The intent of providing a permanent Visitors Center facility is to promote the Downtown through an emphasis of the City's history and the significance of the Gladding McBean industry to the City of Lincoln. It would also serve as a marketing mechanism for Gladding-McBean retail products. The Visitors Center would be comprised of a historic museum, visitor's information center, a staging place for plant tours, and a continuous display of Gladding McBean retail products. The Visitors Center requires public parking facilities, and an off-street City lot should be developed within close walking distance of the Visitors Center location. Lincoln Arts should be closely consulted in the development, design, and operation of the facility. Any new hotel or motel projects should be located in close proximity to the Visitors Center. Sites on Highway 65 should be emphasized.

Transit Center

Over the long run, perhaps beyond the 20 year scope of the Downtown Plan, the City will require a public transportation center. This center will be multi-modal in nature and must be located within close proximity of existing rail lines. This center would provide for light-rail, Amtrak, local bus and Dial-A-Ride, park-and-ride facilities, and inter-city bus lines such as Greyhound. The vacant Southern Pacific property appears to be a logical choice. The stub-street right-of-way of McBean Park Drive could also be added to the McBean and H Street site.

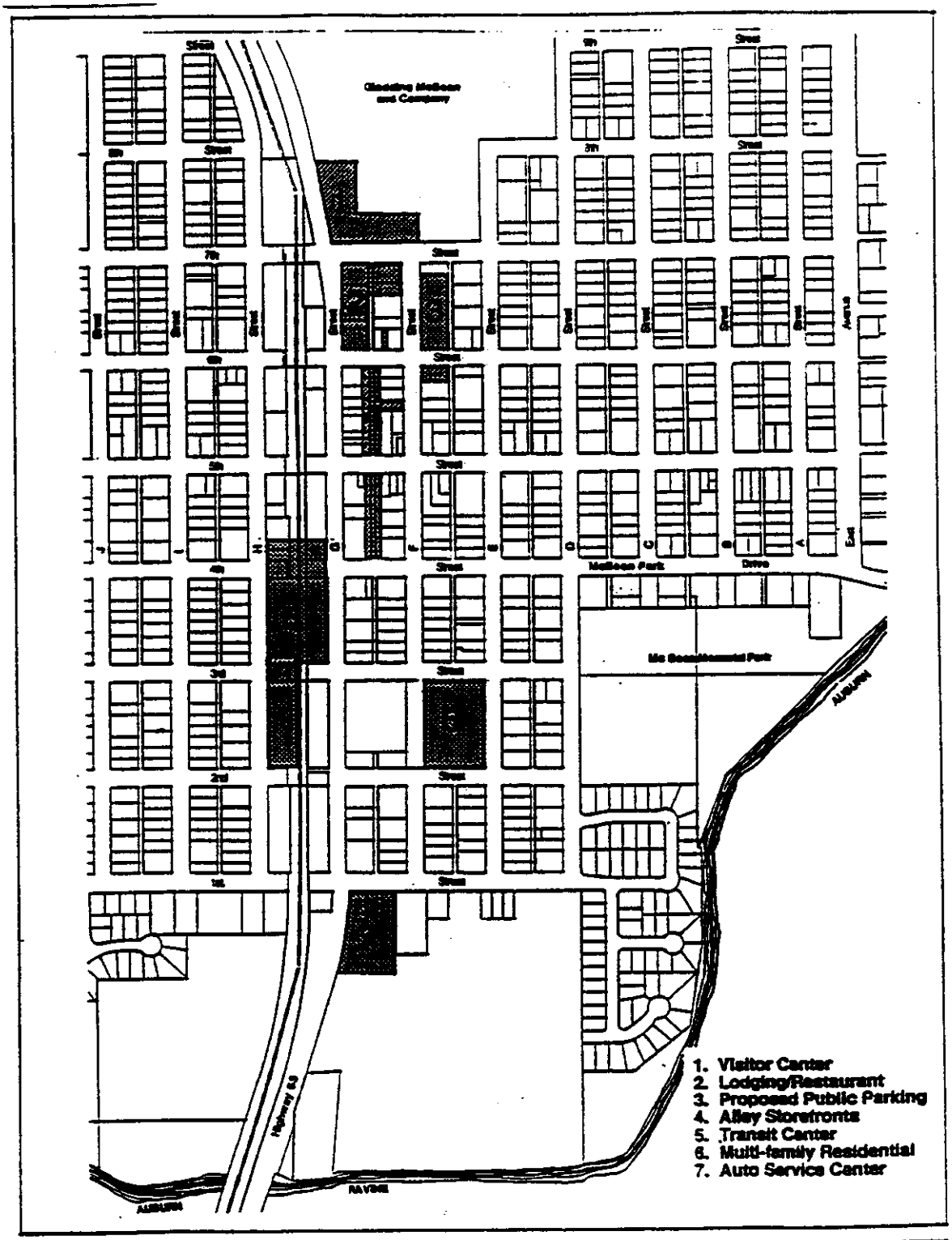
Multifamily Development

Seniors and/or affordable housing needs to be emphasized in the future land use program. Three sites appear to hold high potential for new multifamily development, they include — 1) Ristau / Feingold property along 1st Street; 2) Rainbow Market site; and 3) 5th and E Street site. Multifamily development could be two story townhomes, small scale clustered cottages, garden style apartments, or four-plexes in a planned development setting. Small lot, cottage / patio home development will be appropriate in District 3 with higher density, 2-3 story projects, leading into District 1.

4.5. LAND USE POLICIES

The following are recommended policies for the downtown area.

- ❑ **Encourage mixed-use and multi-story development within the Downtown. If necessary, use of the Planned Development (PD) overlay zone should be considered to enhance flexibility.**
- ❑ **Allow for streamlined approval procedures for projects in conformance with the Downtown Urban Design Plan.**
- ❑ **Encourage city administrative offices to return to the downtown.**
- ❑ **Support the development of a Gladding McBean Visitors Center in the downtown.**
- ❑ **Support the development of a new library facility at a downtown location.**
- ❑ **Support the development of high density multi-family development within the Downtown.**
- ❑ **Support the development of a Downtown Transit Center on Highway 65.**



POTENTIAL DEVELOPMENT SITES

LINCOLN DOWNTOWN URBAN DESIGN PLAN
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Figure 8

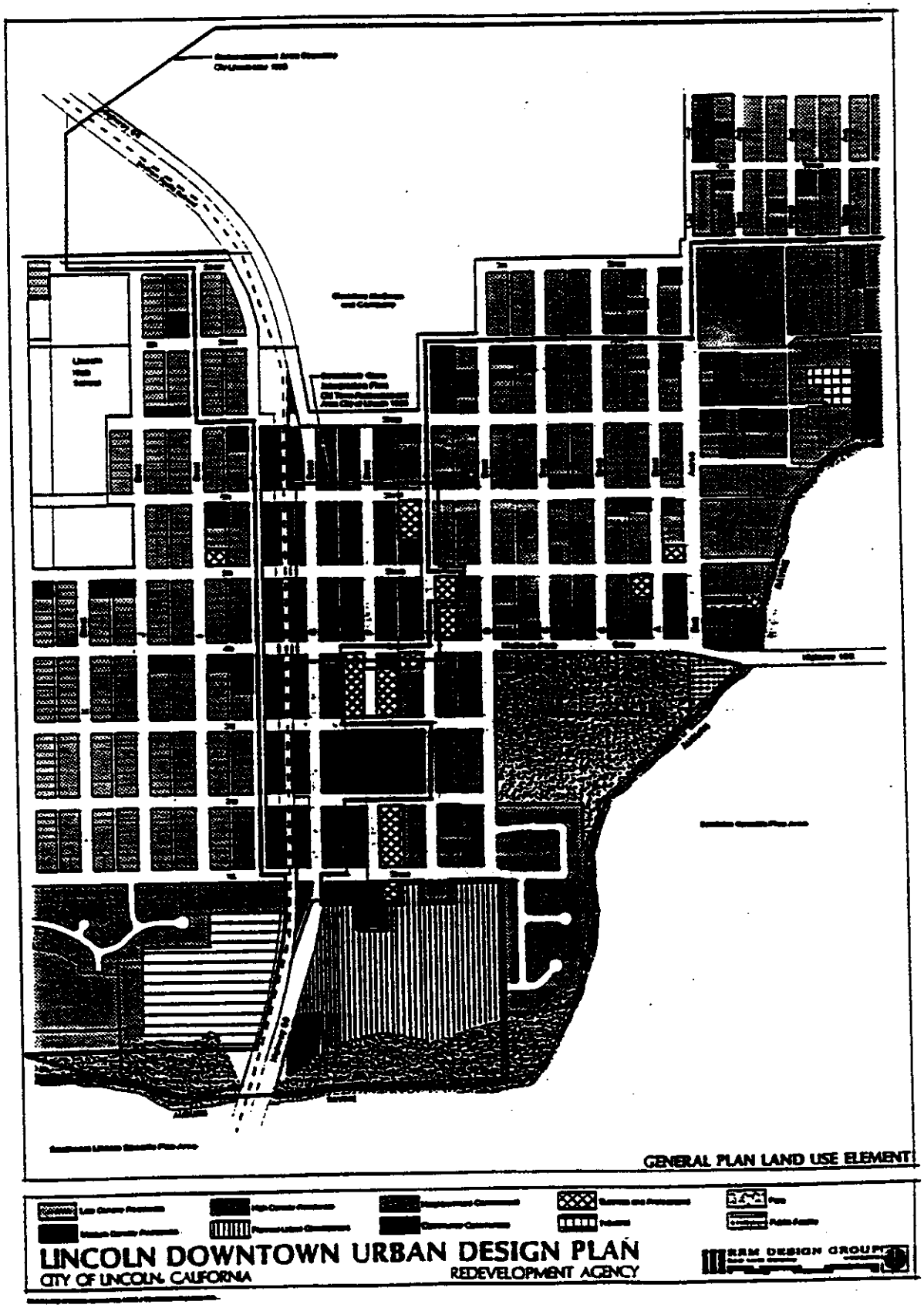
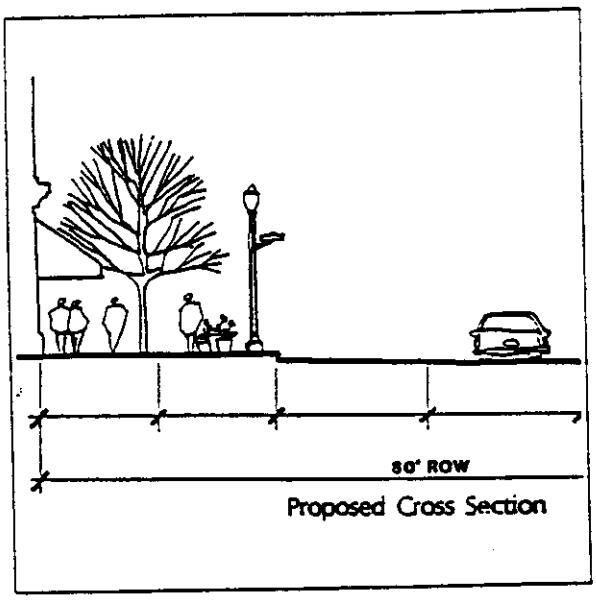

GENERAL PLAN LAND USE ELEMENT
LINCOLN DOWNTOWN URBAN DESIGN PLAN
CITY OF LINCOLN, CALIFORNIA
REDEVELOPMENT AGENCY
SRM DESIGN GROUP

Figure 9

5. Parking, Circulation, and Transportation



"In some American cities so much of downtown has been cleared for parking there is now more parking than there is city."

—William H. Whyte

5. Parking, Circulation and Transportation

5.1. SUMMARY OF EXISTING CONDITIONS AND PLANNING ISSUES

Introduction

The City of Lincoln is served by State Routes 65 and 193. State Route 65 provides direct access to the Cities of Roseville and Rocklin in southern Placer County and to Interstate 80 and points west. It also provides access to the north valley towns of Marysville, Yuba City and Oroville. State Route 193 is a short route linking Lincoln and the Newcastle / Auburn area. It is the City's connecting link with Auburn and points east on Interstate 80. Major streets within the City are Nicolaus Road (9th Street), 1st Street, 3rd Street, 7th Street, 12th Street, East Avenue, O Street and Aviation Boulevard.

Overview of Traffic Patterns

Lincoln traffic patterns are dominated by the two existing State Routes. This "T" formation creates two major arteries which intersect in the Downtown. Average Daily Traffic (ADT) is 10,000 to 14,000 on State Route 65, and 5,000 to 7,000 on State Route 193. Local streets in the Downtown carry approximately 2,000 to 4,000 ADT. The Southern Pacific tracks run north-south through Downtown, paralleling State Route 65. Major consideration must be given to the streets that provide rail-crossings — 1st Street, 3rd Street, 5th Street, and 7th Street. Signals are presently installed at 5th Street and State Route 65, McBean Park Drive and State Route 65, and 1st Street and State Route 65. Signals are proposed for McBean Park Drive and East Avenue, 3rd and State Route 65, and 7th and State Route 65. Level of service during peak periods is now A and B. The General Plan requires a minimum level of service of C, according to OmniMean's Traffic Study. Future State Route 65 traffic in the Downtown will be 17,000 ADT at community build-out.

Public transit service in Lincoln is provided by the Lincoln Transit Service, which is operated by the City, and provides weekday fixed-route service within the City limits form 7:30 am to 8:12 am, and 10:30 am to 3:45 pm.

Southern Pacific Railroad operates a main line through the center of Lincoln along the west side of State Route 65. This line is used only for freight service within Lincoln, although Amtrak service operates through the City. Amtrak terminals are located in Sacramento and Marysville.

The Lincoln Municipal Airport is owned and operated by the City. During 1989, an estimated 240 aircraft were based at the airport, with an estimated 103,000 operations (landing and take-offs). The existing capacity of the airport is approximately 200,000 operations per year, depending on the type of aircraft. The airport is designed to accommodate an additional runway, which would double its capacity.

Major Traffic Improvement Projects

Highway 65 realignment: The ultimate area transportation plan calls for movement of State Route 65 to one of two locations; one location mid-way between Downtown and the Lincoln Airport, on the west side of the community, and the other approximately one half mile further west of Lincoln Airport.

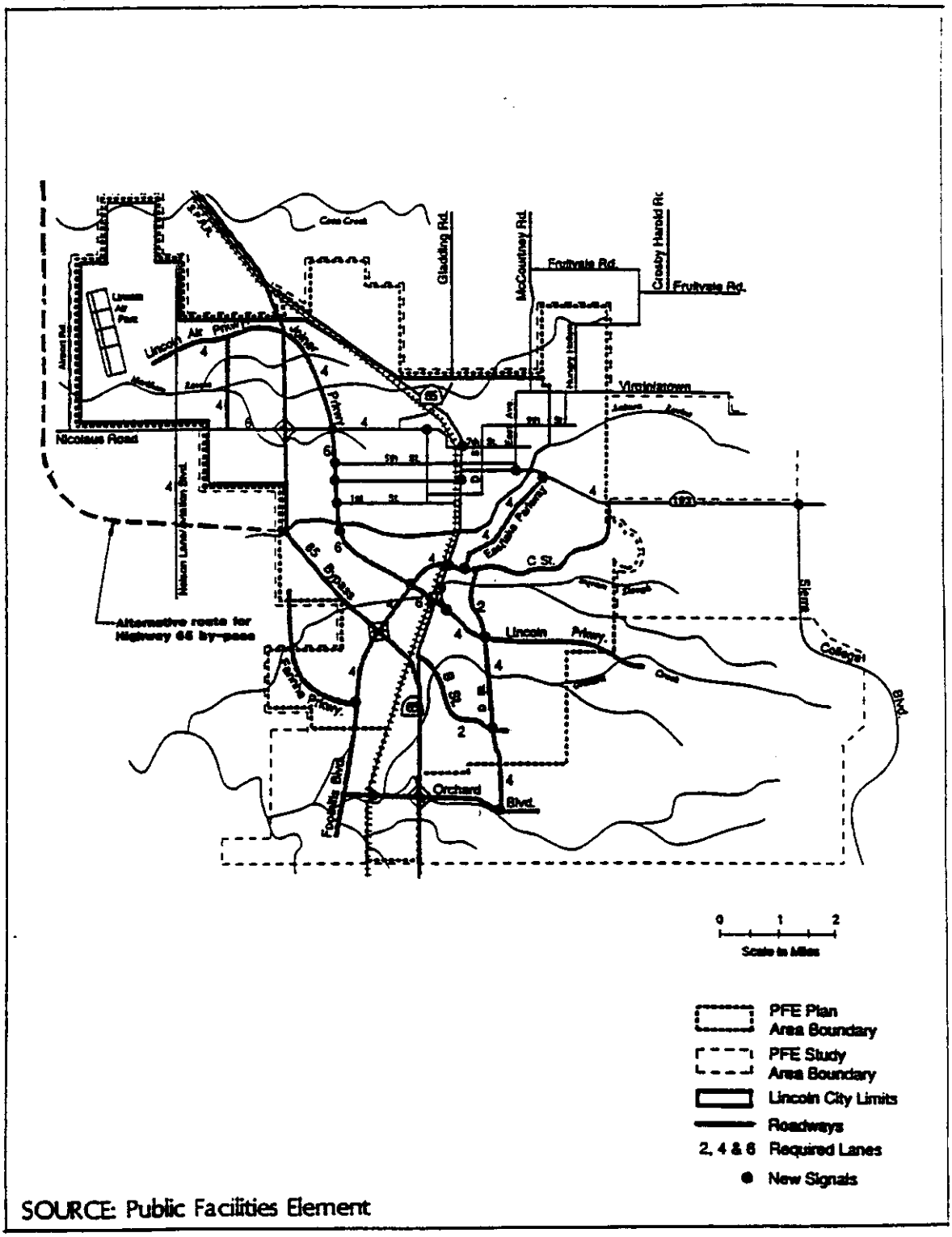
Highway 193 reconditioning and widening: The California Department of Transportation has started design work and environmental review on a project to repair and widen Highway 193 between Highway 65 in Lincoln and Sierra College Boulevard. According to Caltrans engineer Mark de Martini, the three-mile section will be rehabilitated and a section widened. Where the road narrows to 28 feet, east of Pioneer Lane on the edge of Lincoln, it will be widened to 40 feet. The wider the facility will have two 12-foot lanes and 8-foot shoulders. A left turn lane is also planned at Oak Tree Lane. The section between Highway 65 and Pioneer Lane is 50 feet wide and will be resurfaced only.

Street Widening: Several existing roadways will require widening by two to four lanes including, but not limited to:

- **Joiner Parkway Bridge**
- **State Route 65**
- **Nicolaus Road**
- **State Route 193**
- **Aviation Boulevard**
- **Lincoln Airport Drive**

Lincoln / Joiner Parkway

A major thoroughfare connecting the southern annexation growth zone and the western addition area will be developed over the planning period. At build-out this expressway will carry approximately 25,000 to 30,000 ADT.



SOURCE: Public Facilities Element

FUTURE CITY WIDE CIRCULATION PLAN

LINCOLN DOWNTOWN URBAN DESIGN PLAN
CITY OF LINCOLN, CALIFORNIA
REDEVELOPMENT AGENCY
RRM DESIGN GROUP

Figure 10

Consistency with Public Facilities Goals

The Downtown Plan must strive for consistency with these two key Public Facilities goals taken from the City's Public Facilities Element in the General Plan:

- **Maintain a minimum level of services (LOS) "C" for city streets and intersections and all new street intersections within the City. For the purpose of this policy, city streets and intersections exclude state highways.**

- **Provide landscaped corridors along State Route 65 south of 1st Street, State Route 65 north of 7th Street, Lincoln Parkway, Joiner Parkway, Eastlake, Nicolaus Road west of O Street, and all major arterials. Require developers to provide installation and establish a means of providing for maintenance of landscaping by either private covenants or a lighting and landscape district. Development patterns for State Route 65 should be consistent in design if possible.**

Public Transportation / Transit Systems

The Public Facilities Element calls for development of light rail between Lincoln and Roseville. It is recommended that any associated train station developed with this system be located in the downtown.

The following Transportation System Management (TSM) goals and objectives will be pursued in the planning and urban design for the Downtown:

- **Actively pursue measures that will help reduce vehicle trips as established in the City's Rideshare Ordinance.**

- **Provide pedestrian / bicycle crossings at appropriate intervals along new roadways that will adequately serve new large-scale commercial office, industrial development, and residential development.**

- **Encourage specific plans and development plans to include design of pedestrian access that enables residents to walk from their homes to places of work, recreation and shopping.**

Downtown Parking

There is presently a perception of downtown parking being inadequate. The Citizen's Survey further indicated a concern over a downtown parking problem. The following Parking Program will address this concern (see Sections 5.3 and 5.4 below).

Sidewalk, Bikeway, and Pedestrian Facilities

The Citizen's Survey and the Camera Survey indicated a major concern with sidewalk conditions and pedestrian improvements. The RRM field survey verified the lack of and condition of sidewalks to be a major problem in Downtown infrastructure. Bikeways are also lacking in terms of full system development. With the exception of the East Avenue bikeway, the downtown lacks a clearly designated bike system. The downtown is also lacking in terms of cohesive streetscaping public walkways, and plaza areas. Beermann Plaza is representative of the type of improvement necessary to enhance the pedestrian environment in downtown. This concept should be enhanced and expanded.

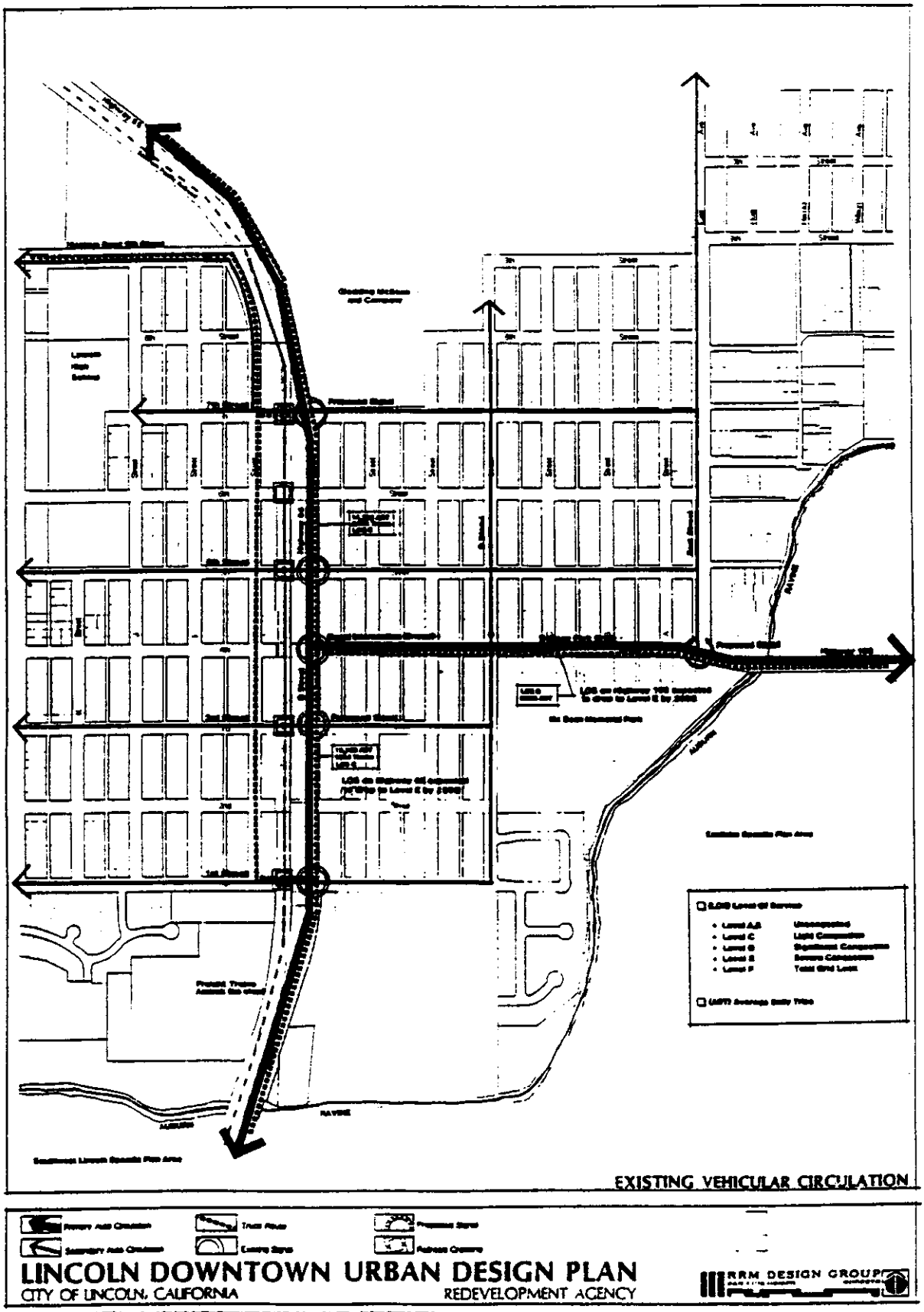

EXISTING VEHICULAR CIRCULATION
LINCOLN DOWNTOWN URBAN DESIGN PLAN
CITY OF LINCOLN, CALIFORNIA
REDEVELOPMENT AGENCY
RRM DESIGN GROUP

Figure 11

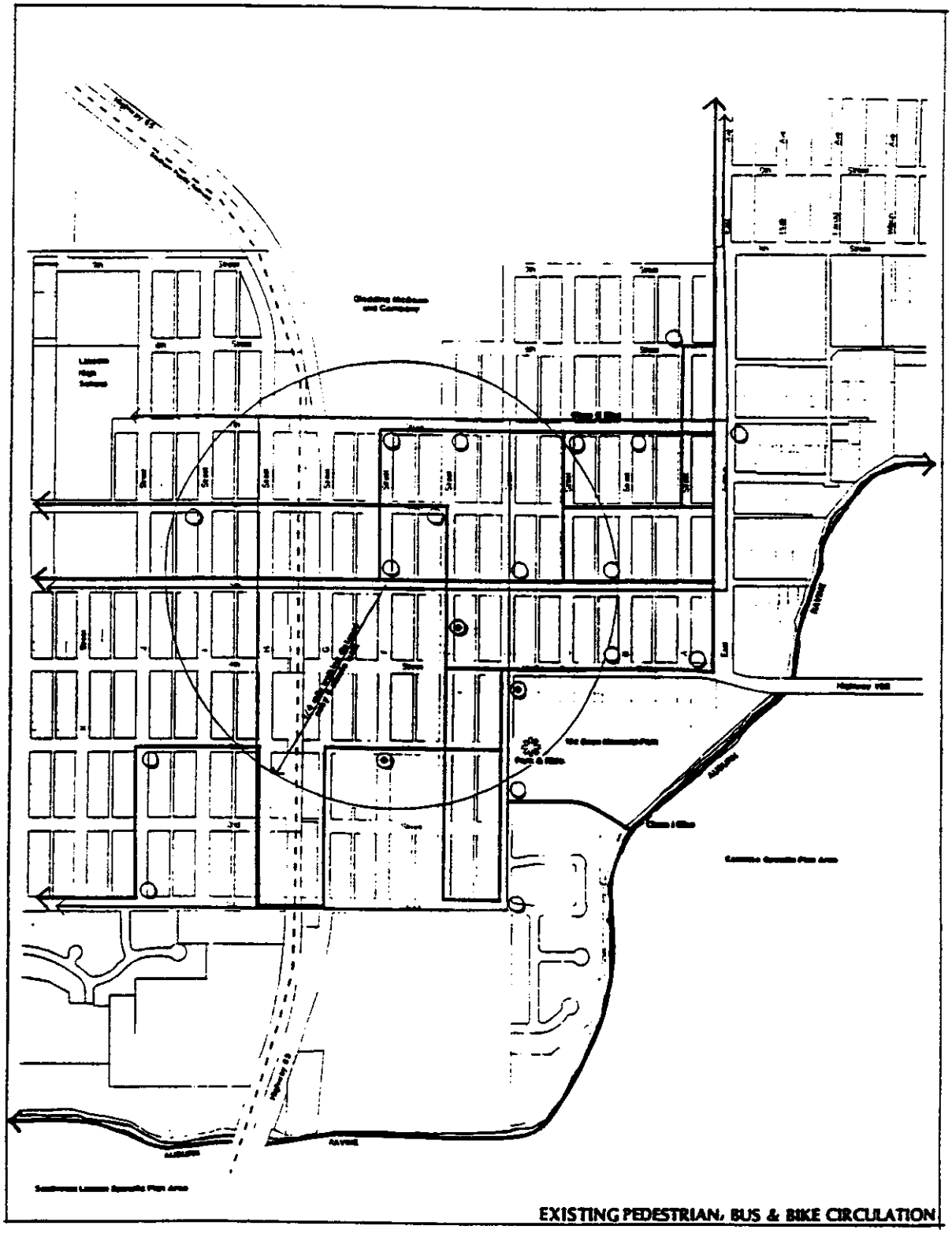

EXISTING PEDESTRIAN, BUS & BIKE CIRCULATION
LINCOLN DOWNTOWN URBAN DESIGN PLAN
CITY OF LINCOLN, CALIFORNIA
REDEVELOPMENT AGENCY
KRM DESIGN GROUP

Figure 12

5.2. STREET SYSTEM CONCEPTS

A determining structure of the downtown environment is the hierarchy and system of streets envisioned for the Downtown. The street system will respond to the districting concept described in the Land Use Section of this Plan. Maintenance of the historic grid pattern will be an important aspect of the proposed street system. In District 1, the Historic Old Town area, streets will respond most strongly to pedestrian use and access. In District 2, which includes the State Route 65 corridor, street design will respond to auto traffic with an emphasis on traffic based geometrics. District 3, 4 and 5 will display a hybrid interplay of pedestrian and auto orientation. In District 6, Historic Residential Grid and preservation of existing grid street patterns will be emphasized.

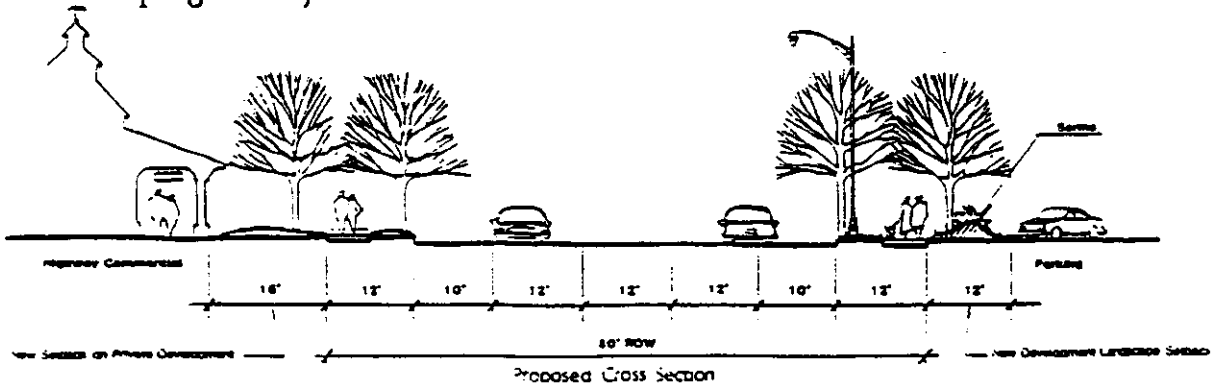
The following cross-sections and plan view illustrations depict the proposed hierarchy and design of the ultimate Downtown street system.

State Route 65 Corridor

The existing right of way along the Downtown segment of State Route 65 is 80', with a curb face to face measurement of 50'. This profile allows for a large existing public right of way area for landscaping and sidewalk improvements. The current striping of State Route 65 provides for a single travel lane in either direction and a continuous striped left hand turn zone along the center line.

On street, parallel parking is allowed along the entire State Route 65 corridor. Pedestrian access is difficult all along this segment of roadway. To enhance the pedestrian environment and protect the pedestrian, the sidewalk should be separated from the street with berming and landscape in an informal suburban form (eg. turf and groupings of street trees). As State Route 65 approaches downtown from the south, it will ultimately be a four lane, median landscaped, expressway. Allowing the expressway to narrow down to its' current width is a good way to "announce" arrival in the downtown and begin to capture the motorist's attention. It is recommended that roadway width be maintained at its present condition as two travel lanes. Elimination of on-street parking near busy intersections may be justified and desirable over the long-run (due to safety concerns). On-street parking could be designated to mid-block "clusters" allowing expansion of sidewalk and landscaped parking areas at intersections.

The section illustration depicts suggested pedestrian improvements for 3rd, 5th and 7th Streets. The key focal point of the State Route 193 and State Route 65 intersection should receive median landscaping in conjunction with lefthand turn lanes.



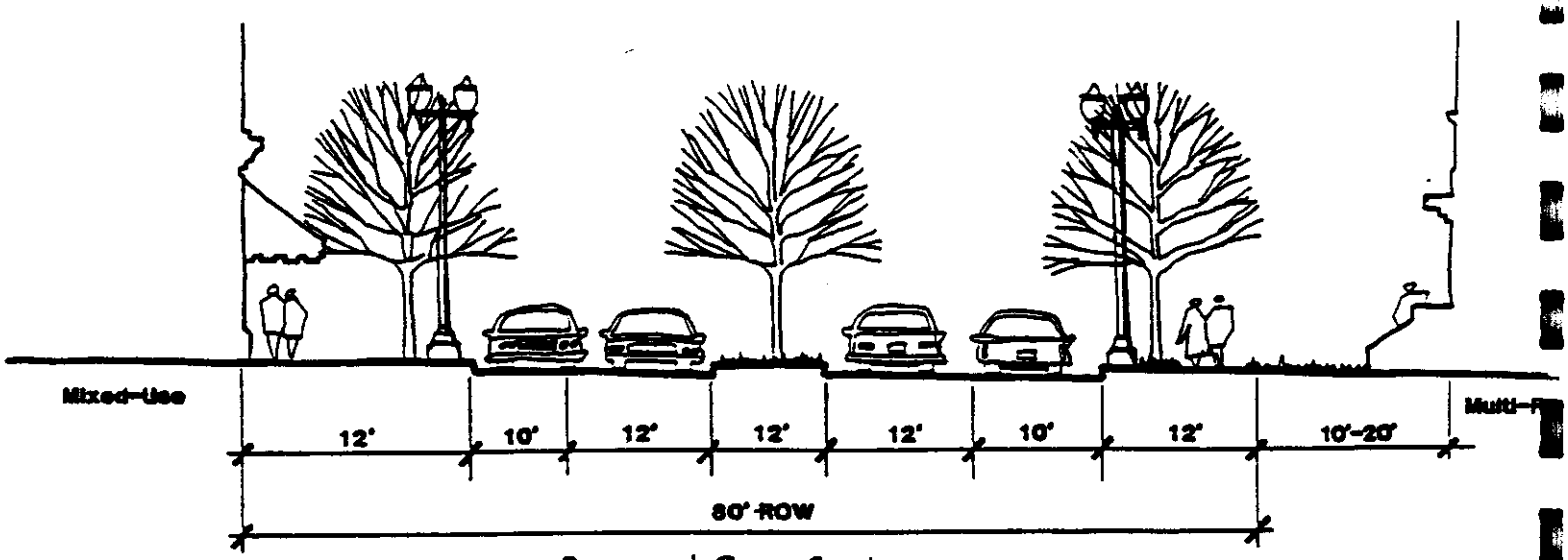
Proposed Cross Section

S.R. 65 District 2

McBean Park Drive

The key emphasis of McBean Park Drive will be its role as a major inter-city connector and its role in linkage of McBean Park to the commercial core. A pedestrian pathway system needs to be introduced on the north side of McBean Park Drive special crosswalk enhancements are required at F Street and D Street.

Existing right of way is 80' with a paved section of 50' from curb to curb. This road segment will be rebuilt by Caltrans and proposed improvements can be integrated with their plans. Landscaped median treatment should be considered approaching F Street and from F Street to State Route 65. On-street parking should be clustered mid-block. The following plan view of the intersection of F Street and McBean Park Boulevard depicts typical improvement proposals.



Proposed Cross Section
McBean Park Drive

F Street

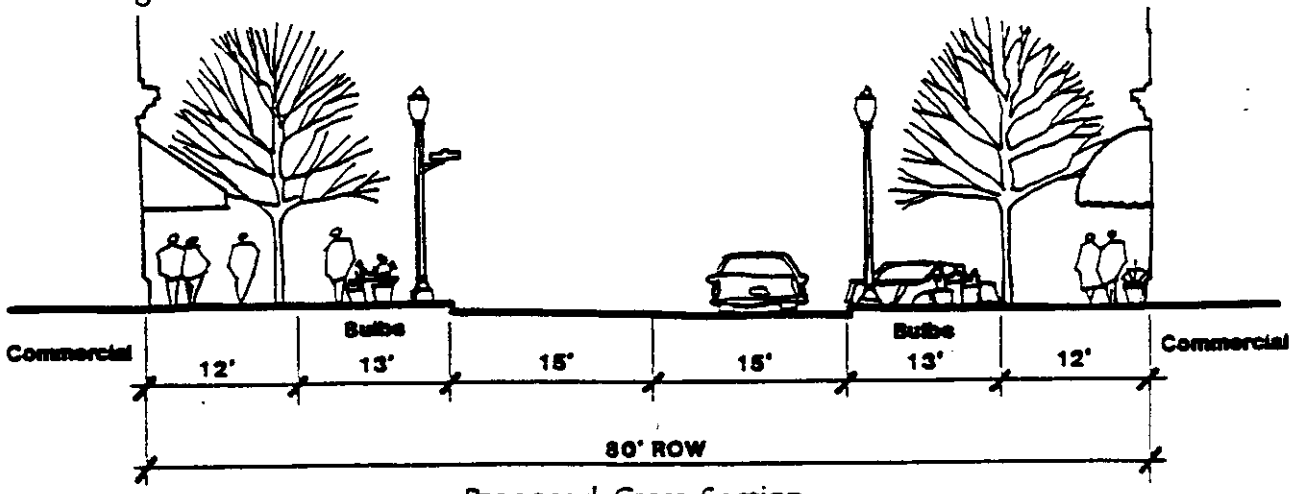
F Street will play a critical role in pedestrian linkage in the Downtown Plan. F Street has key nodes at its north and south termini — Rainbow Market and the Gladding McBean Clay Factory. It is important to give this street segment a special treatment. Right of way is the standard 80', the paved width is 50' curb to curb. This is a comfortable pedestrian geometry and should be reinforced. Diagonal parking, either continuous or clustered, is desirable where feasible. The sidewalk area is critical to the pedestrian environment and it should be allowed to expand into the street at key activity points.

Due to its axial relationship to the 5th Street / "Main" Street environment, it should be designated as a "ceremonial" street. The ceremonial street concept provides for conversion of the street to a pedestrian only zone during special events and Street Fairs. Removable bollards

can be placed as temporary barricades to restrict auto access during events such as Farmers Markets, sidewalk sales, and the Feats of Clay Festival. It is recommended that the "convertible" designation of F Street run from McBean Park Drive to the intersection of 6th Street and F Street. A special intersection treatment is required at the landmark intersection of 5th and F Streets. This intersection needs to make a statement as being the heart of the Historic District. Articulation of corners and sidewalk areas are recommended here.

5th Street

5th Street is the historic "main street" of Lincoln. Its role will be traditional and historic in orientation. The main street character calls for pedestrian scale and access. The existing right of way is 80' with a 50' pave out curb to curb. 5th Street will bear a close relationship to F Street. The same streetscape and sidewalk pattern will repeat on 5th Street. Commercial treatment should terminate at E Street near the Women's Club. Emphasis of improvements should be the key intersection with F Street and alley connections from the Beermann Plaza. Diagonal parking should occur from State Route 65 to E Street. Sidewalk cafes and store displays should be encouraged in this area.

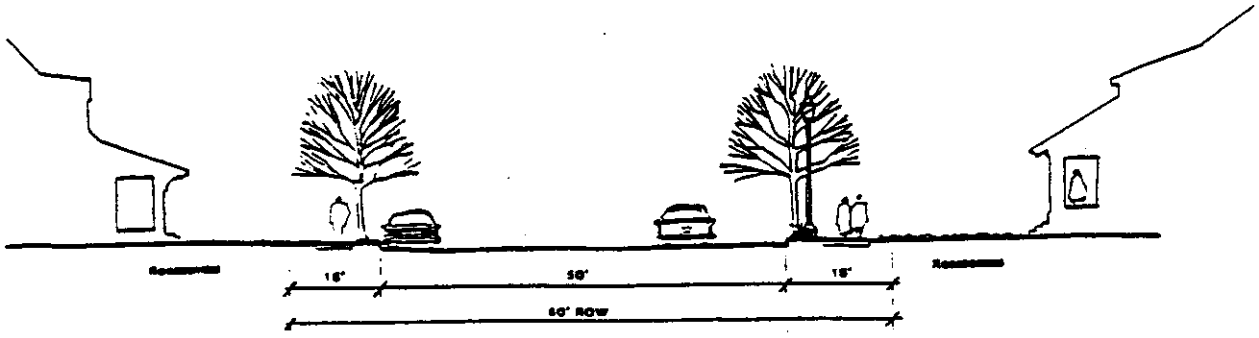


Proposed Cross Section

Downtown Commercial (District 1)

District 6 Residential Streets

The classic grid street pattern will be encouraged throughout these areas. Sidewalks need to be installed on one side of the street. The following cross section typifies the concept of the historic grid street.



Proposed Cross Section
District 6

Existing Parking Resources and Suggested Planning Criteria

Downtown parking requirements need to be more flexible and adaptable than typical off-street requirements for suburban areas. Space is at a premium and direct parking access by individual land use or property is not possible. Off-street parking must be clustered within walking distance of activity centers and on-street parking must be utilized for visitors and customers only. A physical parking inventory and count was conducted in August of 1991. Figure 14 illustrates existing parking facilities and the survey area. The following inventory was the result of this field review:

Table Three: Parking Count

Location	Spaces
5 Off-Street Parking Lots	385 spaces
Diagonal On-Street Parking	124 spaces
Parallel On-Street Parking (Est.)	125 spaces
Total Existing Parking	**634 spaces**

Source: Field Survey by RRM Design Group, October 1991

A large untapped, under-utilized parking area exists on the alleyways. Alleyways in Downtown should be developed with pocket parking at secondary/rear store entrances. In addition, potential sites are available in Downtown for development of new off-street parking lots.

In order to evaluate Downtown Parking Standards and Criteria, a survey of other City's parking standards was conducted. The results are depicted in the Parking Table.

Lincoln's existing parking standard is flexible and less restrictive than most City requirements. Remodeling and revitalization efforts receive special consideration. For purposes of evaluating future parking needs, an average parking standard of 1 space per 375 square feet of commercial space was utilized. According to the WKS, there is presently 150,000 square feet of commercial space (retail and office) in the Downtown. Based on the cited criteria, Downtown existing parking demand is 400 spaces. By this criteria, Downtown off-street parking is sufficient in supply.

Future demand for the planning period doubles downtown commercial space to 250,000 square feet. Future parking demand (20 year planning horizon) then is for 670 spaces. Based upon planning criteria, there is not ample supply to accommodate future growth. There is a forecast need for a minimum of 36 spaces. An offstreet public lot of 40 to 60 spaces should be developed.

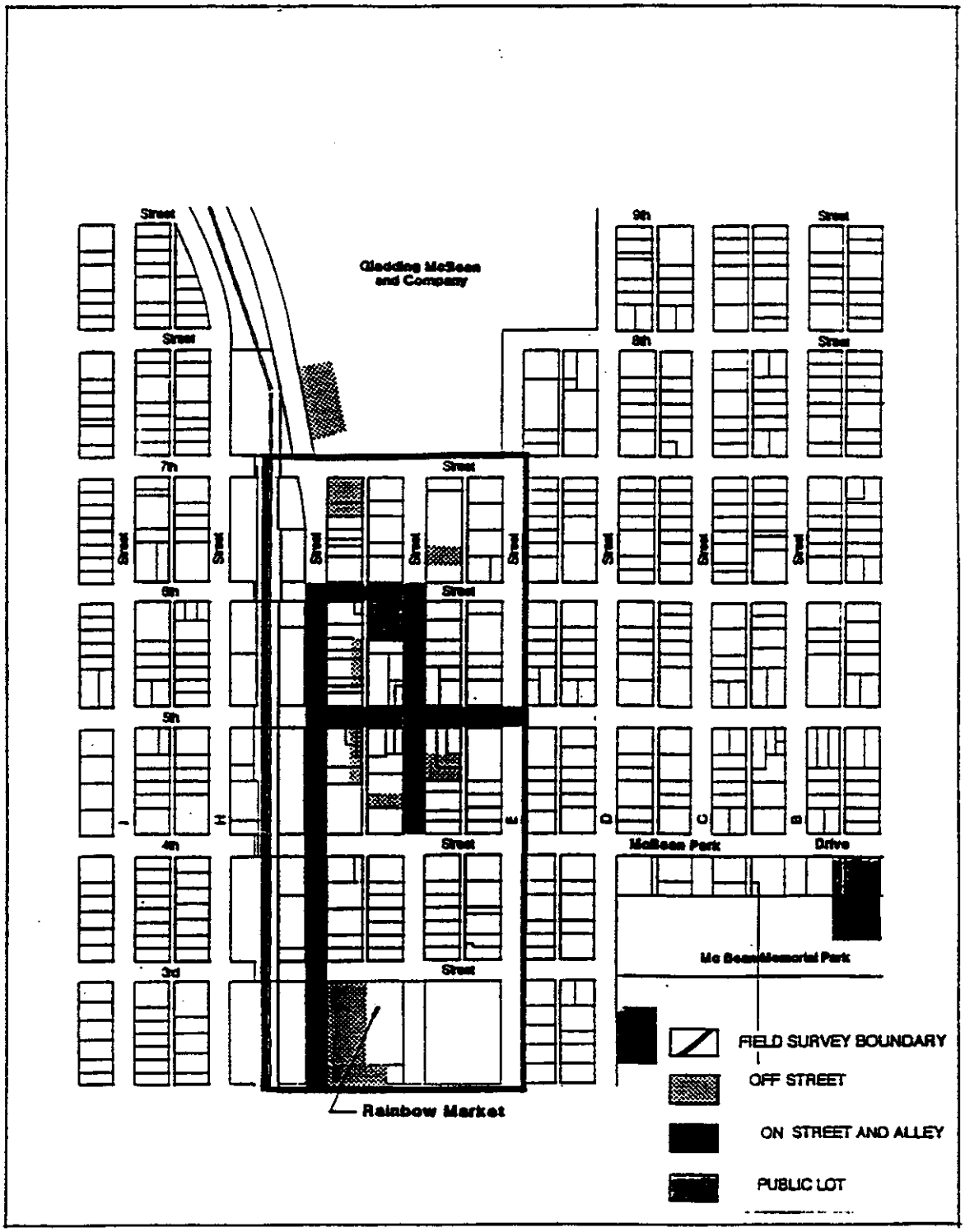
Residential parking demand would be in addition to this forecast need. At 1.5 spaces per unit, future residential parking demand would be 300 spaces. Residential parking will be satisfied in conjunction with site specific developments (such as Grey Brothers Multifamily concept) and in mixed use projects in District 1. District 1 demand is the most critical evaluation. Based on 70 units being developed in District 1, parking demand would be 105 spaces.

Table Four: Parking Standards Survey

Location	Retail	Office	Restaurant	Residential
Numbers indicate parking spaces required per square footage				
Auburn	1/400 sf	1/400 sf	2.0 unit	1/400 sf
Mountian View	1/300 sf	1/333 sf	2.0 unit	1/300 sf
San Luis Obispo	1/400 sf	1/600 sf	1.5 unit	1/150 sf
Merced	1/300 sf	1/200 sf	1.8 unit	
Modesto	1/300 sf	1/500 sf	2.0 unit	
Average	**1/340 sf**	**1/407 sf**	**1.9 unit**	**1/170 sf**
City of Lincoln				
New Construction	1/400 sf	1/400 sf	1.5 unit	
Reuse of Existing Building	1/800 sf	1/800 sf		

5.3. SUMMARY OF FINDINGS / PARKING RECOMMENDATIONS

It appears from this analysis that existing quantitative parking supply is ample for existing demand and can accommodate most of the forecast demand. There is however, a major problem with the quality of Downtown parking resources. Off-street parking is scattered between several small private lot locations. Public parking is not sufficient to meet future growth. There is need for the development of at least one new off-street, public parking lot. The development of alley parking may circumvent the need to develop a second public lot. The level of senior and low income housing in District 1 will be an important consideration in parking facilities. The advent of the Beermann Plaza lot has assisted in meeting existing off-street deficiencies. On-street parking needs to be re-striped and alley parking requires better signage. It is recommended that new public parking be located near the terminus of F Street or adjacent to the proposed Senior Center at 5th and E Streets.



EXISTING PARKING FACILITIES

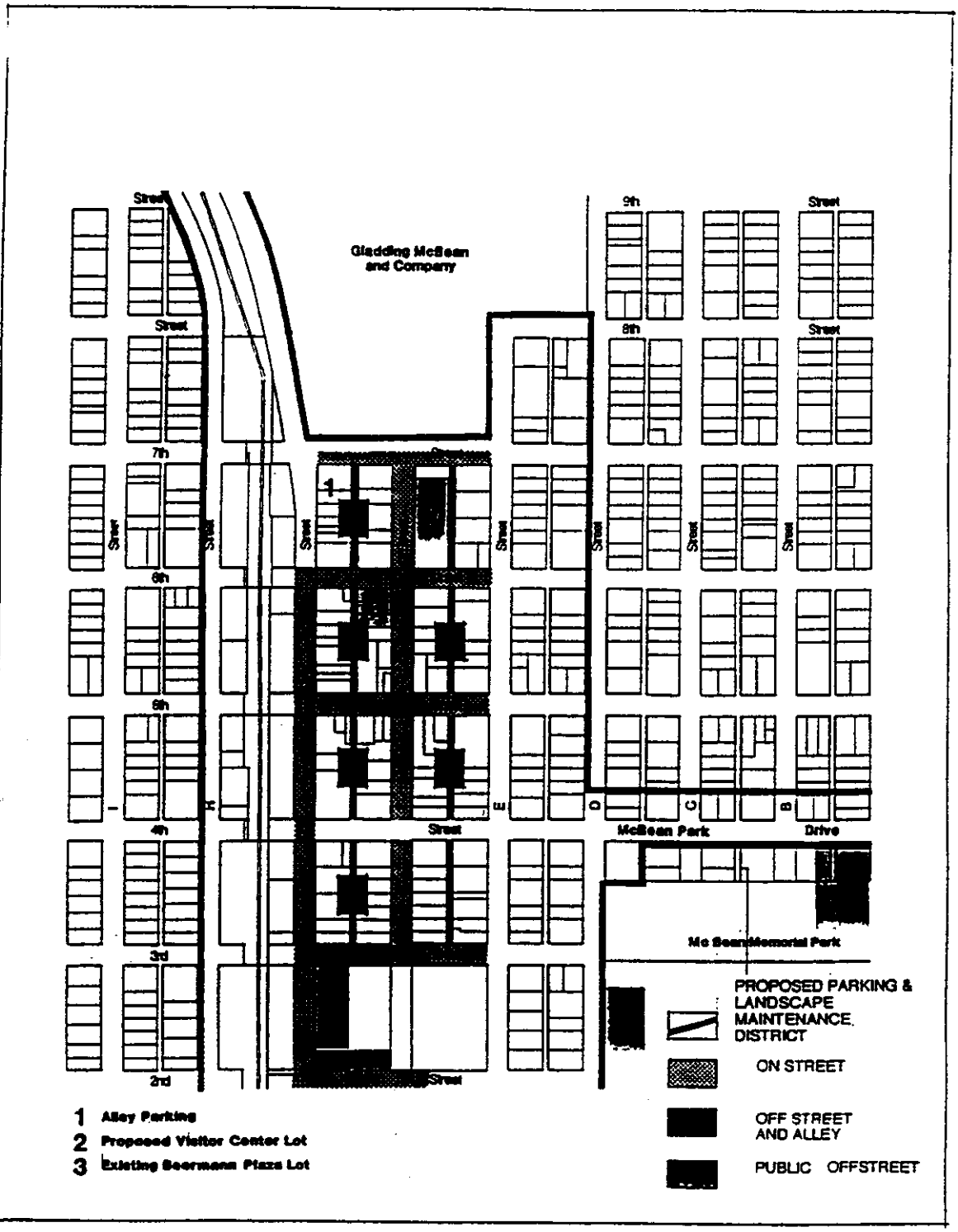
LINCOLN DOWNTOWN URBAN DESIGN PLAN
CITY OF LINCOLN, CALIFORNIA
REDEVELOPMENT AGENCY
EDAW DESIGN GROUP

Figure 13

5.4. PARKING AND TRANSPORTATION POLICIES

The following are recommended parking policies for the downtown area.

- ❑ **Recognize the special importance of downtown pedestrian streets and allow their closure for street fair and special events.**
- ❑ **Encourage better utilization of parking resources through a public parking management district, conversion of private lots into public facilities, and providing longer term parking for customers at downtown businesses.**
- ❑ **Provide for the designation of certain alley parking areas for long term (12 hour) parking for downtown employees, business people, tenants, and property owners.**
- ❑ **Acquire and develop one new public off street parking lot along "F" Street.**
- ❑ **Encourage flexible off street parking requirements, including walking distance standards, for new uses within the Downtown PD District.**
- ❑ **Allow diagonal parking on 5th and "F" Streets within the Downtown PD District.**
- ❑ **Encourage future rail passenger facilities to be directed to a downtown Transit Center location.**

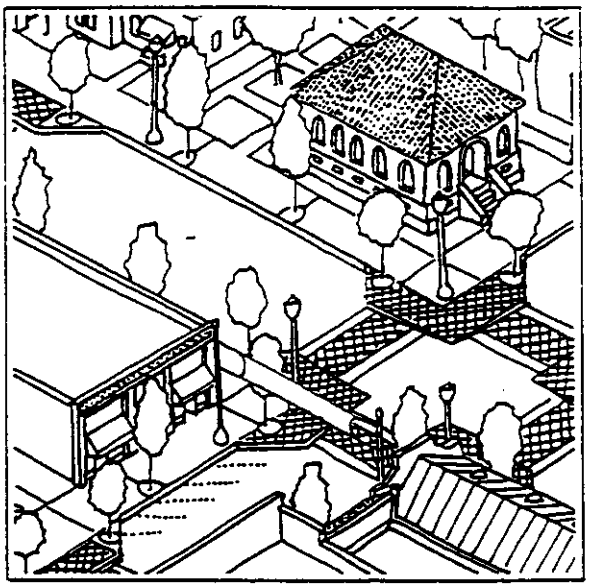


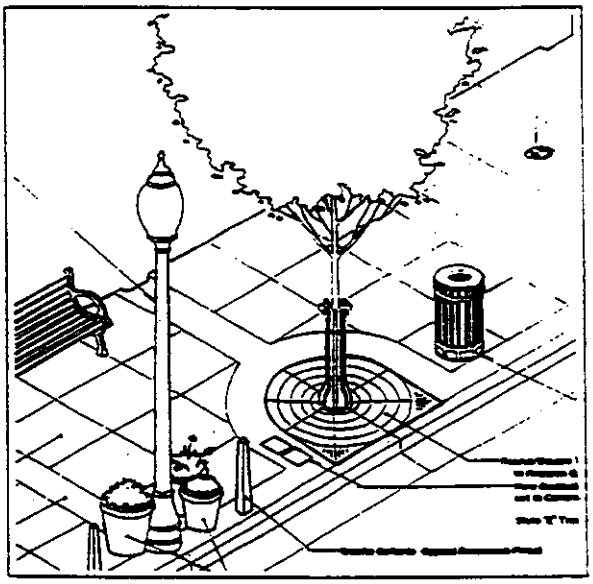
PROPOSED PUBLIC PARKING IMPROVEMENTS

LINCOLN DOWNTOWN URBAN DESIGN PLAN
CITY OF LINCOLN, CALIFORNIA
REDEVELOPMENT AGENCY
RRM DESIGN GROUP

Figure 14

6. Urban Design





"Main Street is to America what the Piazza is to Italy."

—Richard Longstreth

6. Urban Design Framework

Introduction

The Urban Design Element provides a vision of what Lincoln's downtown area can become. This section is divided into two different parts. The first section, the Urban Design Framework, deals with streetscaping, pedestrian circulation, landscaping and gateways at a macro or overall plan level. These elements are addressed in the framework because they overlap districts and provide methods of unifying the different downtown districts into a coherent system.

The second section, District Design Guidelines and Standards, deals specifically with defining the unique character of each of the downtown districts. This section will provide very detailed recommendations and design standards. Implementation of specific individual projects should reference and utilize both sections for a comprehensive understanding of the Downtown Urban Design Plan.

6.1. URBAN DESIGN FRAMEWORK

The main thrust of the recommended urban design framework of the Plan is the creation of a vital, active, and aesthetically attractive downtown core. In order to revitalize the downtown, the Downtown Urban Design Plan must accommodate potential new land uses and development projects. It must enhance pedestrian environments, pathways, and connections. It must link up and tie together the series of special "people" places that make up a downtown environment. The basic urban form of Lincoln has been identified as the "T" shaped circulation framework of Highways 65 and 193. The land use triangle formed by the Gladding McBean Plant, Beermann Plaza, McBean Park, and Rainbow Market Shopping Center is at the heart of the urban design concept. The backbone or "spine" of the urban design is the F Street pedestrian corridor. The heart of downtown is Beermann Plaza and streetscaping improvements are suggested for the key intersection of 5th and F Streets.

Design Objectives

The urban design approach for the Downtown Development Plan follows several key objectives set forth in the goals and objectives of Section One:

- ❑ **Re-enforcement of the Beermann Plaza pattern of street trees and streetscaping,**
- ❑ **Articulation of the importance of the 5th and F Street intersection as a special focal point,**
- ❑ **Creation of a pedestrian corridor and environment along F Street,**
- ❑ **Recognition of the four blocks surrounding 5th and F Streets as "ceremonial" streets to be utilized for public events and street festivals,**

- ❑ **Integration of new activity nodes such as the Civic Center, the Gladding-McBean Visitors Center, and a future Downtown Transit Center,**
- ❑ **Recognition of a rural, agrarian style of landscaping and architecture along State Highways entering the downtown,**
- ❑ **Creation of a transition style of parkway streetscaping along feeder streets such as McBean Park Drive, 3rd Street, 5th Street, sections of G Street, and a two block section of E Street,**
- ❑ **Development and expansion of the formal historic district streetscaping established in Old Town,**
- ❑ **Introduction of mini-plazas and historic markers at select locations, and**
- ❑ **Introduction of a master street tree plan with new street tree species and varieties in the residential districts in order to make the street tree system more disease resistant.**

6.2. LAND USE AND DISTRICT CONCEPTS

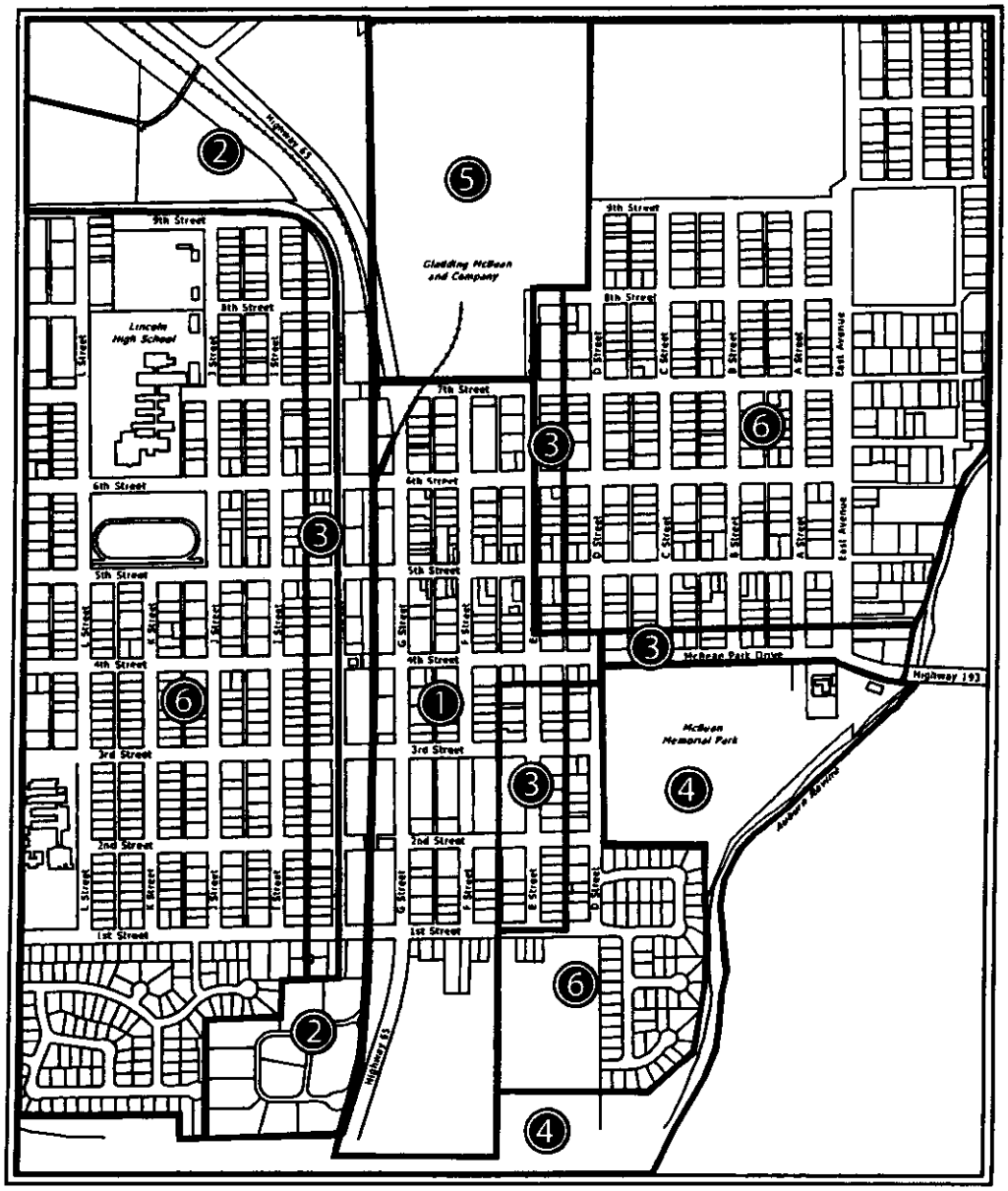
As previously described in the Land Use Element, the Downtown Urban Design Plan has been organized into land use districts. The districting concept guides land use patterns and makes distinctions in urban form, development standards, and design parameters. In addition to district design guidelines, this Plan also addresses vacant developable sites and recommends potential land development projects. These potential development projects are illustrated by the Urban Design Illustrative (perspective drawing) and the Urban Design Development Plan (plan drawing). In order to provide consistency and reaffirm the land use policies of Chapter 4, the following summary of the district concept is restated here:

DISTRICTING CONCEPT

Walking through Lincoln, it becomes evident that different areas possess different characteristics and uses. For example the historic commercial buildings on 5th Street have a strong "mainstreet commercial" character. The area around Rainbow Market on Highway 65 has an auto oriented, strip commercial character typical of suburban development. Surrounding these two distinct commercial areas are established residential neighborhoods with pleasant, tree lined streets and attractive older homes.

In an effort to tie together the best of each of the district characteristics, the downtown study area has been divided into six distinct districts with different standards to maintain and emphasize the desirable characteristics of these districts while preserving Lincoln's "small town" image. Each district will have a unique character and fulfill a different land use objective. Common design

DISTRICTING MAP



1. Historic Retail
2. Highway & Service Commercial
3. Transitional / Mixed Use
4. McBean Park
5. Gladding McBean Industrial
6. Fringe Residential

Lincoln Downtown Urban Design Plan

CITY OF LINCOLN, CALIFORNIA

REDEVELOPMENT AGENCY

RRM DESIGN GROUP

elements will tie the six districts together resulting in an interesting and functional downtown core for Lincoln.

The six districts have been defined as follows:

DISTRICT ONE: HISTORIC OLD TOWN COMMERCIAL

District One will build upon the existing historic commercial core and emphasize pedestrian circulation and mainstreet building styes, while providing for retail, office and residential uses. The functional and visual center of District One will be the intersection of 5th and F Streets. This district will stretch along F Street linking the Gladding-McBean Company and Rainbow Market to the existing downtown. District One will also run east along McBean Park Drive to incorporate McBean Park into the downtown.

DISTRICT TWO: HIGHWAY 65 COMMERCIAL

District Two is the Highway 65 commercial district. The purpose of this district is to introduce a unifying architectural theme to the highway area and better balance pedestrian circulation with parking lots and automobiles. District Two reflects the economic importance of Highway 65's automobile traffic to Lincoln. This district will build on the existing development occurring around Rainbow Market and extend both north and south on Highway 65 to create gateways into Lincoln.

DISTRICT THREE: MIXED USE TRANSITIONAL

District Three provides a transition between the activity of the commercial districts and the historic residential neighborhoods. District Three will provide a mix of residential densities ranging from apartments and townhomes to detached single family homes. A key component of this district could be a multi-family development behind Rainbow Market.

DISTRICT FOUR: MCBEAN PARK

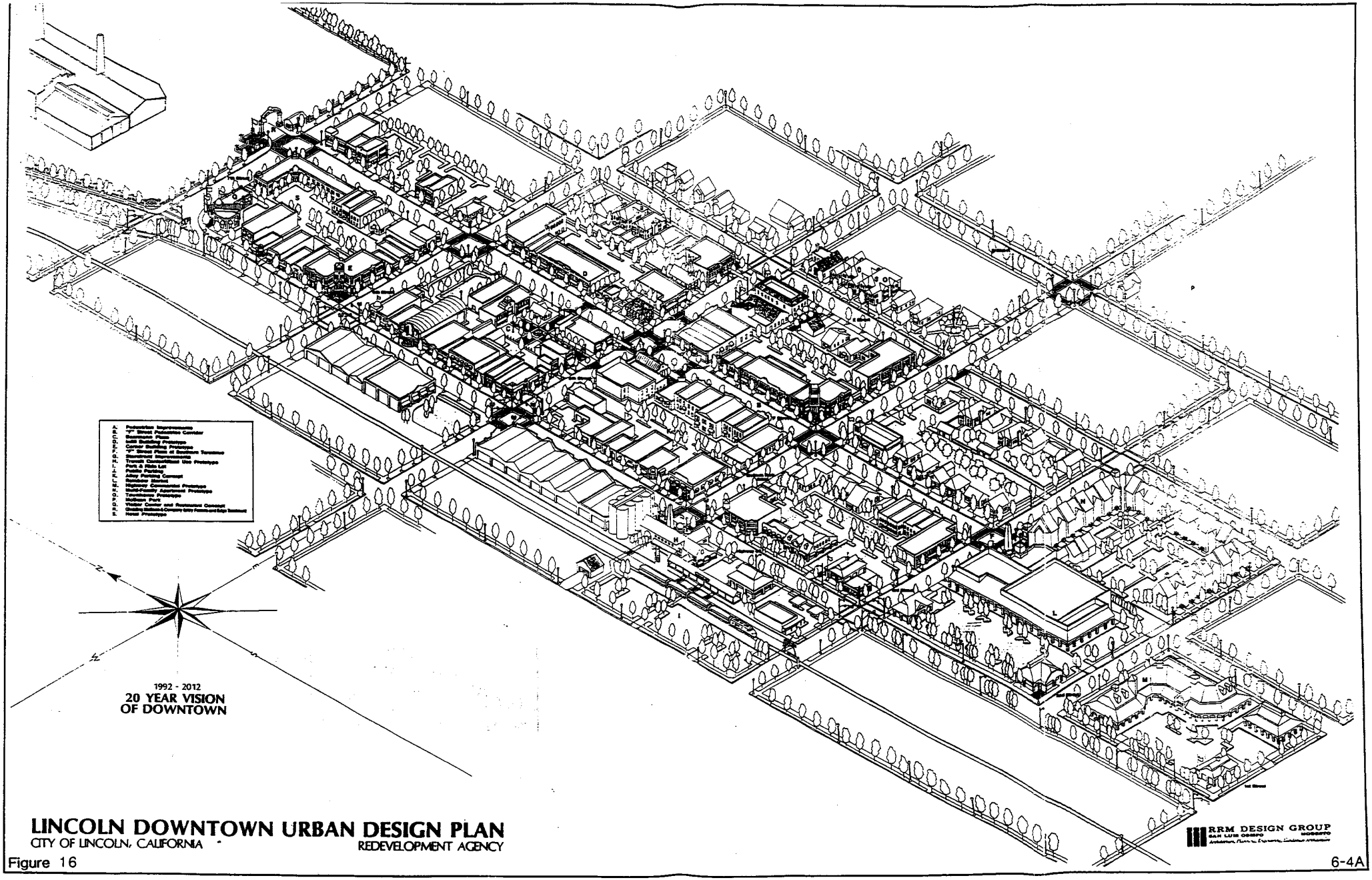
District Four reflects the importance of McBean Park to the City of Lincoln. This section will provide concepts and guidelines for maintaining and improving the park as well as better integration of the park into the town.

DISTRICT FIVE: GLADDING MCBEAN INDUSTRIAL

District Five deals with the transition between the downtown and the historic Gladding-McBean manufacturing facilities. The district will better define the plant's edges, buffer residential areas, and link the plant to the downtown. A visitor's center is envisioned in District Five to accommodate the growing Feats of Clay festival and serve as a year round visitor's information center and museum.

DISTRICT SIX: HISTORIC RESIDENTIAL

District Six encompasses the residential areas that surround the commercial districts. District standards will encourage the protection and rehabilitation of historic residences while upgrading residential streetscaping.



LINCOLN DOWNTOWN URBAN DESIGN PLAN

CITY OF LINCOLN, CALIFORNIA

REDEVELOPMENT AGENCY

RRM DESIGN GROUP

Figure 16

6.3. DEVELOPMENT PROJECT CONCEPTS

The following projects are suggested as feasible development proposals based upon Lincoln's economic development studies, citizen and consumer surveys, and physical location characteristics. These project concepts are illustrated in the Plan text and the Urban Design Development Plan.

- **Gladding McBean Visitors Center, in the vicinity of 7th, F and G Streets.**
- **Small scale hotel or downtown inn, in the vicinity of 7th Street and Highway 65.**
- **Downtown mixed-use in-fill project, in the vicinity of 6th Street and Highway 65.**
- **Library and Social Service Offices, in the vicinity of 5th Street and E Street.**
- **Transit Center, in the vicinity McBean Park Drive and Highway 65.**
- **Large scale multi-family in the vicinity of 3rd and F Streets.**
- **Auto Convenience Service Center, in the vicinity of 2nd Street and Highway 65.**

These potential projects and locations are suggested for the Downtown Urban Design Plan. Most of these projects could be accommodated at other nearby properties or could be part of private sector revitalization of existing parcels or block groups.

6.4. PEDESTRIAN SYSTEM

F Street Pedestrian Corridor

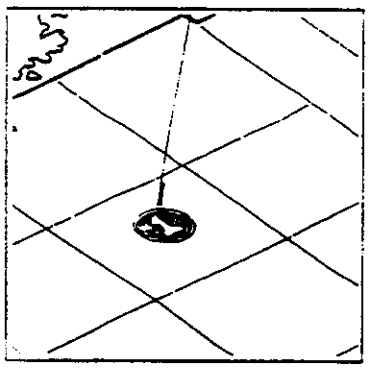
The central axis of the proposed Downtown Urban Design Plan is the F Street pedestrian corridor. F Street will be developed as the key street of District 1. F Street will link three key concentrations of public activity: Gladding McBean, Beermann Plaza, and Rainbow Market. This powerful north-south axis provides an important linkage at the historic core and the emerging commercial growth areas. F Street will give priority to the pedestrian and will receive the greatest concentration of pedestrian amenities. F Street will be given the potential to concert to exclusive pedestrian usage by closing the block between 5th and 6th Streets, and 5th Street and McBean Park Drive. Sidewalks will be important spaces for walking, merchandise display, and public gatherings.

McBean Park Linkage

A key objective to the Plan is the linkage of McBean Park and Old Town. Two significant park/plaza resources are separated by a residential area. In

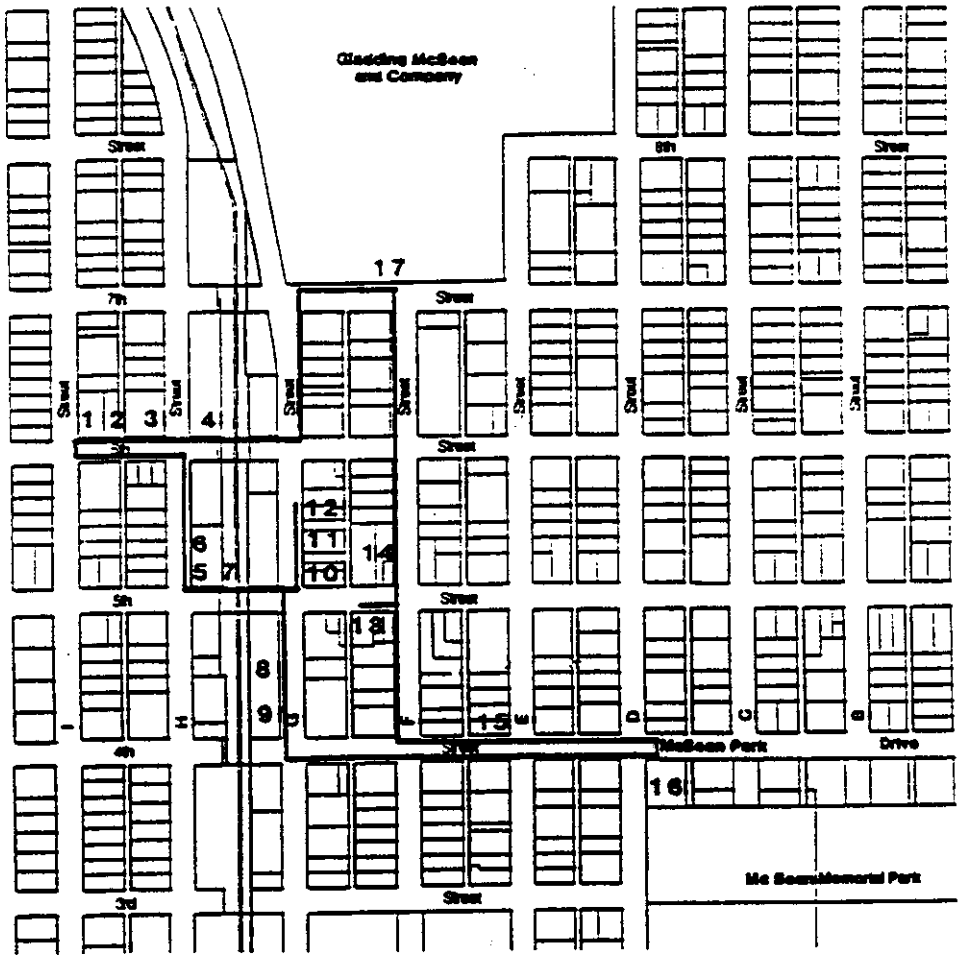
order to bridge this zone and effectively link McBean Park in with the commercial core, a system of interlocking public spaces is needed. This interlocking public space approach will be a key design method for achieving McBean Park physical linkage. The pathway selected for this system follows feasible windows of access in a staged series of public spaces that are inter-tied by pedestrian walkways. Beermann Plaza is the first link in the network. The articulation of the intersection of 5th and F Streets is the second stage. The next step occurs with enhancement and upgrading of the parking lot between F and E Streets. When the existing police facility is removed, a pedestrian walkway could provide the next connection to E Street.

Final pedestrian linkage will be accomplished along two major streets, McBean Park Drive and 3rd Street. Crosswalk enhancements along F Street will bridge the traffic barrier at McBean Park Drive. Improvements and tree plantings along McBean Park Drive and 3rd Street will tie F Street to McBean Park. At this juncture, the system would terminate in a Terra Cotta Plaza at the northwest corner of McBean Park. If the Terra Cotta Plaza concept is abandoned, other plaza concepts such as a Rose Garden, fountain or band-stand element could provide a terminating landmark.



History Walk and Landmarks

At present, a public landmark is located at the Gladding McBean gate. A reciprocating and balancing landmark should be provided at the southerly F Street terminus. A formal History Walk should be developed with special route markings inlaid in sidewalk improvements. The key buildings along the walk could be marked by plaques, statues or other public art. The route of the existing History Walk is illustrated by Figure 18.



1. Methodist Church - 1890.(6th & I)
2. Old Berryford Home - 1888.
3. Old Mariner House - built as a warehouse on R.R. Moved to I St. 1893. Served as first Lincoln High School 1907-1910.
4. Lincoln Cemetery - 1895. Some buildings remain. Used by high school as a gym later. Across from Mariner House.
5. Everts Stone Store - erected in Virginiatown in 1850's by P. Everts. Moved to Lincoln 1886 by I. Meyer. (5th & H).
6. 4 Brick Homes - erected as a store in Gold Hill in 1860 by T. Ross. Bricks brought to Lincoln for 4 homes in 1886 by I. Meyer.
7. Central California R.R. - 1861. End of line from Sacto. Stagecoach connection to & from all points N, E, & W. Depot was on 5th, just east of tracks.
8. Butterfield Store - 1883. Date marks Lincoln worst fire. (See north side 5th & G).
9. Twin Warehouses - 1880's. Built by George Aldrich. Became Jensen's in 1894. Brick warehouse, 1883.
10. Ziegenbein Bldg.- 1862-63. Oldest standing building in town. Originally general store, then library, P.O. First Bank was once in this bldg.; later Fleming and Hemphill.
11. Ramada Bldg. - 1860's. Originally Good Templar's Hall. School here 1860's, then Granger Hall. Stores and first phone company in 1893. (Brick)
12. Lincoln Hotel Bldg - 1883. Fire of 1883 destroyed 4 old hotels. Now Lincoln Inn Bldg. Bldg. burned and rebuilt 1896.
13. IOOF Bldg. - 1864.
14. Store Bldg. - by Gladding McBean 1892.
15. Old Brick Church Bell - 400 lb. bell cast in 1879 for church (6th & K).
16. Old Hemphill Home - 1887. Bricks fired in Lincoln. (4th & D).
17. Gladding McBean - most of the buildings date circa 1898-1900. (7th & G).

HISTORIC WALK ROUTE

HISTORIC WALK

LINCOLN DOWNTOWN URBAN DESIGN PLAN
CITY OF LINCOLN, CALIFORNIA
REDEVELOPMENT AGENCY

RRM DESIGN GROUP

Figure 17

6.5. LANDSCAPE AND STREETSCAPE SYSTEM

Existing Conditions

The streetscape in the downtown study area of Lincoln is defined by many elements including trees, buildings, walls, fences, sidewalks, furniture and the street itself. The relationship between these elements is what determines the degree of success for the streetscape. Some sections of the study area, such as the "F" and 5th Street intersection, have evolved with a reasonable level of success. Street trees, benches, tree grates and on-street parking contribute to a secure and pleasant pedestrian atmosphere.

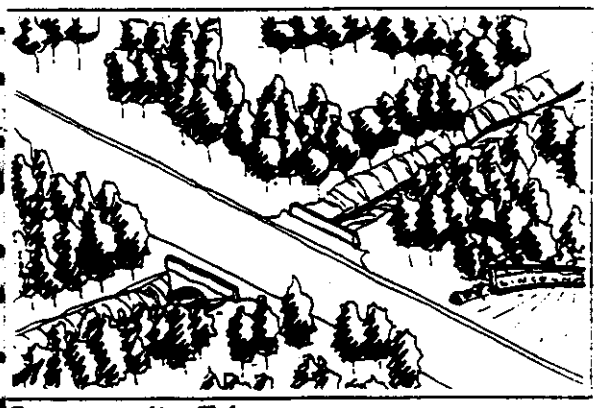
Much of the study area has at least one desirable component of a small town streetscape. However, the overall streetscape system will require significant improvements to bring it up to full potential.

The most impressive existing feature of the streetscape is the canopy of large trees displayed in a deliberate but sporadic pattern. Though the trees are infrequent in many sections of town, they are planted consistently in groups of tightly spaced cues.

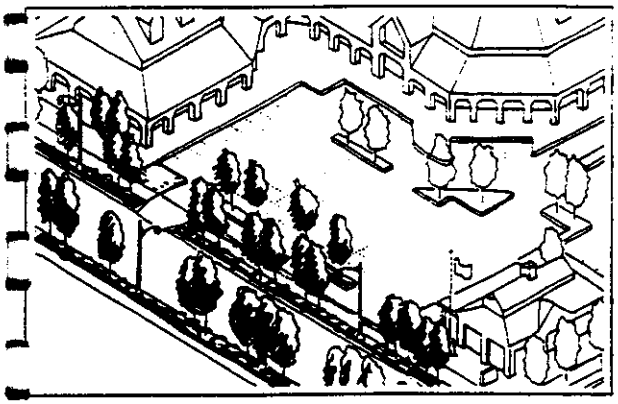
A street tree's most powerful contribution to a small town street scene is its ability to tie together all of the neighborhoods into a single cohesive unit. The trees act as the thread which holds the "fabric" of the town together. In Lincoln, the thread is frayed and even in some cases cut off. If the town were to start over, they might use one or no more than two trees per street as a theme. The selected trees should be planted 25 to 50 feet apart. In residential areas, street trees should eventually form a head-to-head canopy over the streets.

Summary of Field Survey

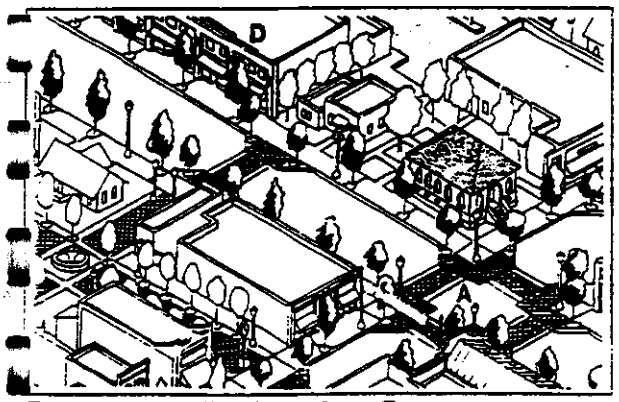
In August of 1991, a field investigation was conducted by a RRM Design Group landscape architect and a registered arborist. The detailed results of that tree survey are given in the Technical Appendix, Section 10. The survey results indicate a need for a greater variety of tree types in residential areas. The use of the Chinese Pistache has been positive and its use in the downtown should be expanded. Many tree types have become disease prone and have been recommended for discontinuance (Modesto Ash, Dutch Elms, Camphors, and Fruitless Mulberry). In general, the City needs to identify suitable replacement trees and develop a more formal design program to guide the use to street tree species.



Community Edge
Rural/Riparian Plant Community
Large, dense stands of tree and shrubs



Highway 65
Transitional Landscape
Clustered Trees, turf berms, landscape setbacks



Downtown Pedestrian Core
Formal Streetscape
Regular spacing of smaller street trees, minimal use of shrubs and turf, empathsis on hardscape and street furniture

Transition in to Town

Street Tree and Streetscape Master Plan

In conjunction with the urban design goals developed through the community workshop process, a three tiered approach for master planning landscape improvements has emerged. This approach focuses upon the stated community goals of small town imagery, preservation of historical buildings and urban form, and community desire to promote city beautification.

The three design treatments are as follows:

1. **Natural, Riparian Character**
2. **Transitional / Auto Oriented Character**
3. **Formal Streetscape Style**

NATURAL, RIPARIAN CHARACTER

The natural and rural treatment strives to mirror existing conditions at the edge of the community. The rural riparian landscaping envisioned by the Plan recognizes the importance of the Auburn Ravine open space system. This type of landscaping treatment will be located on State Highways 65 and 193.

TRANSITIONAL/AUTO ORIENTED CHARACTER

Transitional landscape treatment responds to the auto orientation of District 2 and District 3. Parkway areas separate sidewalks from travel lanes in these two districts. Transitional landscaping will provide a gradual reduction in the riparian elements of the community edge and begin to present a more suburban commercial landscape form. Transitional landscaping will utilize low shrubs, grassy berms, and tree clusters. Transitional parkways will allow occasional curbs and irregular tree plantings.

FORMAL STREETSCAPE STYLE

The formal streetscape of the downtown historic core, District 1, will be highly structured and provide a rigorous geometric pattern of street tree plantings. Sidewalks will be opened with tree wells and grates to accommodate the street tree system. Formal street scenes will be articulated with pedestrian pavers, bulb-outs, and deco-

Figure 18

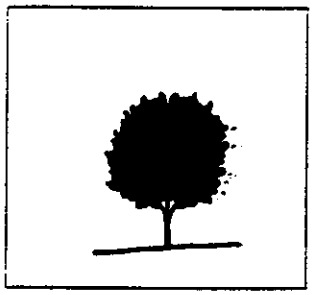
rative bandings. All of these elements will be orchestrated within a formal streetscaping plan to respond to downtown urban forms. Pedestrian orientation, close interaction with storefronts, and public squares are key components of the Formal Streetscape style of District 1. The four blocks surrounding the 5th and F Street intersection will receive the most intensive level of geometric streetscaping. The entire F Street pedestrian corridor will reflect this landscaping style.

The three landscaping styles and treatments are illustrated by Figure 19.

These design objectives have been followed in development of the Street Tree Master Plan, Figure20. Selection of species follows these objectives and makes distinction in size, canopy, maintenance impacts, coloration, and visual image created by introduction of new street trees. In general, larger shade producing species are located in residential districts, urban edges, and on major parkways. Medium sized street trees are located along transition and feeder street. Smaller more formal trees are directed to the commercial core areas and public plazas. Color accent species are placed at strategic activity nodes and gateways.

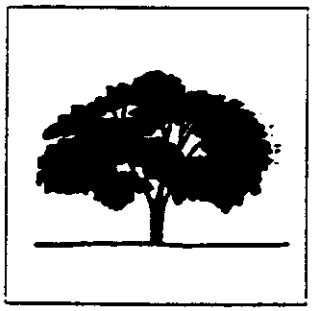
STREET TREE DESCRIPTIONS

The following descriptions identify the type of tree selected, its design function, and general botanical characteristics:



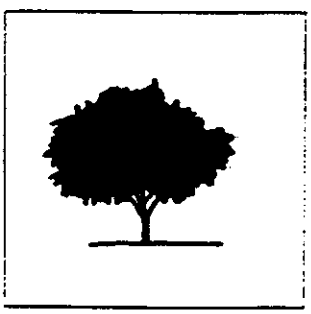
Ornamental Pear (Pyrus Calleryana)

The Ornamental Pear is a color accent tree utilized in focused and concentrated planting applications. This tree has been selected as the Beermann Plaza tree and therefore will be replicated at key locations within the Downtown Urban Design Scheme. This attractive tree will produce a pure white flower, it grows to 50 feet in height, and generates a strong horizontal branching pattern. This ornamental species produces a small inedible fruit. The Ornamental Pear requires full sun and only occasional watering when mature.



Chinese Pistache (Pistacia Chinensis)

This tree has been established in the Old Town area as the primary street tree of District 1. This specie will be used throughout the downtown commercial core. The Chinese Pistache is a deciduous tree which can reach 60 fee in height and 50 feet in width. This street tree displays beautiful fall foliage — scarlet, crimson, orange and yellow tones. Fruit of the female trees are bright red. The Pistache is resistant to oak root fungus. This tree requires extensive pruning in the early growth phase to raise to proper pedestrian heights for a downtown environment. The Chinese Pistache will be utilized heavily on the pedestrian corridors of F, 3rd, 5th, 6th and 7th Streets.

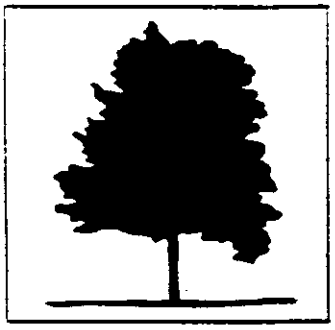


Golden Rain Tree (Koelreuteria)

This deciduous tree produces small yellow flowers in large loose clusters. It also produces a colorful fruit which resembles tiny Japanese lanterns. The Golden Rain tree is a slow grower, of moderate size, reaching 20-35 feet tall with a 20-35 foot canopy. Its growth pattern is open, giving only moderate shading. These characteristics give it good applications in downtown settings where storefront visibility is desirable. This street tree will be primarily used as a transition from the Chinese Pistache and will be concentrated on G and E Streets.

California Black Walnut (Jugian Hindsii)

The California Black Walnut is a large parkway tree that provides a broad crown and canopy. A drought and root resistant species, this tree will mark the major highways entering the downtown, Highways 65 and 193. At maturity, the Black Walnut will reach 60 feet in height. This tree has been selected to fulfill the agrarian edge and rural atmosphere of the over-all landscaping design concept.

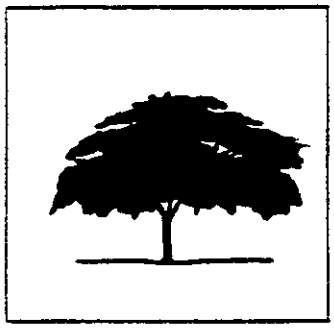


White Alder (Alnus Rhombifolia)

The White Alder is a large fast growing tree, with a broad canopy reaching heights of 90 feet. This tree has been selected for use in transitional applications between the riparian edges of town and the formal downtown.

Tulip Tree (Liriodendron Tulipifera)

The tulip tree is a large, fast growing shade tree is well suited for use as a street tree. This deciduous tree has large bright green leaves and colorful tulip shaped flowers in spring. At maturity the tree may reach 60 to 80 feet. The tulip tree has been selected for use in the outlying areas of District Six.



Chinese Evergreen Elm (Ulmus Parvifolia)

The Chinese Elm is a moderate to large street tree which will also be utilized on main traffic corridors. This tree will provide a transition from the large Walnuts as parkways narrow on approaches into the downtown core. This species provides a long, arching and weeping branch system. The trees are similar in bark appearance to Sycamore trees. This tree will grow at a faster rate and with a 40 to 60 foot height range.

London Plane (Platanus Acerifolia)

The London Plane is the dominate residential tree of Lincoln. this Master Plan recognizes the important role this tree already plays in the City. District 6 will continue to be dominated by this species. This large street tree creates a large canopy and provides needed shade of Lincoln's hot summer climate. London Planes can obtain over 80 feet of height.

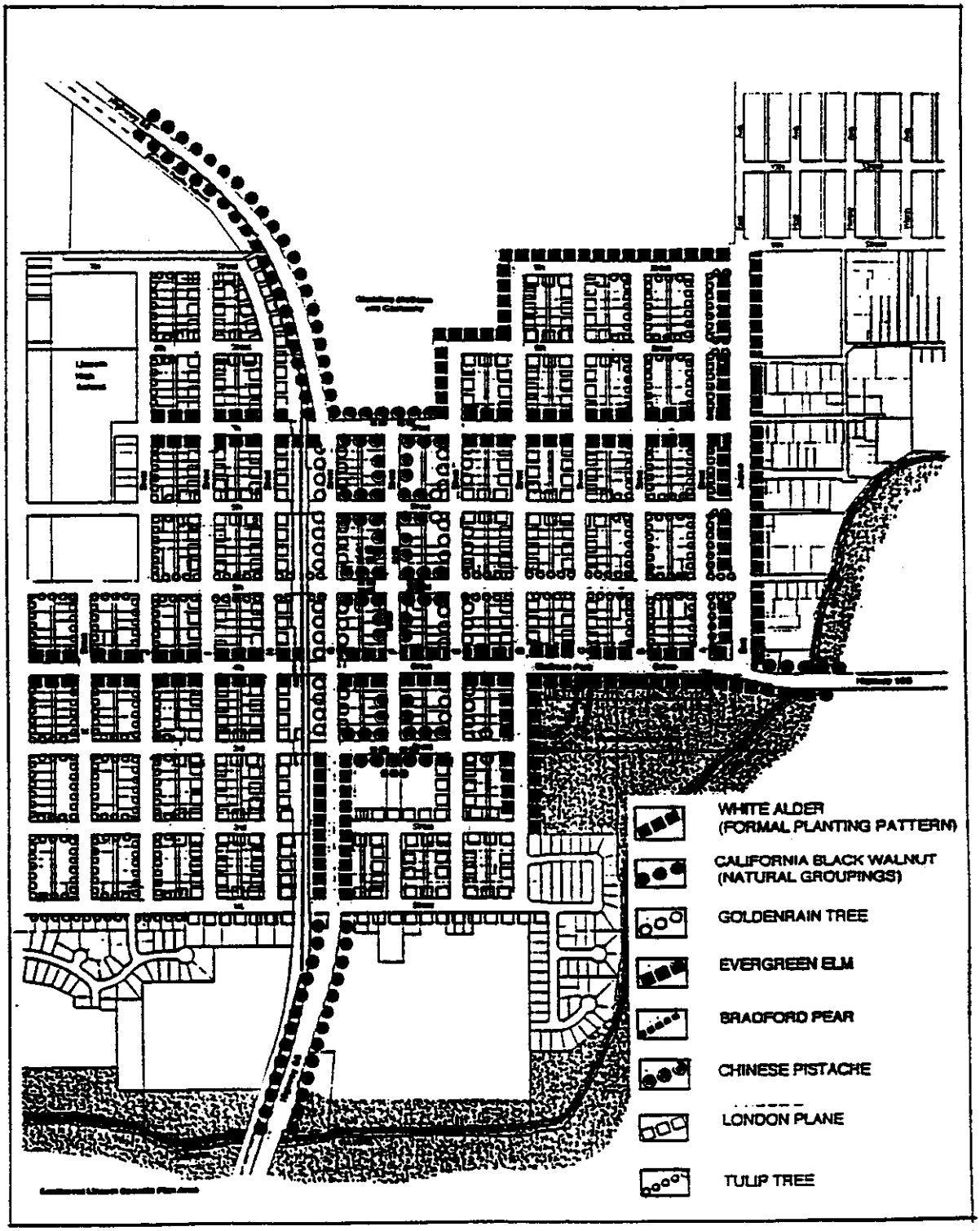

WHITE ALDER
(FORMAL PLANTING PATTERN)
CALIFORNIA BLACK WALNUT
(NATURAL GROUPINGS)
GOLDENRAIN TREE
EVERGREEN ELM
BRADFORD PEAR
CHINESE PISTACHE
LONDON PLANE
TULIP TREE
STREET TREE MASTER PLAN
LINCOLN DOWNTOWN URBAN DESIGN PLAN
CITY OF LINCOLN, CALIFORNIA
REDEVELOPMENT AGENCY
RRM DESIGN GROUP

Figure 19

6.6. GATEWAYS AND EDGE TREATMENTS

There is a need to establish at least three gateway features at key community entrance points. The gateway design will respond to the rich history and architecture of Lincoln. At present, the City has three metal signs listing community organizations located at the City limit lines along State Highway 65 and 193.

The following map indicates the recommended gateway locations listed below:

Northern:

State Route 65 in the vicinity of Gladding McBean Plant.

Eastern:

Located at Auburn Ravine and State Route 193.

Southern:

1. **At Auburn Ravine and State Route 65.**
2. **In the vicinity of future Lincoln Parkway and State Route 65.**

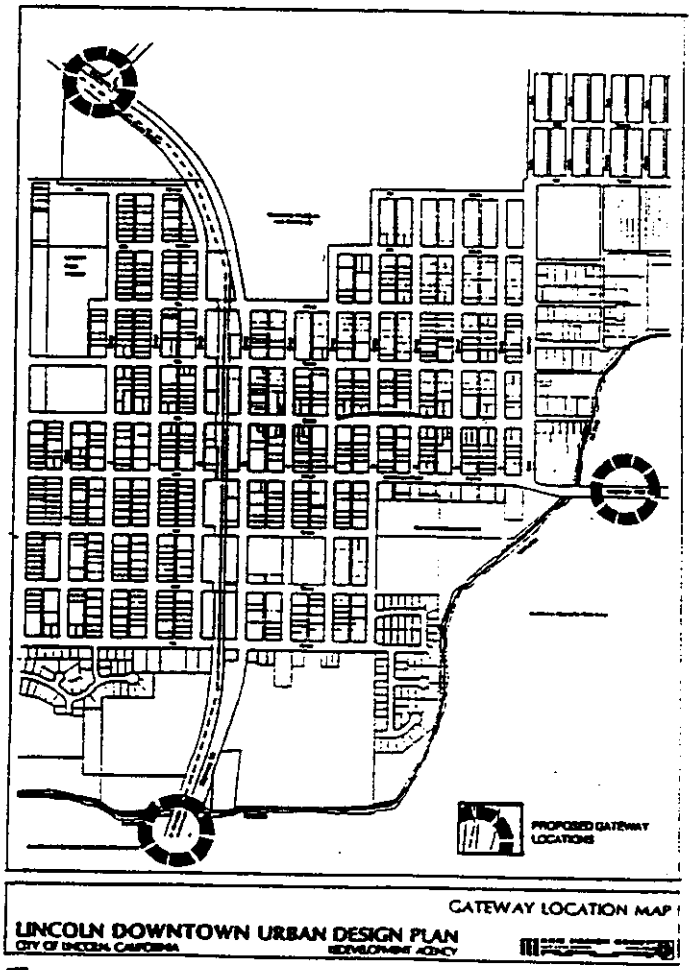


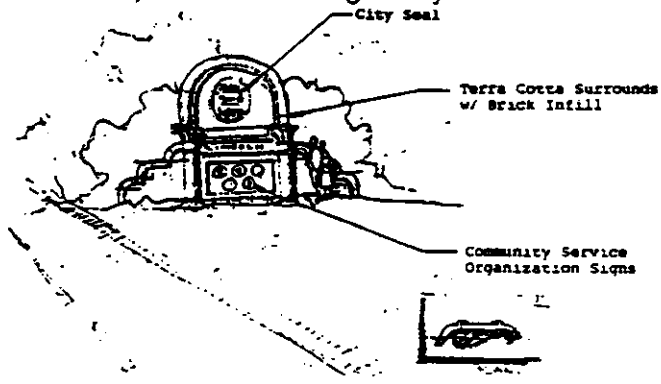
Figure 20

Gateway Design Concept

The City Gateway should address the broad array of physical, social and cultural parameters. The physical image of the City is reflected in the Gateway. The Gateway must also address history while pointing towards future community goals. According to our citizen input, Lincolnites are proud of the small town atmosphere, historic buildings, and natural features of the town. The Gateway design should respond to historic architectural forms (i.e. terra cotta) and generate an image of small town friendliness and natural open space settings. The following design concepts address these community goals.

Gateways can define a city edge or city limit. They also serve to announce arrival into key locations, districts or public places. The Downtown is an important destination and currently represents the extent of the town of Lincoln along State Routes 65 and 193. Therefore, it warrants consideration for entry statements. These downtown entry locations are identified on the accompanying map, Figure 21.

It is recommended that the downtown entrance gateways be developed in the early phases of Plan implementation. Eventually, as the City grows to the south and west, City edge or fringe area gateways will be needed. It is impossible to fix a precise location for urban edge gateways until the State Route 65 realignment route has been selected and interchange locations have been determined. The gateway concepts presented here can be modified for downtown / City edge applications. The public mural concept works best with the Auburn Ravine open space recreation system. It is a staging point where visitors and residents can learn about the community and its history. The other gateway concepts are adaptable to outlying locations. The abstract-industrial form gateway concept is best applied in close proximity to the Gladding-McBean plant. All of the gateway concepts are envisioned to be a landscaped public place which creates a positive community image. A bermed, landscaped area would be required in all but the abstract-industrial option. Where possible, public spaces (plazas or parks) should be integrated with the gateway design. Information kiosks and small offstreet parking areas (where feasible) are recommended in conjunction with the gateways.



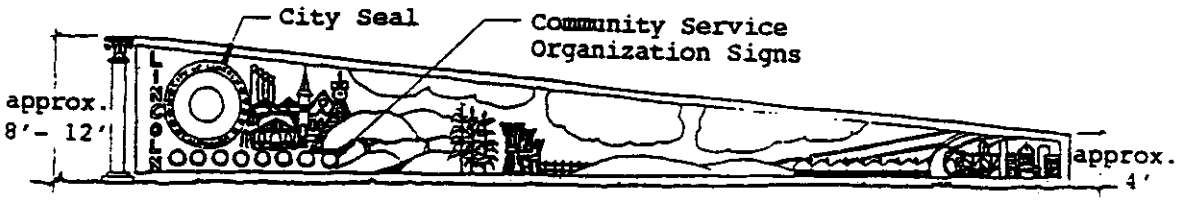
Downtown Lincoln Gateway - Alternative 2

Downtown Lincoln Gateway - Alternative One

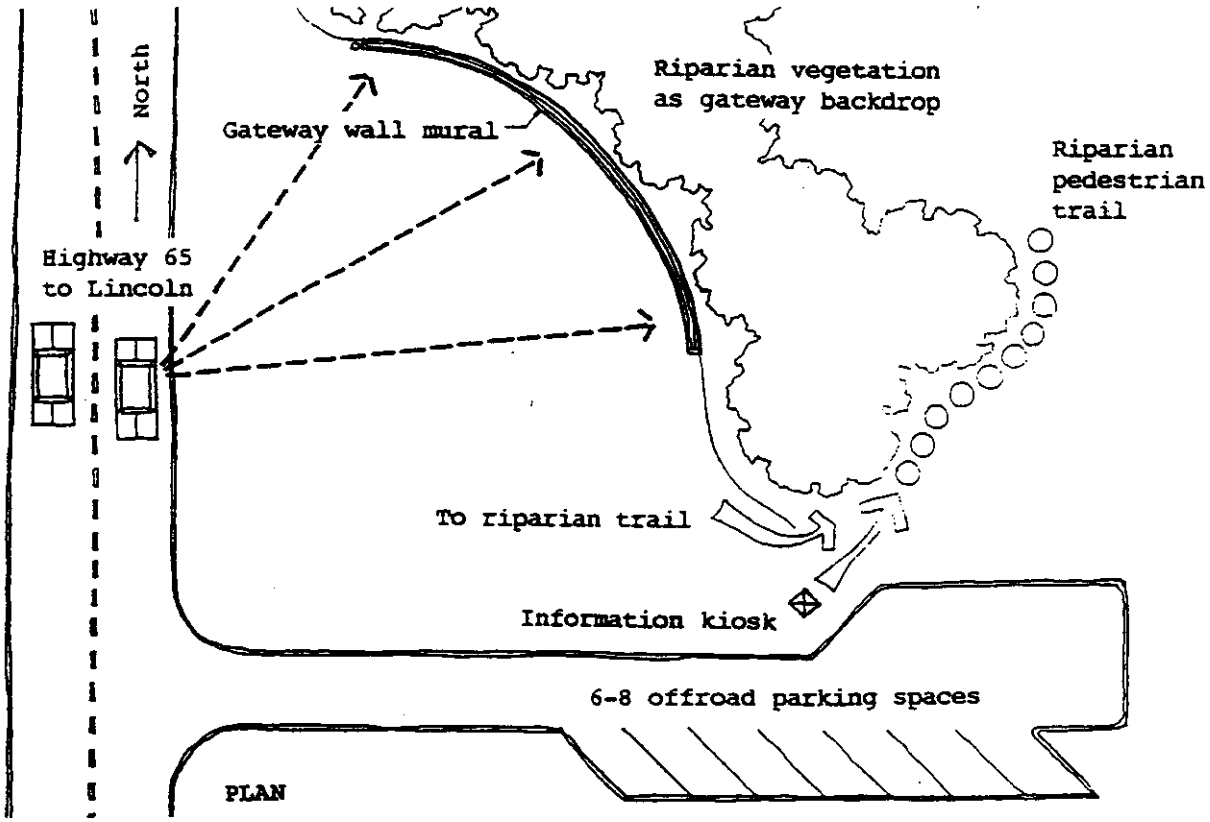
The concept involves a roadside monument that utilizes architectural elements which emphasize Gladding McBean's role in the development of Lincoln.

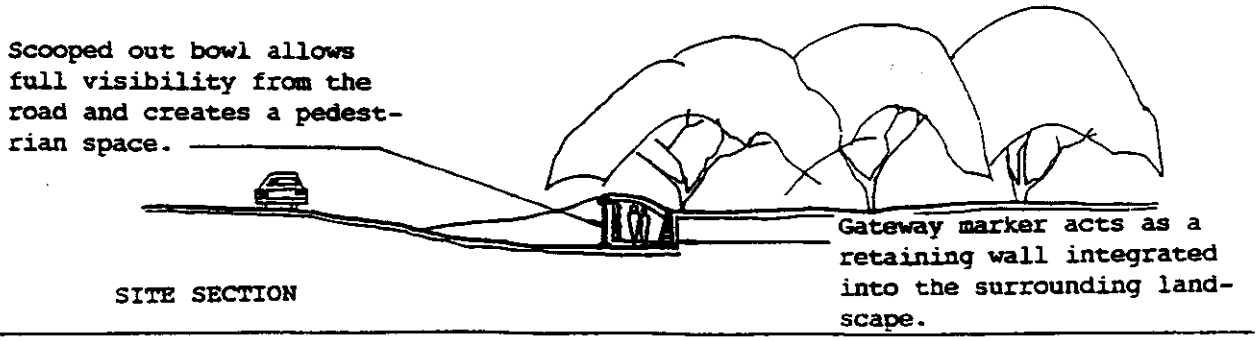
Downtown Lincoln Gateway - Alternative Two

The concept is a semi-circular wall mural of sculptured brick or some other relief material that will both serve as a city gateway marker and as a public art object that depicts the route into Lincoln.



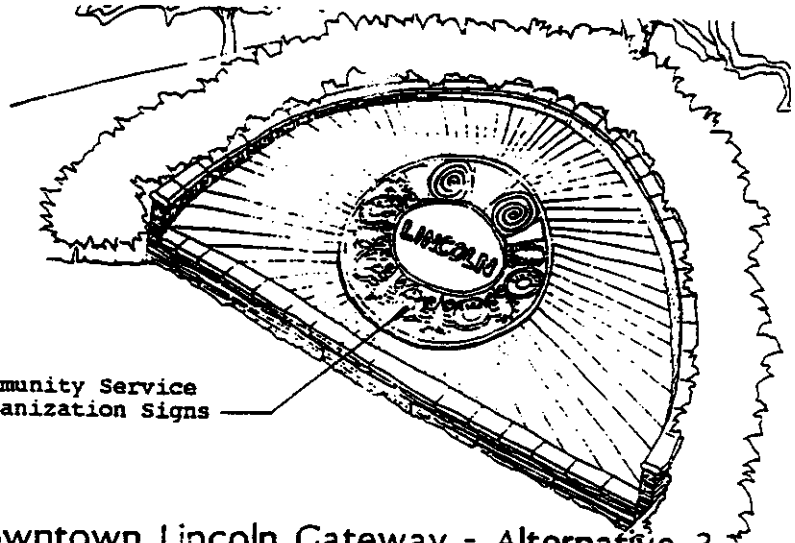
Downtown Lincoln Gateway - Alternative 1 ELEVATION





Downtown Lincoln Gateway - Alternative Three

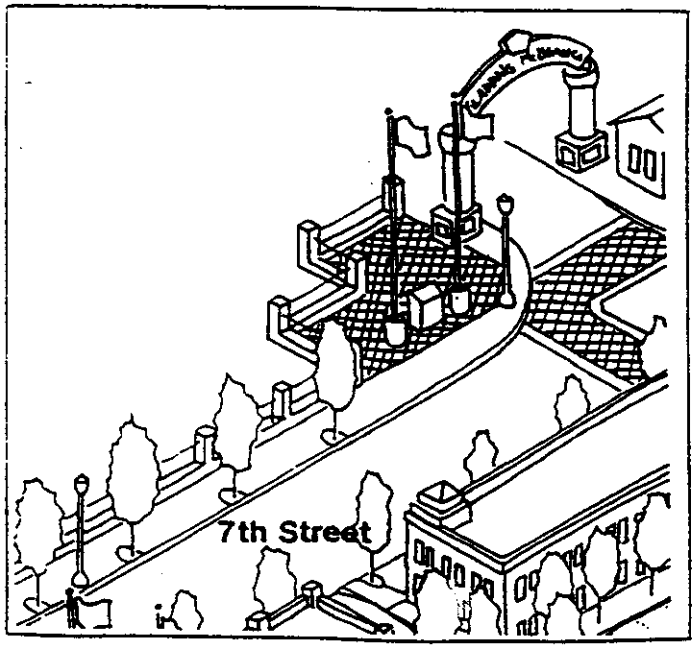
The concept is a semi-circular disc which is set into a berm. The disc is angled upwards so that it can be seen by passing motorists. As with Alternative One, a strong emphasis is placed upon the unique role that architectural terra cotta plays in the image of the city.



Downtown Lincoln Gateway - Alternative 3

7th Street Streetscaping / Industrial Buffer

The interface of the Gladding McBean Plant and adjoining residential presents a potential land use conflict. This edge needs to be softened, and a visual transition created. The introduction of a wall and streetscaping buffer around the plant's southern periphery is needed to reduce existing land use conflicts.



6.7. OVERALL DOWNTOWN URBAN DESIGN PLAN

20 Year Vision

Based upon community goals, land use and project concepts, and environmental conditions, the following Downtown Urban Design Plan is proposed. The Plan represents the twenty year vision of the downtown, and future project and land use concepts have been illustrated. Key components of the Plan include the pedestrian systems along F Street, McBean Park Drive, and 3rd Street. Streetscaping and street furniture selections have followed district oriented material palettes. These district level material palettes follow the form, theme, and character of the individual districts.

Material palettes for Districts 1 through 3 are illustrated by the sketches and plan enlargements that follow:

District Material Palettes

DISTRICT 1: MATERIAL PALETTE

The selection of a material palette for District 1 is central to the overall streetscape to be created for the Downtown. Following the historic and small town themes of this district, the following materials and street furniture are proposed.

A key recommendation of the Urban Design Development is the extension of the formal street tree pattern initiated by Beermann Plaza. Because of the commitment to Beermann Plaza and its central place in District 1, the District 1 material palette will follow very closely to the established design pattern.

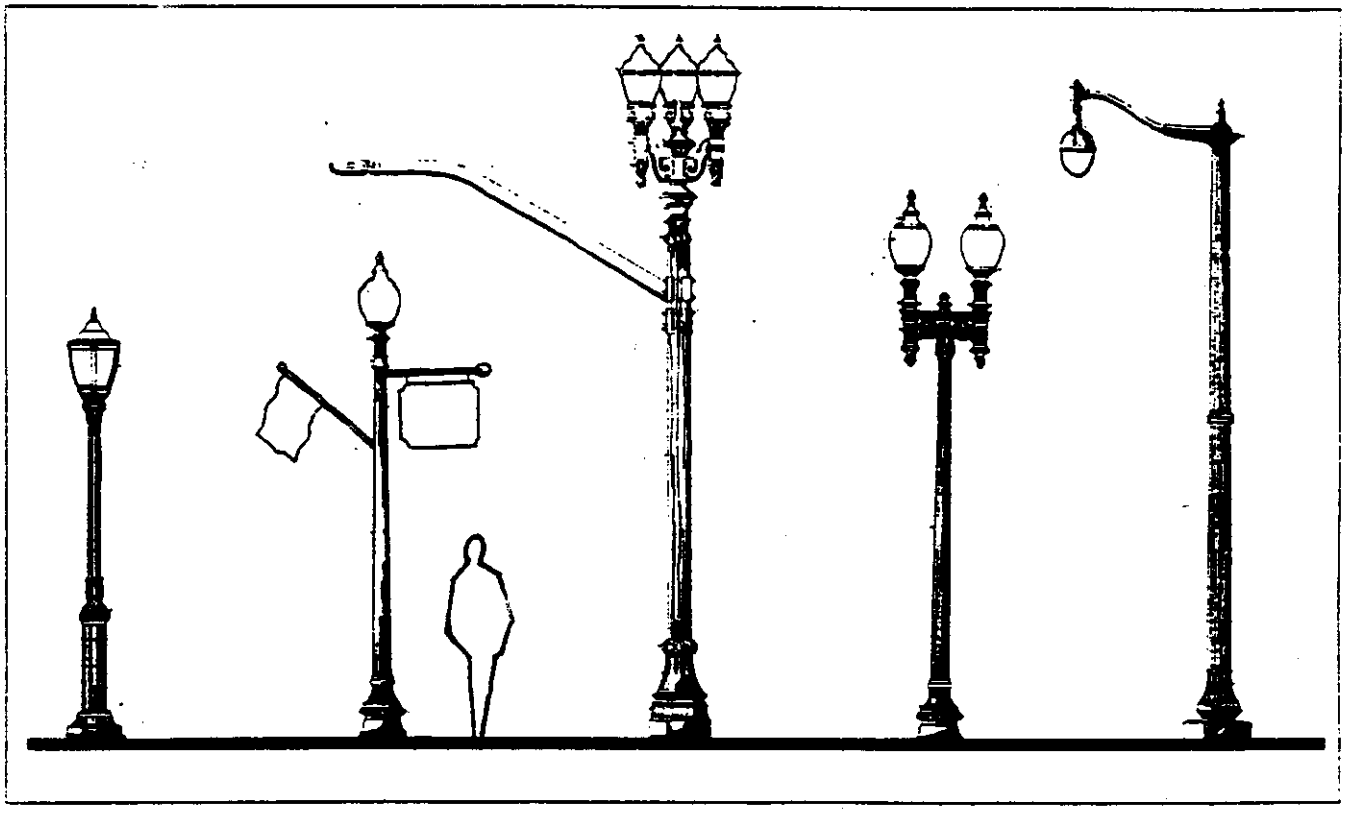
Tree Grates

A variation in the existing approach to the tree wells and sidewalk at tree surrounds. Existing treatments arose out of a special community effort to use memorial plaques and terra cotta tile tree surrounds. Recognizing the importance of the memorial plaques, the Urban Design Plan presented here suggests a modification of this street tree treatment. The plaques should be preserved, but integrated into a tree grate application. It is recommended that existing tree/tile surrounds be replaced with a decorative patterned metal tree grate. The suggested tree grates and their design pattern are illustrated by Figures 22 and 25. The introduction of tree grates will create a interesting variation in the sidewalk space, create a historic imagery, and increase pedestrian safety. The iron grate look can be expanded into a vertical element by adding decorative street tree guards. The repetition of this design feature will provide a strong visual element throughout the Historic Old Town District. It is suggested that round tree grates selected for Beermann Plaza be utilized at all mini-plaza and park settings — at the Visitors Center, Rainbow Market, Terra Cotta Plaza/ McBean Park, and at the entrance to the proposed Transit Center.

Street Lights

Street lights are also a key ingredient to achieving a historic image in the downtown. Again, the plaza lighting established in the downtown and Beermann Plaza will be closely adhered to. A pattern of lights consistent with the Downtown Integration Plan lighting system will be employed. The major variation proposed is the new light standard recommended for McBean Park Drive and Highway 65. A new decorative iron column with cast aluminum ornaments is suggested. This special avenue light pole has twin/dual luminaries which will present a striking street scene in the important linkage zone between McBean Park and the juncture of State Routes 65 and 193. The streetlight locations should follow a tight geometric balance mirroring positions along both sides of McBean Park Drive.

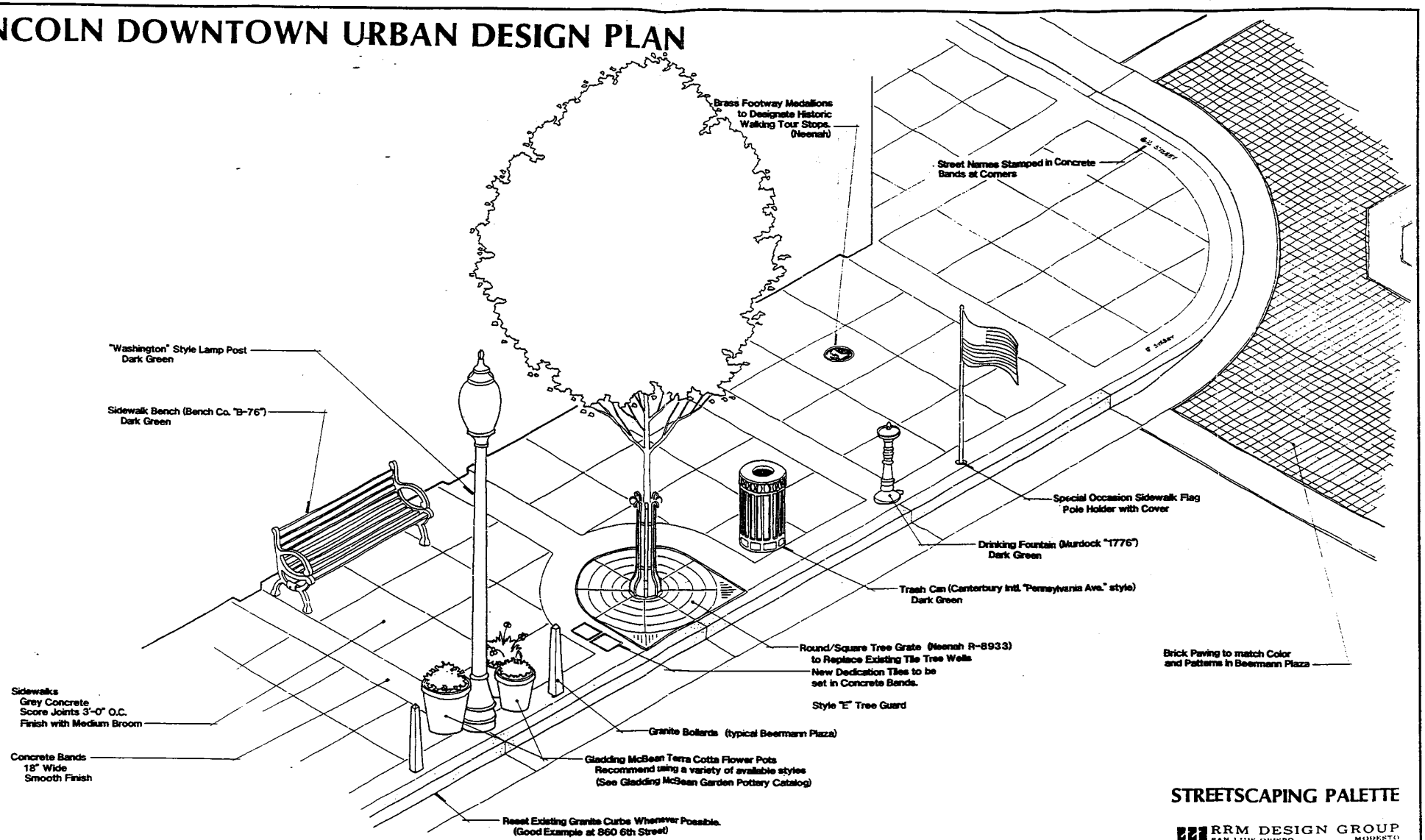
Two special situation applications of proposed streetlights — in conjunction with traffic signals and within plazas. The Beermann Plaza streetlight will be used in all plaza applications. The historic column streetlight standard will coincide with the fluting patterns and decorative base/cap features of the plaza lighting.



Plaza Light | **Old Town Light** | **Old Town Intesection Traffic Signal** | **McBean Park Drive** | **Higway 65**

Paint all lamp post dark green (per integration plan)

LINCOLN DOWNTOWN URBAN DESIGN PLAN



STREETSCAPING PALETTE

RRM DESIGN GROUP
SAN LUIS OBISPO MODESTO

Figure 21

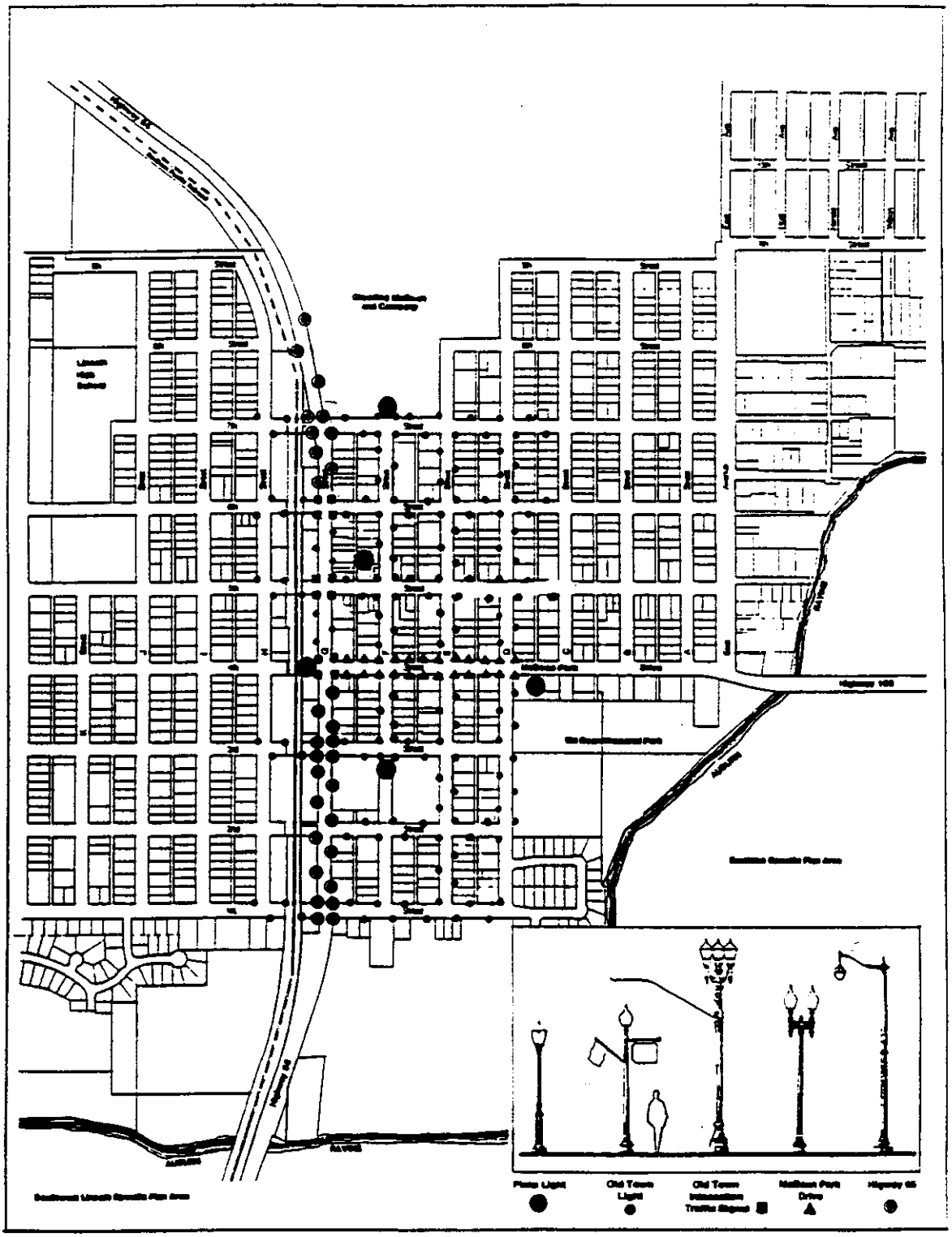

Lamp Placement per Integration Plan
MASTER STREET LIGHTING PLAN
LINCOLN DOWNTOWN URBAN DESIGN PLAN
CITY OF LINCOLN, CALIFORNIA
REDEVELOPMENT AGENCY
RRM DESIGN GROUP

Figure 22

Crosswalk and Sidewalks

The most intensive pedestrian pavement and sidewalk enhancements will occur at the 5th and F Street intersection. Figures 25 and 26 illustrate a proposed intersection treatment. The design approach utilized seeks to expand and enlarge the pedestrian environment surrounding this central and key intersection. All four corners receive pedestrian "bulb-outs" which project slightly into the street space. This device creates a pedestrian safety platform and narrows crosswalk distances. Bulb-out zones at all four corners will receive a "basketweave" pattern of concrete or brick pavers. The pattern will also switch to the basketweave pattern in crosswalk areas. The change in pattern will be visually interesting and "call out" the pedestrian crossing area in the street surface. Mid-block crossings, with basketweave pattern pavers, are indicated on 5th and F Streets at pedestrian focal points of the "ceremonial" streets of the four blocks radiating from the intersection. These mid-block crossings will be planted with the color accent border themes of Beermann Plaza. Highway 65 pedestrian crossings will receive a less ornate treatment — a concrete walk with integral colored concrete will be utilized as depicted below.

The recommended sidewalk module pattern is as follows: a 12 foot by 12 foot square is surrounded by 18 inch wide smooth band of gray tone concrete, joints at 3 feet on center. At tree grates, the 18 inch band forms a half circle, creating a horseshoe band effect at each tree location. All concrete work would use grey concrete to match the existing Downtown sidewalks (Fig 22).

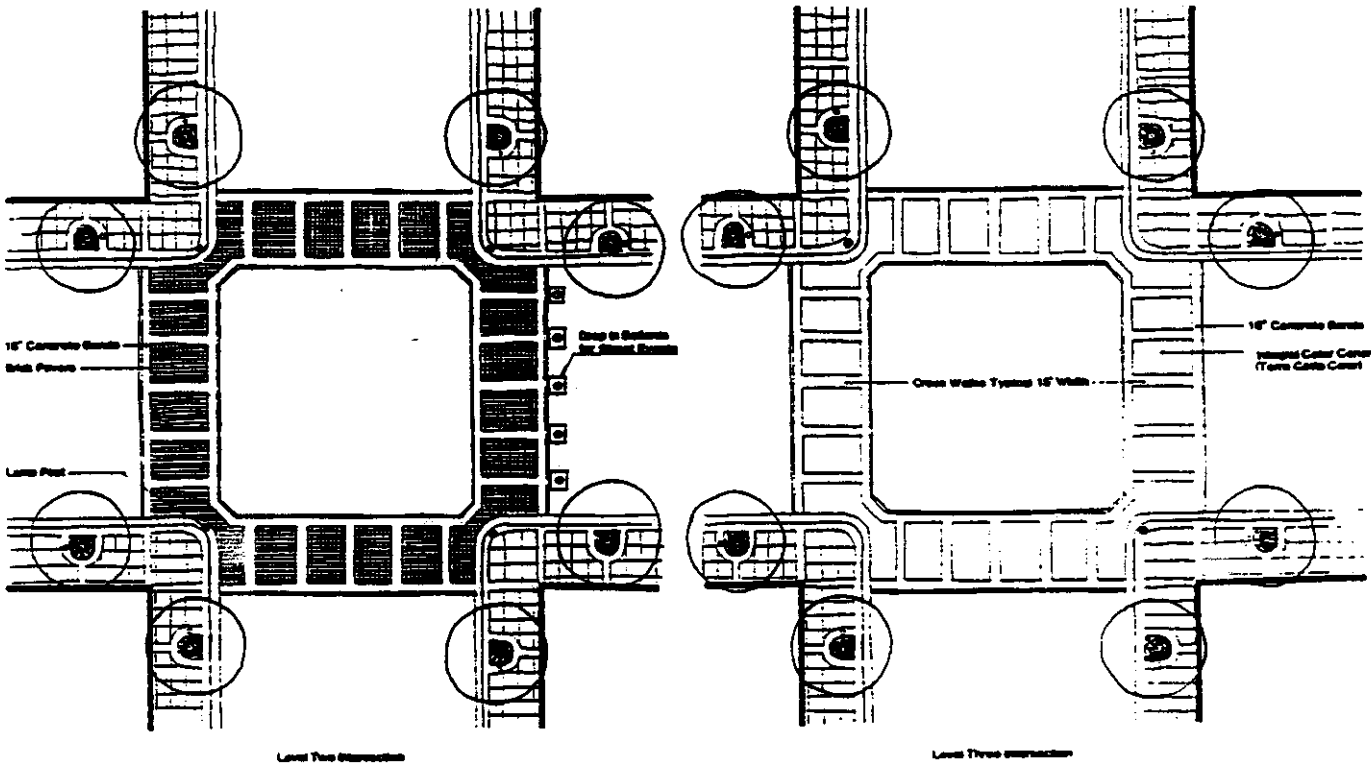


Figure 23

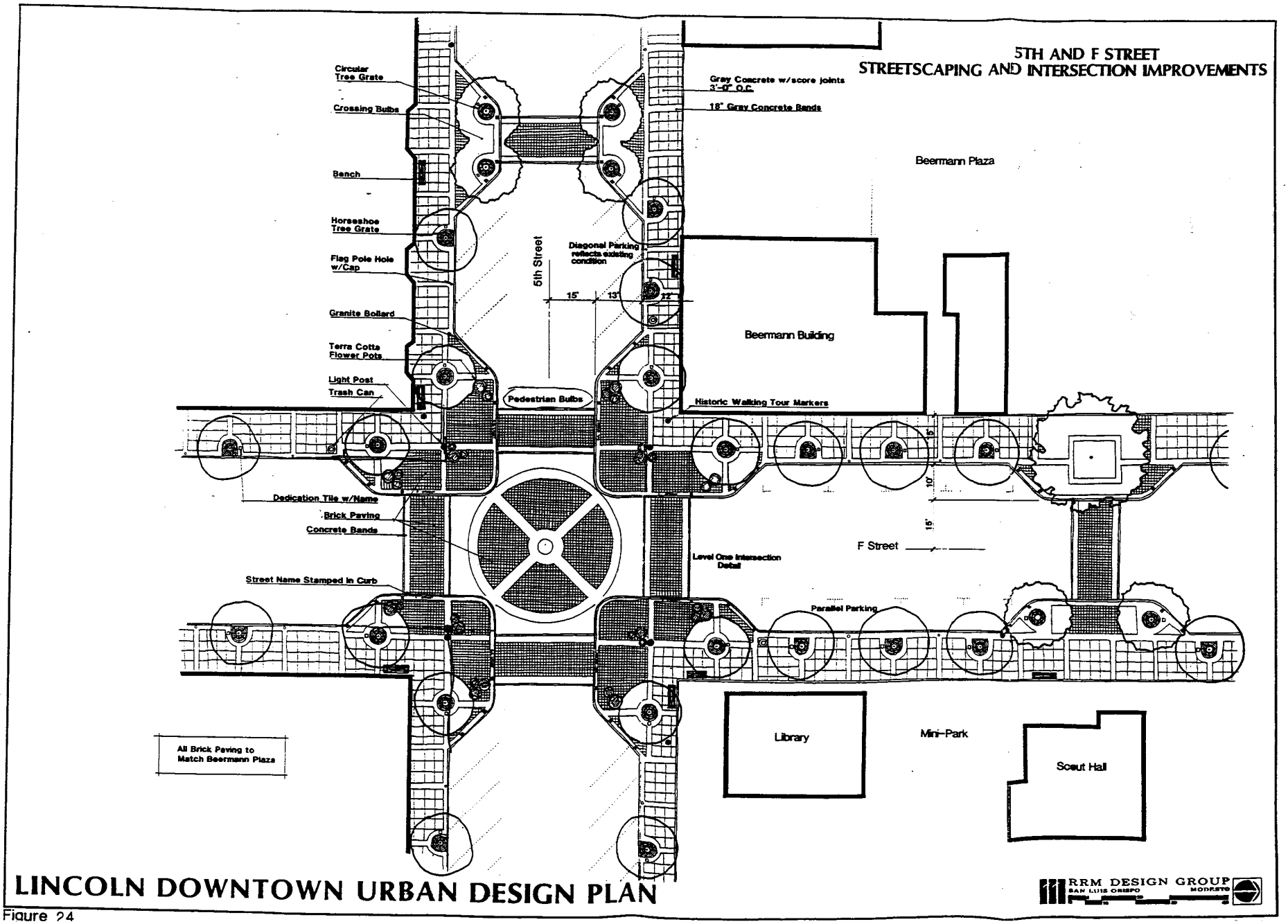
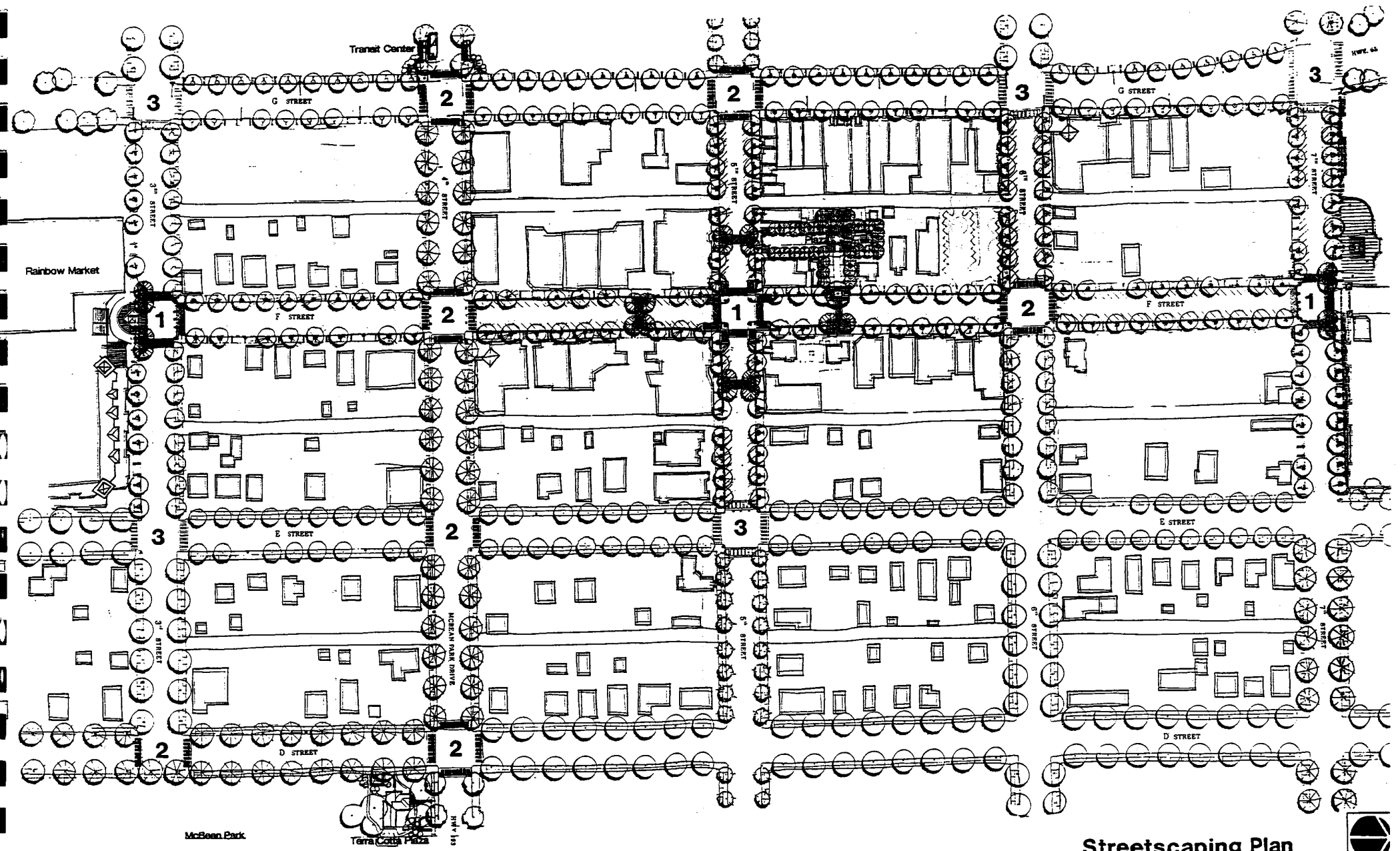

5TH AND F STREET
STREETSCAPING AND INTERSECTION IMPROVEMENTS
Circular Tree Grate
Crossing Bulbs
Bench
Horseshoe Tree Grate
Flag Pole Hole w/Cap
Granite Bollard
Terra Cotta Flower Pots
Light Post
Trash Can
Dedication Tile w/Name
Brick Paving
Concrete Bands
Street Name Stamped in Curb
All Brick Paving to Match Beermann Plaza
Gray Concrete w/score joints 3'-0" O.C.
18" Gray Concrete Bands
Beermann Plaza
5th Street
Diagonal Parking reflects existing condition
15'
13'
12'
Beermann Building
Pedestrian Bulbs
Historic Walking Tour Markers
10'
15'
F Street
Level One Intersection Detail
Parallel Parking
Library
Mini-Park
Scout Hall
LINCOLN DOWNTOWN URBAN DESIGN PLAN
RRM DESIGN GROUP
SAN LUIS OBISPO
MODESTO

Figure 24



Streetscaping Plan

Number indicates Level of Intersection Improvement (see intersection details)

Figure 25

Plazas

Lincoln has begun to establish a system of plazas and mini-parks within the Downtown. These pedestrian spaces are very important to the overall downtown environment. Additional plazas in conjunction with new buildings and projects are desirable. The following guidelines are intended to assist in the design of future plazas and improvement of existing plazas.

"People tend to sit most where there are places to sit."

–William Whyte

The following design standards are based on research and studies on public places developed by William Whyte:

Recommended elements of a successful public space.

- ❑ **Provide plenty of seating. One linear foot of seating space per 30 sq. ft. of plaza is a good rule of thumb. Bench, chairs, steps, and walls (between 1'-3' high) should be considered seating space.**
- ❑ **Plaza must have a strong relationship to the activity of street. Think of the plaza as an extension of the sidewalk environment. The elevation of a plaza should be within 3 feet of the sidewalk.**
- ❑ **Provide a combination of sun and shade in plazas. Sunny sitting areas are important during winter, while shade is equally essential in summer. Deciduous trees properly planted in relation to seating areas will provide shade in summer and sun in winter. Use 6 trees per 5000 sq. ft. as a rule of thumb.**
- ❑ **Grassy areas provide additional sitting space, play areas, and relief from hardscaped areas.**
- ❑ **Food has the effect of attracting people which is essential to a successful plaza. Consider combining plazas with cafes, restaurants, coffee shops and other outdoor eating areas.**
- ❑ **Provide features to create water animation and a focal point to a plaza.**

Bollards

Bollards provide a means for punctuating key focal points and plaza entrances. They can also be utilized to close a stre[illegible] to automobile traffic. The ceremonial street concept of the Downtown Urban [illegible]sign Plan calls for creation of a four block convertible street around the 5th and F Street intersection. Bollards will have box inlets in the street surface which will allow for short duration street closures for special events. A lighter weight metal bollard will be used in the street right of way.

Street Furniture

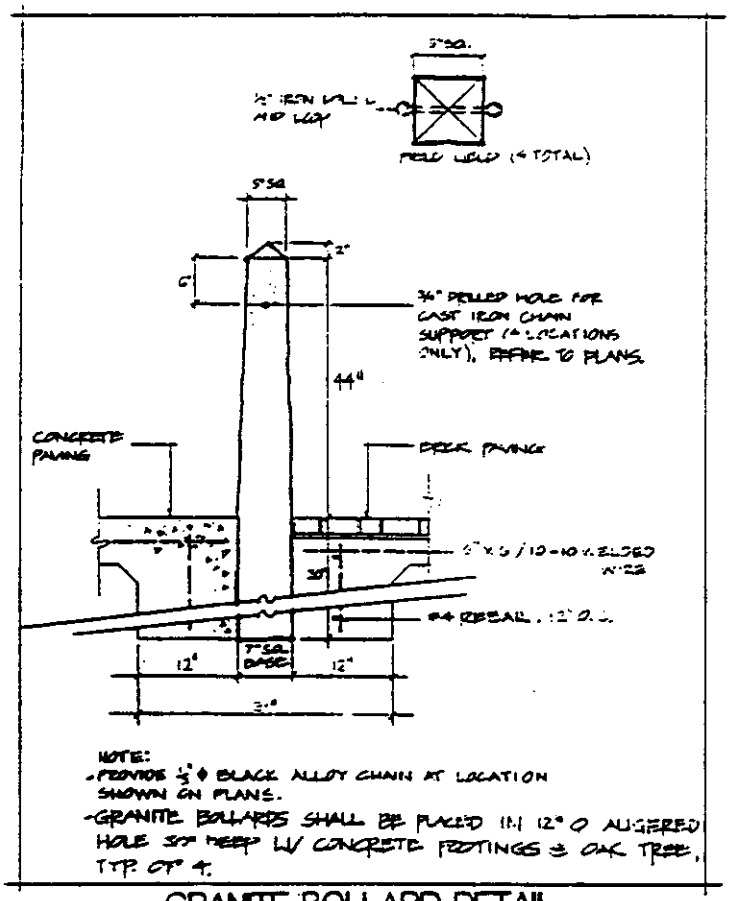
Figures 22 and 25 indicate design recommendations for fountains, bike-racks, benches, kiosks, bus shelters, flower pots and other related street furniture. These decorative and ornamental elements will be used as strategic corners and gathering points throughout the downtown core area. Outside of District 1, street furniture will only be found at plaza and park settings.

DISTRICT 2 AND 3 MATERIAL PALETTES

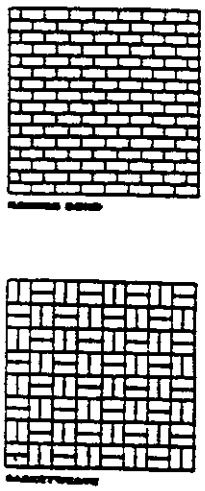
Other areas of the Downtown do not require intensive material, pavement, or lighting design treatments. Key intersections treatments will follow Figure 24 material pattern. If the Civic Center is located at McBean Park, special applications for 3rd Street, D Street and the pedestrian connection at McBean Park Drive will have to be developed. A special streetlight is suggested and illustrated by Figure 23. Tree grates will only be employed at the plaza locations suggested in the Urban Design Development Plan.

District 4, 5 and 6

These districts require "edge" landscaping and streetscaping transition treatments. The industrial buffer treatment for Gladding McBean is illustrated in the Visitor Center concept drawing, see Figure 17.



GRANITE BOLLARD DETAIL



Brick Notes

1) ALL BRICK SHALL BE H.C. MUDDOX STANDARD SIZE BRICK.

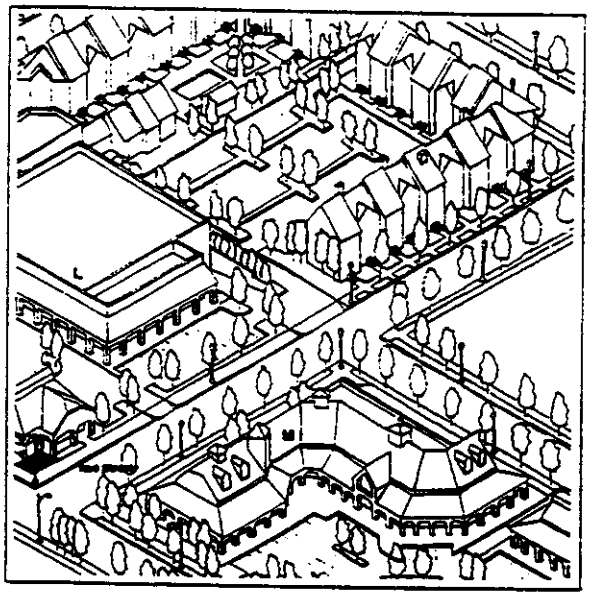
2) THE FOLLOWING BRICK RATIOS SHALL BE APPLIED IN RANDOM FASHION:
   - 1088 SUTTER GOLD BRICK (28%).
   - 1120 SUMMER WHEAT (24%)
   - 1081 LIGHT DUSTY ROSE (26%)
   - 1081 DUSTY ROSE (22%)

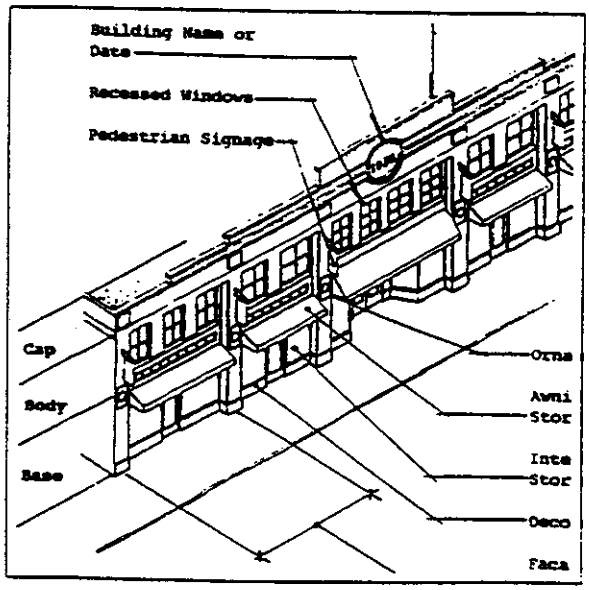
3) ALL MORTAR USED SHALL HAVE LATICRETE ADD MIXTURE AS PER MANUFACTURER'S SPECIFICATIONS.

4) CONTACT H.C. MUDDOX AT (916) 362-1171. CONFIRM AVAILABILITY OF BRICK UPON BEING AWARDED CONTRCT.

BEERMANN PLAZA BRICK PAVING DETAILS

7. District Design Guidelines

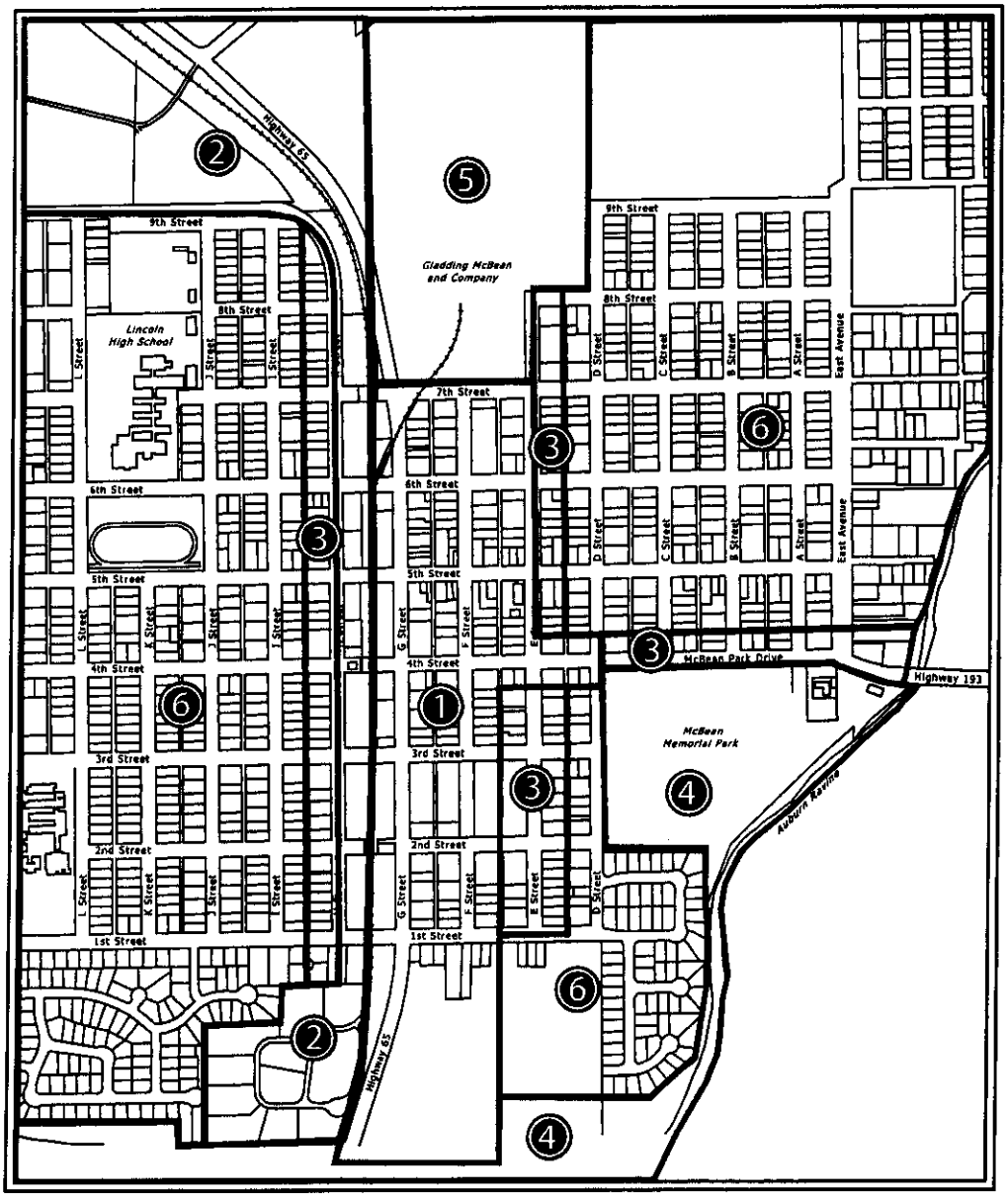




"The Pedestrian is a Social Being: he is also a transportation unit, and a marvelously complex and efficient one."

—William H. Whyte

DISTRICTING MAP



1. Historic Retail
2. Highway & Service Commercial
3. Transitional / Mixed Use
4. McBean Park
5. Gladding McBean Industrial
6. Fringe Residential

Lincoln Downtown Urban Design Plan

CITY OF LINCOLN, CALIFORNIA

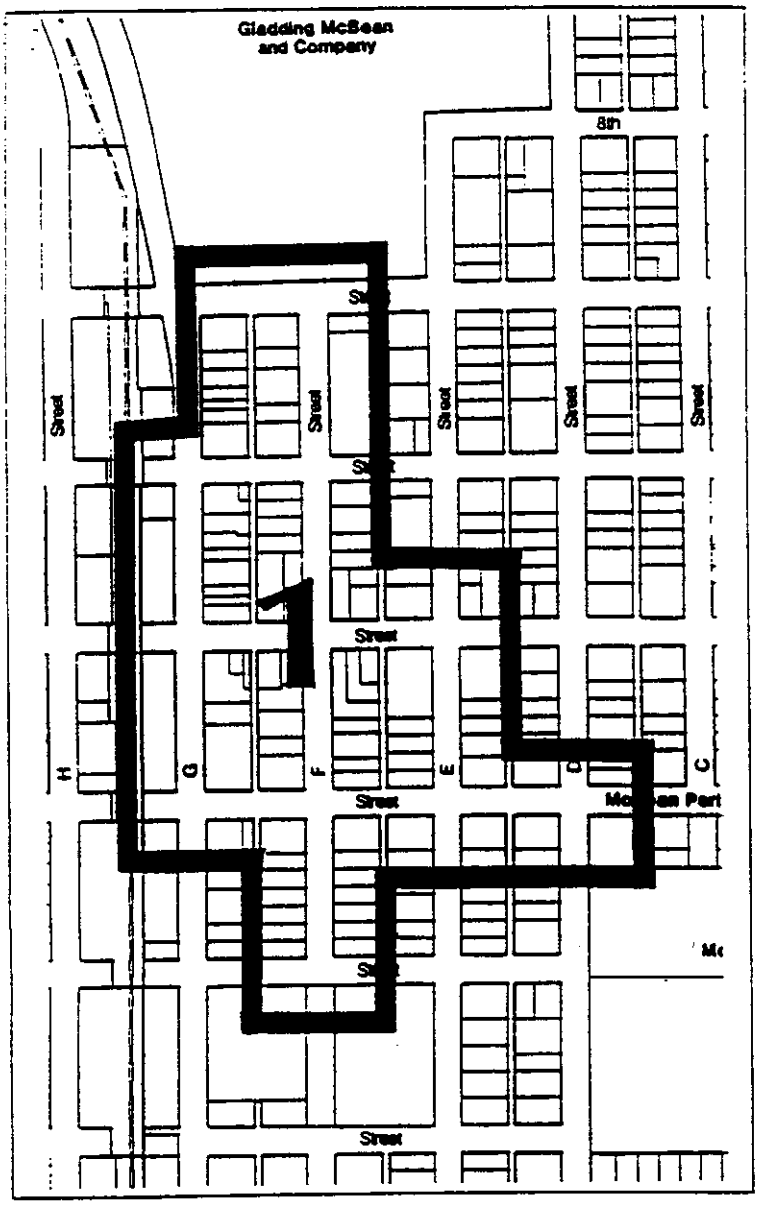
REDEVELOPMENT AGENCY

R&M DESIGN GROUP

7. District Design Guidelines and Standards

The following section contains detailed design standards for Districts One through Six. These guidelines provide a tool for designing and evaluating development projects within the overall downtown area. The intent is to encourage harmonious and appropriate developments which will improve the economic and social function of the downtown area.

7.1. DISTRICT 1 HISTORIC OLD TOWN COMMERCIAL

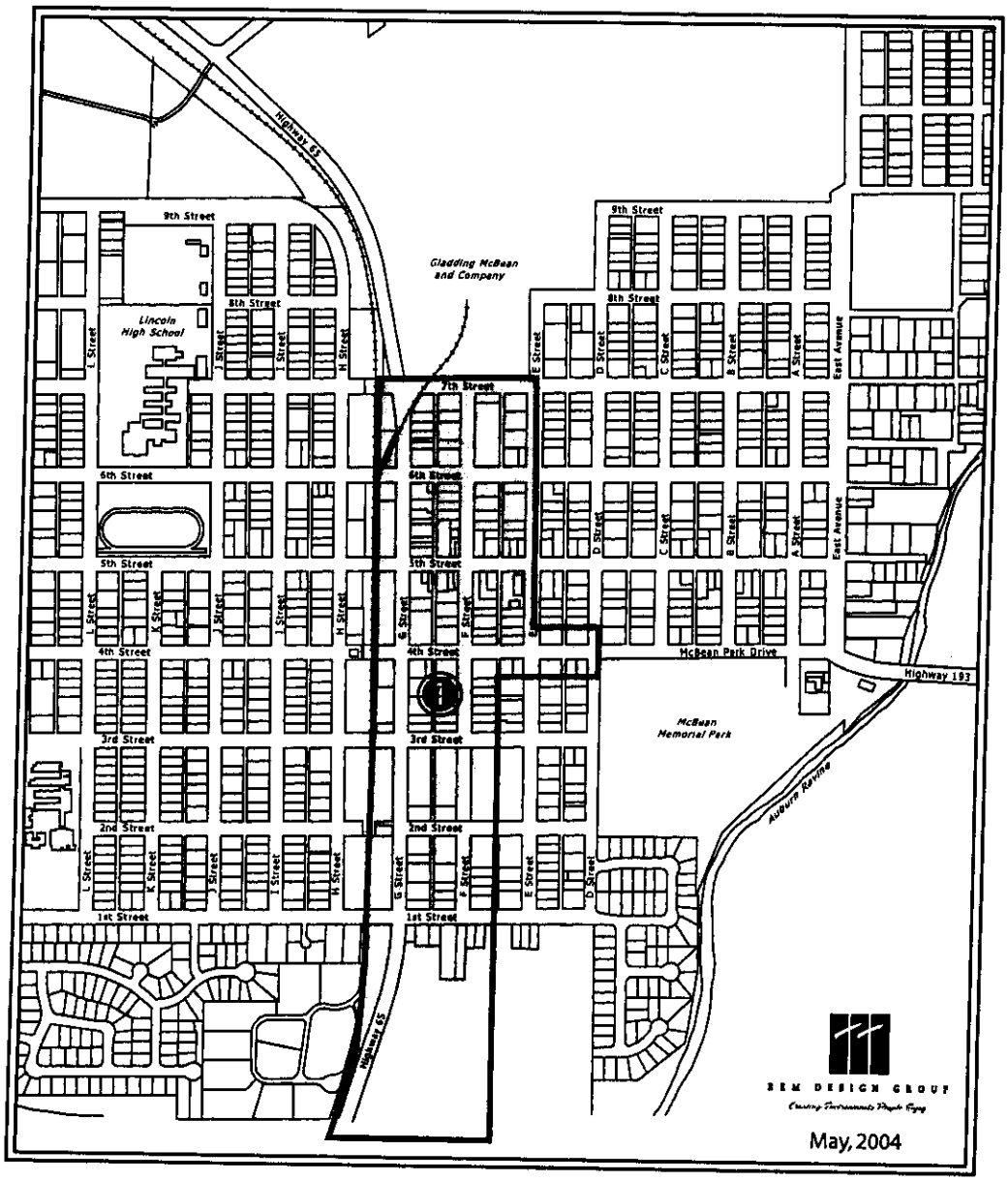


A Vision of the Downtown (re-stated)

A downtown is the heart of a city. It is a place of importance and vibrancy that reflects a community's heritage and gives direction to the future. Downtown is the place in town to gather, it's the place visitors see, and it is a place of civic pride. The purpose of the Urban Design Plan is to reestablish the significance of downtown and to enhance the community's sense of pride toward downtown Lincoln.

Preservation of the downtown as the center of Lincoln socially, culturally, economically, and visually are paramount to this plan. Downtown will become the focus of community activity. Pedestrians will stroll along sidewalks with interesting storefronts, cafes and restaurants. People will naturally want to gather and meet downtown as well as shop and live there. This will be a place for a parade, a street market, or just to get a cup of coffee with a friend.

Diversity of the downtown core is an important part of a vital city center. Downtown will function as the civic core, an employment center, and a residential neighborhood with retail commercial activities focused on convenience shopping needs of the surrounding neighborhoods. Specialty retail will also be provided for the tourist and special festivals and activities. Pedestrians will be attracted to the pleasant sidewalks and attractive storefronts. Restoration of historic buildings, construction of new buildings, creation of pedestrian plazas with landmarks and streetscape improvements will all contribute to defining the downtown as a place.

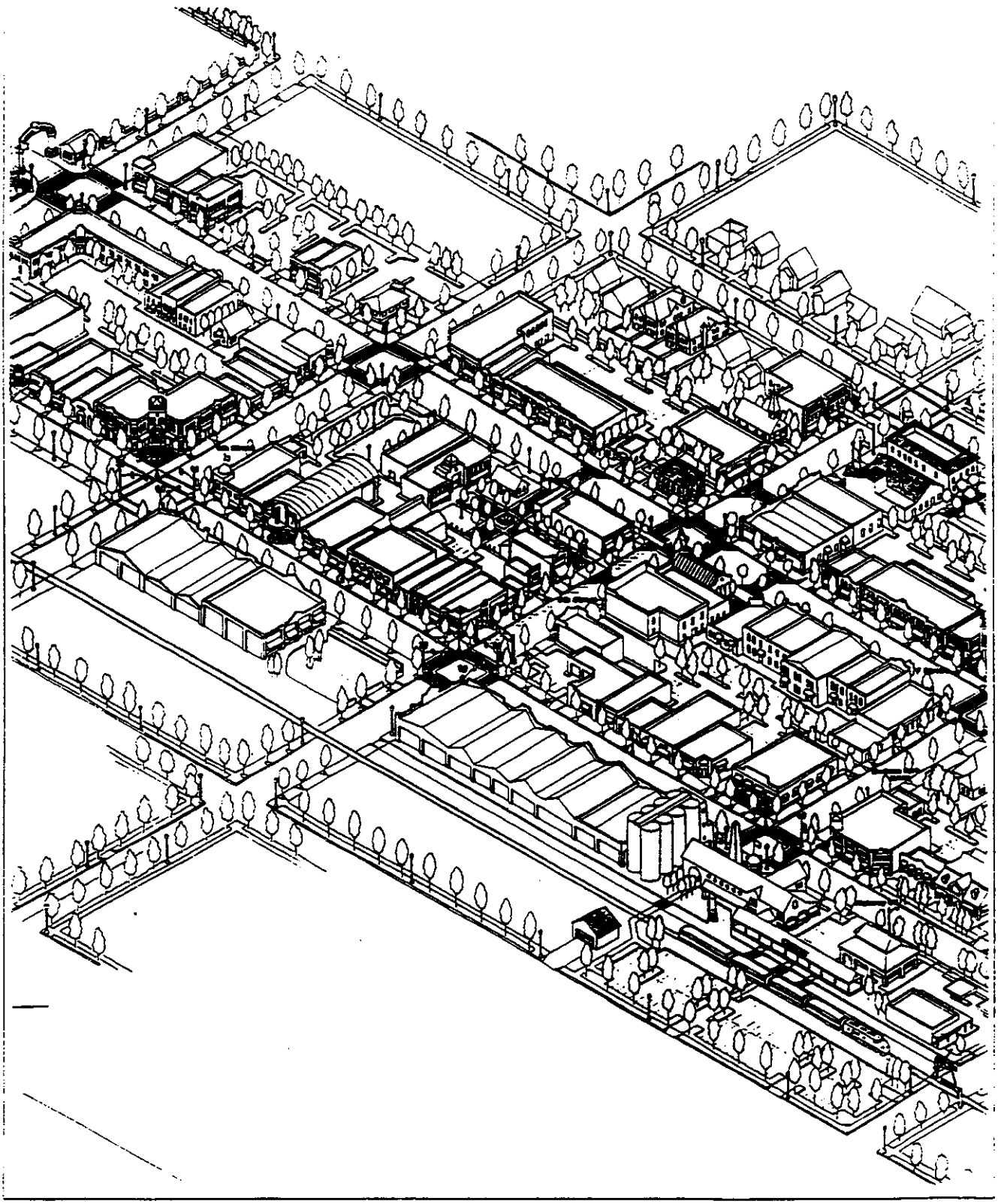


DISTRICT ONE

Lincoln Downtown Urban Design Plan

CITY OF LINCOLN, CALIFORNIA

REDEVELOPMENT AGENCY



Issues

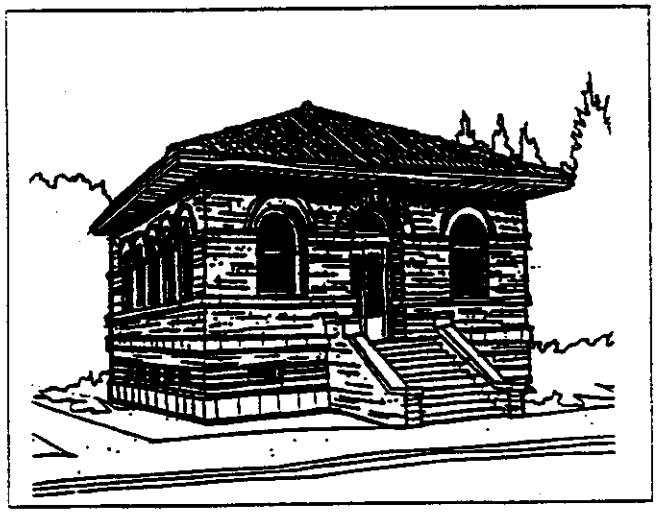
The existing Old Town commercial core has always been the geographic and social heart of Lincoln. The downtown's historic buildings, pleasant sidewalks and rich history make the area a special place worth saving. District One is the key component of the overall Downtown Urban Design Plan. The following guidelines and recommendations are intended to provide a framework for improving the aesthetic, economic and functional aspects of the downtown.

Analysis of Existing Architecture

The most important element of Old Town is its historic buildings. These historic structures define the character and environment of a downtown. Storefronts against the sidewalk catering to the passing pedestrians are becoming rare in today's world of hypermarkets and mega malls. Old Town Lincoln's historic buildings on 5th, between E and G Streets, are precisely what defines the area as the "downtown." Many of these buildings serve as local landmarks and offer a glimpse of Lincoln's rich heritage.

But what is it about the IOOF Hall, the Emmada Building, or the Beermann Building that make the downtown different from the Rainbow Market area? It is not merely because the buildings are older; the differences between these districts are rooted much more deeply. These older buildings differ from recent commercial buildings in terms of architectural style, their relationship to the automobile, and their economic and social functions.

The following section will examine the characteristics of the historic buildings in downtown Lincoln and offer ideas for improving the economic function of existing buildings, and suggest ways to create new buildings that contribute to the downtown's character and sense of place.

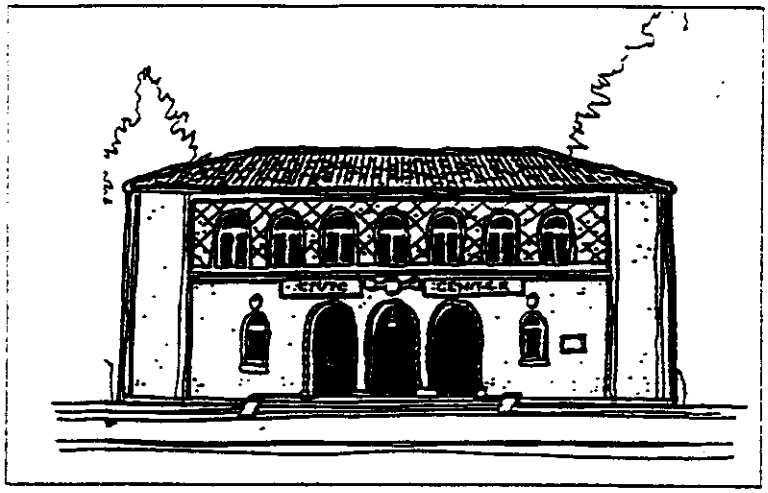


Lincoln Library

ARCHITECTURAL CHARACTER

Renaissance Revival -

Also known as the Neo-Renaissance Movement, this style gained popularity in America in the mid 19th century. Architects of the time delighted in the opportunity to use classical architectural forms in new, playful, and creative arrangements. The conventions of the Florentine urban palazzo were among the major form generators of this style. The result is a well balanced composition of lively decorative forms such as arched windows, corbelled cornices and trim, and bold articulation of base, body, and cap all set against a serene background of gracefully ordered symmetry. An excellent example of this architectural style in downtown Lincoln is the Carnegie Library of 1909 at 511 5th Street.



Lincoln Civic Center

Spanish Colonial -

This architectural style is derived from California's Spanish Mission architecture of the late 18th century which in turns traces its roots to the heavily Moorish influenced architecture of Old Spain. It is one of the strongest regional associations of California architecture. It is characterized by heavy stucco or plaster walls over a heavy timber or masonry frame, arched and collanaded arcades surrounding cool courtyards, colorfully painted ceramic tiles, and extensive use of clay barrel tile as a roofing material. A good example of this architectural style is found in the Lincoln Civic Center Building of 1921 at 511 5th Street.

Old Bank of Western Placer

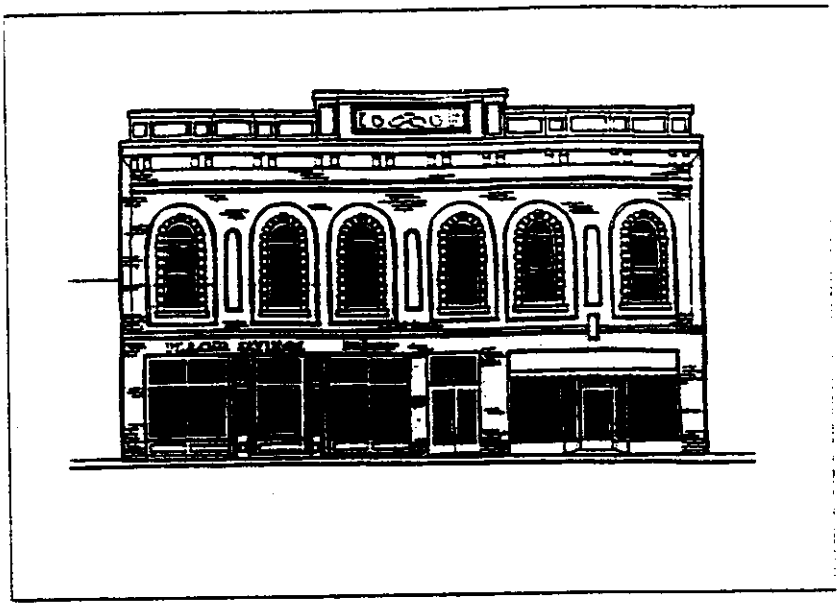
Neoclassic

Neoclassic architecture originated in France in the 18th century during the reign of King Louis XIV. This was a particularly popular style in the United States of America during the first 100 years of its existence as a nation. It was felt that architectural forms based on classical Greek buildings would serve as a highly suitable parallel between the lofty ideals of the new American republic and those of ancient Greece's Age of Grandeur. As the 19th century closed, Neoclassicism was transformed into what came to be known as the Beaux Arts Style. Beaux Arts designs derived most of their forms from the principles of Neoclassicism and elements of the two styles are nearly indistinguishable from one another.

Neoclassic-Beaux Arts architecture in downtown Lincoln is best exemplified in the Bank of Western Placer at 519 G Street, which dates from 1914. Forms characteristic of this style are evident in the columns which flank the entry portico, the arched window over the entry, and in the restrained order and symmetry of the overall composition.

Romanesque Revival -

This architectural style was almost solely the creation of a single American architect of the late 19th century named Henry Hobart Richardson. Romanesque Revival can be described as a very robust, substantial architecture. It is characterized by heavy stone or brick masonry, stout columns, clean lines of decorative trim, and soaring arched entrances and windows. In downtown Lincoln, the IOOF Building of 1905 is a good example of this style.

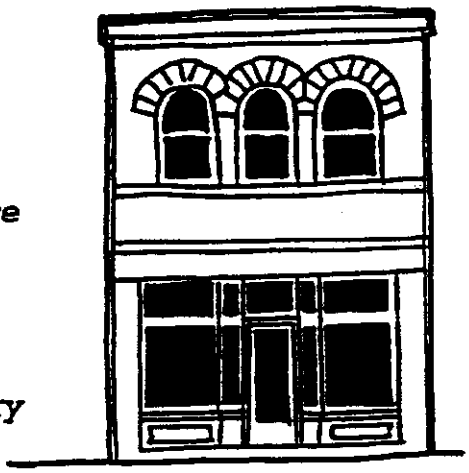


IOOF Hall

Typical Architectural Treatment
late 1800's to early 1900's

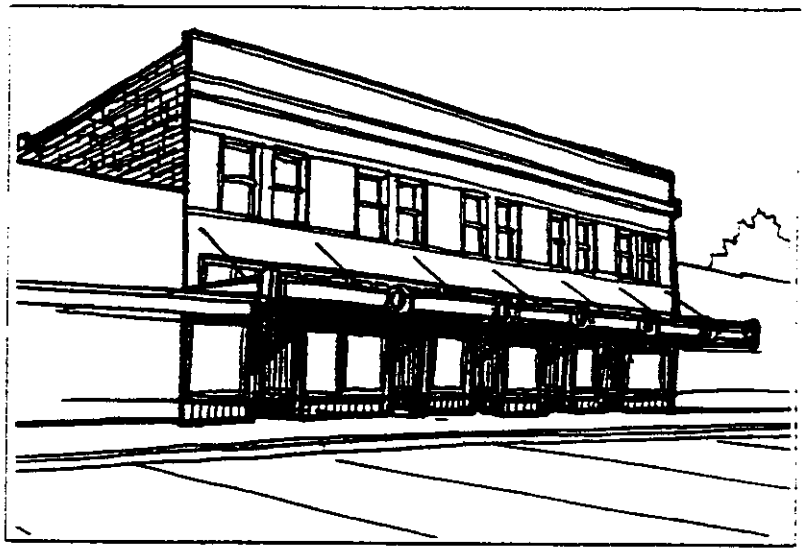
Upper Facades
- *corbelled brick cornice*
- *large, arched windows*

Storefronts
- *simple cornice*
- *transom windows*
- *slightly recessed entry*



Post 1900 Commercial -

This architectural style actually originated in the United States in the late 19th century and is probably best known as the "Main Street America" style. This architecture is characterized by first floor storefronts which are strictly commercially oriented. The upper levels (usually one to four additional floors) were devoted to office or residential use. The buildings were frequently of masonry construction, and sometimes of wood, with a fairly extensive use of architectural ornamentation that was based on a classical form vocabulary. The style more or less declined in popularity after the 1920's when the Great Depression and World War 2 changed the economic and technological realities of commercial construction. As the 20th century draws to a close however, America's passion for technology-at-any-cost is cooling considerably and these old buildings are being reexamined for the very humane qualities that they were somehow able to impart to the downtown districts in which they were built.



Emmada Building

Typical Architectural Treatment
early 1900's to 1930's

Upper Facades
- *simple brick cornice*
- *large window openings w/ multiple units*

Storefronts
- *metal window frames*
- *deeply recessed entry*

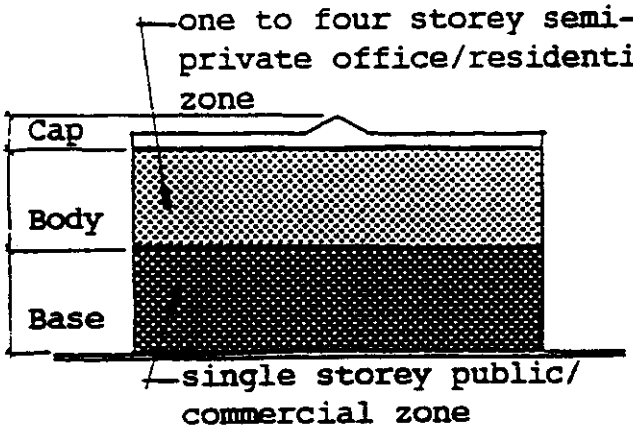
ELEMENTS OF DOWNTOWN BUILDINGS

The Two Part Commercial Building

The variety of architectural styles found in the downtown core help give the district its character. However, the Old Town environment is highly influenced by the underlying architectural form of the downtown's buildings. In other words, the shape, size and location of the downtown buildings really define the downtown district.

The majority of Lincoln's downtown buildings were constructed as either one-part or two-part commercial buildings. This type of building evolved quickly during the 19th century in the United States as a result of the nation's industrial and economic growth of that period. Both the Emmada Building and the IOOF Hall are examples of two-part commercial buildings with different architectural facade styles. Close examination of these two buildings reveals a very similar underlying form.

The two-part commercial buildings are characterized by the following.



- **The Cap:**
  A cornice which caps the top of the building.
- **The Body:**
  One to four additional upper stories which provides a semi-private zone for office and residential uses.
- **The Base:**
  A single story public/commercial zone at street level with mainly transparent storefronts, against the sidewalk.

A one part commercial building has the same first story commercial zone as its two-part cousin but lacks the semi-private upper stories. The two-part commercial block became the dominant form of commercial development in small and moderate sized American communities from 1850 to 1940. Today, the two part commercial pattern of development has become synonymous with downtown commercial districts, and strongly contrasts with modern auto oriented strip commercial development.

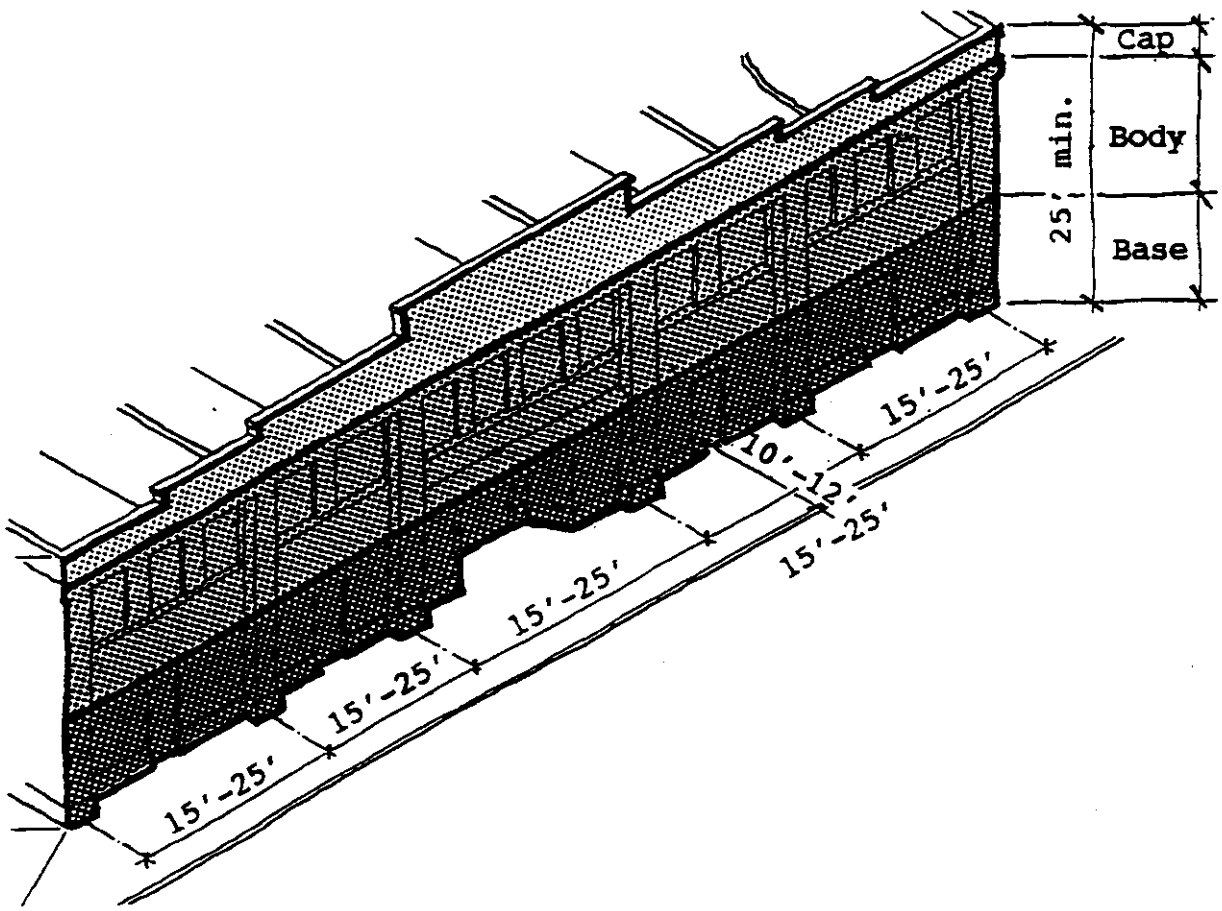
Old Town Design Model

Old Town Lincoln, like most California downtowns, is characterized by its historic one and two-part commercial buildings. The two-part commercial building's pedestrian orientation, small town scale, ability to accommodate a mixture of uses and historic appropriateness make it a logical model for future development in Lincoln's Old Town business core (District One).

Form of Existing Old Town Buildings

Height/Bulk

The majority of District One is composed of solid rectangular forms with flat roofs and parapets. There are also several buildings which have adopted residential forms in massing and roofline. For the most part, these commercial buildings are one or two stories in height. This roughly translates to a physical dimension of between 15 feet to 40 feet in height. The individual interior spaces within the buildings are typically deep and narrow. In other words, they are arranged in such a manner that the street frontage dimension is rather narrow compared to the depth of the space, which is usually a much greater dimension. In some of District One's larger buildings, many such spaces are combined into the same building. At street level the change in storefronts creates the perception of many small buildings. When viewed from a short distance away, however, (such as across the street), it becomes clear that these storefronts are all individual spaces which exist within a single larger building. The large building can be more clearly read as a unified whole when the upper levels can be seen, since there are few if any distinctions, between individual interior spaces at this level. These buildings are also often symmetrical about the main entry axis.



Base, Body, Cap

District One's buildings are good examples of an architectural theory which espouses the division of a building into a composition of base, body, and cap. There are several buildings which feature a masonry or tile base, or bulkhead, which is usually from 18 inches to 30 inches in height and is slightly projected out from the face of the building. On taller buildings, the entire street level may be read as the building base, particularly where awnings or a running canopy exists.

The body of the building can be characterized as the main portion of the building. It is the area which contains the doors and windows of the building. Sometimes the body of the building is subdivided into a series of parts through the use of horizontal string courses. These string courses are also known as beltways and usually occur at the storey line. They are often of decorative brick masonry or wood moulding. String courses play a useful role in diminishing a building's vertical mass as well as adding another level of detail and visual relief to a building facade.

The building cap serves to provide a visual terminus of the building facade. It can be thought of as the building's roofline. In District One there are many buildings which utilize a stepped masonry parapet as a building cap. Quite often there is also an entablature, which is a strong horizontal band at the roofline containing ornamental detail. The entablature also serves as the vertical terminus of any columns or pilasters on the building facade.

Proximity to Street

The majority of District One's commercial buildings have a zero street setback, which means that they stand flush at the inward edge of the sidewalk. This allows the building to have immediate proximity to the sidewalk and encourages passing pedestrians to enter the building.

Modulation/Bays

The commercial spaces in larger buildings and the smaller individual buildings which front downtown Lincoln's sidewalks are spaced within a 25 foot to 50 foot range. This spacing takes the form of structural bays in larger buildings and a complete change of building facade at smaller buildings. This modulation creates a pleasing rhythmic change of storefront composition and has been shown in various studies to better maintain pedestrian interest in the storefront. Incidentally, it is this concept which is responsible for the deep, narrow configuration of the interior spaces.

Entrances

Street Entries

As mentioned above, most of the entrances to District One commercial buildings are immediately accessible from the sidewalk and are either flush to the sidewalk or no more than one step up into the building. Downtown Lincoln utilizes a typical commercial storefront entry / display window system characteristic of downtown commercial districts everywhere. There are some recessed entries which create additional room for pedestrian circulation as well as increase the merchant's display window frontage. The entrances to commercial spaces are usually covered by some kind of awning or canopy. This serves as protection from inclement weather and creates a definable transition space between the building interior and the street.

Alley Entries

At present, most of the alley entrances in District One are utilitarian in nature. They are not usually recessed or covered. They do provide immediate access to the alley however, and in many cases there is the possibility of creating a second pedestrian entry and potentially doubling the pedestrian traffic in a commercial building.

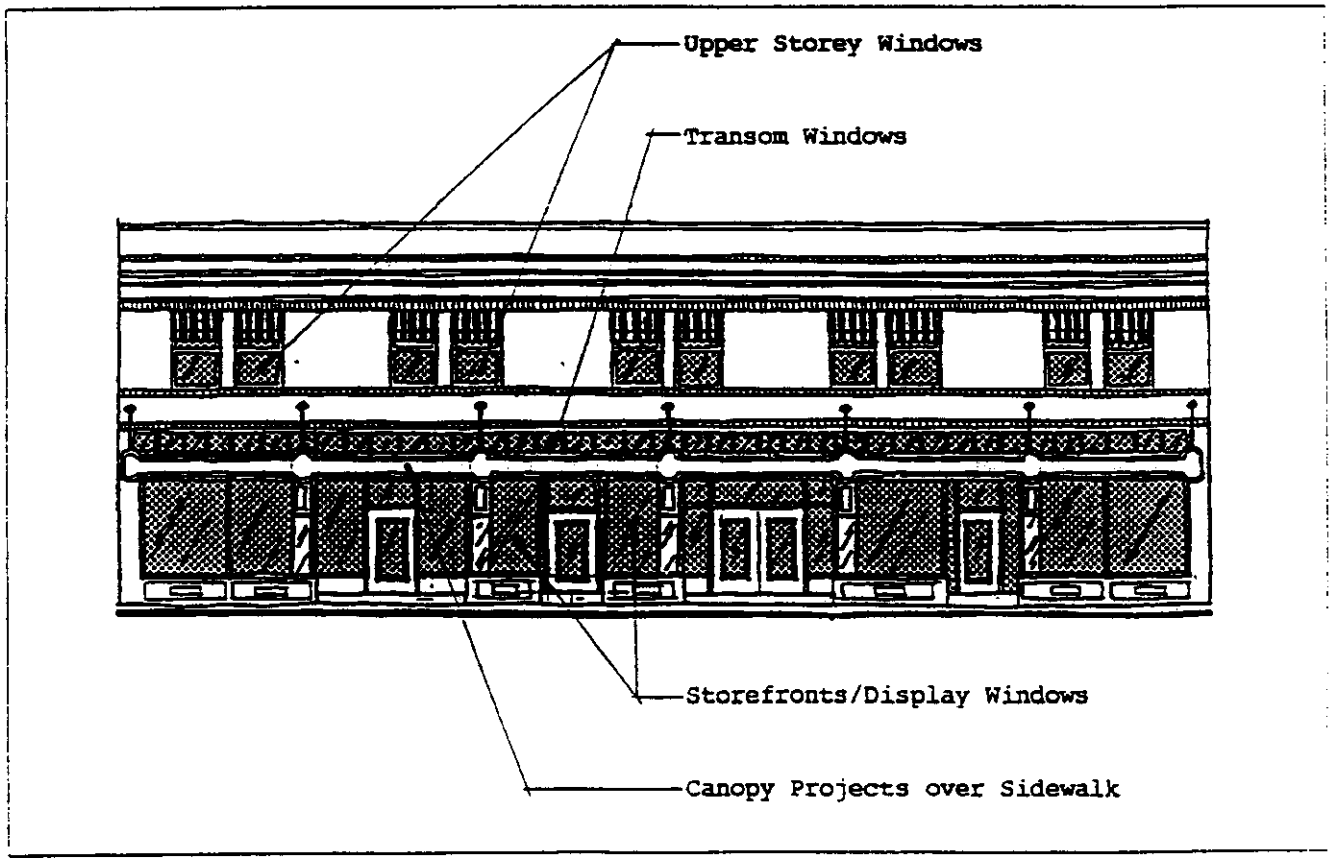
Window Treatments/Glazing

Storefronts

Storefront windows in District One are typically large plate glass surfaces set in wood or aluminum frames. In some of the older buildings, these windows are set in high quality bronze frames. At present, some businesses use an overabundance of signage in these large windows. This tends to present a cluttered and rather unattractive appearance to the street.

Upper story

There is a consistent usage downtown of transom windows above a building's entry and storefront system. These transom windows usually take the form of a single horizontal band above the exterior canopy or awning. They were originally intended to admit daylight into the interior space. Unfortunately, in many instances these transom windows have either been boarded or painted over. On the upper levels of the downtown buildings, there are large rectangular wood or aluminum framed windows which are usually of the double hung variety and set in wood or masonry frames. In several buildings, the windows are arched with a relief surround, usually of some type of masonry (i.e. brick, terra cotta, stone, or some simulation thereof).



Architectural Ornamentation

Cornice/Frieze

The cornice and frieze are both elements of the entablature mentioned above. In downtown Lincoln, these elements are often done in decorative terra cotta. In many instances, the cornice (horizontal band at the roofline) projects outward from the building. This is achieved through the use of stacked up masonry and creates texture, detail, and visual interest. The frieze is a horizontal band which may serve to visually divide the building into its component parts. It often serves as a wide horizontal band upon which decorative terra cotta elements are hung. The borders of this element are usually defined as outward projections in masonry using the same stacked up brick technique mentioned above, although usually not to the same degree as the cornice.

Story Line/String Course

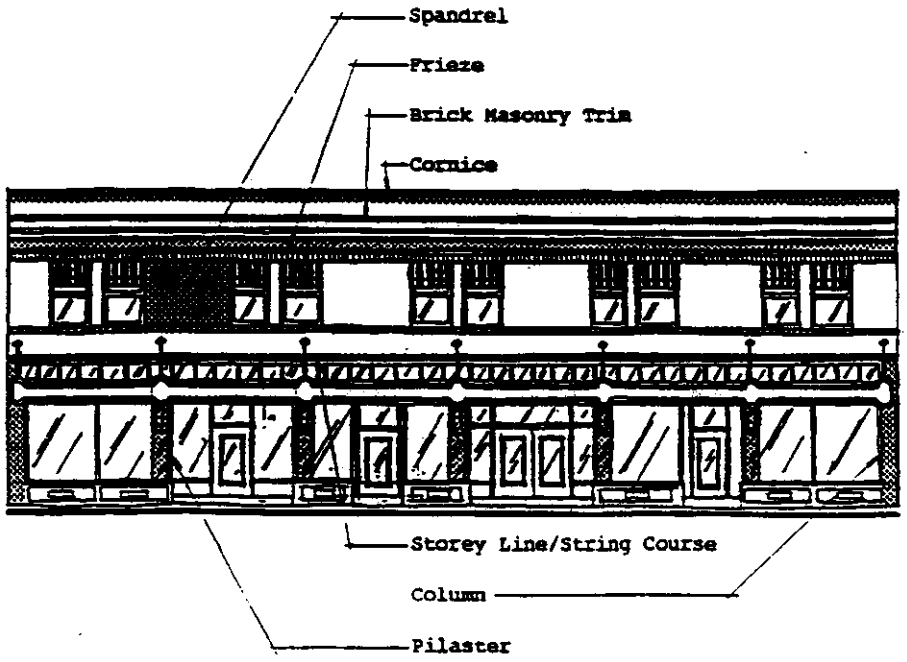
Story lines are usually secondary in prominence to the cornice and overall entablature, but as mentioned above they perform a useful role in better defining the building mass.

Spandrels

These spaces of exterior wall between windows are usually blank. There are many cases in which windows are recessed and finished with a relief surround or the spandrels are finished in masonry, resulting in a pleasing textural quality. In some other instances the spandrels are finished in painted stucco, with no other accompanying window details. The unfortunate result is a rather bleak lack of visual interest.

Columns/Pilasters

There are few examples of round columns in District One, but there is a wide use of pilasters. These are rectangular engaged (attached to the wall) columns which project from the face of the building. They are usually done in masonry or plaster and often bear ornamental terra cotta features.



Materials

There is a widespread use of brick masonry in District One. The brick is usually smooth finished and blond to light orange in color. In several cases the building is framed in masonry but the exterior walls have been plastered or stuccoed. Wood buildings are the exception in this area, but there are a few good examples of wood framed commercial buildings. On commercial buildings where the roof is not flat, the roofs are usually finished in dark red clay barrel tile. There is a widespread use of terra cotta ornamentation on many downtown buildings. There are also several cases where painted, glazed terra cotta tiles are applied to the building base.

Canopies/Signs/Marquees

Canopies/Awnings

There is a good example of a finely detailed sheet metal canopy at the Emmada Building on G St. which runs the entire length of the building. There are several other wood or metal canopies of lesser detail and quality but with good potential for future rehabilitation. There are some examples of canvas awnings used downtown. These are mostly employed at the building entry only and usually do not run the width of an entire structural bay.

Signs

As mentioned above, there is a good deal of store signage along the building storefronts at street level. This signage is directed primarily at the passing pedestrian. Signage directed primarily at passing motorists is usually located above the building entrance on the upper level of the building. These signs are usually large and mounted on the building perpendicular to the street and sidewalk.

Architectural Glossary

For a complete list of architectural terms please see the Glossary for a list of Architectural Terms.

District One Design Guidelines

Old Town must not remain static if it is going to survive economically. To serve the needs of local residents and businesses additional commercial, office, and residential buildings will be necessary. According to the Williams-Kuebelbeck Economic Study there will be a 20 year demand for an additional 100,000 sq ft. of office and commercial space plus 100-200 residential units in the downtown. Presently there exist numerous parcels in the downtown core which are either vacant or under utilized. In response to these conditions it would be foolish not to plan for a number of new buildings in the downtown.

Consequently, Downtown Lincoln stands at the threshold of an excellent opportunity to shape the future of its downtown. Lincoln has the ability, with the Downtown Urban Design Plan, to shape the character of its downtown as it grows. New buildings do not have to be generic, roadside commercial buildings surrounded by a "sea of parking," which would contribute nothing to Lincoln's small town character. Rather, new buildings can be an interesting mix of old and new. New construction, whether small infill buildings or larger developments should strive to achieve excellence in design. With characteristics similar to the historic two-part commercial buildings, new buildings should respect the site and surrounding downtown environment.

The following guidelines are intended to assist builders in creating buildings which will contribute to Old Town's unique turn of the century character.

Guideline 1A
Land Uses

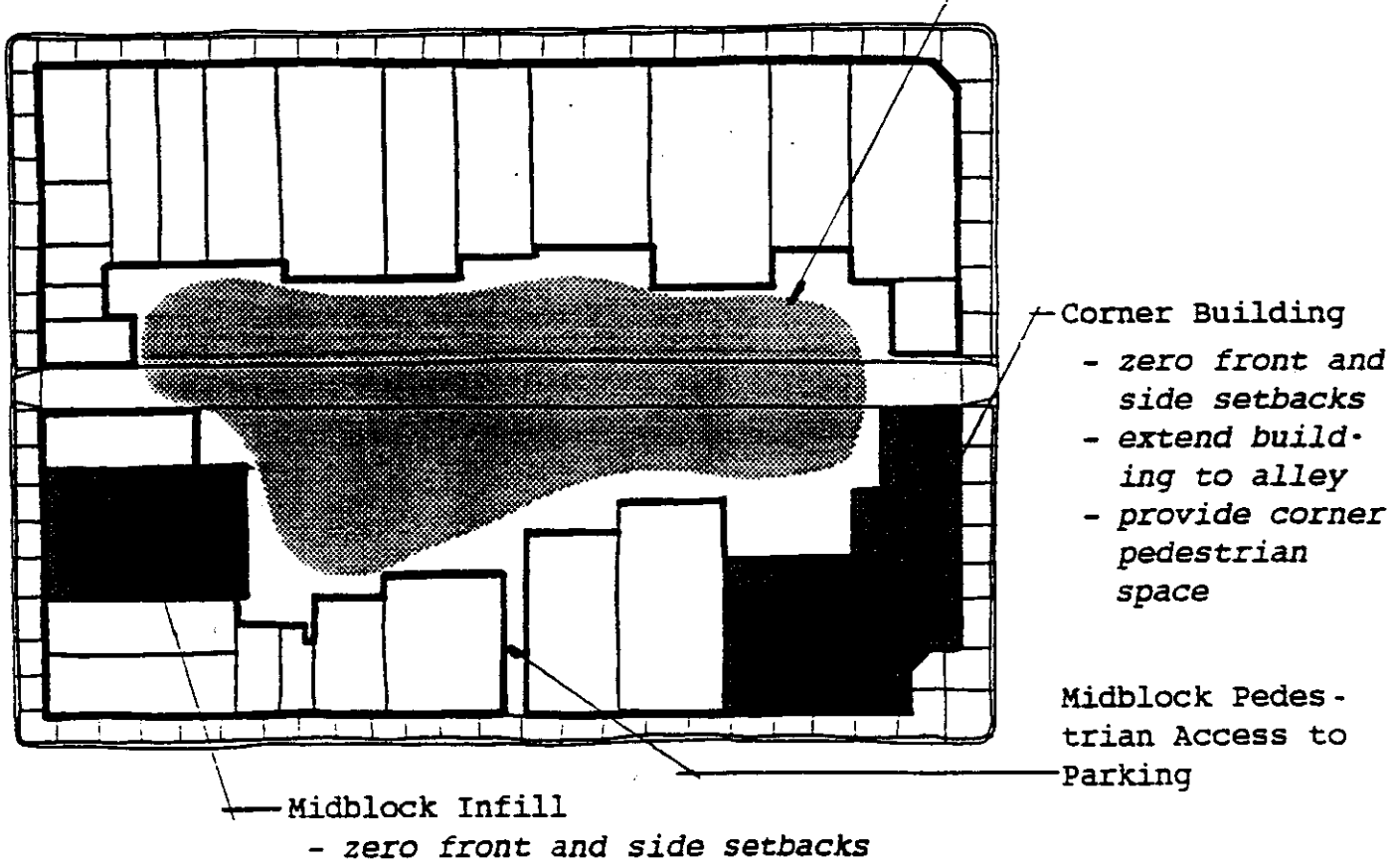
The downtown core is intended to provide a variety of uses. Consequently, downtown buildings are encouraged to provide a mixture of uses. Street level uses should be public and commercial in nature. The intent is to create a lively sidewalk environment for shopping, eating, and socializing. Upper level uses should be private or semi-private in nature, for example: office, professional space, and residential.

Guidleline 1B
Setbacks

The placement of new buildings must respect the historic development patterns present in the downtown.

Recommendations:

- ❑ **New buildings should have a zero setback against the sidewalk.**
- ❑ **Zero sideyard setbacks are typical of downtown buildings and are encouraged.**
- ❑ **Encourage creative use of rear areas against alley to accommodate offstreet parking, loading, building utilities, and provide secondary pedestrian access to stores.**

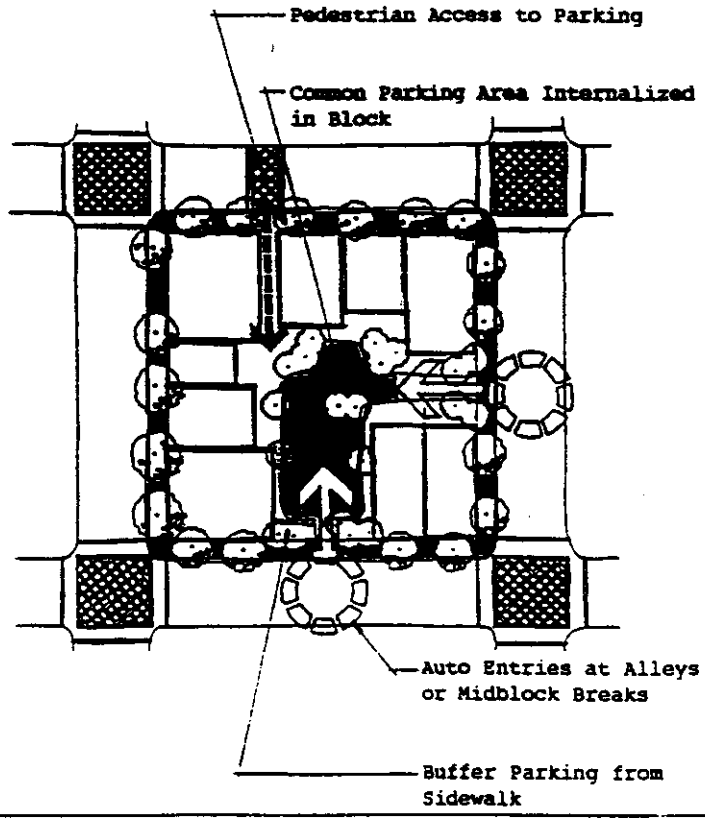


Guidleline 1C
Parking

The primary difference between downtown Lincoln and the new highway commercial areas is the parking lot. Large "seas of parking," between the street and the buildings create many of the negative visual impacts which are associated with modern commercial development. On site parking in front of a building is fundamentally incompatible with the pedestrian environment of a downtown. Therefore, new Old Town buildings should not attempt to meet parking requirements strictly with on site parking. Consider the following.

Recommendations:

- ❑ **Offstreet parking should be located behind the building with access from the alley.**
- ❑ **Parking lots adjacent to sidewalks should be screened with low walls or landscaping.**
- ❑ **On site parking should be reserved for customers, and employees should be encouraged to park their vehicles in remote parking lots.**
- ❑ **Parking lots in front of downtown buildings are inappropriate and strongly discouraged. Additional curb cuts should be discouraged throughout District One.**
- ❑ **Residences of Mixed Use development should be given reserved parking within their block's offstreet parking area. A standard of 1.5 per unit should be utilized in setting residential parking requirements.**



Guiideline 1D
Height

The height of the buildings enclosing the street space influences the quality of the street environment. Buildings which are too short fail to enclose the street and will not contribute to creating the desired downtown street environment.

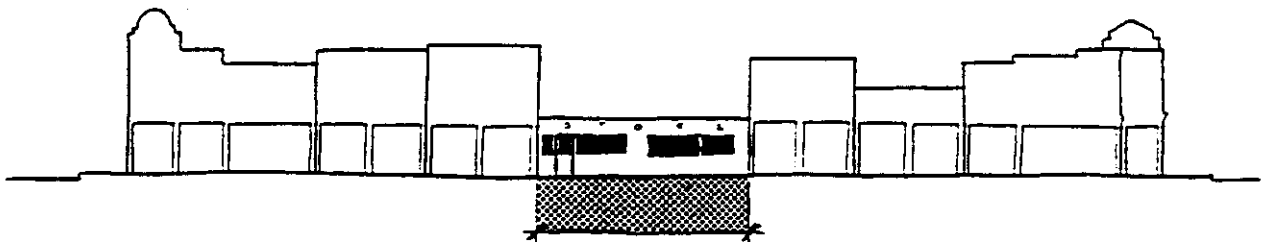
Recommendations:

- ❑ **New building facades against the sidewalk should be at least 25 feet high.**
- ❑ **Buildings exceeding two storeys should be stepped back and vertically articulated to reduce the building's bulk against the street.**
- ❑ **Consider the height of adjacent buildings. A new building's height should not be greater than one storey taller than neighboring buildings.**
- ❑ **New building design should be responsive to the existing pattern of height variation on the block.**

THIS

Infill Site

Consistent:
- *height*
- *width*
- *storefront modulation*
- *facade treatment*
- *string course*



NOT THIS

Infill Site

Guideline 1E
Building Massing

The overall mass of a new building should be compatible with surrounding buildings.

Recommendations:

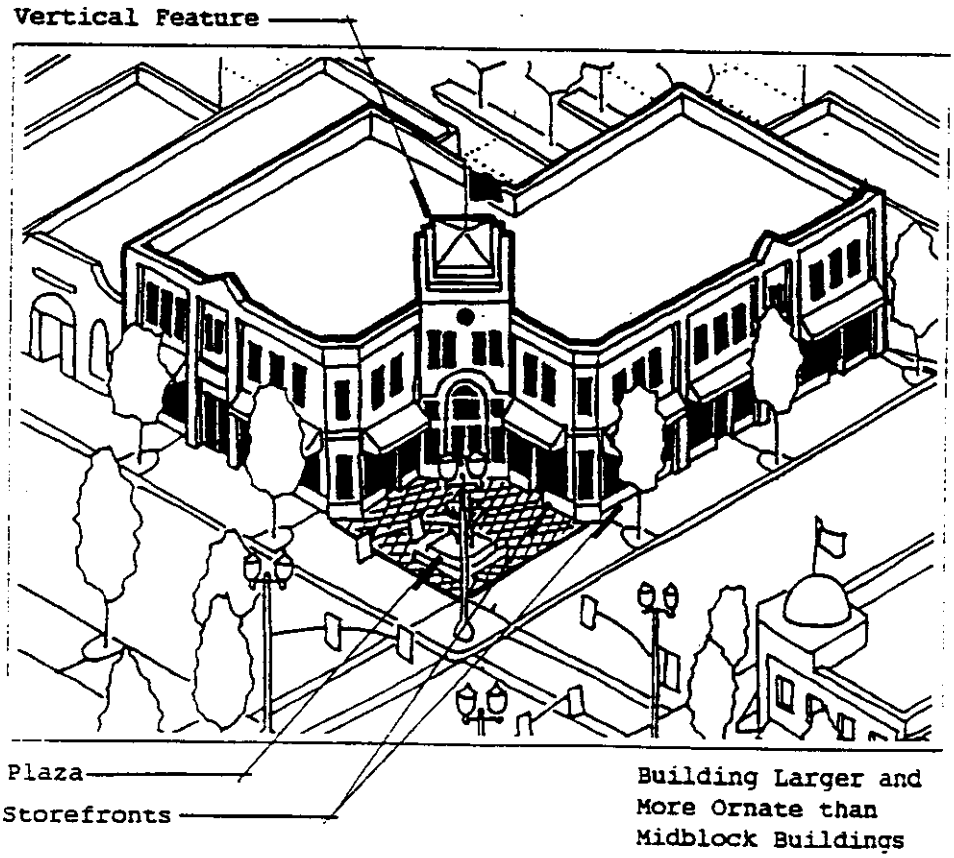
- ❑ **A new building should not appear substantially taller, wider, or more massive than its neighbors - unless it is located at a corner or central to the block, or if it is intended to house a significant use (i.e. government facility, economic anchor tenant, etc.).**
- ❑ **Articulation of the building's facade and roof line will improve the compatibility of a larger building with smaller surrounding buildings.**
- ❑ **Mid-block buildings should be modest in design and size and not attempt to overshadow neighboring buildings. More monumental, statement oriented buildings are best located on corner sites.**

Guideline 1F
Corner buildings

Block corners are visually very important to a downtown's character. These sites have the greatest visibility and define the overall look of the rest of the block. For this reason corner parcels should be given special attention.

Recommendations:

- ❑ **Reserve corner sites for substantial buildings which make an architectural statement. Parking lots, or small non-descript buildings are poor uses for corner sites.**
- ❑ **Corner buildings typically are larger, taller, and more ornate than midblock buildings.**
- ❑ **Elements like clock towers, roof flags, turrets, and other landmark elements are appropriate on corner buildings.**
- ❑ **Corners buildings offer an excellent site for plazas, public art, sidewalk cafes, and other pedestrian amenities.**
- ❑ **Blank walls associated with sides of corner buildings should not be allowed. Existing corner buildings with blank walls could add display windows, extend facade material, colors and treatments to blank side walls. Painted graphics / murals (public art) is the easiest and most cost effective method for improving blank walls.**

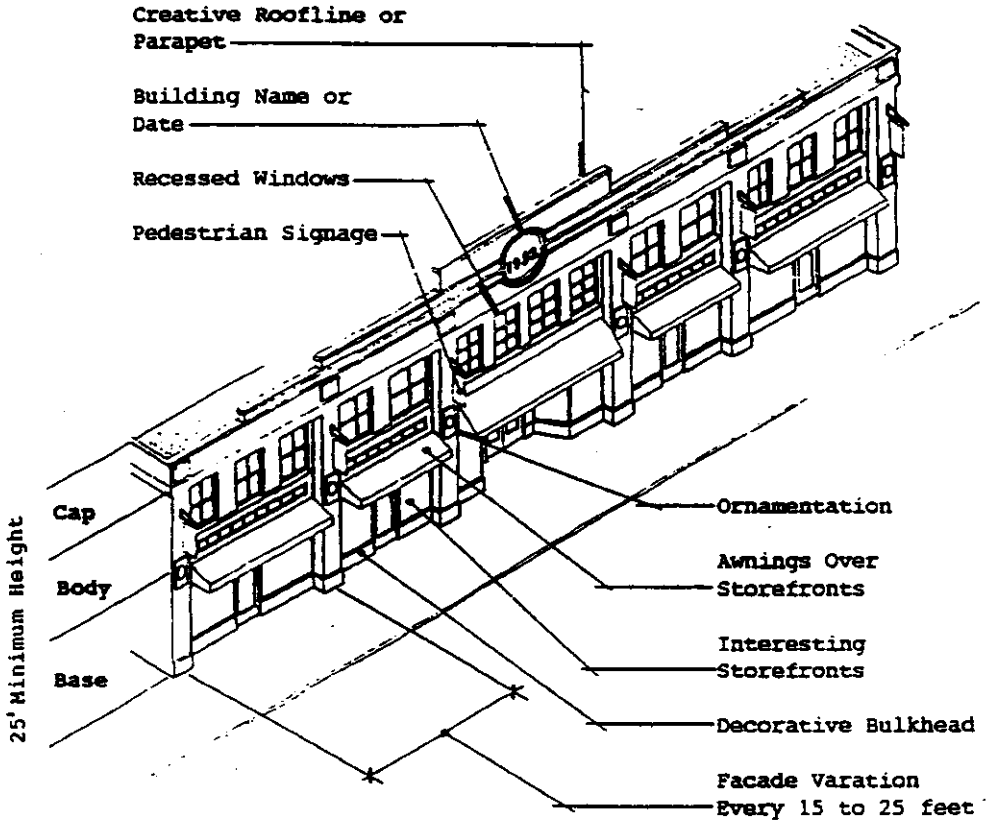


Guideline 1G
Building Form

The most important part of a downtown building is its street front facade. Attention must be given to designing new building facades which contribute to the overall downtown environment.

Recommendations:

- ❑ **New buildings should reflect the historic two part commercial development pattern of the downtown.**
- ❑ **New building facades should reflect the historic pattern of building widths in downtown.**
- ❑ **Facades are encouraged to include a traditional base, body and cap into creative and contemporary design solutions.**
- ❑ **The rich variety of architectural treatments and materials found on downtown buildings should be considered a resource to draw upon when designing new buildings which contribute to downtown.**

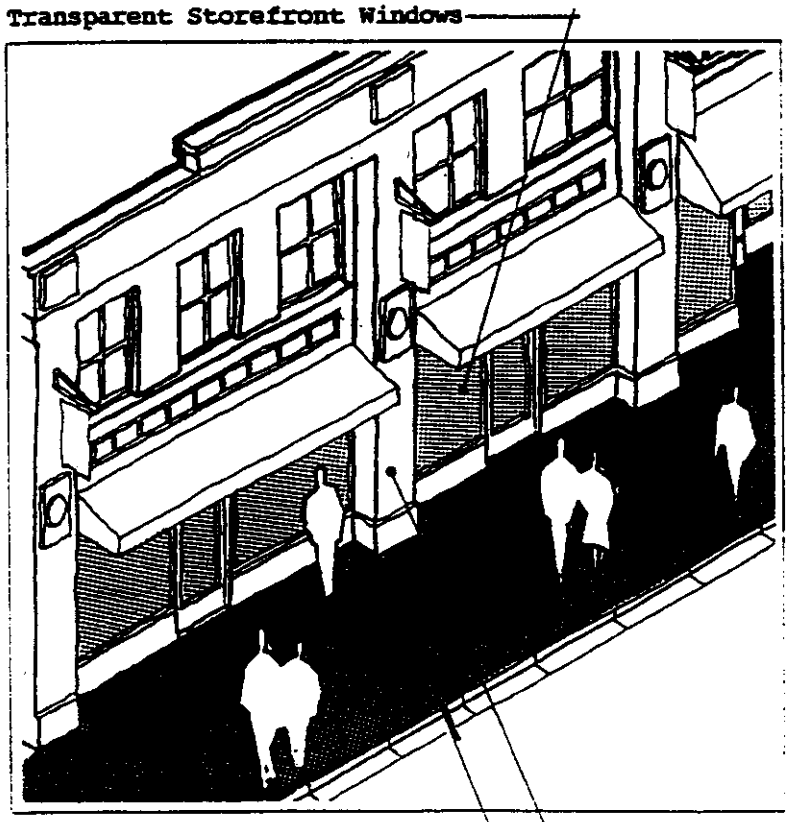


Guideline 1H
Pedestrian Orientation

A primary objective of the Downtown Design Plan is the creation of an environment which is friendly to the pedestrian. Downtown commercial areas were built before the automobile became the dominant form of transportation. Consequently, downtown's buildings were designed to accommodate people on foot rather than people in their cars. In order to maintain the desired character and environment of Old Town Lincoln, new buildings should be designed to respect the needs of the pedestrians.

Recommendations:

- ❑ **Locate the building adjacent to the sidewalk.**
- ❑ **The building's street level floor should be predominantly transparent (around 70%) and comprised mainly of storefronts and inviting entries.**
- ❑ **Buildings should be articulated at the sidewalk level with building piers, pilasters, columns, mullions, etc. to separate storefronts. Spaced at approximate intervals of 15 to 25 feet, these elements will modulate the storefronts and create a pleasant rhythm for the passing pedestrian.**
- ❑ **Blank walls against sidewalks should not be allowed.**



Guideline 11
orefronts

Storefronts are the most important part of a building because they are the primary visual focus of the overall building facade. A good pedestrian sidewalk environment is characterized by a continuous band of interesting display windows, inviting entries, colorful awnings and a consistent sign frieze. The quality of storefronts found in a downtown will play an important part in determining whether the overall downtown becomes an attractive pedestrian environment. A successful storefront follows a few simple rules.

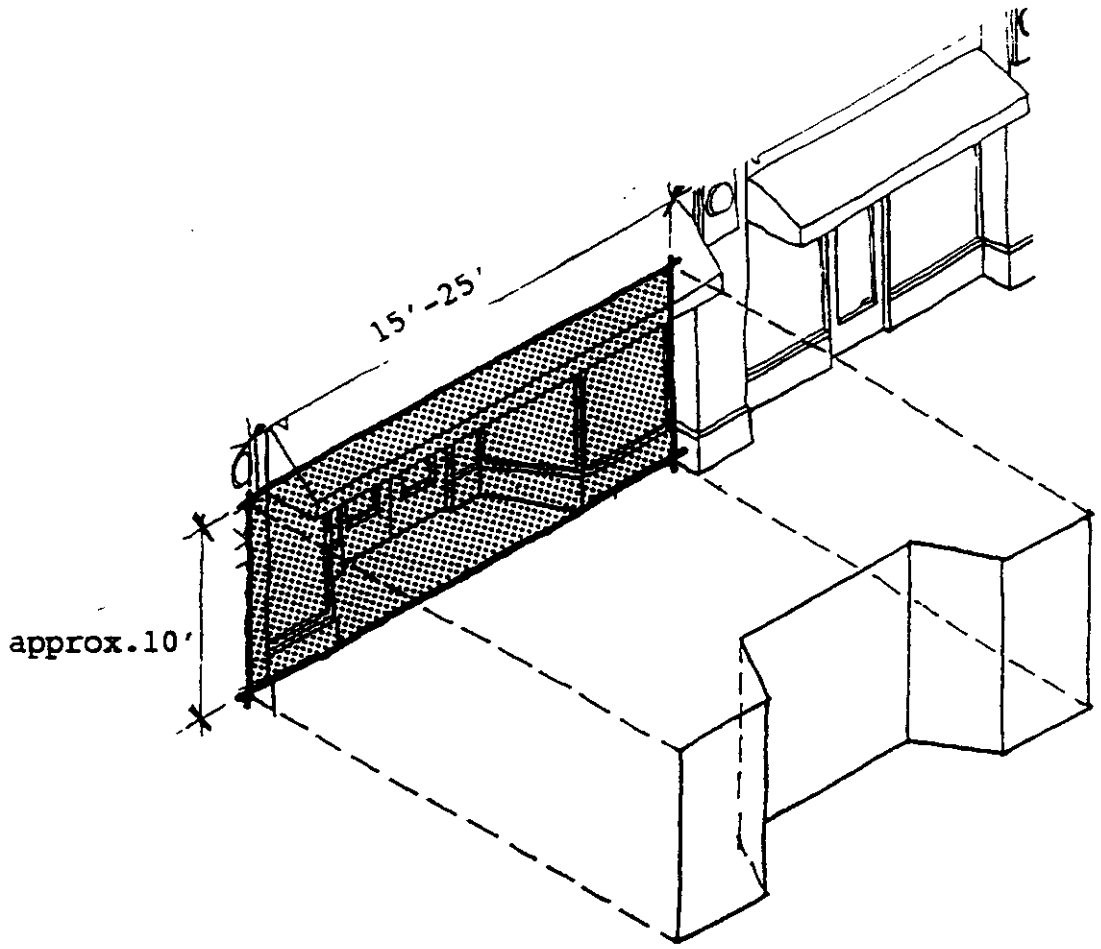
Recommendations:

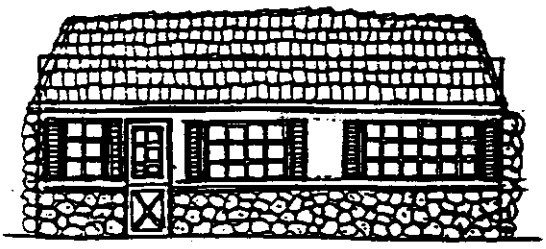
- ❑ **The storefront must be contained within the original opening of the building. When the storefront extends beyond the proper opening it disrupts the balance between the upper and lower facades. This results in a store front which appears pasted onto the building.**

- ❑ **The storefront must be transparent. The majority of the storefront should be devoted to clear glass display windows and entry doors. Tinted, mirrored, or colored glass are anti-pedestrian and should never be used, except on transom windows.**

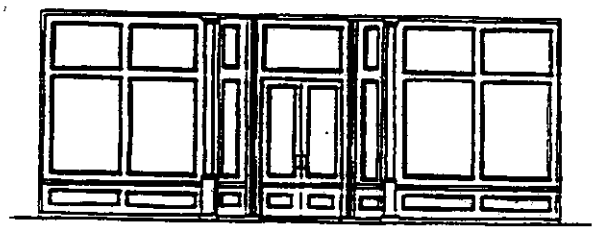
- ❑ **Materials consistent with historic appearance and quality must be used on storefronts. Traditional storefronts were often made of wood and occasionally incorporated cast iron elements; the Placer Savings storefront is a good example. Contemporary storefronts are often made of aluminum. When aluminum is used it must never be left in its unfinished factory condition. Aluminum storefronts must be either painted or anodized, preferably a dark color.**

- ❑ **Merchandise displays are an important way of advertising and offer the passing pedestrian a reason to stop and enter a store. Quality display windows are essential. Empty, cluttered, or neglected window displays send a negative message to shoppers. Window displays should be designed to showcase merchandise and intrigue the passing customer.**

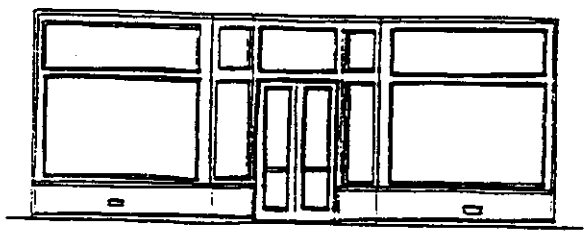




NOT THIS -
Inappropriate Storefront



ENCOURAGED -
Traditional Storefront



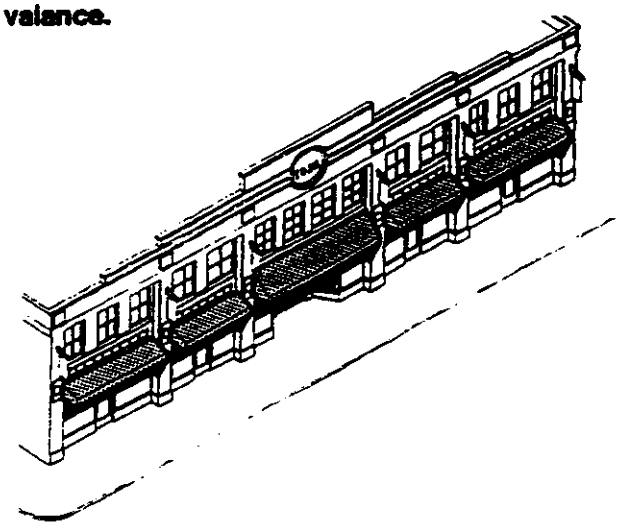
ENCOURAGED -
Contemporary Storefront

Guideline 1J
Awnings and Canopies

Canvas awnings, while fairly simple and inexpensive, are extremely important to storefronts and the pedestrian environment . Awnings help ease the transition from storefront to upper facade and they provide a color accent as well. In addition, awnings give the sidewalk a pedestrian scale, while providing shade and weather protection. While awnings are beneficial, some points need to be considered prior to choosing an awning.

Recommendations:

- ❑ **Awnings should conform to the size and shape of the storefront or opening they are intended to shade.**
- ❑ **Consider installing retractable awnings. Retractable awnings can be adjusted to weather conditions, extended fully on hot sunny days to maximize shade, and retracted on cold days to optimize solar exposure. This flexibility will enhance the sidewalk environment year round.**
- ❑ **Awnings should be constructed of high quality canvas materials. Avoid poorly constructed or metal awnings.**
- ❑ **Awnings provide a good opportunity for tasteful business signs or address. A business sign can also be painted inside the awning's side valance where passing pedestrians can see it.**
- ❑ **At night, awnings can be illuminated internally to create a pleasant glowing effect .**
- ❑ **A canopy is a flat metal shelter extended over the sidewalk. The Emmada Building on G Street has a good example of a canopy. Historic canopies should be preserved, but they are not encouraged on new buildings. Existing canopies in disrepair can be vastly improved by adding an awning valance.**

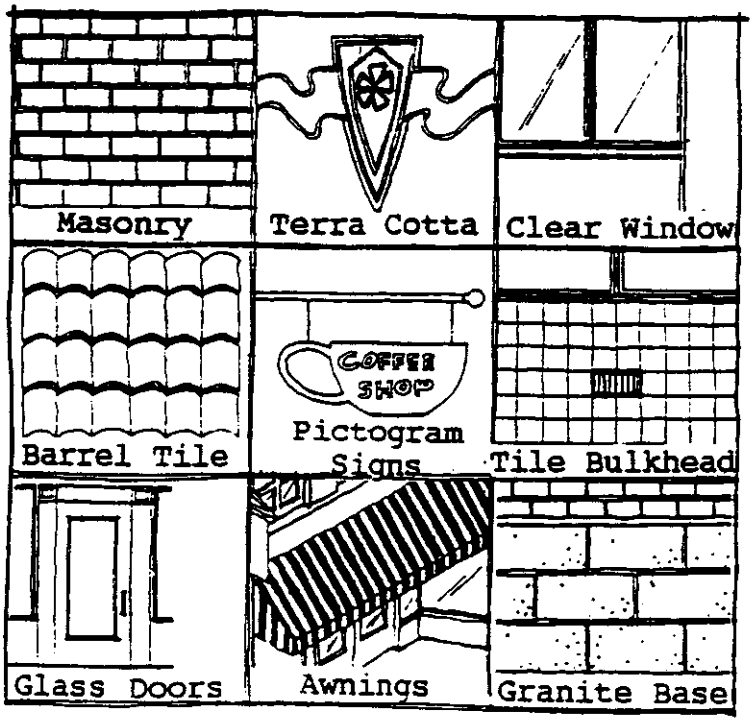


Guideline 1K
Materials / Color

While a wide variety of materials have been used on buildings throughout the downtown on buildings some trends in material uses are present. Many of the widely used materials were products produced at the Gladding McBean Pottery. New buildings should incorporate a selection of these materials into their designs.

Recommendations:

- ❑ **Terra cotta is found in many decorative applications in the downtown. The terra cotta corner pilaster of the Beermann building elicited a strong response in the citizen photo survey as a positive image of the downtown.**
- ❑ **Masonry is found on most downtown buildings. Brick masonry colors range from light blonde to deep oranges.**
- ❑ **Granite has been used in limited cases for bulkheads, foundations, steps, and low walls.**
- ❑ **Red barrel roof tiles have been used on downtown buildings with hipped, gabled, and mansard roofs.**
- ❑ **Ceramic tile is commonly used on bulkheads as an accent color.**

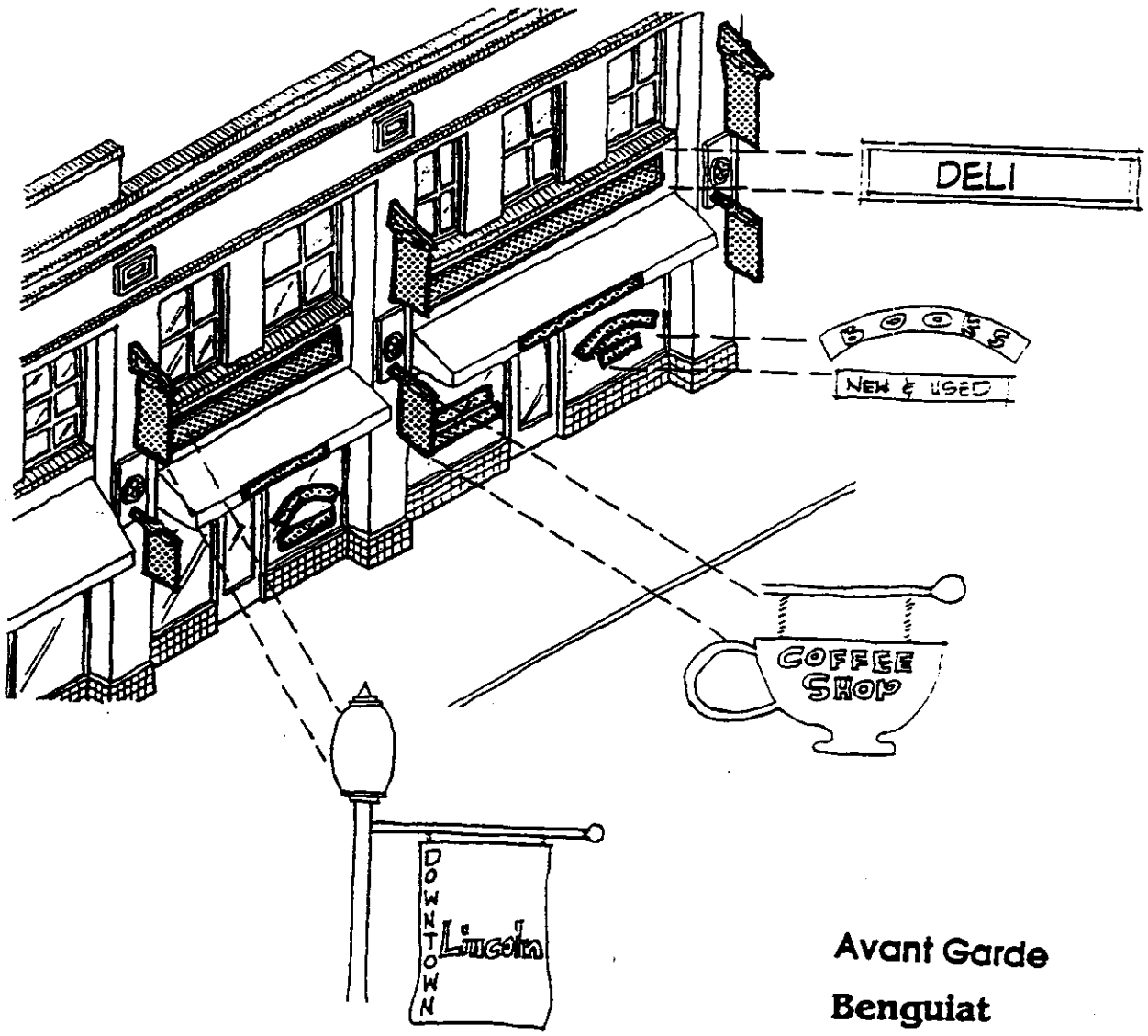


Guideline 1L
Signs

Signs are a very important part of any business. They communicate a message and draw attention to a business, yet overdone signs that compete for attention can be bad for business. In the downtown, successful signs can attract business as well as contribute to the district's overall identity.

Recommendations:

- **A sign should be simple and easy to read.**
- **A storefront should have two signs attached to the building. The primary sign should be in the space above the storefront and visibly oriented towards the street. The secondary sign should be smaller and intended for the passing pedestrian. Consider a colorful, pictograph sign which reflects the nature of the business. For example, a coffee shop might use coffee cup shaped sign or an ice cream cone for an ice cream parlor. Generally, sign lettering should be 8" - 18" in height and occupy 65% of the signable area.**
- **Appropriate areas for additional signs include windows and awning valances. Care must be taken not to obscure window displays with signs. Awning and window signs must be permanent in nature and of high quality. Temporary banners, posters, and painted window signs are discouraged.**
- **The style and color of letters are important. Choose a lettering style that is easy to read and reflects the nature of the business. Three dimensional cut lettering is the best choice. Signs are easier to read when the lettering is a lighter color than the background. Make sure the color of the sign is compatible with the color of the building and storefront.**
- **Externally illuminated signs are the best choice for a downtown environment. Avoid internally illuminated box signs. Neon tube signs can also be a tasteful addition to a storefront.**



Avant Garde

Benguiat

Bookman

COPPERPLATE

Garamond

Helvetica

Optima

Palatino

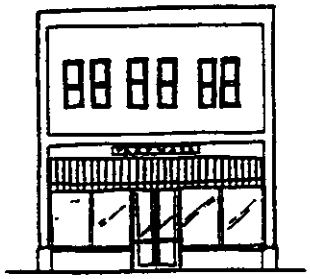
Souvenir

Times

Signage Lettering Styles

Existing Condition

Rehabilitation



Renovation

Historic Restoration

Rehabilitation, Renovation, and Restoration of Existing Buildings

When discussing the extent of potential upgrade work on a downtown building it is perhaps best to start with a set of definitions which describe on a general level the extent of work involved.

REHABILITATION

Rehabilitation is the least expensive and least intensive stage of building upgrade. A rehabilitation project will essentially leave the building unchanged and involves work of a more cosmetic nature, such as cleaning, repainting, installing more professional signage, and perhaps installation of awnings.

RENOVATION

Building renovation involves work of a medium level intensity and expense in which previously altered storefront elements are largely removed and rebuilt. These changes bring the building closer to its original appearance than would a rehabilitation project.

RESTORATION

Finally, building restoration refers to the most intensive and expensive level of building upgrade. A full scale restoration project involves completely restoring the building to its original, historically accurate condition.

REHABILITATION, RENOVATION, OR RESTORATION - HOW TO DECIDE

Having clarified the meanings of the terms, the next step to take in choosing the level of building upgrade is to determine the initial quality of construction of the building in question. This is a critical step in determining the extent of the work to be undertaken. How does a building owner decide what level of upgrade his or her building merits? The simplest and most fundamental step is to investigate the historical society archives. Usually a record of historically important buildings will exist there in the form of old photographs and perhaps text describing a building's history. The owner looking at these photographs may ask himself or herself if the building's appearance has changed significantly through the years. If so, were the changes for better or worse? If the answer is that the building now looks better than it did in its early years, the building is probably a good candidate for a simple rehabilitation project. This would involve more or less a freshening up of the building's appearance and could be accomplished with minimal outlay of owner resources.

If, on the other hand, it is clear from the old photographs that the building was once much more attractive than it now is, then perhaps the building is a good candidate for a renovation or even an historic restoration. It is possible that architectural features that appear on the old building may still exist under a more recent alteration. If original architectural features have been removed, it is possible that they may be stored in the building's basement or on the upper floors.

Next, it may be a good idea to hire an architect with a strong background in historic preservation work to examine the building and make a determination as to whether the building was initially of sufficient quality and architectural value to justify a more extensive renovation or restoration project. Finally, the determining factor as to what level of upgrade a building owner wishes to commit his or her resources depends of course on how much money can be budgeted for the project. Clearly, an historic restoration will be more costly than a simple rehabilitation, but the owner should keep in mind that this is another instance in which the level of outlay is proportional to the level of return.

In the case of downtown Lincoln there are many buildings which may easily be seen as candidates for each of the three categories of building upgrade work. The following specific existing downtown buildings are utilized as examples of rehabilitation, renovation, and historic restoration projects.

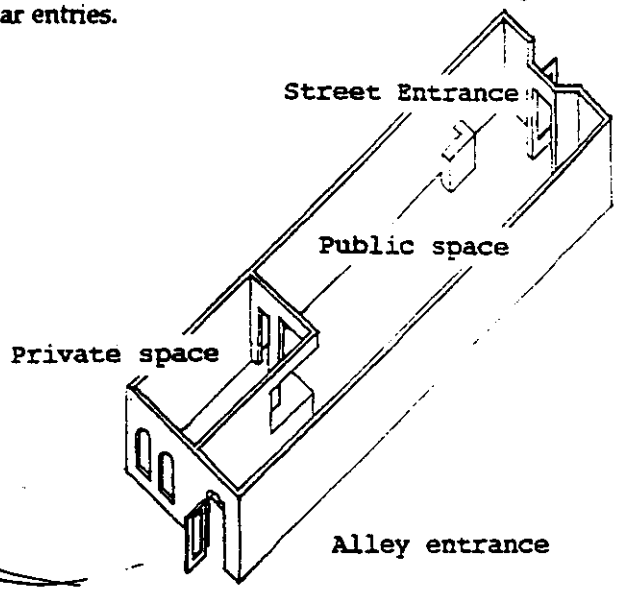
TYPICAL BUILDING FACADE REHABILITATION

Nigro Building

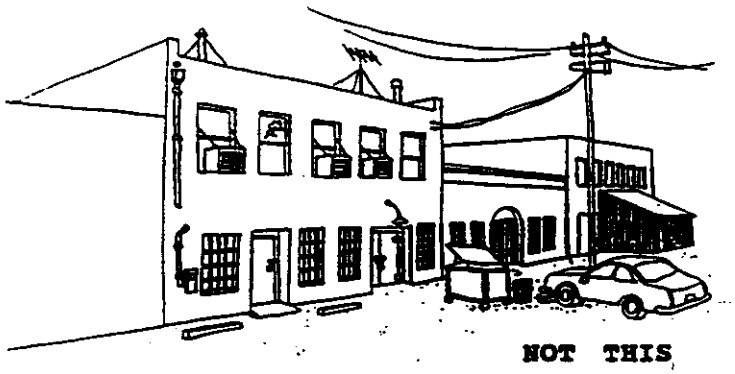
The following sketch illustrates how awnings, decorative trim, and new signs can improve the relationship of existing buildings to Old Town.

TYPICAL ALLEY RENOVATIONS

Alley areas offer downtown merchants the opportunity to expand their business potential. Alley entries can be improved with awnings and signs. Walks, landscaping, and restriped parking can make stores more accessible and appealing to shoppers. Interior retail spaces can usually be redesigned to allow for both front and rear entries.



Retail space with double entrance



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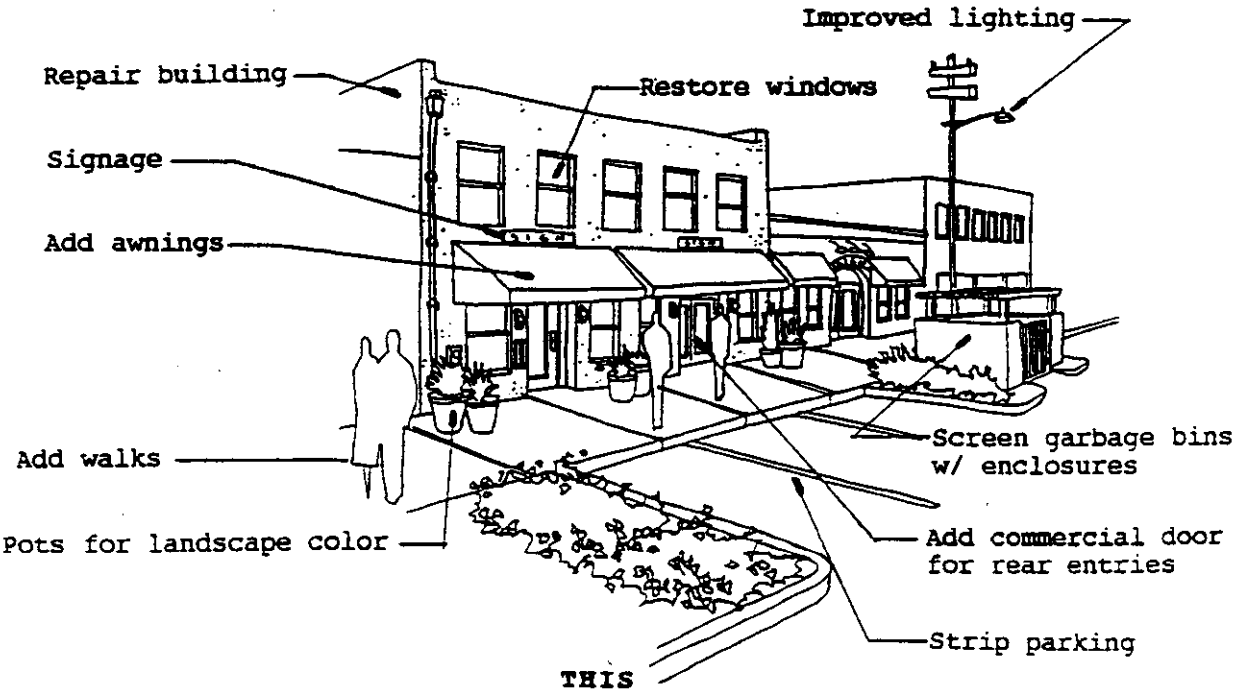

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HISTORIC RESTORATION

IOOF Hall

The IOOF Hall at 625 5th Street is a good example of an historic renovation. The building has been thoroughly repainted and restored. Careful attention to details like the lion head lintels over the second story windows and revitalized storefronts have made this building a beautiful downtown landmark.

An excellent example of an historic storefront renovation is the Placer Savings storefront in the IOOF Hall Building . Careful attention has been given to restoring the details typical of late 1800's store fronts. The decorative wood storefront, large transparent windows, cast iron columns, wood doors, granite curb stones, and tasteful signage are important elements of historic storefronts and enhance the pedestrian experience downtown.

RESTORATION TECHNIQUES

The following is a general list of building restoration techniques that are designed to assure the continued life of an historic building in a condition as close as possible to its original state. Refer to the Technical Appendix for more detailed restoration standards and techniques for historic buildings published by the U.S. Secretary of the Interior.

Cast Iron and Sheet Metal:

- ❑ **Regular painting will prevent corrosion.**
- ❑ **A chemical paint remover will effectively remove built up paint and rust. Low pressure dry grit blasting (80 to 100 psi) may be used as long as it does not abrade or damage the surface.**
- ❑ **Missing parts can be recast in aluminum or fiberglass or substituted by wooden pieces.**
- ❑ **Stamped sheet metal must always be painted to retard its susceptibility to rust.**
- ❑ **To clean stamped metal, a chemical paint remover should be used.**
- ❑ **High pressure (greater than 100 psi) dry grit blasting must never be used.**

Masonry:

- ❑ **Loose or crumbling mortar joints between masonry units that are recessed more than 1/2" should be repointed with new mortar.**
- ❑ **New mortar joints should match the original in style, size, composition, and color. Typical mortar for older buildings contains one part Portland cement to two parts lime to nine parts sand.**
- ❑ **Cleaning of masonry surfaces should always be done by experienced professionals. Masonry surfaces should *NEVER be cleaned by sandblasting or any other abrasive cleaning technique.* These methods can damage or remove altogether the protective outer surface of the brick and leave it susceptible to moisture and deterioration. Masonry surfaces should only be cleaned with steam or high pressure water. Water pressure of not more than 600 psi, a mild detergent and scrubbing with a non-metal bristle brush is generally all that is required to thoroughly clean masonry.**
- ❑ **To remove paint from a masonry surface, a chemical paint remover can be used following the manufacturer's specific**

instructions. Chemical removers can be either alkaline or acidic. Acidic cleaners or removers should never be used on marble or limestone.

- A masonry building should never be cleaned when there is any potential for frost because trapped water can freeze and crack the masonry.

- Exposed masonry should not be painted unless it is necessary to protect the surface.

Windows:

- All wooden window frames should be checked for deterioration and replaced if necessary.

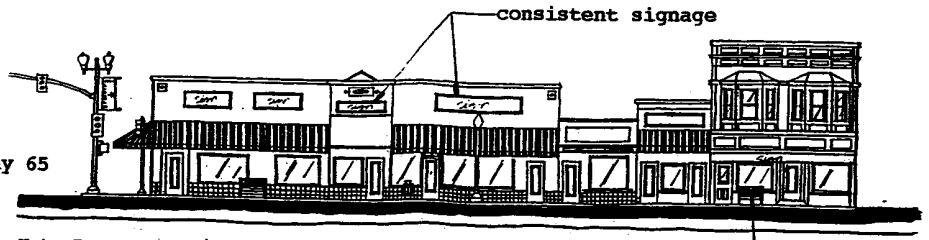
- Cracks in the wood should be filled with wood putty and the surface sanded.

- Loose glazing putty should be replaced.

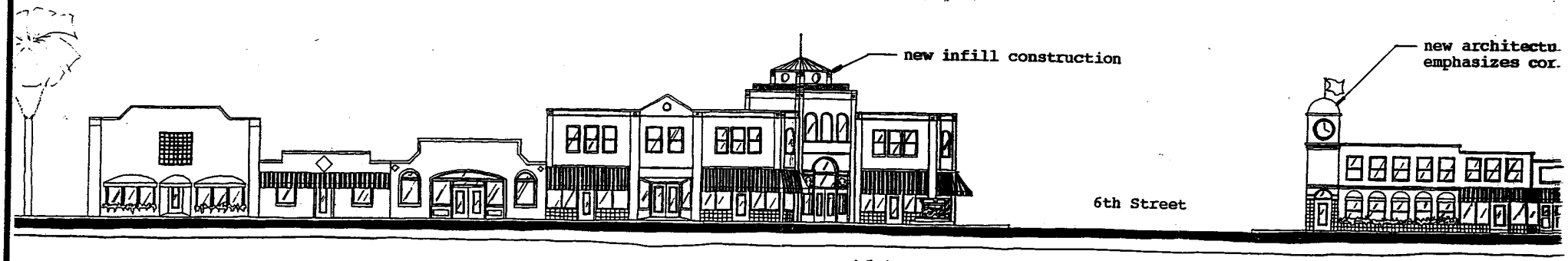
Exterior Woodwork:

- Exterior woodwork that is soft and rotted can often be repaired by renailing, filling rotted areas with wood putty, sanding, then priming and repainting the wood.

- Wood pieces that are extensively rotted or missing should be replaced by a carpenter and matched to the original and / or existing wood.



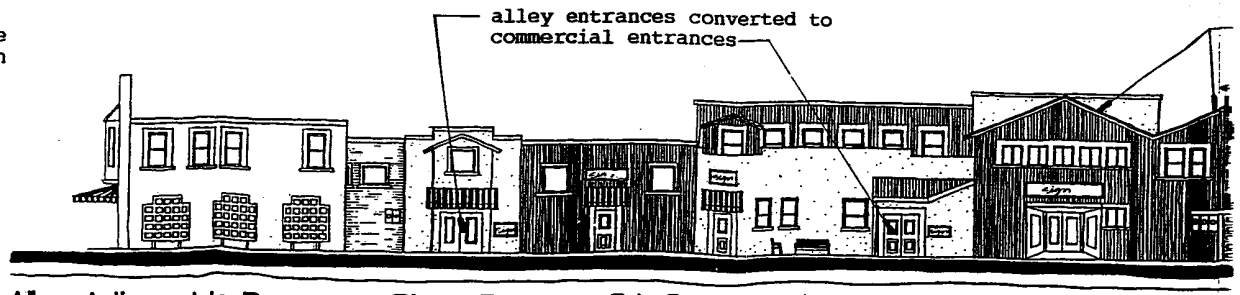
5th Street Between Highway 65 and F St.
South Elevation



Highway 65 Between 7th St. and 5th St. West Elevat

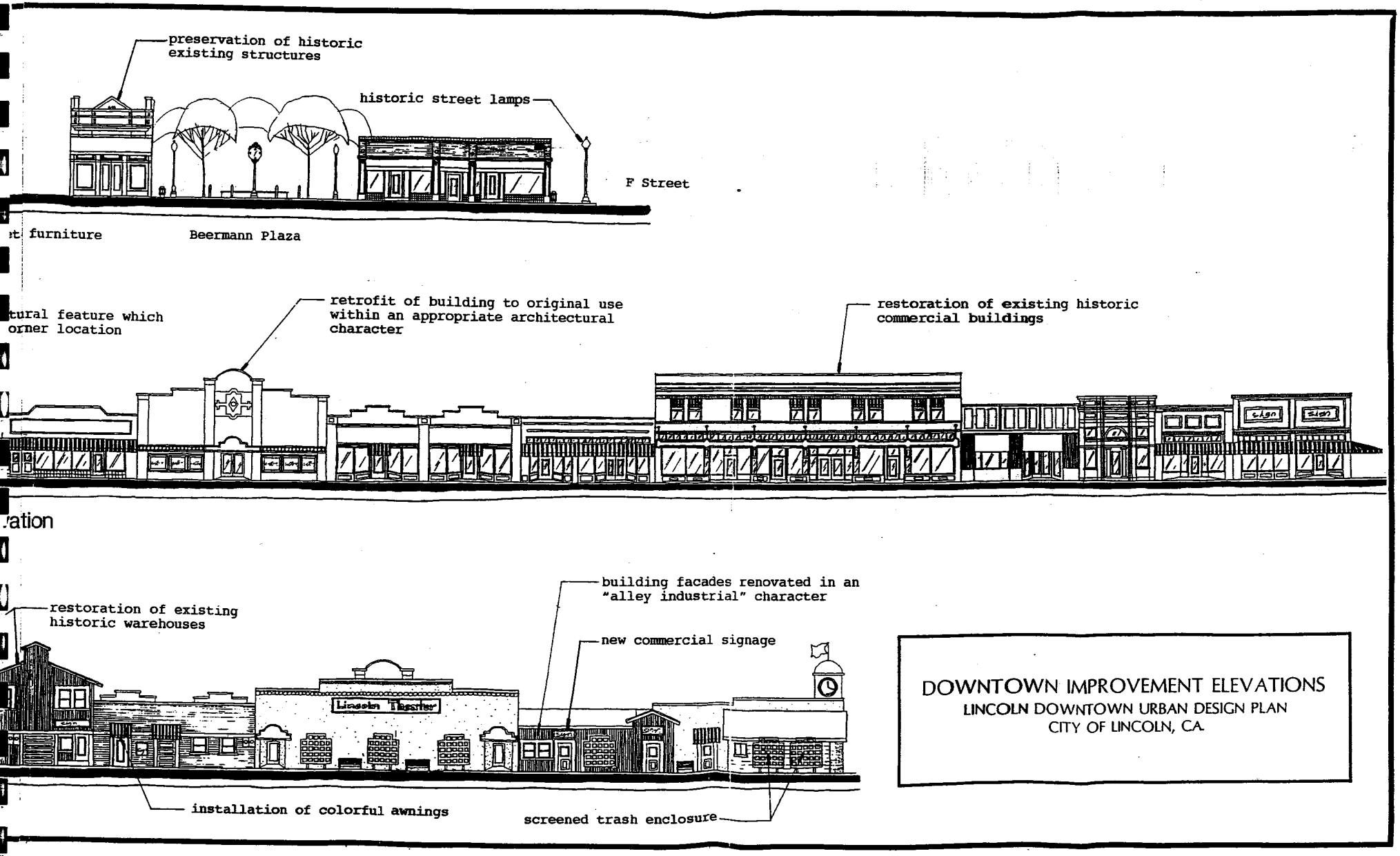
These elevations of some of the major blocks in downtown Lincoln are site specific representations of what the existing areas could one day become after application of the urban design and planning concepts presented in the Downtown Urban Design Plan.

The elevations empasize such principles as preservation and restoration of existing historic structures, new infill construction that is in character with the existing architectural vocabulary, and consistent and visually appealing signage and street furniture.



Alley Adjacent to Beermann Plaza Between 5th St. and 6th St.
East Elevation

Figure 26



DOWNTOWN IMPROVEMENT ELEVATIONS

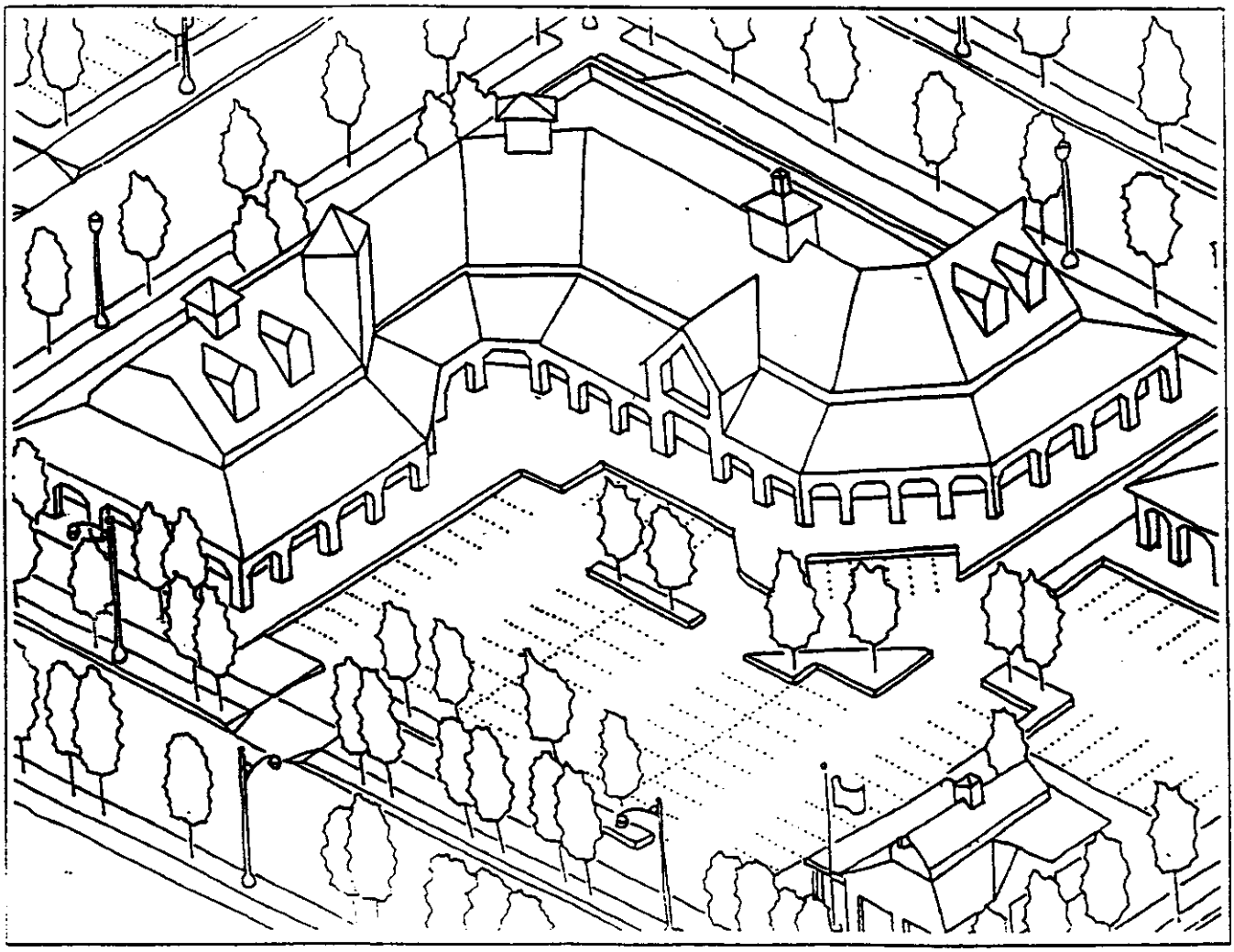
LINCOLN DOWNTOWN URBAN DESIGN PLAN

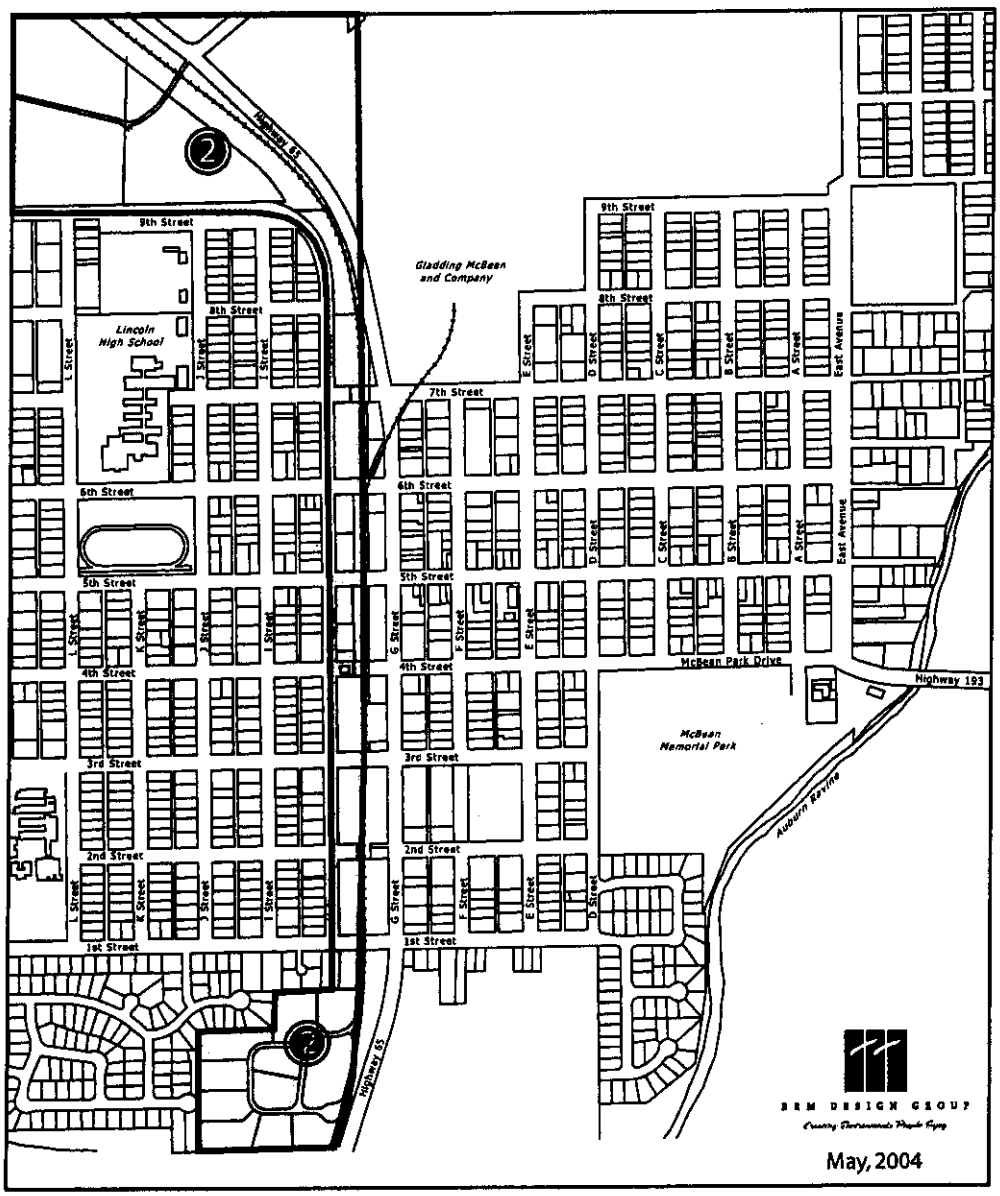
CITY OF LINCOLN, CA.

7.2 DISTRICT 2 HIGHWAY COMMERCIAL

District Concept

District Two will establish a unifying architectural theme and development pattern for the Highway 65 commercial corridor which will reflect Lincoln's small town character and coordinate with the historic pedestrian nature of Old Town. The intent is to improve the appearance of Lincoln to highway travelers and shoppers while accommodating modern highway oriented businesses. The quality of development found at Rainbow Market is a good start towards improving the appearance and function of District Two. However, the following guidelines will help establish a pattern of commercial development which better balances the parking demand of automobiles with the needs of the pedestrian. Architecturally, District Two will be unified with a common design theme which celebrates Lincoln's small town character which was influenced by the railroad, agriculture, and the Gladding McBean Company.



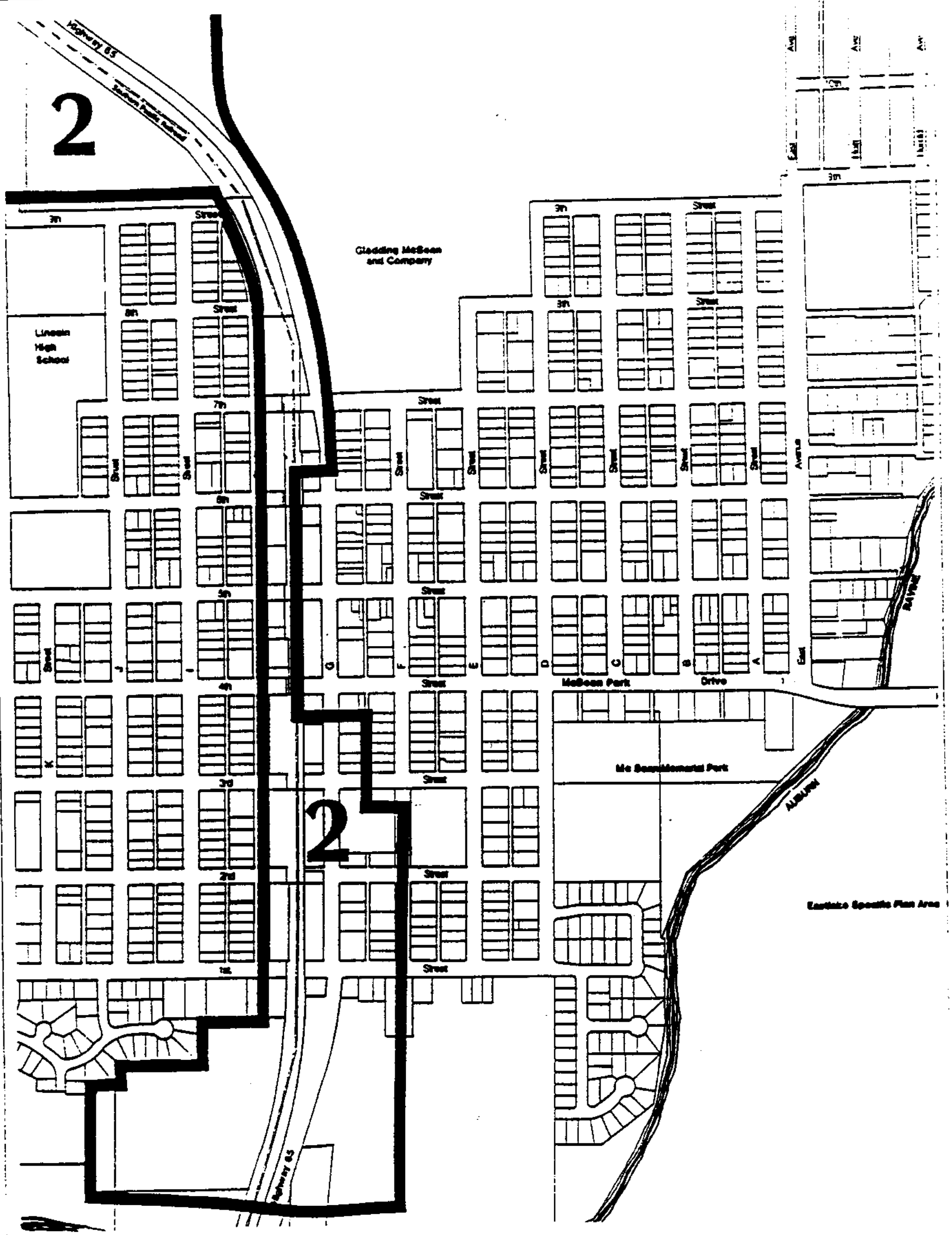


DISTRICT TWO

Lincoln Downtown Urban Design Plan

CITY OF LINCOLN, CALIFORNIA

REDEVELOPMENT AGENCY


2
Highway 65
Gladding McBean and Company
Lincoln High School
McBean Park
Drive
2
Highway 65
Eastlake Specific Plan Area

Existing Conditions / Issues

District Two is primarily characterized by a strip commercial development present along the south end of Highway 65. This area is markedly different than the Historic Old Town Core of District One. Highway 65 reflects the pattern of strip commercial development typically characterized by the period following World War II. Strip commercial development evolved to accommodate the expanding use of the automobile in America.

The largest commercial development in District Two is the Rainbow Market center at Highway 65 and 3rd Street. This project is typical of modern commercial development with large parking areas fronting the street and single storey commercial buildings at the back of the parcel. The "parkway" landscaping treatment against the highway with turf berms, random tree placement, and meandering sidewalk are also characteristic of modern strip commercial development.

The quality of the built environment varies greatly throughout District Two. Many buildings are in poor condition and/or are underutilized. A number of auto repair related businesses are distributed along the length of Highway 65. Most of these facilities are visual eyesores. In general the buildings and uses along Highway 65 appear unrelated, lack any sort of unifying architectural theme, and present a negative image of Lincoln from the highway.

Design Concepts

The following design concepts outline the major design and land use elements of District Two.

GATEWAYS

Both the north and south entries to Lincoln are along Highway 65. These entry points have been established as gateways and are within District Two. A third gateway has been identified on Highway 193 at Auburn Ravine. These gateways are intended to replace the existing metal entry signs. The new gateways would be more permanent, visually recognizable, and welcoming than the present entry signs. The gateways would also be landscaped to begin a transition between the rural edge formed by the riparian canopy of Auburn Ravine and the urban streetscaping of Old Town. The Highway 65 northern gateway to Lincoln will incorporate the striking form of the Gladding McBean & Company's industrial complex into an entry feature.

AUTO CENTER

Presently, a variety of auto repair shops are distributed along Highway 65. Under the planning framework of District Two it is recommended that these auto related uses be consolidated into a unified auto complex.

This would serve three objectives:

- **Customers would be able to find a number of auto related services in one convenient location**
- **Negative impacts associated with auto repair business such as noise, vehicle storage, and visual appearance would be**

easier to control in a single location.

- **A new facility could be attractively designed and serve as both an aesthetic and economic resource to the overall downtown area.**

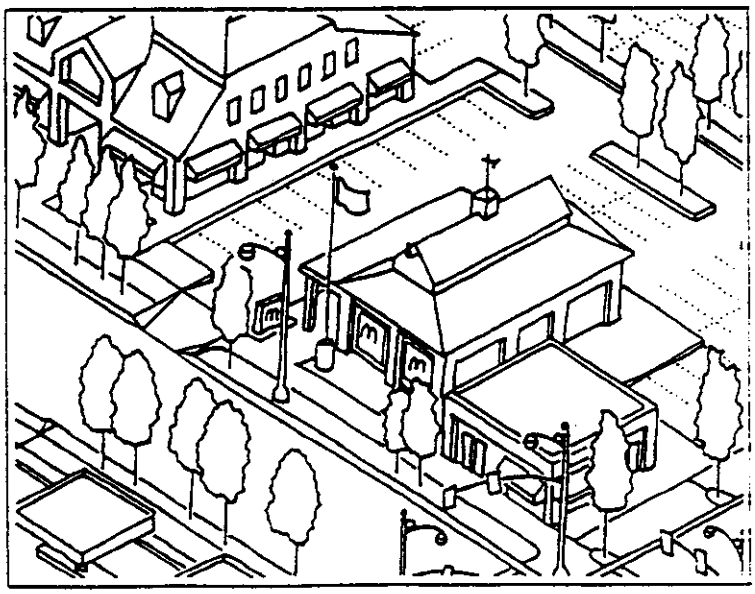
A possible location which might be appropriate for such an auto complex is the block between Highway 65 and F Street, and between 1st and 2nd Streets.

RESTAURANT AREA

Market studies by Williams-Kuebelbeck, citizen survey results, and public workshop discussions have indicated a large deficiency in restaurants and eating establishments. While the District One core area is well suited for accommodating small cafes, sandwich shops, and specialty restaurants, it is not well suited for handling the demands of larger highway oriented restaurants or fastfood franchise outlets. These types of uses are best handled in District Two. Ideally, new roadside restaurants should be developed in conjunction with a Downtown/Gladding McBean Visitor's Center.

The block within Highway 65 and F Street between 7th and 6th Street would be ideally suited for the following reasons.

- **The location is adjacent to Highway 65 and the proposed Visitors Center**
- **New restaurants would be located on the north fringe, close enough to the District One Core, to attract visitors to the downtown.**
- **A number of under utilized buildings and vacant parcels presently exist on the block.**
- **Well designed new restaurant buildings would improve the visual character of Lincoln's northern entry.**



New Development

REASONS FOR A DESIGN THEME

The Highway Commercial District 2 is crucially important in terms of the role it plays in giving a first impression of Lincoln. Highway 65 bisects District 2 and carries all northbound and southbound motorists into and through Lincoln. It seems that this is the most logical area for Lincoln to express its unique sense of place. It is also important to develop a design concept for this district that circumvent the typically poor quality of design that has previously characterized strip commercial development in cities and towns all over the country. These strip commercial buildings are generic in nature, displaying a remarkable lack of sensitivity to both the pedestrian and the city in which they are located. They are stark, utilitarian structures which are geared strictly towards the automobile. Casual window shopping is strongly discouraged by these building forms. While the importance of the automobile in bringing customers to merchants cannot be ignored, it is unlikely that the perpetuation of this type of development will continue to be an intelligent marketing strategy for towns and businesses. The City of Lincoln is clearly interested in making an attractive presentation of itself to visitors and potential customers entering and passing through on Highway 65. It is important that future highway commercial development can accommodate both the automobile and the pedestrian.

What is Lincoln's unique sense of place and how can that be expressed in future District 2 development? It is necessary to pose these questions and answer them so that a justifiable design concept can be developed for the area. The best place to start may be a look at how District 2 has functioned historically, and then to draw design influences from that history. In the past the use and architecture of District 2 has been heavily influenced by the railroad and agrarian industries upon which Lincoln was founded and prospered. These influences can best be expressed architecturally in District 2 through the use of building forms, materials, and elements which bear a relationship to historic railroad and agrarian buildings. The following is a list of architectural features which may be seen as appropriate to the design concept. Please also refer to the accompanying illustrations on page 7-46.

Recommended Thematic Elements:

- **Building Mass: Agricultural buildings with barnlike forms are appropriate. These forms can be clustered together and the the mass vertically and horizontally differentiated to create an impression of many small buildings where there is actually one large one.**

- **Roofs: Steep pitched hip and gable end roofs are appropriate. Flat and/or mansard roofs are not appropriate to this design concept.**

- **Materials: Horizontal lap or vertical board and batten siding are appropriate, as is wood shingle siding. Materials such as brick masonry or terra cotta ornamentation are best suited to Old Town District One buildings. The use of stucco is not especially encouraged in District 2 but it can be an**

acceptable exterior finish material in this district if used in a limited and sensitive way.

- Eaves, Canopies, & Arcades: These features are attractive in any commercial development. An appropriate articulation of them in District 2 would be through the use of heavy timber posts supporting long roof overhangs to form an arcade or supporting an overhead trellis structure which can be planted with vines to form an eventual live green canopy.

- Doors: Use of clear glass doors set in wood or aluminum (anodized or painted) frames is appropriate.

- Windows: Texture and visual interest are created through the use of multi-paned windows. Again, clear glass is the best way for businesses to display their wares as well as present a unified appearance from the exterior. Dormer and clerestory windows are also appropriate.

- Decorative Elements: Architectural elements such as a free standing windmill bearing signage and serving as a landmark element, roof cupolas, wrought iron weather vanes, fabric awnings, and "barnyard" or squared off arches are appropriate to the District 2 design concept.

District Two Design Guidelines

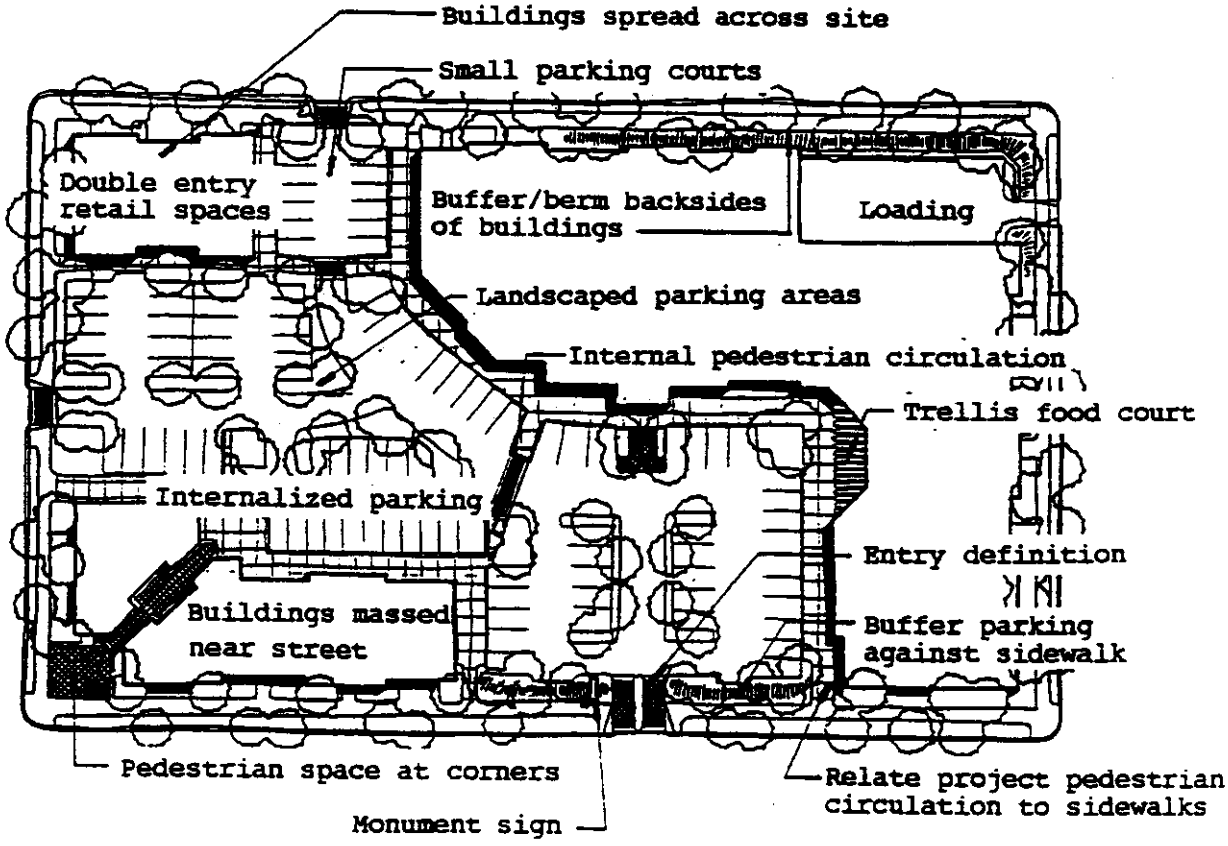
The following guidelines are specifically intended to improve the appearance and function of highway commercial buildings in District Two. These guidelines differ substantially from those of District One and respond to the emphasis on the automobile rather than the pedestrian.

Guideline 2A
Building Siting

The present pattern of development in District Two is highly influenced by the need to accommodate parking. Typically, the streetside half of a property is occupied by parking while the commercial building is located at the back of the property. The resulting large parking areas separate buildings from the street resulting in a stark environment along the street frontage.

Recommendations

- ❑ **Separate the building and parking lots into smaller modules which can be intermixed across the site.**
- ❑ **Site buildings near the street at intersection corners and development entries.**
- ❑ **The majority of parking should be internalized within the overall project development.**



Guideline 2B
Pedestrian Orientation

Currently District Two is strictly an auto oriented area. Walking there is not only unpleasant but it can be dangerous as well. New commercial development should do a better job of balancing pedestrian and automotive circulation.

Recommendations

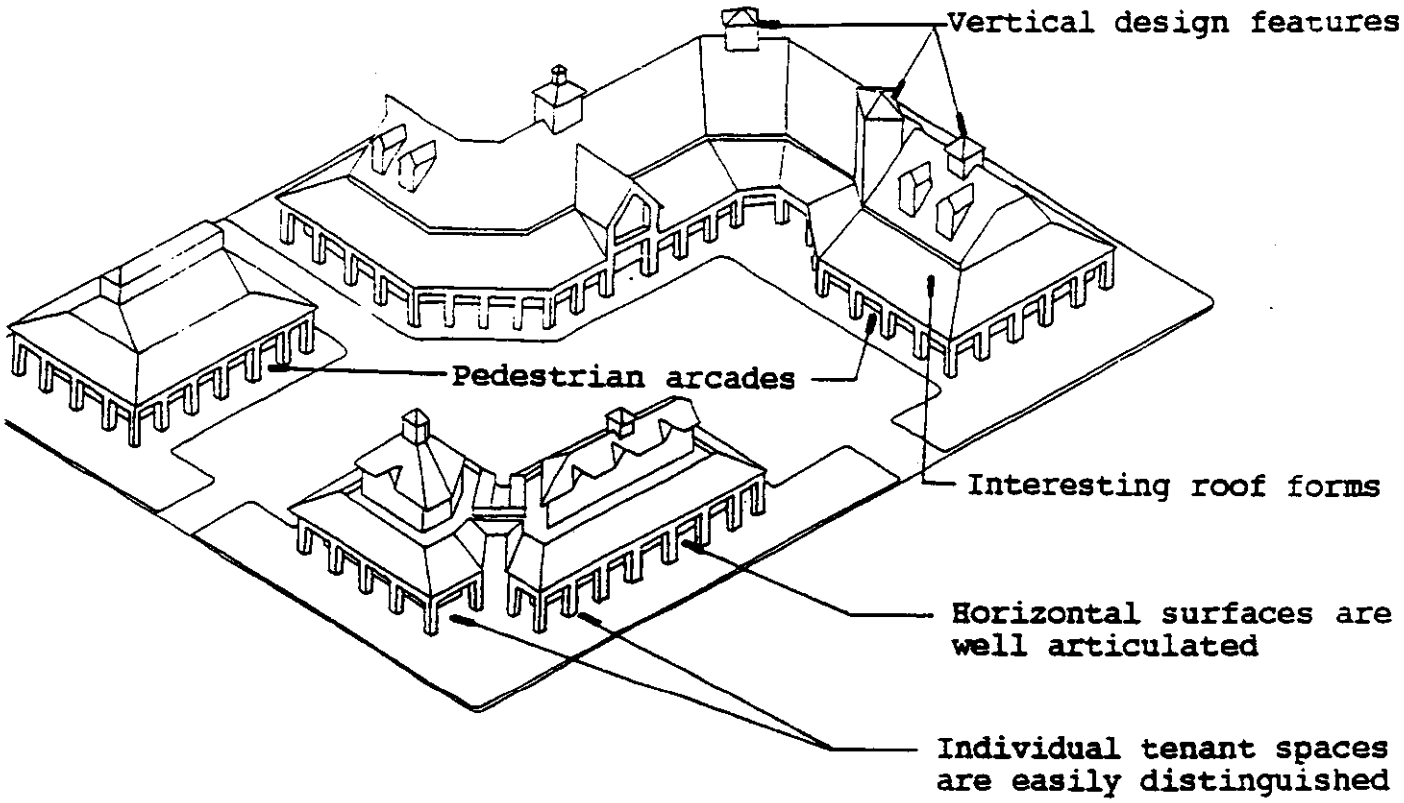
- ❑ **Place buildings with display windows, outdoor eating areas, entries, etc. near the sidewalks.**
- ❑ **Encourage two sided commercial buildings around the outer perimeter of the site with entries facing the sidewalk and the parking lot.**
- ❑ **Design internal pedestrian circulation to logically relate to the surrounding sidewalks.**
- ❑ **Provide landscape buffering between sidewalks and parking areas. Consider providing amenities at key pedestrian nodes, such as plazas, fountains, benches, sculpture, pergolas,etc.**
- ❑ **Parking areas should be well landscaped to provide shade and reduce their visual impact.**

Guideline 2C
Building Massing and Design

Existing buildings within District Two generally lack character. The are boxy, one story commercial buildings with flat roofs. These buildings do not characterize or enhance Lincoln's small town character. The following guidelines are intended to provide the framework necessary to ensure that new construction in District Two is creatively designed in response to Lincoln's small town character.

Recommendations

- ❑ **Avoid building with lengthy, flat horizontal facades. Buildings should have vertical elements and articulation of horizontal surfaces. Varied heights and distinctive massing of forms is encouraged.**
- ❑ **Long blank walls are discouraged.**
- ❑ **Articulate the mass of the building so that individual tenant spaces are identifiable in overall building form.**
- ❑ **Consider second storeys for offices.**
- ❑ **Buildings with interesting sloped roof forms are encouraged.**
- ❑ **Pedestrian arcades should be part of the overall building design.**
- ❑ **Use of vertical features which emphasize the District Two theme are encouraged. Features like water towers, clock towers, windmills, etc., are good examples.**
- ❑ **A building's mechanical system must not be visible from surrounding streets.**
- ❑ **Buildings should have muted natural and light colors which reflect the nature of the exterior materials. Bright accent colors, tastefully applied to doors, windows and other architectural details are encouraged.**

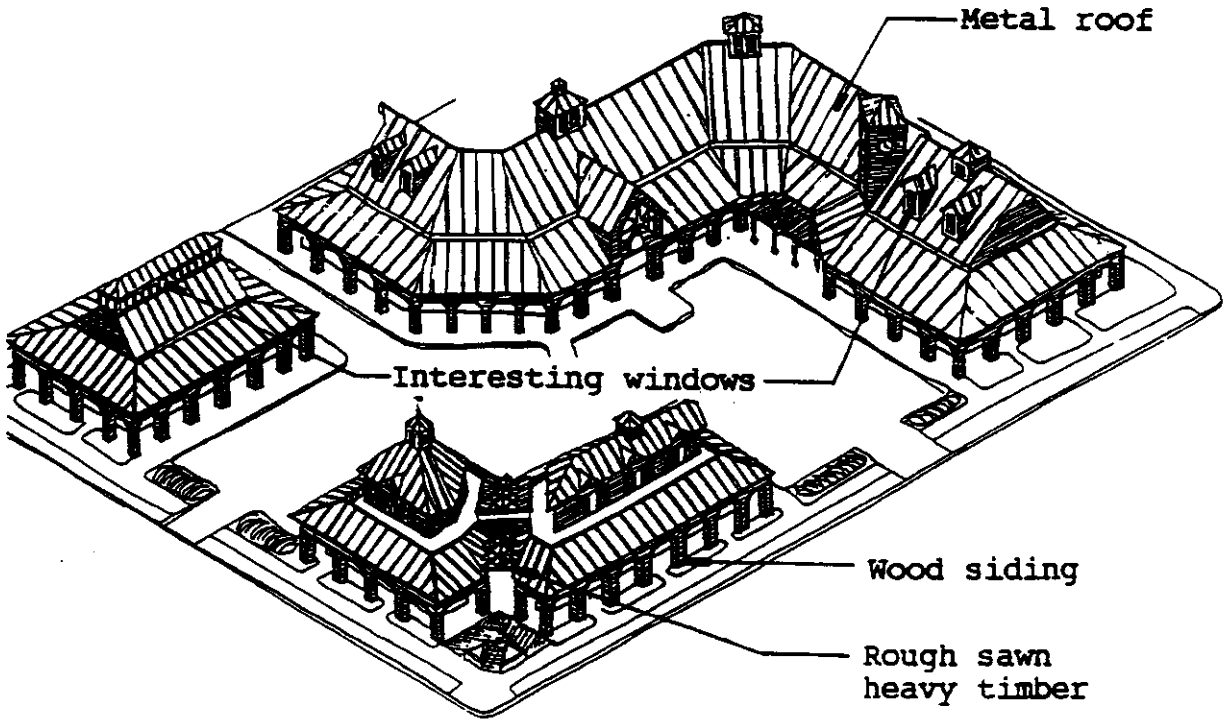

Vertical design features
Pedestrian arcades
Interesting roof forms
Horizontal surfaces are well articulated
Individual tenant spaces are easily distinguished

Guideline 2D
Materials

Materials used on buildings should reflect the District's agrarian/railroad character.

Recommended

- ❑ **Rough cut wood features**
- ❑ **Hipped, gabled, gambrel metal roofs**
- ❑ **Masonry · Board & batten and lap siding**
- ❑ **Split face masonry.**
- ❑ **Multi-paned, dormer, and clerestorey windows are encouraged.**
- ❑ **Window awnings.**



Guideline 2E
Signage

Individual tenant signs which compete with each other or vary in style detract from the overall commercial development.

Recommendations

- ❑ **Each commercial development should have a single roadside monument sign which is integrated into the project's landscaping and overall design. Vertical pole type signs are discouraged.**

- ❑ **Within a development, all individual tenant signs should be coordinated with the character of the development (colors, lettering style, graphic design, and placement).**

- ❑ **Signs should be of high quality and tastefully executed (see District One sign section).**

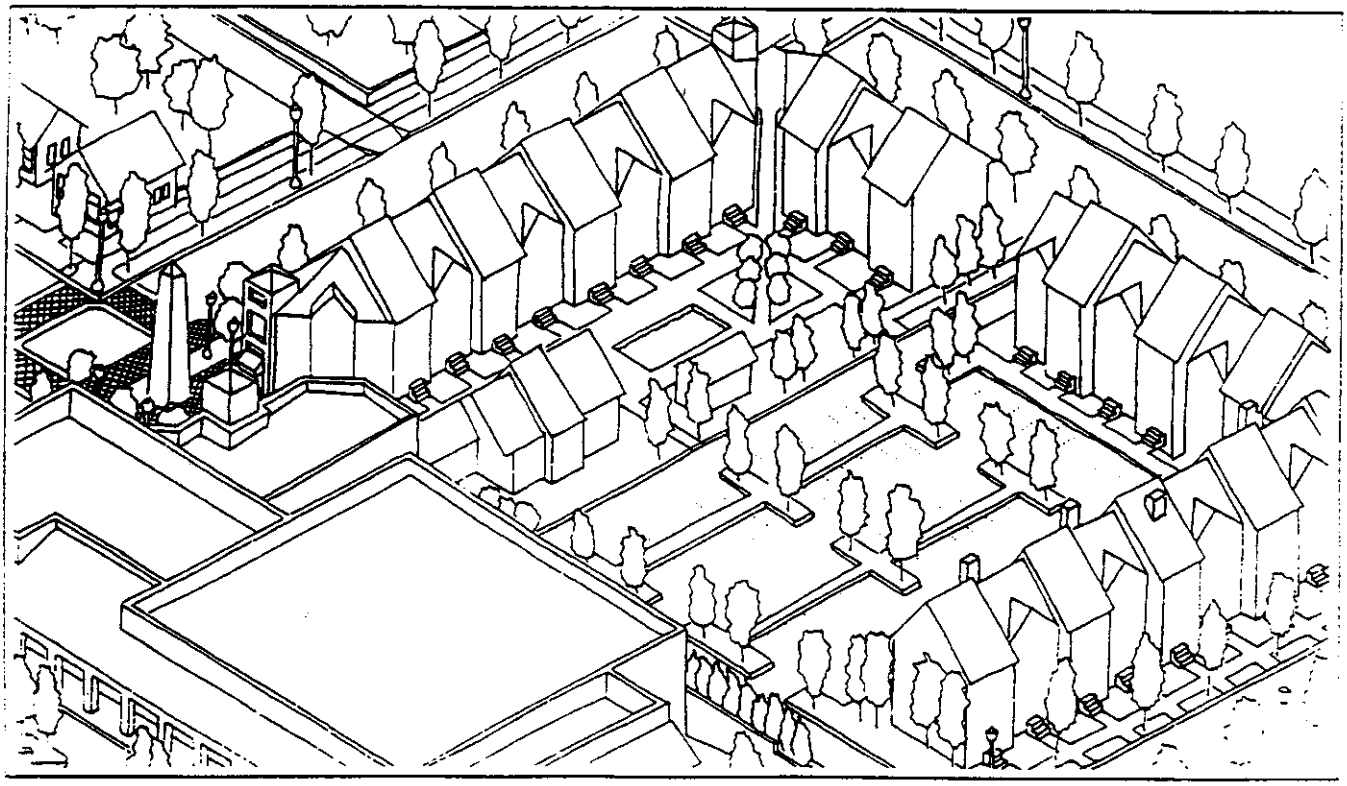
DISTRICT 3 MIXED USE RESIDENTIAL

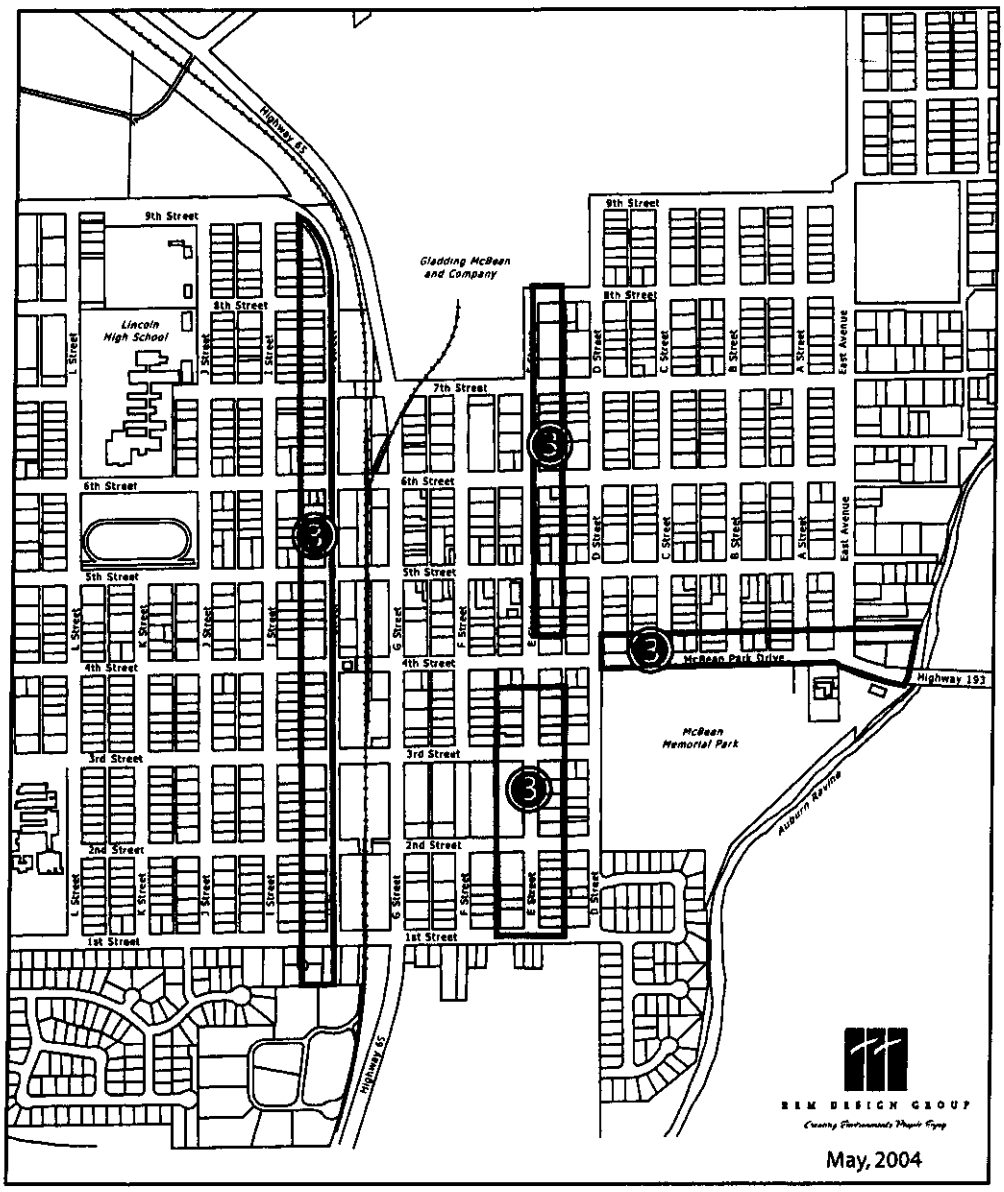
District Concept

District Three is envisioned as becoming a transitional mixed use and multifamily development zone. District Three will ease the transition from the dense commercial core of District One to the low density residential pattern of District Six. District Three will also serve to provide an area to accommodate the projected need for multifamily housing as identified in the Willams-Kuebelbeck Economic Study. To accomplish this transition, District Three will be a mix of the characteristics of both District One and District Six.

District Three will be primarily a residential neighborhood like District Six. However, District Three will accommodate a variety of higher density residential dwellings, such as walk-up apartments, townhomes, and duplexes. The form of District Three will combine elements from both District One and Six. Apartments and townhouses will be massed and oriented towards the sidewalk in a manner similar to the pattern established for District One. Articulation and architectural character of these units will reflect the styles of the single family homes found in District Six. For example, multifamily units will have rooflines, porches, windows and exterior materials similar to those found on homes in District Six.

By no means is the Downtown Urban Design Plan intended to "force" the conversion of existing single family homes (particularly those of historic significance) located within the District Three area. It is instead intended to allow for the conversion of these properties if and when market forces warrant such a transition in residential densities. However, large vacant properties in District Three are expected to develop consistent with the Downtown Urban Design Plan Guidelines.

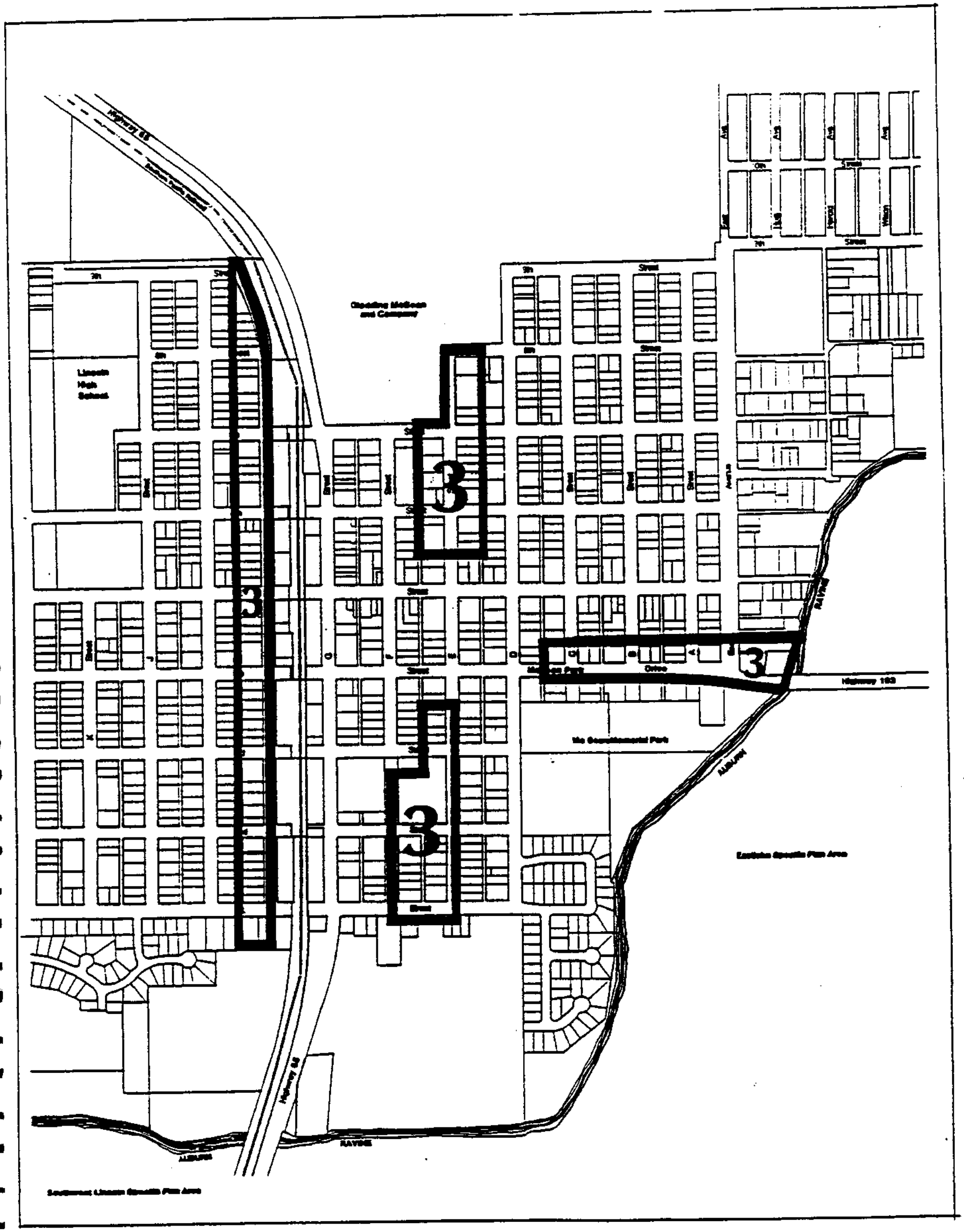




DISTRICT THREE

Lincoln Downtown Urban Design Plan

CITY OF LINCOLN, CALIFORNIA REDEVELOPMENT AGENCY


3
3
3
3
Lincoln
High
School
Gladding McBean
and Company
Highway 193
AUBURN
RAVINE

Issues and Existing Conditions

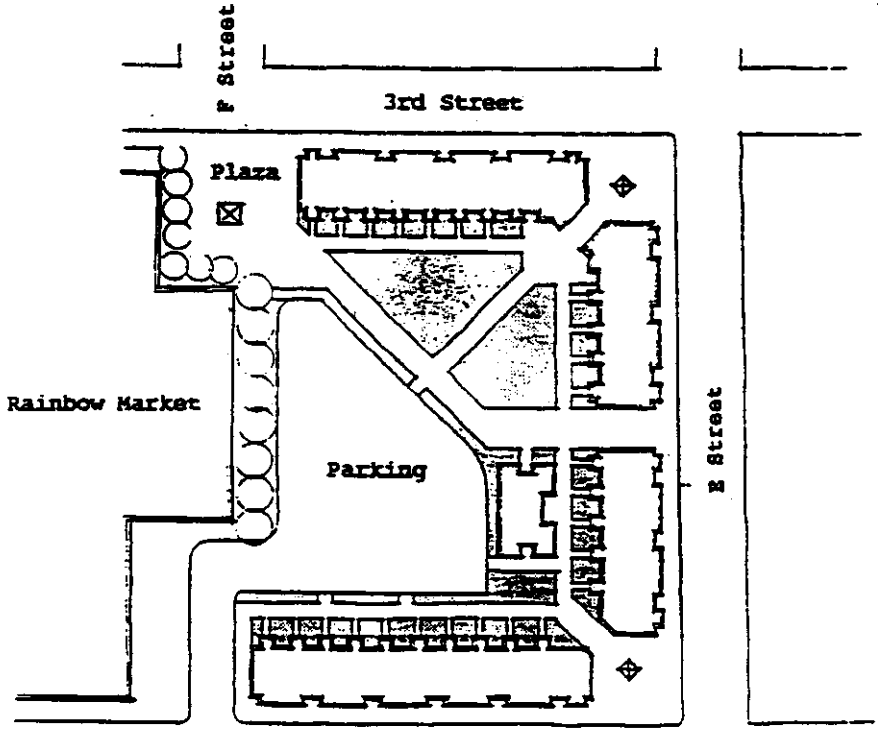
The existing single family neighborhood districts have been identified as an important element of Lincoln's small town character. District Three is intended to preserve these single family residential areas by creating a logical transitional zone between the commercial nature of downtown (District One) and Highway 65 (District Two).

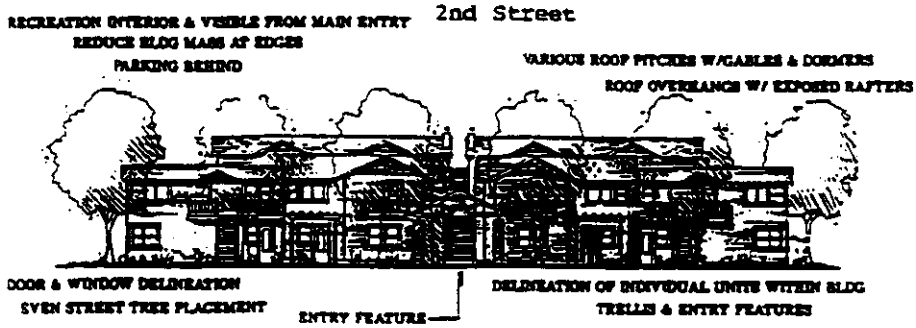
New Development Prototypes

The following development prototypes reflect design concepts which are necessary if District Three is to create a transition between Districts One and Six. Two types of attached residential building are envisioned for District Three.

WALKUP APARTMENT

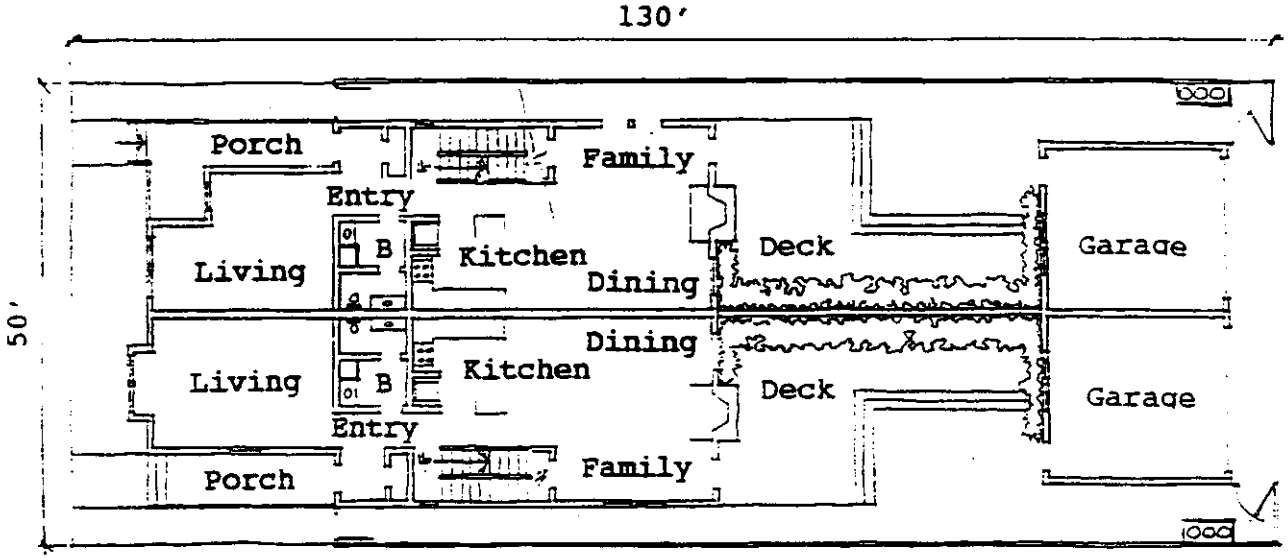
The first is a large scale residential apartment complex which could accommodate limited commercial uses. These developments will be similar in function to a typical suburban garden apartment but have a massing and sidewalk orientation similar to an urban low-rise, walk up apartment. This type of development is ideally intended for the vacant block behind Rainbow Market, which is recommended in the Williams-Kuebelbeck Economic Study. However, there are possibly other locations within District Three that could accommodate a scaled down version of this concept (possibly on E Street between 5th and 6th Street).



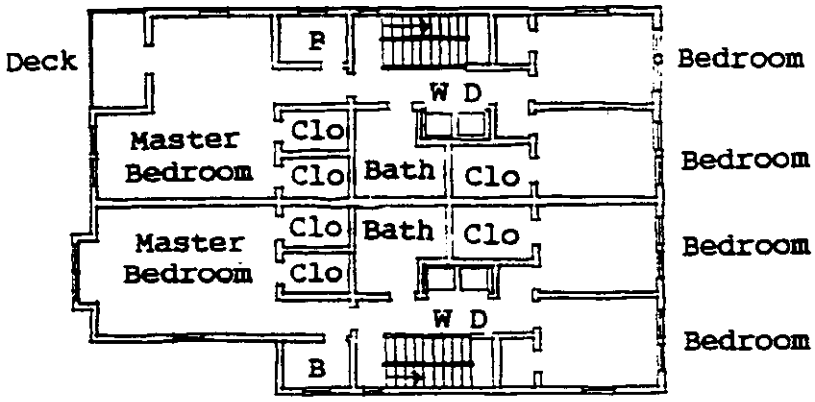


SINGLE LOT MODULE TOWNHOUSE

The second type of residential unit is intended to provide a parcel-by-parcel infill on vacant lots in District Three. This townhouse design would be compatible with existing single family dwellings and the commercial character of District One.



Single Lot Duplex Townhouse — 1st Level Floor Plan



2nd Level Plan

Appropriate materials include:

- *stucco*
- *terra cotta*
- *wood*
- *barrel tile*
- *wrought iron*

Single Lot Duplex Townhouse — Street Elevation

District Three Design Guidelines

Guideline 3A
Mixed Uses

In some cases, multifamily units may be located on or near commercial areas of 5th Street or F Street. In certain cases a mixed use approach of adding street level commercial to a residential apartment should be considered.

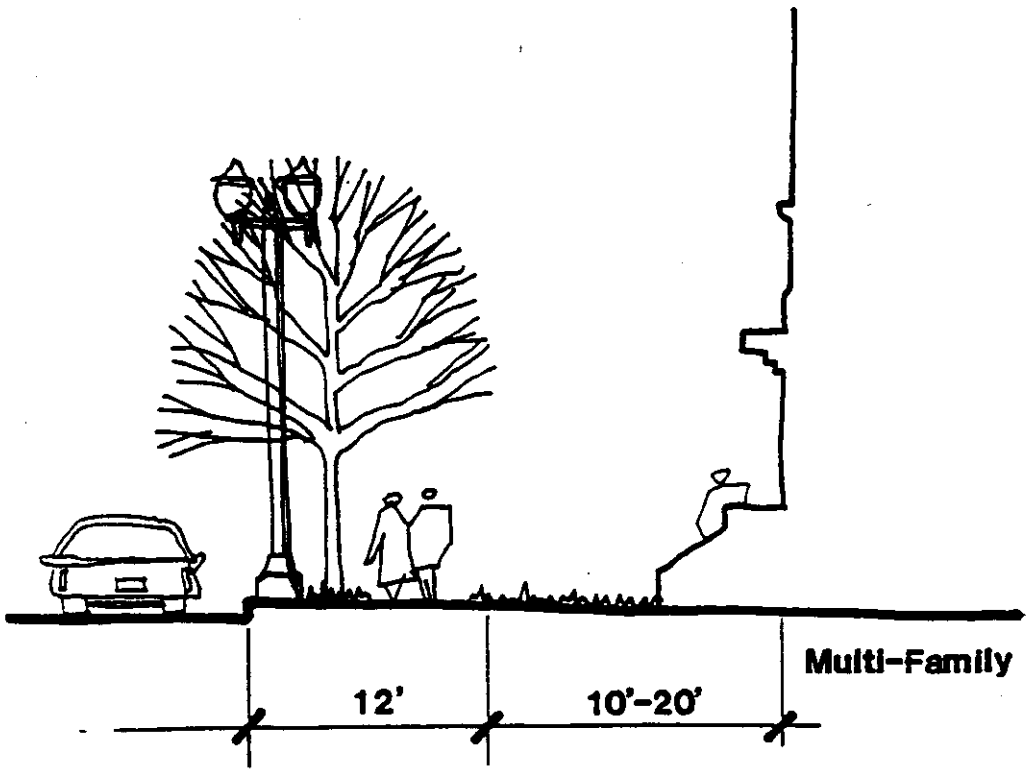
Recommendations:

- ❑ **Commercial uses in District Three should follow the store-front guidelines specified in District One.**
- ❑ **Office uses are compatible with residential apartments and should also be considered for mixed use developments. Re-use of Historic Residential structures for offices or mixed uses is encouraged.**

Guideline 3B
Setbacks

Recommendations:

- ❑ **Multifamily units must be set back at least 15' from the street right-of-way.**
- ❑ **Sideyards are only required on sides where new development is adjacent to existing single family units.**

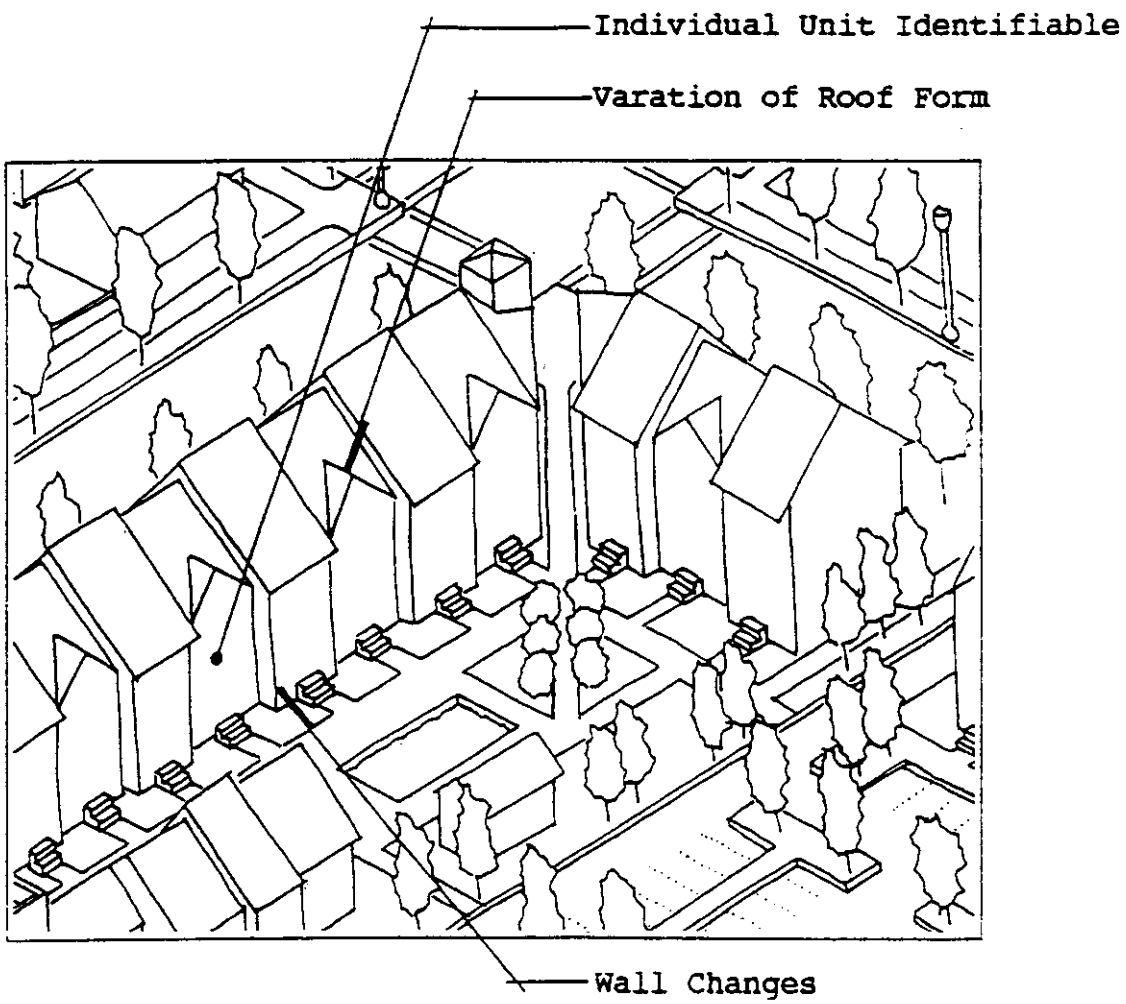


Guideline 3C
Building Form

Infill multifamily units must be respectful of scale and massing typical of existing single family units.

Recommendations:

- ❑ **Unit massing should be such that individual units are identifiable in the overall form of the building.**
- ❑ **Walls should be staggered or have breaks at intervals of 25 feet or less.**
- ❑ **A building should be composed of interesting forms and openings which create areas of shade and shadow.**
- ❑ **Avoid uninterrupted blank walls.**



Guideline 3D
Roofs

Roofs should be similar in character and material to single family dwellings.

Recommendations:

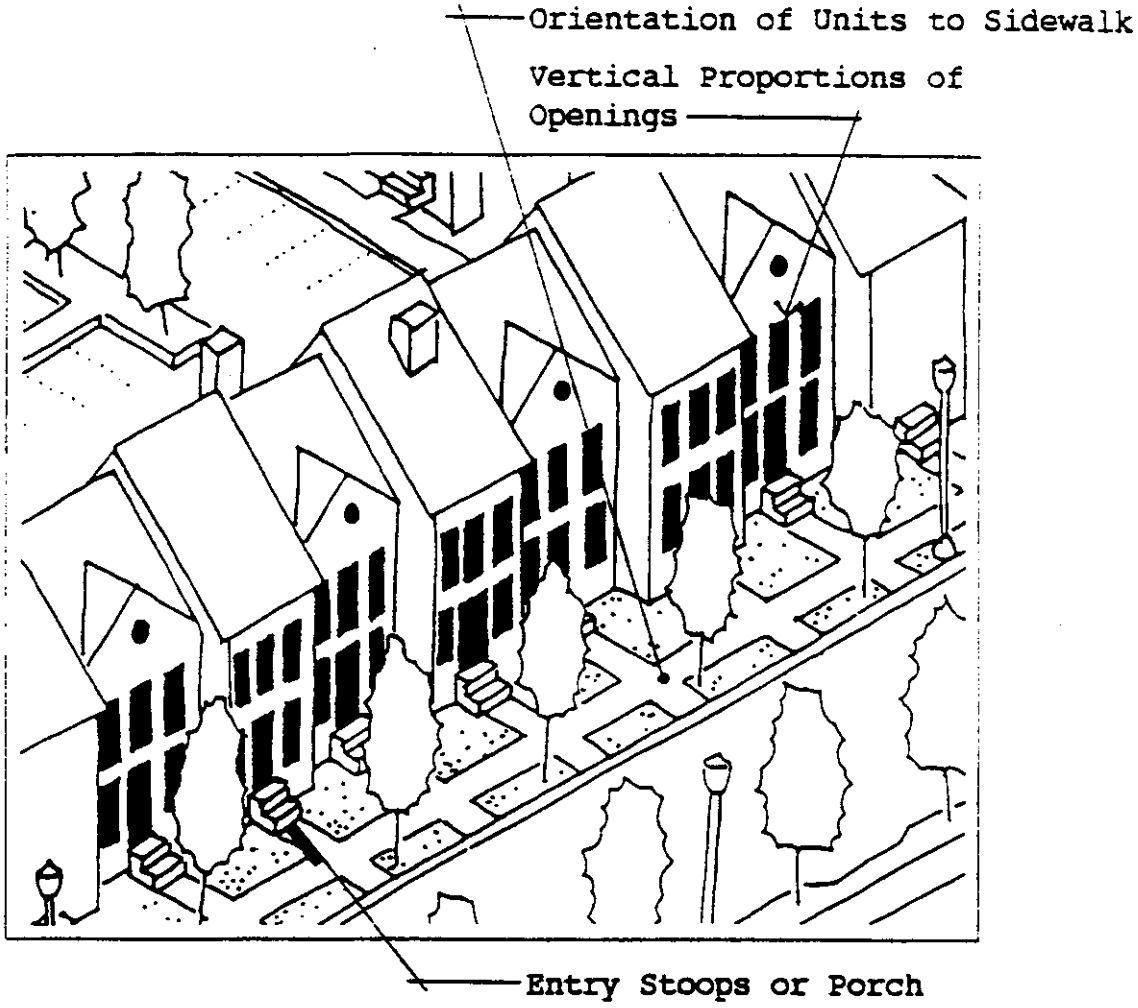
- ❑ **Variation of the roof lines should occur throughout the building to help distinguish individual units.**
- ❑ **Roofs should be sloping gables or hip forms typical of neighboring homes. Long uninterrupted expanses of roof should be broken with elements like dormer windows, chimneys, pitch changes, etc.**

Guideline 3E
Sidewalks Relationship

Infill multi-family units need to relate to the sidewalk in a manner similar to single family units. The street and sidewalk should be considered a friendly pedestrian environment. Consequently multi-family developments should orient entries and interesting residential facades toward the street.

Recommendations:

- ❑ **The primary entrance of a townhome dwelling unit must be from the street. An attempt should be made to orient as many apartment entries to the street as possible.**
- ❑ **Entry features of residential units which are immediately adjacent to the sidewalk are encouraged. These features include porches, stoops, courtyards, garden walls, landscaping, and small lawns.**
- ❑ **Common open spaces in apartments should be linked with the public sidewalk.**
- ❑ **Space between buildings and the sidewalks should be well landscaped.**



Guideline 3F
Doors & windows

Doors and windows should reflect the character of those found in neighboring homes.

Recommendations:

- ❑ **Windows should be vertical in proportion and multi-paned.**
- ❑ **Doors should should be detailed and possibly painted with accent colors.**

Guideline 3G
Parking

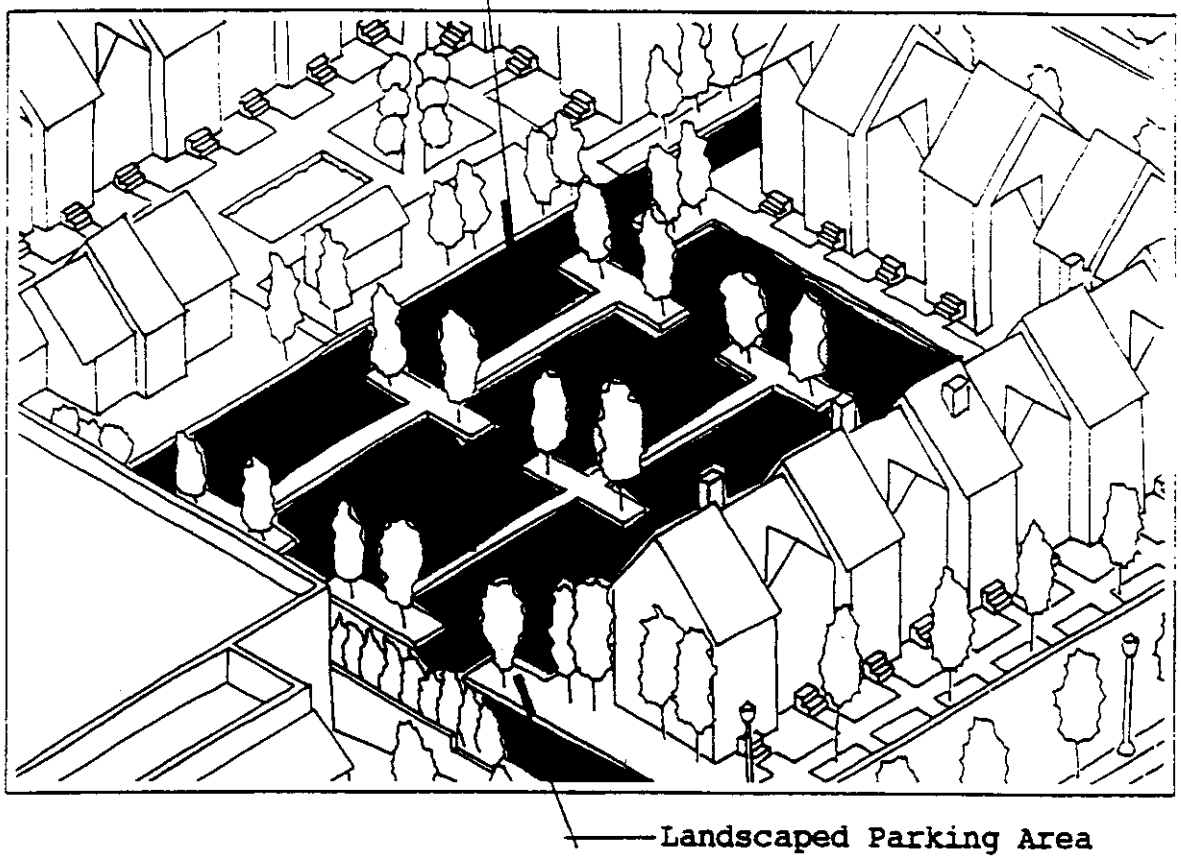
Parking must be carefully handled in order to preserve the residential quality of District Three. Large parking lots or streetloading garages are not compatible with the character of existing dwellings.

Recommendations for Townhouses

- ❑ **Townhomes must maintain all vehicle loading and parking against alleys.**
- ❑ **Access to garages and parking areas should be through the existing alleys.**

Recommendations for Apartments

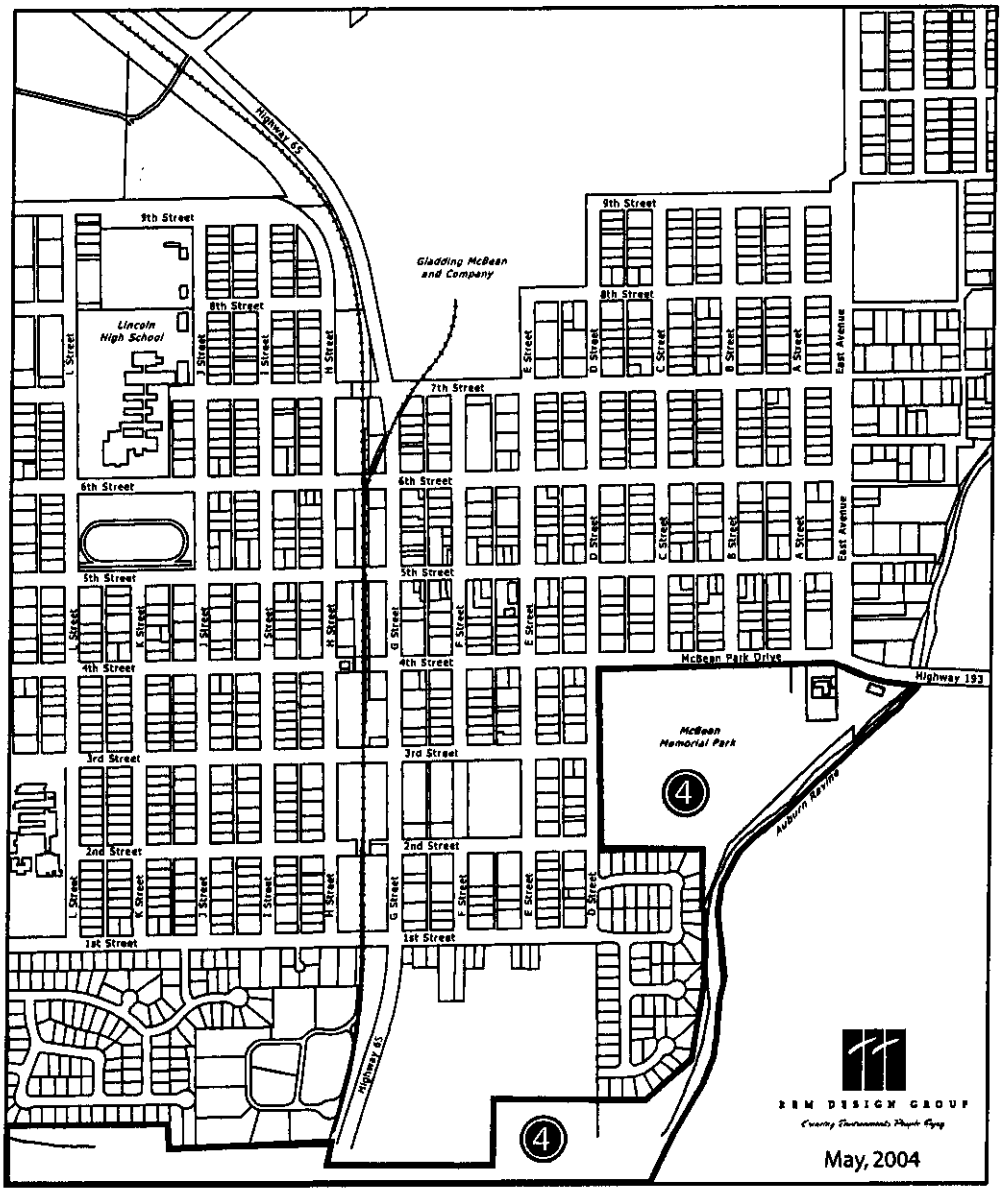
- ❑ **Ideally all parking and circulation should be contained within the bottom level of the residential development.**
- ❑ **Parking areas should be divided into smaller areas and internalized within the development.**
- ❑ **Parking lots should not be located adjacent to sidewalks This area should be occupied by either buildings or landscaping.**
- ❑ **If parking must be located adjacent to the sidewalk there should be a buffer in the form of landscaping and / or low walls.**


All Parking Areas Internalized
and Screened from view
Landscaped Parking Area

7.4. DISTRICT 4 MCBEAN PARK

District Concept

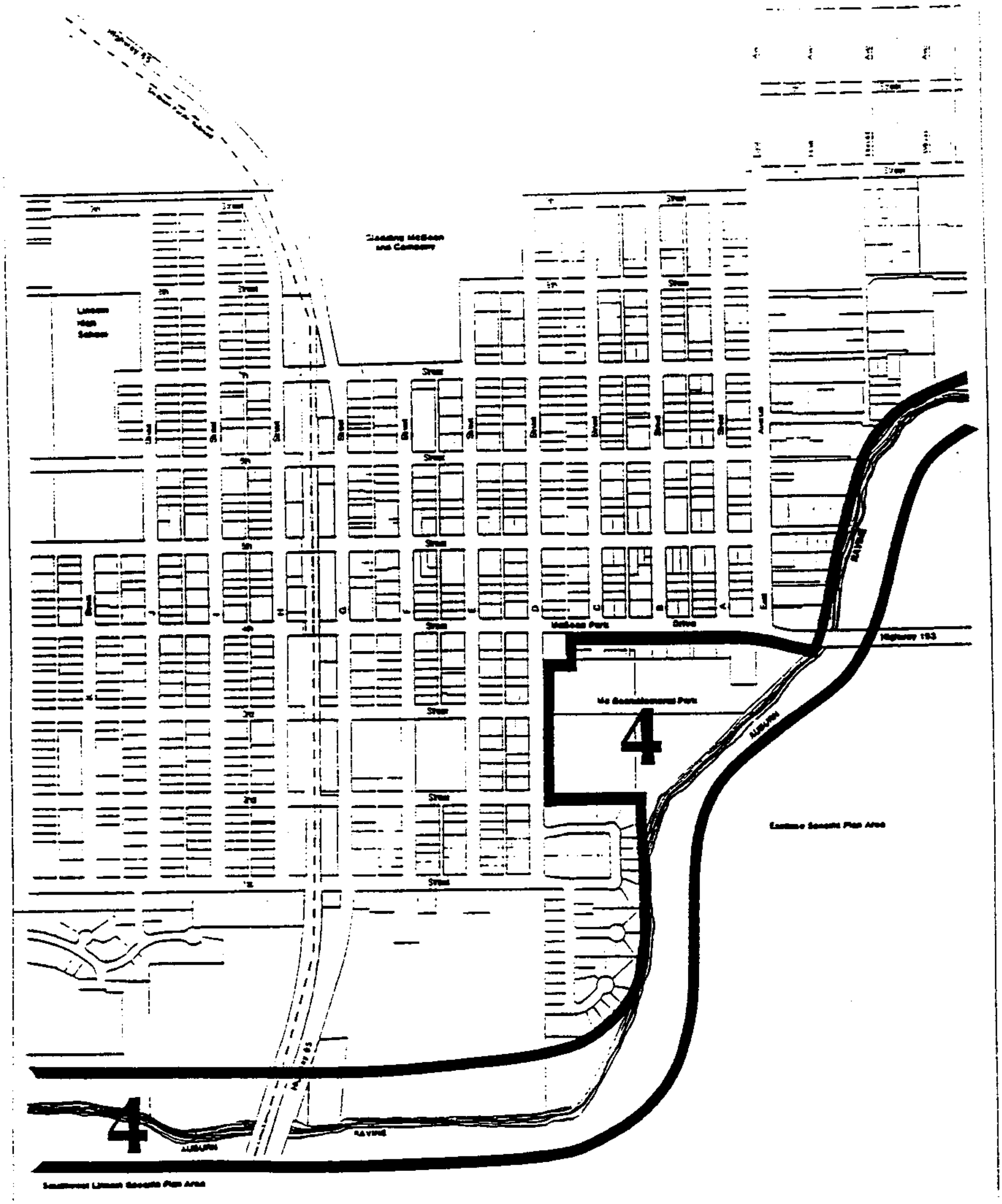
McBean Park already provides the downtown with a wonderful recreation resource and visual amenity.. The Downtown Urban Design Plan seeks to further strengthen the relationship between the park and the downtown. Pedestrian linkages along McBean Park Drive and 3rd Street would improve interaction among the Park and Downtown destinations. Facilities within the park would be improved to better serve the needs of local residence. Finally, McBean Park would act like a "bridge," providing foot and bike trails, between the downtown and the specific plan expansion areas planned for southwest Lincoln.



DISTRICT FOUR

Lincoln Downtown Urban Design Plan

CITY OF LINCOLN, CALIFORNIA REDEVELOPMENT AGENCY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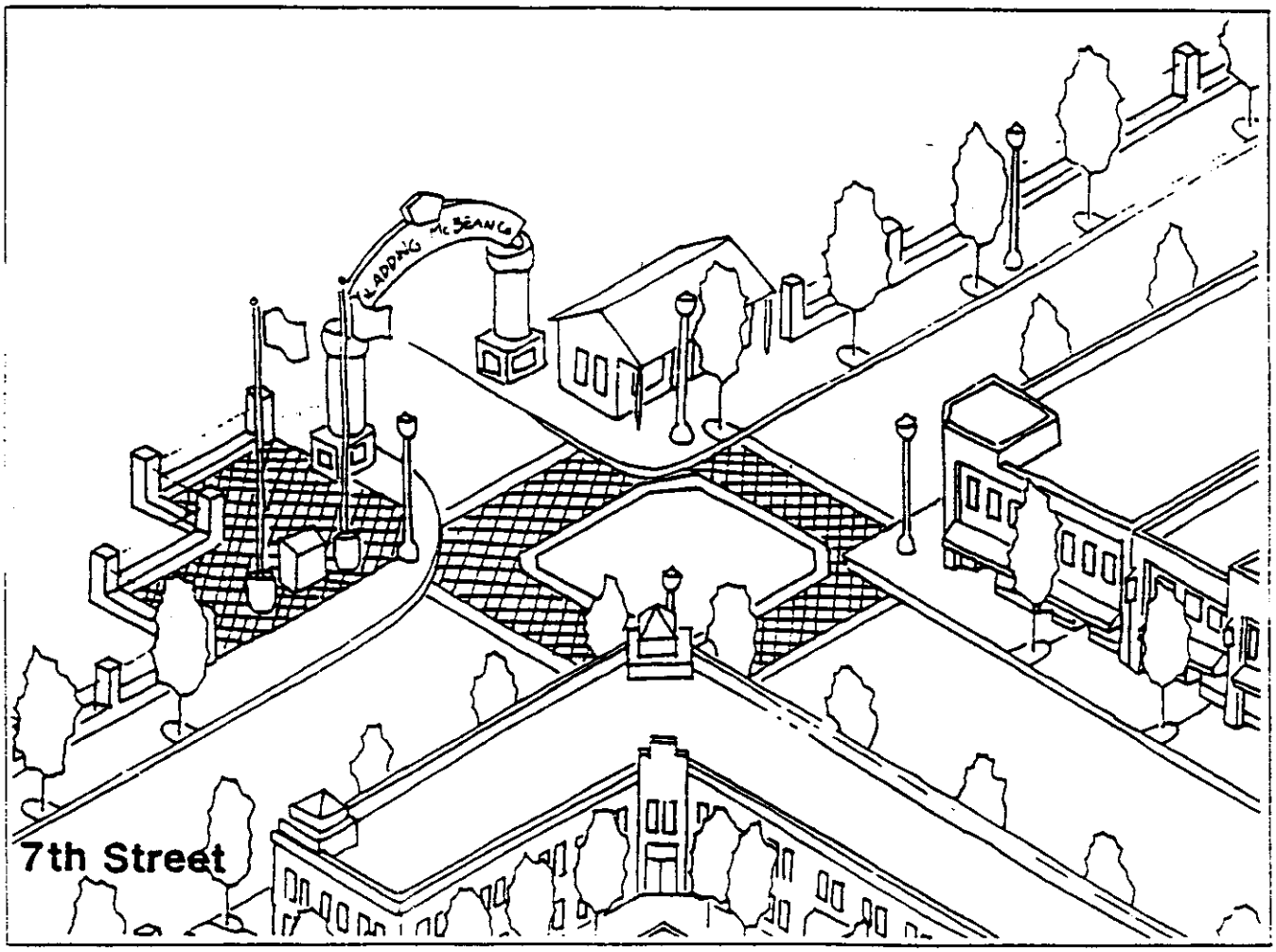
7.5. DISTRICT 5 GLADDING MCBEAN INDUSTRIAL

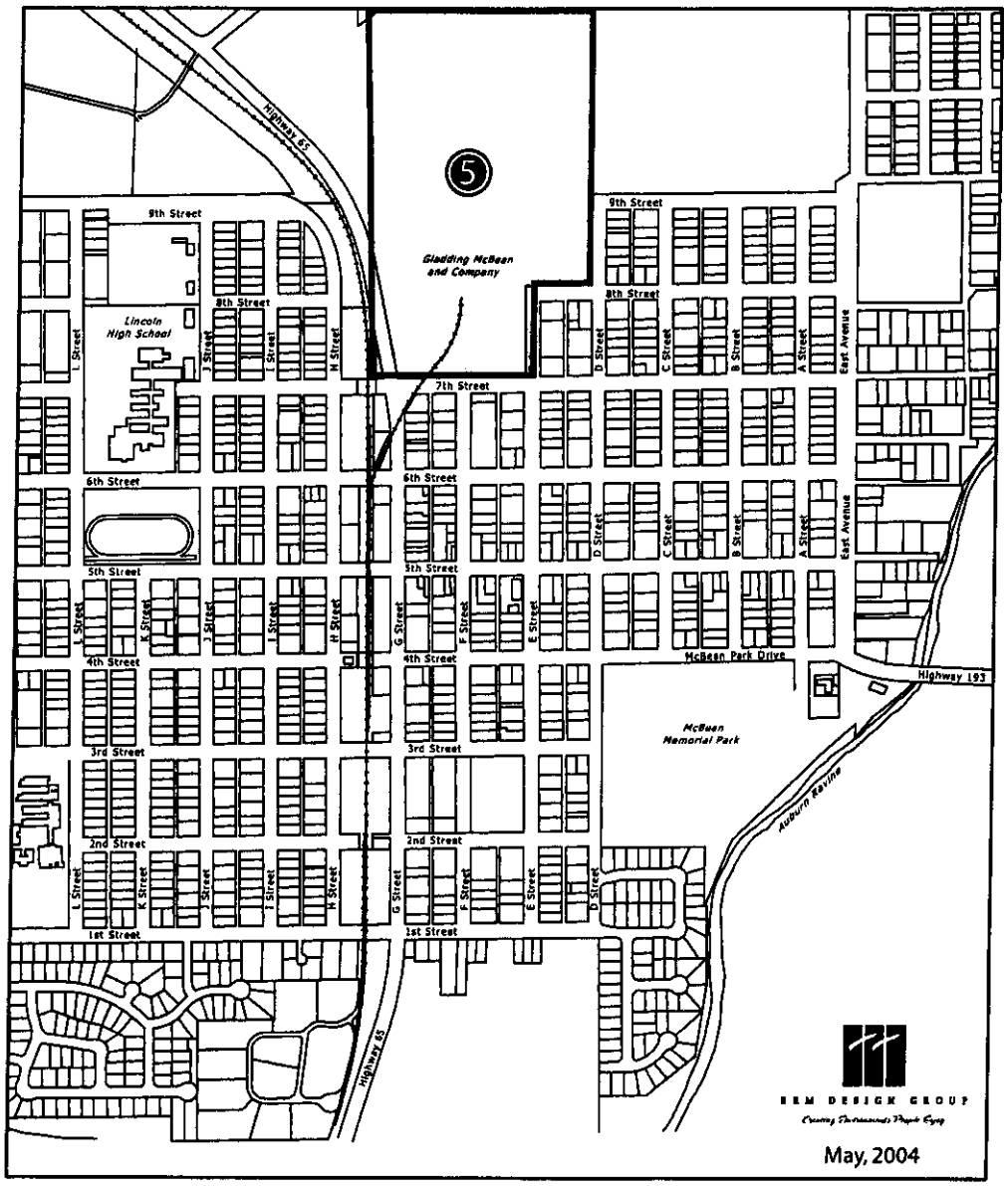
District Concept

The Gladding McBean Company facility has had a dramatic economic, social, visual, and historic impact on Lincoln. The Urban Design Plan recognizes the significance of the plant and seeks to celebrate its important role in Lincoln. The plant would serve as a northern gateway to the Downtown, its chimneys and stacks of pipe providing a dramatic industrial form. A proposed visitor's center and entry feature would improve the 7th street interface between the plant and the downtown. Visitors to Lincoln might stop to see the Feats of Clay exhibit and end up strolling down F Street to explore the downtown or rest at Beermann Plaza.

Issues and Existing Conditions

The primary issue concerning the Gladding McBean Plant is the condition of the facility's edges and how they interface with adjacent uses. Presently the plant's edges are only defined by an old chain link fence. Curb, gutter and sidewalks are missing around most of the plant edges. Employee parking appears to occur haphazardly in and around the plant. On the other hand, the plant's many buildings, chimneys, pile stacks and industrial activity create an interesting northern edge to the downtown.



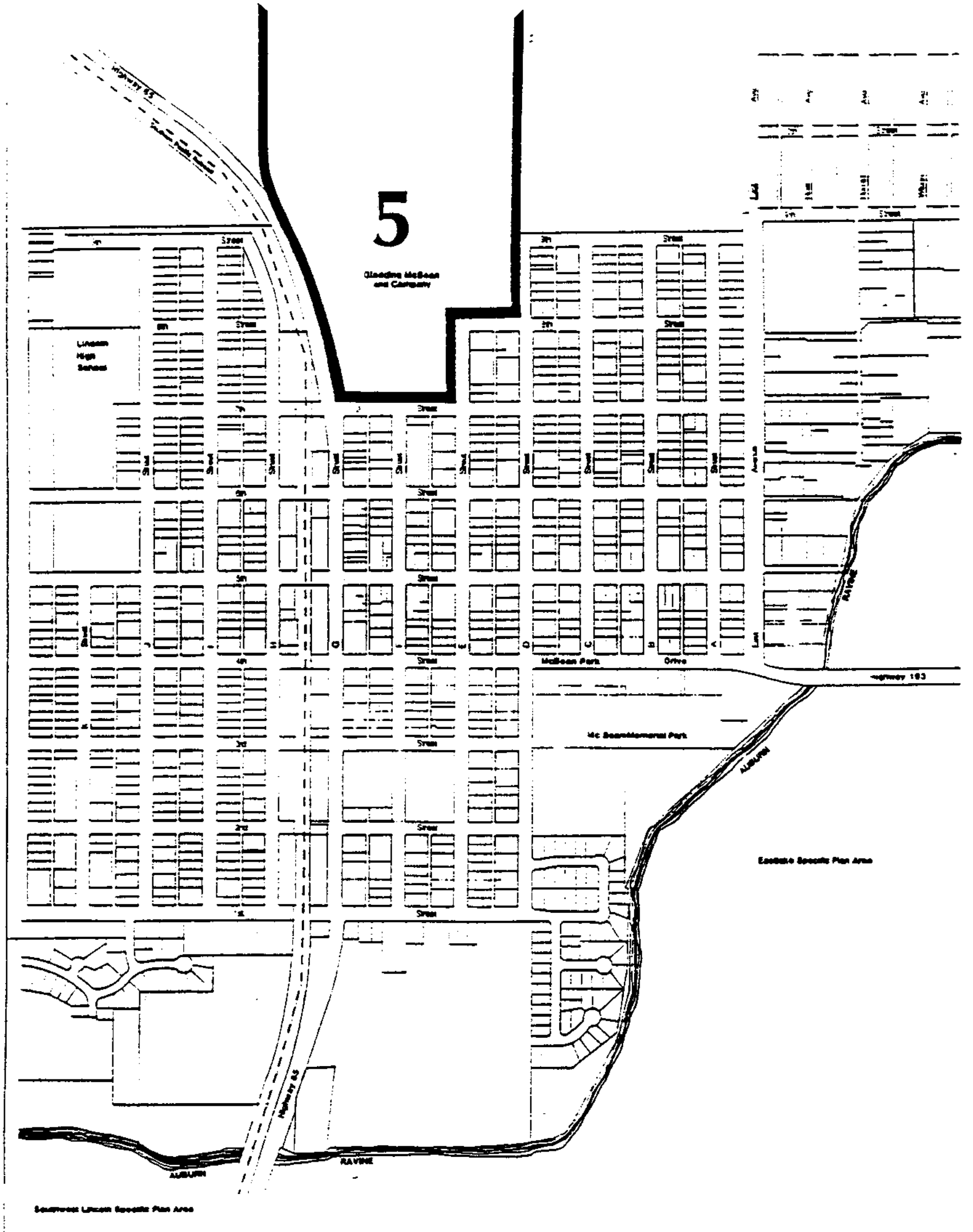


DISTRICT FIVE

Lincoln Downtown Urban Design Plan

CITY OF LINCOLN, CALIFORNIA

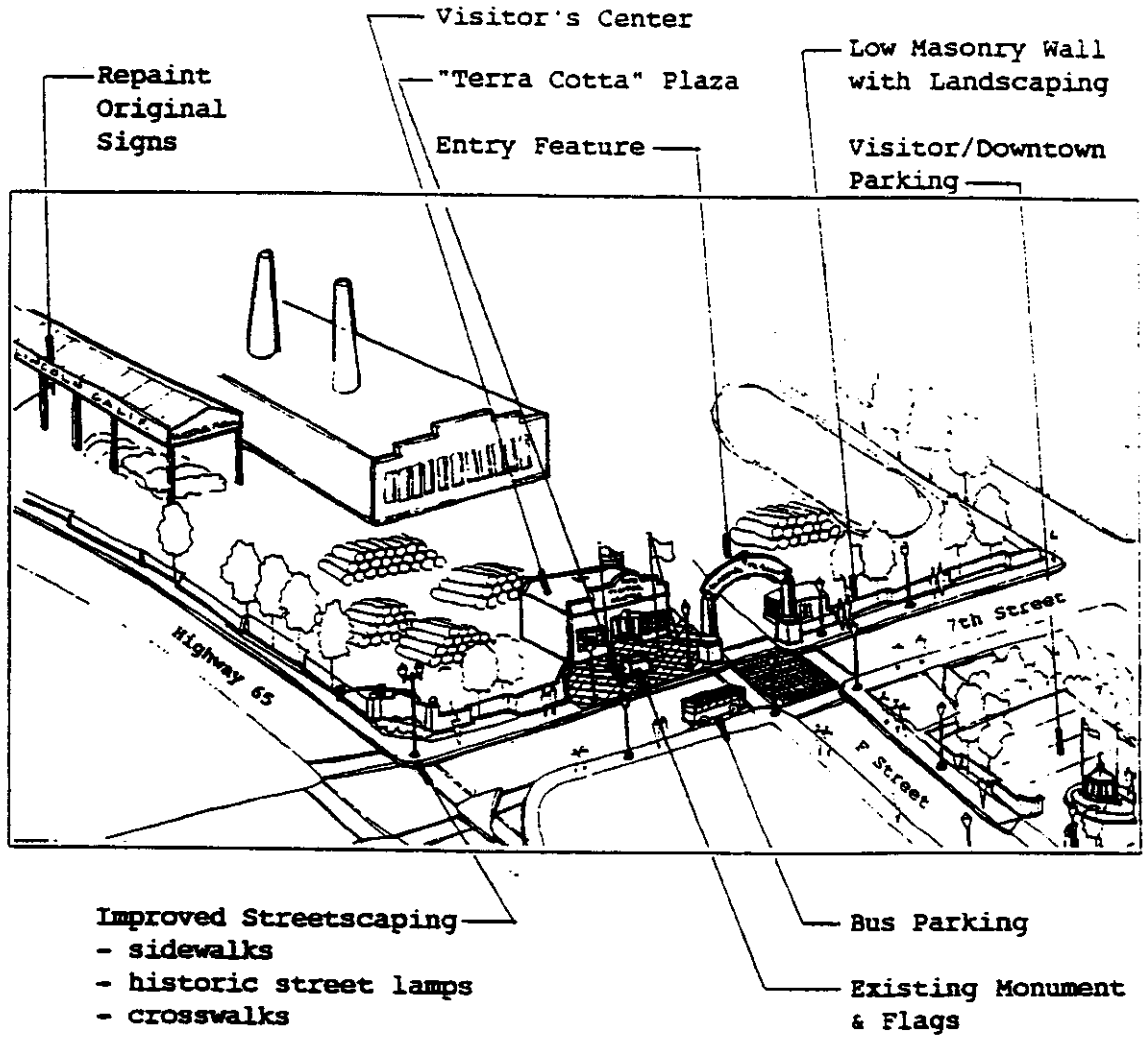
REDEVELOPMENT AGENCY


5
Gladding McBean and Company
Lincoln High School
Highway 65
McBean Park Drive
Highway 193
AUBURN
RAVINE

Design Concepts

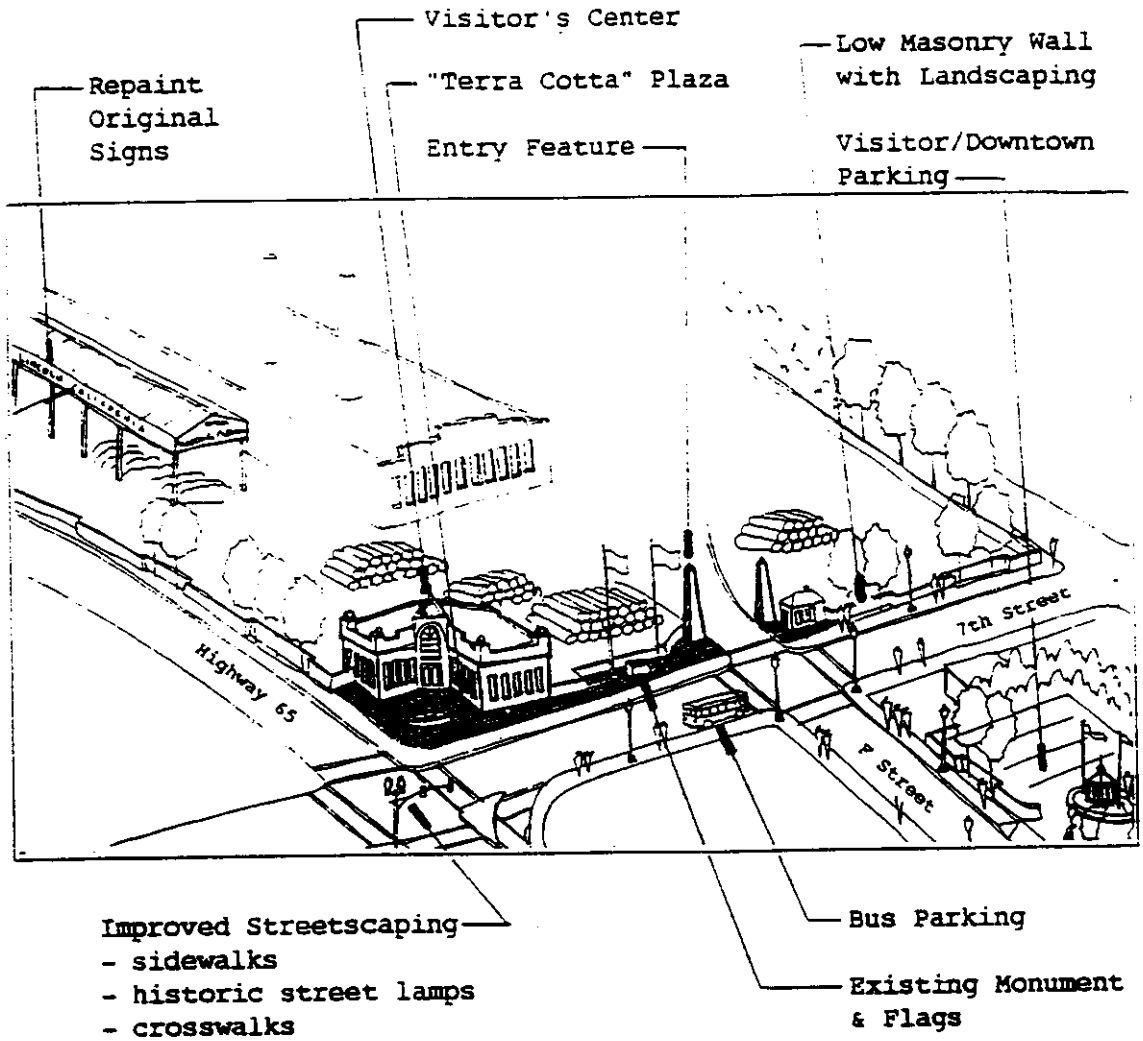
VISITOR'S CENTER

The Downtown Urban Design Plan presents three alternative concepts for a Feats of Clay Visitor's Center. The Gladding McBean Company management has been approached with the Visitor Center concepts. All concepts were positively received. Local reaction has been equally favorable.



Concept A

The first visitor center concept shows a visitor center located next to the entry gate. This concept would incorporate the existing flag poles and historical marker into a "terra cotta" plaza with elements similar to those of Beermann Plaza. An entry feature over the existing plant gate would create a landmark feature which would serve as a northern terminus to F Street. A complementing restaurant and hotel complex would be located across 7th Street from the visitor's center. Visitor parking could be accommodated on an F Street parking lot which would serve the Visitor Center and both downtown shoppers and employees.

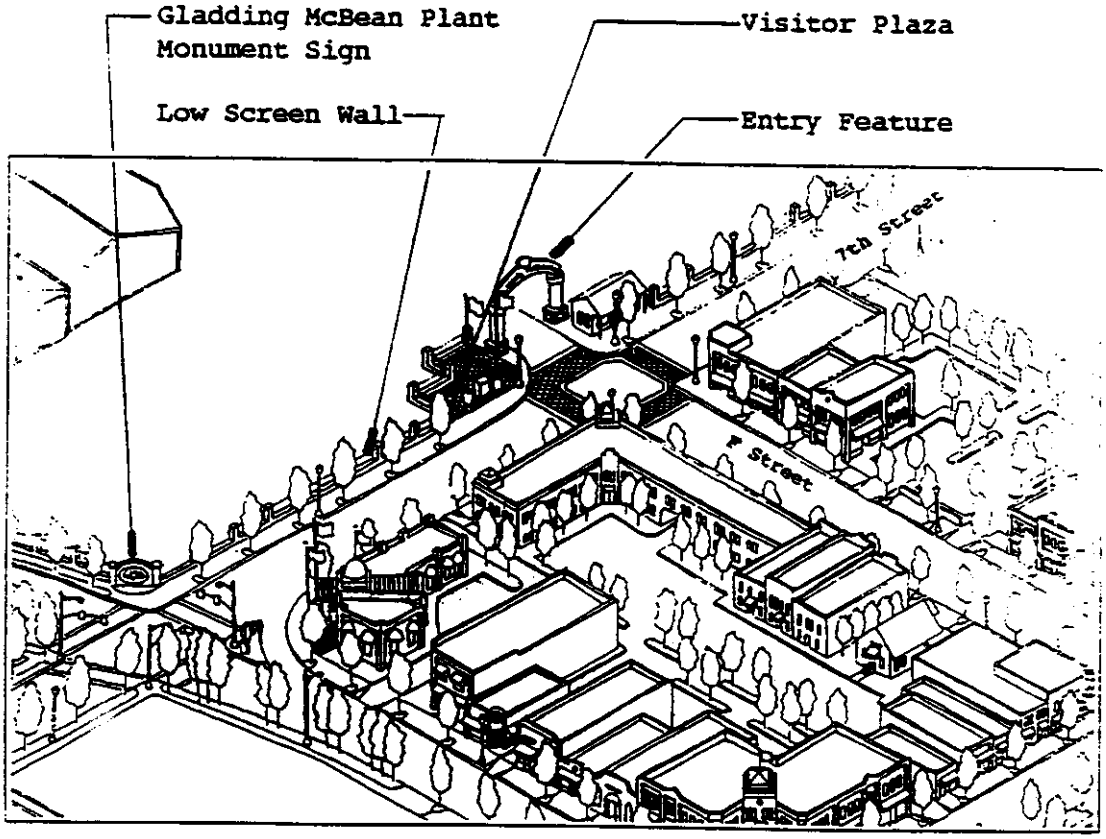


Concept B

The second visitor center concept is similar to the first. The primary difference is the location of the visitor center. The second proposed location is on the corner of 7th Street and Highway 65. This location would make the visitors center more visible from Highway 65 creating an entry statement. The entry gate and F Street linkage to downtown would be more subdued in this design.

Concept C

The Visitor Center concept shown in the 20 Year Vision illustration offers a third design alternative. The Visitor Center is located on the vacant p el at the corner of Highway 65 and 7th Street. The plant entry retains a "ga ay" element to provide a northern visual terminus to F Street. This site would be highly visible from the Highway and serve as an entry feature to southbound motorists. Presently, the site is a vacant dirt lot which is used as a "makeshift" parking lot and creates an eyesore. The property is owned by Gladding McBean Company which has expressed interest in using it for a Visitor Center.



EDGE TREATMENT

The poor condition of the Gladding-McBean factory site edges, where direct interface with residential uses occur, have already been mentioned in the Existing Conditions section. Treatment of these edges must be handled thoughtfully. Strong visual buffers and screening of the plant would be inappropriate along 7th Street, however it might be appropriate where the plant interfaces with residential areas.

Recommendations:

- **Views onto the plant site are very important to the character of the downtown. Maintain views from Highway 65 and 7th Street into the plant.**

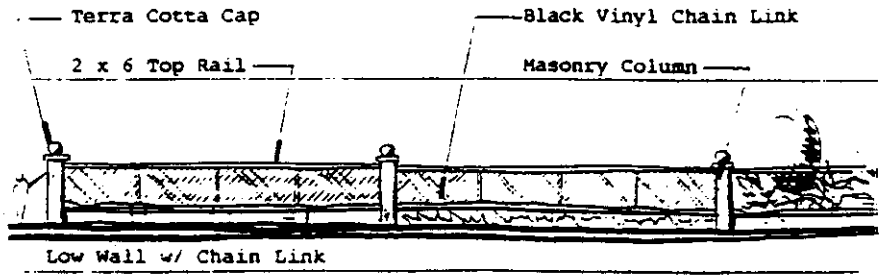
- **The Highway 65 and 7th Street edges need better definition. A curb and sidewalk in combination with an eight foot fence (four foot masonry base with four foot visually transparent cap) would nicely define these edges while maintaining views of the the plant. An edge wall should be articulated with steps and staggering. A space between the wall face and the sidewalk should be left for landscaping.**

- **The plant's F street front gate should be redesigned to better define the plant's entry. An entry feature should announce the plant and serve as a visual terminus to F Street.**

- **In the areas where the Gladding McBean Plant is adjacent to residential areas along E Street, 8th Street, and D Street a more substantial buffering treatment is necessary. A combination of walls and vegetation should be employed to visually screen the residential areas from the plant's side storage areas.**

- **Employee parking needs to be screened and better organized. A single on-site parking area should be developed which is not visually obtrusive to the plant's southern 7th Street edge.**

- **A few simple clean up and repainting projects at the plant could significantly improve the appearance of both the plant and the town. The clay drying structure along Highway 65 is a good example. Repainting the words "Gladding McBean Company" and "Lincoln, CA" on the structure would create an instant northern gateway to Lincoln and improve the plant visually.**



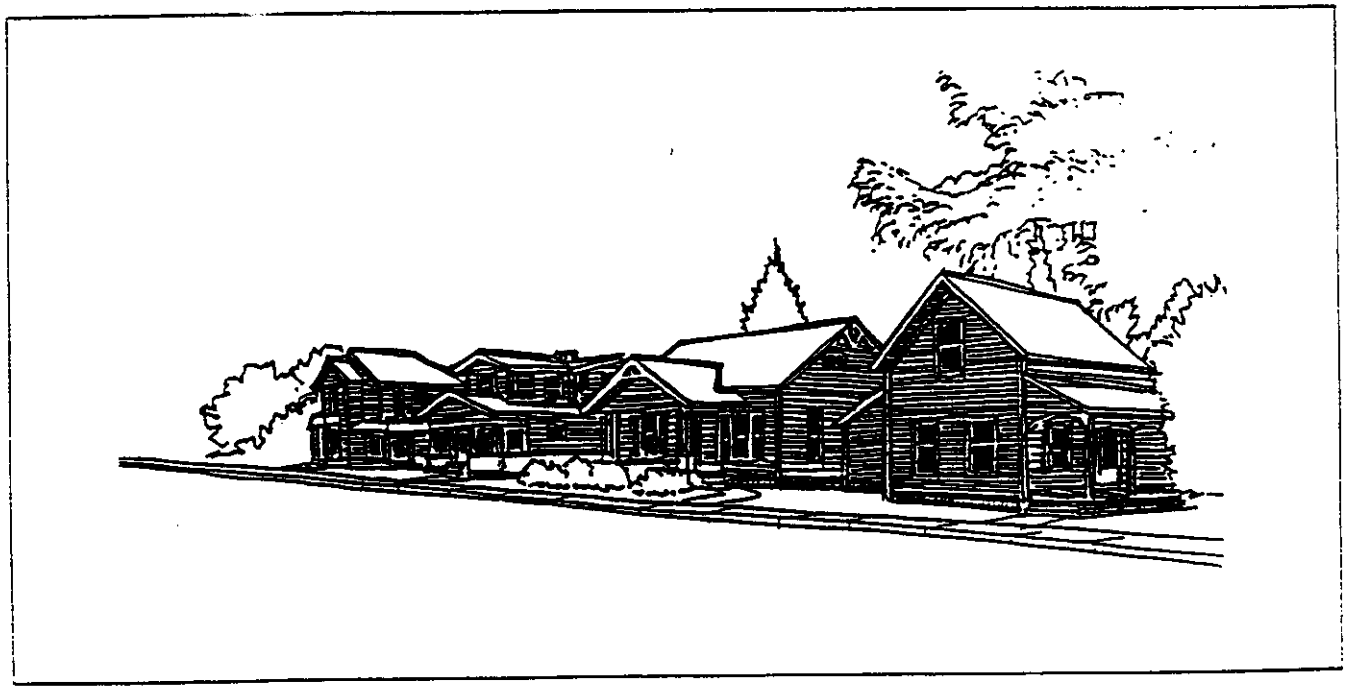
7.6. DISTRICT 6 HISTORIC RESIDENTIAL

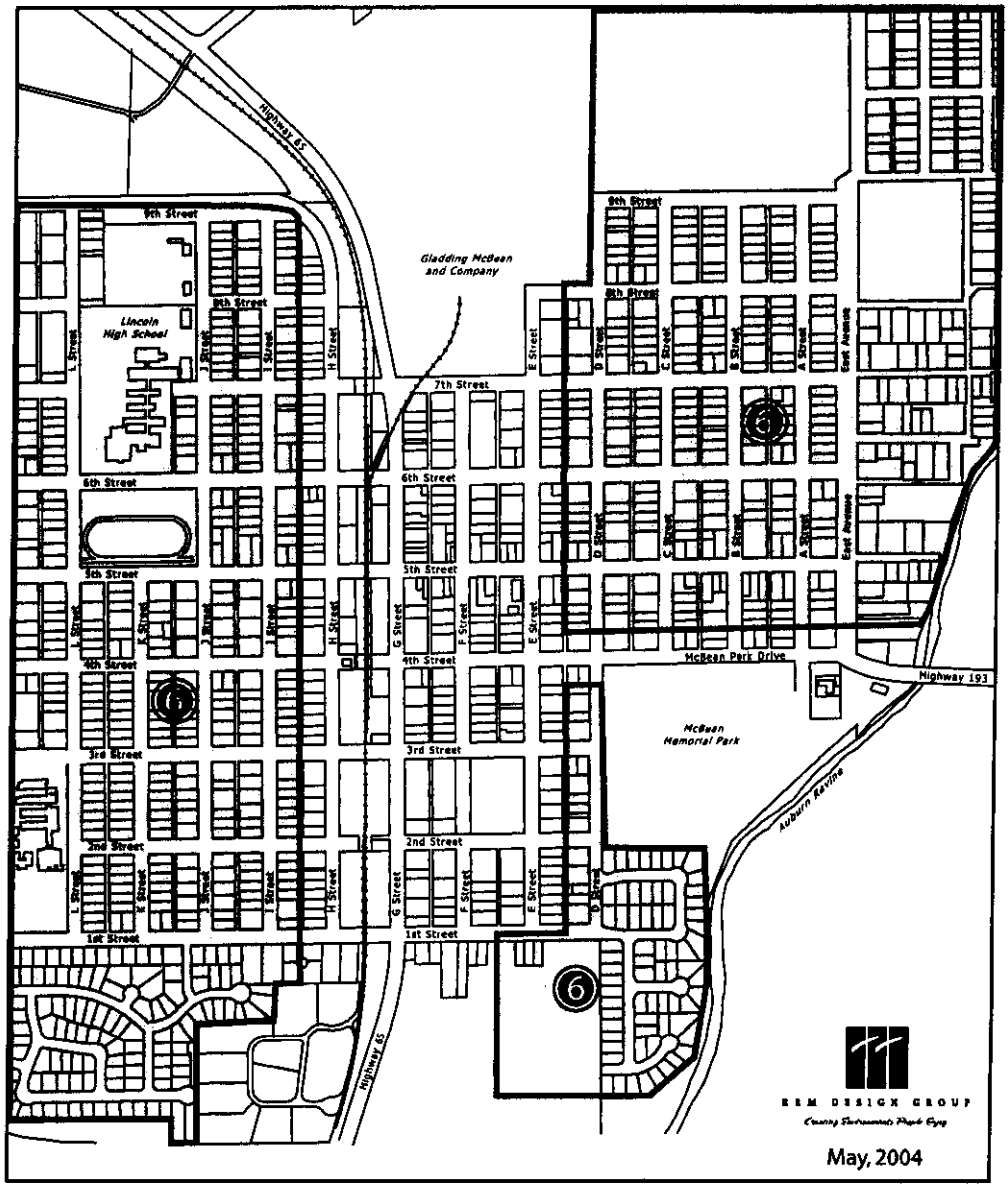
District Concept

The quality of the historic residential neighborhoods and homes that surround the downtown core was often mentioned in the citizen written and photo surveys. Maintaining and improving the quality of these areas is the primary objective of the District Six guidelines. District Six is envisioned as single family residential area comprised of a variety of turn of the century housing styles. This district would surround the commercial and multifamily core of districts one, two, and three. Residents of District Six would live in both old and new homes with large front porches and rear alley garages. The wide quiet streets would be enclosed in a canopy of large street trees. Walking downtown to buy groceries or get coffee would be a pleasant experience for both young and old.

Issues and Existing Conditions

Currently there exists a large variation in the condition of existing homes in District Six. Some larger ornate homes exist in vintage condition while neighboring houses are run down and dilapidated. Vacant parcels are scattered through out District Six. Some areas have curb, sidewalk, and street trees while other areas have none. The original street pattern in District Six is based on the geometric grid while new expansion areas are based on curvilinear cul-de-sac streets.

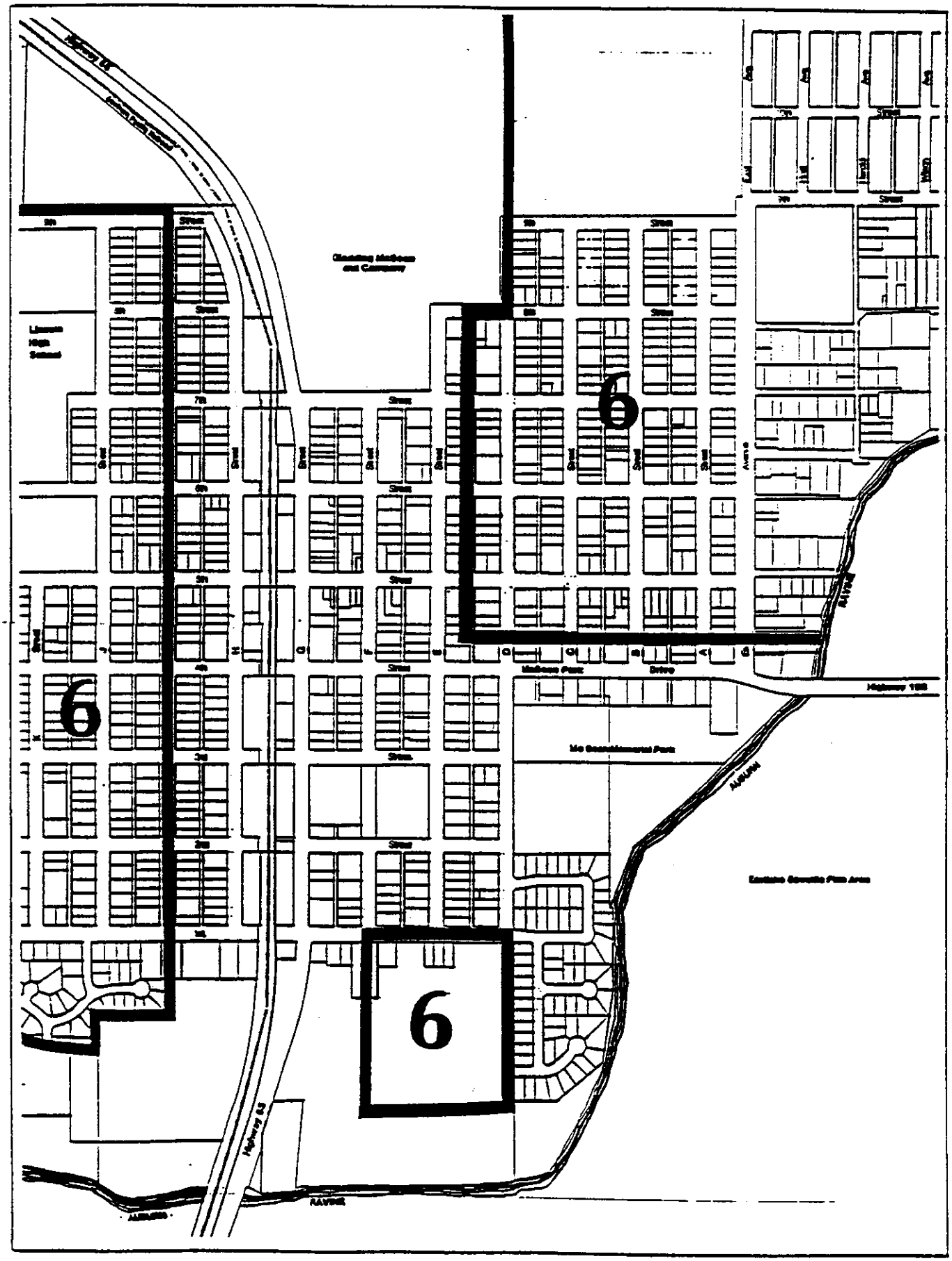




DISTRICT SIX

Lincoln Downtown Urban Design Plan

CITY OF LINCOLN, CALIFORNIA REDEVELOPMENT AGENCY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6
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Highway 65
Highway 65
Auburn
Auburn

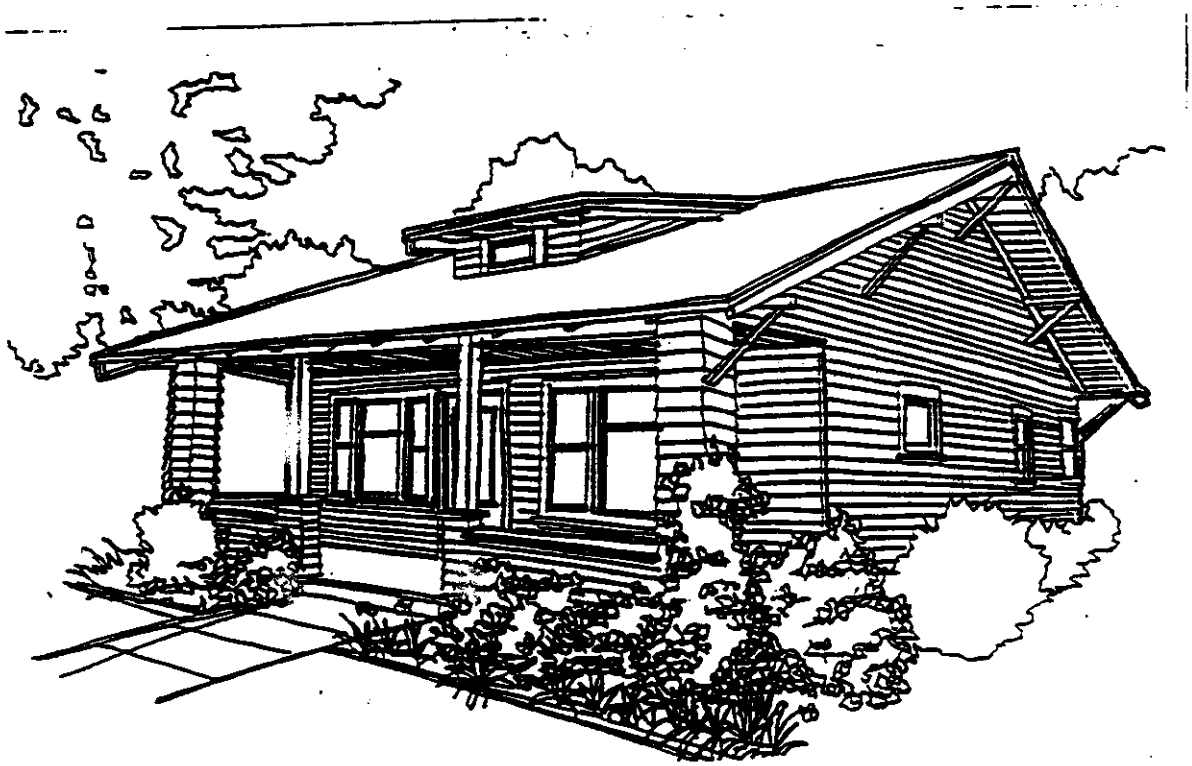
District Six Advisory Design Guidelines

Guideline 6A
Existing Buildings

Many of the older homes in Lincoln are architecturally and historically significant. These homes should be preserved and restored whenever possible.

Recommendations

- ❑ **Restoration and remodels should be sensitive to the buildings original character. Architectural features which have been removed should be restored. Check old photos**
- ❑ **Replaced windows should match the proportion and style of original building windows.**
- ❑ **Original siding materials should be preserved or replaced where needed.**
- ❑ **Creative painting schemes which complement a historic building are encourage**



8. Implementation Program

8. Implementation Program

8.1 PRELIMINARY COST ESTIMATES OF PROPOSED PUBLIC IMPROVEMENTS

According to the Williams-Kuebelbeck Study (WKS), the City Redevelopment Agency developed a budget for project improvements in 1988. This tentative budget describes a capital improvement program of approximately $2,500,000.

Proposed Public Improvement Projects - Downtown Lincoln

OLD TOWN SUB-AREA:

	1988 Estimated Cost:
Landscaping to buffer industrial areas from residential land uses.	$ 300,000
Underground power lines, install light standards, and landscaping.	400,000
Develop and upgrade municipal parking facilities.	250,000
Install or rehabilitate public infrastructure (streets, alleys curbs, gutters, sidewalks, storm drains and sewers)	300,000
Rehabilitation of historic and non-historic structures.	1,250,000
Old Town architectural theme selection.	35,000
TOTAL:	**$ 2,535,000**

Based upon updated and more precise estimates, the following budget was developed:

Detailed Streetscaping, Street Tree and Street Light Budget (2/92)

Cost Estimating Assumptions:

- **All numbers are preliminary and subject to refinement as more details become known.**
- **All quantities and areas are taken from the 50 scale Streetscape Master Plan.**
- **All numbers are installed costs.**
- **Existing streetlights (in District 1 only) were subtracted from total needed.**
- **All numbers for sidewalks and street trees are for new construction without demolition costs.**
- **All mini-plazas are 5,000 sf with $20,000 for trees and grates along with all other furniture items.**

District Budgets:

DISTRICT 1:

	Quantity:	Unit Cost:	Total $:
Pedestrian Crossings:			
Brick Accent	15 @ 6300 sf	$12/sf	$ 75,600
Concrete w/Brick insets	8 @ 5040 sf	$10/sf	$ 50,400
Sidewalks:			
Concrete w/Scoring	82,350 sf	$ 4/sf	$329,400
Brick w/Accent	10,635 sf	$10/sf	$106,350
Granite Curb:	2260 lf	$15/lf	$ 33,900
Standard Curb & Gutter:	5085 lf	$12/lf	$ 61,020
Street Trees:	175	$ 225 each	$ 39,375
Tree Grates:	147	$1000 each	$147,000
Street Furniture: (Bollards, benches, kiosks, flower pots, shelters, flag poles)			$ 95,700

Street Lights:	22	$2,500	$ 55,000
F & 3rd Street Mini-Plaza	1	lump sum	$ 80,000
Visitor Center Parking Lot	1	$ 3/sf	$336,000
Visitor Center Wall & Planting			$ 42,080
TOTAL:			**$1,451,825**

DISTRICT 2:

	Quantity:	Unit Cost:	Total $:
Pedestrian Crossings:			
Concrete w/Brick	8 @ 4920 sf	$10/sf	$ 49,200
Concrete w/Asphalt	9 @ 6060 sf	$4.50/sf	$ 27,270
Sidewalks:			
Concrete w/Scoring	50,175 sf	$ 4/sf	$200,700
Standard Curb & Gutter:	3655 lf	$12/lf	$ 43,860
Street Trees:	76	$ 225 each	$ 17,100
Tree Grates:	39	$1000 each	$ 39,000
Street Furniture: (Benches, trash cans)			$ 9,600
Street Lights:	21	$5,000	$105,000
Transit Center Mini Plaza		Lump Sum	$ 80,000

TOTAL:			**$571,730**

DISTRICT 3:

	Quantity:	Unit Cost:	Total $:
Pedestrian Crossings:			
Concrete w/Brick	8 @ 5040 sf	$10/sf	$ 50,400
Concrete w/Asphalt	6 @ 3720 sf	$4.50/sf	$ 16,740
Sidewalks:			
Standard	171,000 sf	$ 3/sf	$ 51,300
Standard Curb & Gutter:	3340 lf	$12/lf	$ 40,080
Street Trees:	66	$ 225 each	$ 14,850
Street Lights:			
Standard	10	$2,500	$ 25,000
McBean Park Drive	24	$3,000	$ 72,000
TOTAL:			**$270,370**

DISTRICT 4:

	Quantity:	Unit Cost:	Total $:
Terra Cotta Plaza	1	Lump sum	$ 80,000
TOTAL:			**$ 80,000**

DISTRICT 5:

	Quantity:	Unit Cost:	Total $:
Industrial Buffer Treatment	1300 lf	$70 lf	$ 91,000
Planting	13000 sf	$ 3 sf	$ 39,100
TOTAL:			**$130,000**

DISTRICT 6:

	Quantity:	Unit Cost:	Total $:
Typical Residential Block:			
Sidewalk	2940 sf	$ 3 sf	$ 8,820
Curb & Gutter	850 lf	$12 lf	$ 10,200
Street Trees	16	$225 each	$ 3,600
Street Lights	5	$2,500 each	$ 12,500
TOTAL:			**$ 35,120**
GRAND TOTAL (including District 6)			**$,2,539,045**

8.2 FINANCING CONCEPTS AND ALTERNATIVES

Local financing techniques commonly employed by cities and redevelopment agencies to improve the community and that may be applicable to downtown Lincoln include tax increment financing, assessment districts, Mello-Roos Community Facilities Districts, developer fees, Certificates of Participation, Lease Revenue Bonds, Mortgage Revenue Bonds, developer participation and bank line of credit. Tax increment financing is the primary funding tool available to redevelopment agencies and will probably be the primary financing technique for redevelopment projects within the study area. In addition to tax increment revenues, Mortgage Revenue Bonds should be pursued by the Redevelopment Agency as another potential revenue source to finance housing within the study area. Finally, Certificates

of Participation may be an appropriate financing mechanism for the expansion of City facilities.

Redevelopment Bond Financing:

The traditional method for redevelopment financing is through tax increment allocations from new development. Under redevelopment law, the tax base is frozen and all tax increases levied in the redevelopment area accrue to the Agency and are not shared with County or Special District governments. Increased property tax revenues then are utilizes to service bonded indebtedness for the capital needed to make public improvements.

The only problem with this approach is that private investment and development must be occurring within the redevelopment area. If property is not sold, or remodeled, it is not reassessed. In a sluggish economy, the tax increment will build slowly. Once the development and investment engine ignites, the potential for tax increment funding of bonds is great. The public improvements are often needed first to "prime" the economic pump. In this case, federal and state grants are a needed supplement to the Redevelopment Agency.

Special Assessment District:

Property owners can elect to self-assess on the basis of fair share benefit from a public improvement. Downtown property owners could form a Benefit District, assess according to their property's level of improvement and size, and the Agency would add the assessment to their property tax bill. Assessment Districts are difficult to form and will be limited by the financial ability of individual property owners.

Mello Roos Community Facility District (CFD):

The CFD is a special benefit district created to impose a special (property based) tax. In its typical form, long term municipal bonds are sold to fund capital improvements. The bond debt is serviced over the time by the tax proceeds. The amount of tax burden to be placed on an individual property has a ceiling and the bonded indebtedness is a marketing burden that some developers may not desire. In a Redevelopment Area, an election of effected property owners would be required with a 2/3 majority approval needed to approve the CFD. A 3/1 land value to lien criteria is required and would probably be easy to meet in a retail-commercial downtown district. From a property owner's viewpoint, the problem with a special tax will be their ability to recoup the investment in the form of increased rents. The merchants and tenants of the downtown district may not be able to sustain the tax.

Certificates of Participation:

Certificates of Participation are a type of security whereby lease-hold interests (rental income) are sold as shares to private investors. They are most applicable to the lease of public facilities such as a Public Safety Building or Civic Center. Hotels and convention centers would also qualify. A major disadvantage of Certificates of Participation is that they are often

guaranteed against the City's General Fund. Unless a developer provides the guarantee, the City may not wish to pursue this option.

Mortgage Revenue Housing Bonds:

This is a program specifically created for first time homebuyers and affordable housing product. Agency bonds are issued at a below market interest rate for the homeowner. Lincoln has opportunity sites for smaller single family patio homes, and townhouses that would qualify for such a program.

Developer Impact Fees:

Developer Fees have been installed through the adoption of the Public Facilities Element. Many communities have adopted similar fees following the nexus finding requirements of AB 1600. Lincoln's Public Facility Element (PFE) presently makes provision for requiring an in lien fee for parklands and park development. Downtown Streetscaping could be interpreted to be a benefit for new residents of the new growth areas. It might be feasible to apply a portion of the parks fee to downtown parks, plazas, street trees, and pedestrian improvements. The legal feasibility of this approach should be explored. The PFE outlines a need for $1,383,637 for Core Area park improvements. A portion of this fund should be earmarked for downtown streetscaping.

Community Development Block Grant Program:

Community Development Block Grant (CDBG) monies are tightly related to job creation. Public improvements in support of a private development project can be obtained if the private business enters into an employment agreement to hire local low income workers. There must be a nexus between the project and permanent job creation. Streetscaping is difficult to justify under the program. Re-use fund from previous CDBG projects can be utilized for storefront rehabilitation. Lincoln has a re-use fund from a 1986 CDBG project. There is approximately $250,000 in this fund.

Urban Development Action Grants (UDAG):

The federal Department of Housing and Community Development operates a financing program for older downtown districts. This source has been severely curtailed in recent years. Grants can be used for construction loans, utilities, and other public improvements.

SBA 502 / 504 Loan Program:

Eligible use of funds under this program are building construction, improvements, renovation, and storefront restoration. Private lenders provide between 50-90% of project costs. 502 is a 50/50 match program. The business applicant must provide a 10% downpayment under the 504 program.

Revolving Low Interest Loan Program:

A Redevelopment Agency sponsored loan program should be established to assist the rehabilitation and upgrading of structures, storefronts, awnings and signs. Interest earned would recycle back into new loans for additional storefront revitalization.

Rule 20 Funds (PG&E)

PG&E has indicated that the Downtown is eligible for special funding to underground private utility lines.

California Main Street Program/Rural Development Programs

California Main Street

In 1985, the California Legislature appropriated funds for the start-up of the California Main Street Program, an adoption of the National Trust Program of the same name. The Program is administered by the State Department of Commerce. Five cities a year are selected as demonstration programs. The Main Street Program offers a four point approach to rebuilding the image of a declining downtown. These include: organizing groups within the city to better work together, promotion and advertising of downtown businesses, rehabilitation and design to improve the image of buildings, and economic restructuring to provides the right mix of retail, offices, and housing.

Cities must have a population base of less than 50,000 and be committed to historic preservation of downtown buildings. Lincoln would qualify for this program. Services available from the Main Street Program include consulting with the State Architects Office, assistance in forming a Downtown Association, and business recruitment training.

U.S. Department of Agriculture, Rural Development Administration

The Rural Small Business Enhancement Act of 1990 established an Office of Rural Affairs within the Small Business Administration(SBA) to encourage an equitable distribution of financial assistance to rural areas, compile information on the performance of the rural economy, provide information on government and private programs of assistance to rural areas, and assist with rural tourism development.

This is a new agency with a 1992 budget of $1,000,000,000. The program is intended to assist small towns in agricultural areas. It authorizes $1,000,000 in grants for five States for economic development through small business activity in the tourism industry. This would appear to be a funding source for the proposed Visitors Center.

RECOMMENDED FINANCING PROGRAM:

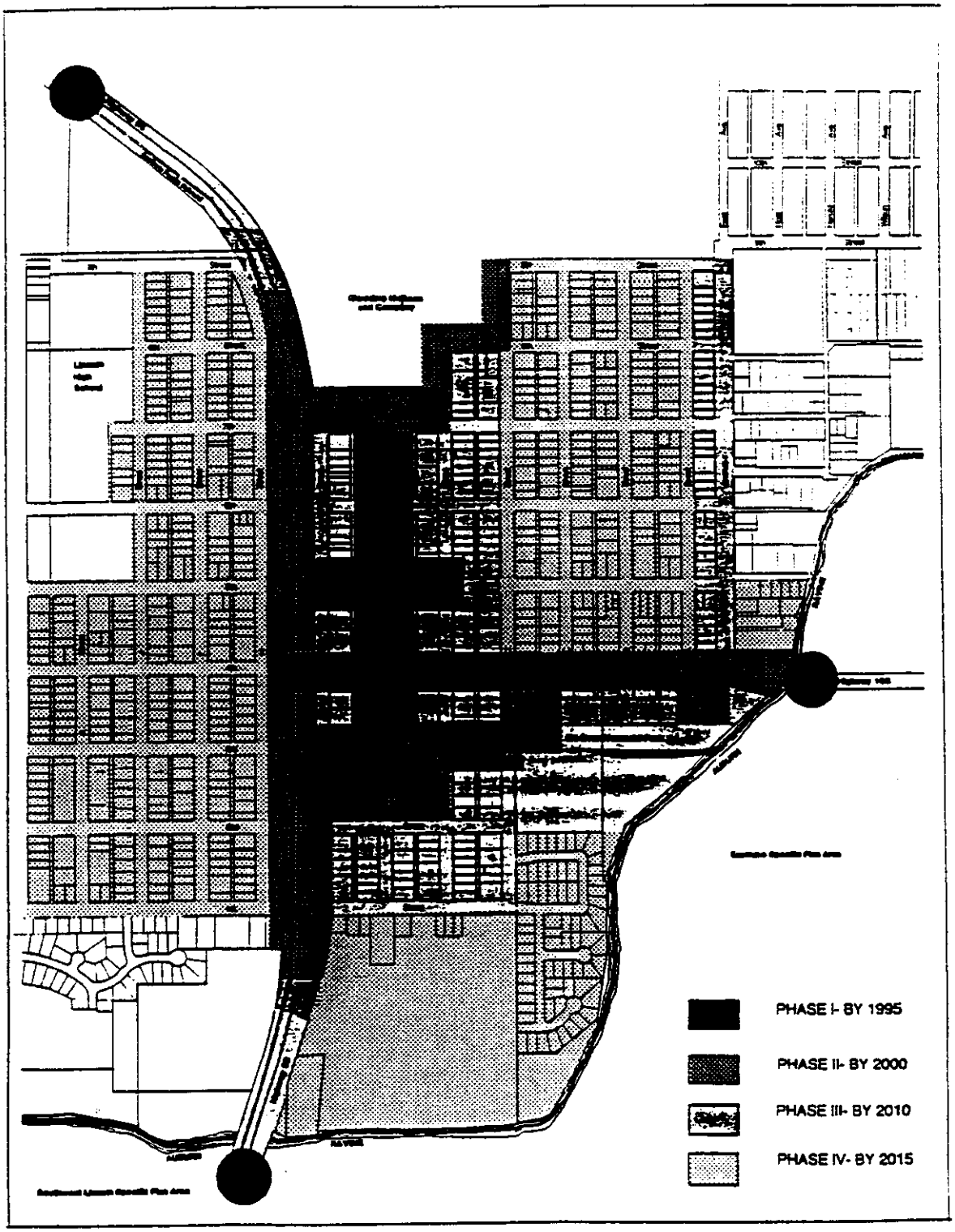
Revitalization Activity:	Cost:	Funding Source:
1. Storefront Rehabilitation	$200,000	CDBG Re-use Program with SBA matching loans by merchant.
2. Street Trees	$ 71,325	Property owner and private donation.
3. District 1 & 2 Tree Grates	$190,000	Agency Bonds
4. Sidewalks/Crosswalk Improvements	$957,360	Agency Tax Increment or Assessment District
5. Street Lights	$269,500	Agency Tax Increment Bonds
6. New Parking Lot and Alley Parking	$490,000	Agency Tax Increment Bonds
7. Landscaping, Mini-parks, and Public Plazas	$425,740	Developer Fees (per Public Facilities Element)
8. Utility Undergrounding	N/A	PG&E Program
9. Street Furniture	$100,000	Agency Bonds
TOTAL PROJECT:	**$2,703,925**	
WITH 20% CONTINGENCY:	**$3,244,710**	

8.3 RECOMMENDED PHASING PROGRAM

The following phasing maps suggests a 20 year, four part, staging program for proposed public improvements.

8.4 PERMIT, DESIGN REVIEW, AND APPLICATION PROCESS

The current design review and permit processing procedures contained in Title 18, of the Lincoln Municipal Code, will be used to carry out the Implementation Program.



RECOMMENDED PHASING PROGRAM

LINCOLN DOWNTOWN URBAN DESIGN PLAN
CITY OF LINCOLN, CALIFORNIA
REDEVELOPMENT AGENCY
RRM DESIGN GROUP

Figure 27

9. Glossary

9. Glossary

A

Anodized • A finishing process in which metal building materials such as aluminum are chemically treated to give them a more wear resistant surface and attractive appearance.

Articulation • The arrangement of exterior building elements which help define a building's character and style.

B

Bulkhead • The base of a building which is often treated with decorative tiles or bricks.

C

Columns • Vertical structural members which may be of wood, masonry, steel,stone, or concrete, and are either free standing or "engaged" (attached to the wall).

Cornice • The topmost horizontal band on a building facade. Usually the cornice is incorporated into the roofline of a building. It usually projects from the base surface and may also act as a string course lower down on the body of a building.

E

Entablature • A term from classical Greek architecture which describes a wide horizontal band at the top of a building which acts as a cap for the building facade. The cornice, frieze, and architrave are all elements of the entablature.

F

Facade • The "face" of a building. The facade describes the exterior walls of a building, e.g. the rear facade.

Frieze • A horizontal band on the building facade on which decorative elements are often hung.

M

Masonry • A type of building construction material which is comprised of individual units or blocks. Brick, terra cotta, stone, and concrete block are all examples of masonry.

Medallions • An ornamental plaque or block on a building, generally under the cornice or near the edges.

O

Ornamentation • Any variety of decorative features used on a building.

Ornamental Window Molding • Decorative trim placed around window openings.

P

Parapet • The parapet is the vertical extension of the exterior wall above the actual roof level on flat roofed buildings. Parapets typically range from 12" to 30" in height.

Pilasters • Pilasters act structurally like columns. They are different only in that they are rectangular or square in shape and project out from the building's walls.

R

Rehabilitation • The least expensive and least intensive stage of building upgrade in which the building is essentially left unchanged. Renovation involves such projects as cleaning, repainting, new signage, and awnings.

Relief • Any architectural element which is raised from the surface upon which it placed.

Remodel • To repair or "fix•up" an existing building. Work done to a historic building without regard to the preservation of the building's historic elements or appearance.

Renovation • A stage of medium intensity building upgrade in which previously altered storefront elements are largely removed and rebuilt. These changes bring the building closer to its original appearance than would a renovation project.

Restoration • This is the most intensive and expensive stage of building upgrade. It involves completely restoring the building to its original, historically accurate condition.

Rhythm • The flow or cadence of repetitive building elements as they are passed from the street.

S

Scale • The relative proportion of elements on a building to surrounding buildings or people.

Setback • A term describing the distance a building must stand from a legal property line. For example, a zero setback means that the building may stand on the site property line.

Spandrels • The areas of exterior wall between windows.

Storefront • A commercial building entry and window display system used extensively in downtown commercial buildings from about 1850 to 1940.

Storey • A building level, e.g. a building with four levels is four storeys high.

Storey Line • A horizontal line on the building facade which is often articulated in masonry or wood to indicate an interior level change.

Streetscape • Beautification of urban public areas with plants, flowers, street furniture, paving materials, street trees, and other physical elements in style or pattern consistent with a urban design.

String Course • A horizontal line on the exterior of a building which is usually indicative of an interior level change (see storey line). Also, the string course acts to break the monotony of a the vertical mass of a larger building.

Structural Bays • A system by which a building is subdivided into smaller areas (such as a grid in plan) so that repetitive structural members such as columns or piers may be used to efficiently carry the building loads down to the foundation.

Surround • The decorative trim or "framing" around a door or window. Surrounds in old buildings are typically of wood or masonry.

T

Terra Cotta • A structural or decorative building material made of fired clay. Terra cotta architectural elements were used extensively on late 19th and early 20th century buildings.

Transom Windows • Windows which are located above the head height of ordinary doors and windows; typically about seven feet from the floor.

V

Valance • The portion of an awning which hangs like a flap over the awning frame bar. An awning valance is typically 12" wide.

10. Technical Appendix

Contents:

1. **Streetscape Opportunities and Constraints**
2. **Preservation Briefs**
3. **Secretary of Interiors "Standards for Rehabilitation"**
4. **California Main Street Program**
5. **Financial Assistance Sources**
6. **Case Studies: Articles on Downtown Revitalizations**

STREETSCAPE OPPORTUNITIES AND CONSTRAINTS

LINCOLN URBAN DESIGN

OPPORTUNITIES AND CONSTRAINTS ANALYSIS
STREETSCAPE

The streetscape in the downtown study area of Lincoln is defined by many elements including trees, buildings, walls, fences, sidewalks, furniture, and the street itself. The relationship between these elements is what determines the degree of success for the streetscape. Some sections of the study area, such as the "F" Street and 5th Street intersections, have evolved with a reasonable level of success. Street trees, benches, tree grates, and on-street parking contribute to a secure and pleasant pedestrian atmosphere.

Much of the study area has at least one "healthy" component of a nice small town streetscape. However, the overall streetscape system will require significant improvements to bring it up to full potential.

The most impressive existing feature of the streetscape is the canopy of large trees, displayed in a deliberate but sporadic pattern. Though the trees are infrequent in many sections of town, they are planted consistently in groups of tightly-spaced cues.

A street tree's most powerful contribution to a small town street scene is its ability to tie together all of the neighborhoods into a single cohesive unit. The trees act as the thread which holds the "fabric" of the town together. In Lincoln, the thread is frayed and even cut off in some cases. If the town started from scratch, they might use one or no more than two trees per street as a theme tree. These trees would be planted approximately 30 to 35 feet apart and eventually form a head-to-head canopy over the streets and sidewalks.

Politically, financially, and practically, this is not likely to be the best solution for the revitalization of the Lincoln streetscape. There are many valuable and beautiful trees that have time (size) on their side, and some residents may object to removing a tree. There are also many stressed and diseased trees that do not contribute any long-term value significantly to the streetscape and should be replaced. Following is a summary of a street tree inventory completed in the downtown study area. The inventory and analysis was conducted by a landscape architect and arborist and includes both technical and aesthetic observations.

Platanus x Acerifolia – The London Plane tree is the dominant species found in the Lincoln streetscape. It is planted heavily in the downtown study area as well as the outlying residential neighborhoods. Many of the trees have been poorly trained by an attempt at pollarding and generally the trees are planted too close together. Supplementing future tree plantings with the newer cultivars 'Yarwood' or 'Bloodgood' will increase disease resistance. The Platanus when not planted under power lines is a very nice street tree for summer and winter.

Fraxinus Velutina Glabra 'Modesto' – There are a large number of Modesto Ash found in the study area. The trees, like the ones planted on the corner of "D" Street and McBean Park Drive, in front of the old brick house, are diseased with mistletoe, 'yellows' or wilt. This tree has poor disease resistance and is being phased out of use throughout the San Joaquin Valley. These dying trees should be removed and replaced by more suitable trees listed on the Street Tree Master Plan in this document.

Ulmus spp. (probably Americana) – The elms in town are beautiful trees in a healthy condition. They provide much needed shade and a good sense of human scale. However, these trees are very susceptible to Dutch Elms disease, and, in fact, are being infested in other Valley communities. Protection of these trees is warranted but replacement with other species would be wise upon their potential decline from Dutch Elms disease or some other cause.

Pecan Carya Illinoiensis – Several homes in the study area have mature and quite large Pecan trees. Some are in need of height reduction by drop crotching (not topping). These trees should be preserved because they are a link to the Valley's past heritage when settlers brought them out from the east. They are probably not readily available, so new trees will not be recommended for planting as a street tree.

Cinnamomum Camphora – A few camphor trees, in very poor shape, are scattered around the downtown area. Verticillum wilt which cannot be easily controlled at this stage is responsible for their declining health. The disease is in the soil and will likely attack new camphor tree plantings. These trees should be removed and replaced with a tree specified on the Master Plan.

Magnolia Grandiflora – The Southern Magnolia is found in a few areas under healthy conditions. The tree survives well under harsh conditions and has merit for this area. As an evergreen tree, it does not perform well as a passive

solar tree in the winter. The Magnolia has been a wonderful street tree in California towns for many years and could be useful on selected streets in Lincoln.

Morus Alba – The fruitless Mulberry found on 5th Street, adjacent to the high school track and within the study area, is a tough tree for the hot summers and cold winters of Lincoln. This tree is fast growing but it has invasive root problems and requires regular and proper pruning. It may require too much maintenance to include as a downtown street tree.

Acer Saccharinum – The Silver Maple is represented on a sporadic basis. Though it is a large and beautiful tree, it is also well known for its ability to lift curbs and sidewalks.

Quereus Suber – The Cork Oak is found in a few places downtown. It is a tree with excellent adaptability to the Lincoln environment. It has a very nice scale for a street tree and provides an interesting texture with its spongy bark. One possible detracting feature is the slow growth rate and evergreen canopy during the winter.

Lagerstroemia Indica – Crape Myrtles, like those found on "F" Street, across from the Carnegie Library, are a good selection for a small scale downtown tree. The existing trees are doing quite well with the exception of the first stages of girdling which has begun. This can be mitigated by simply removing the tree ties. This tree is a candidate for wider use in future plantings.

Pistacia Chinensis – The tree selected for use in the old downtown, the Chinese Pistache, is a beautiful and colorful deciduous tree. This tree grows to be very large and is quite messy with fruit and leaf drop. Considering the current status of the tree downtown, it merits becoming one of the backbone street trees.

Liquidambar Styraciflua – A few sweet gum trees were found in the study area and some groupings were located on the fringes of the downtown area. This tree can be a successful street tree when its vertical qualities and fall color can be appreciated. Some people may consider this tree to be messy. Many people consider its brightly colored leaves on the ground to be a picturesque trait.

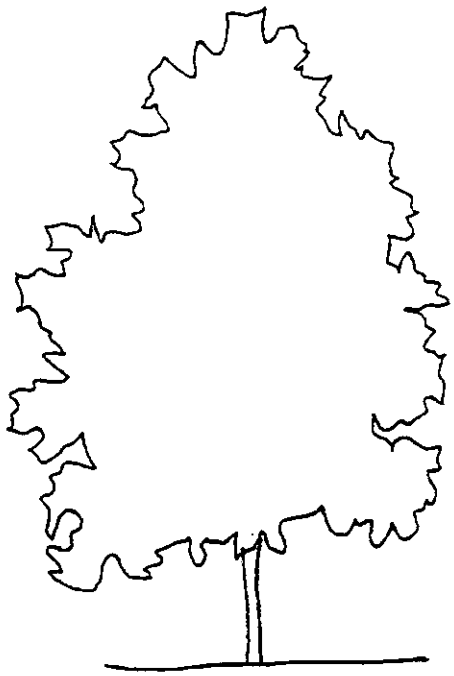
Many other trees are being used successfully as private landscape specimens or park trees. The primary opportunity lies in the City implementing a street tree program that removes undesirable trees and replaces them with species called out on the Street Tree Master Plan. Over time the street trees can develop a continuous canopy and become an asset to the community.

Street Furniture

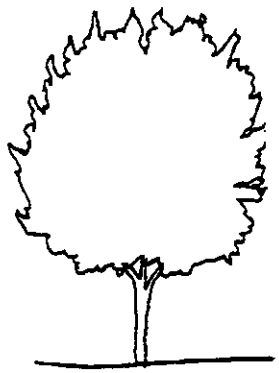
Street furniture helps to create the theme or character of the streetscape. Through buildings' materials, size, shape, color, and location, these elements need to have some commonality with each other. Streetscape furniture or elements which currently exist in the downtown study area include:

1. Walls
2. Fences
3. Mail boxes
4. Trash receptacles
5. Planters
6. Street lights
7. Signs
8. Fire alarm boxes
9. Tree grate
10. Benches

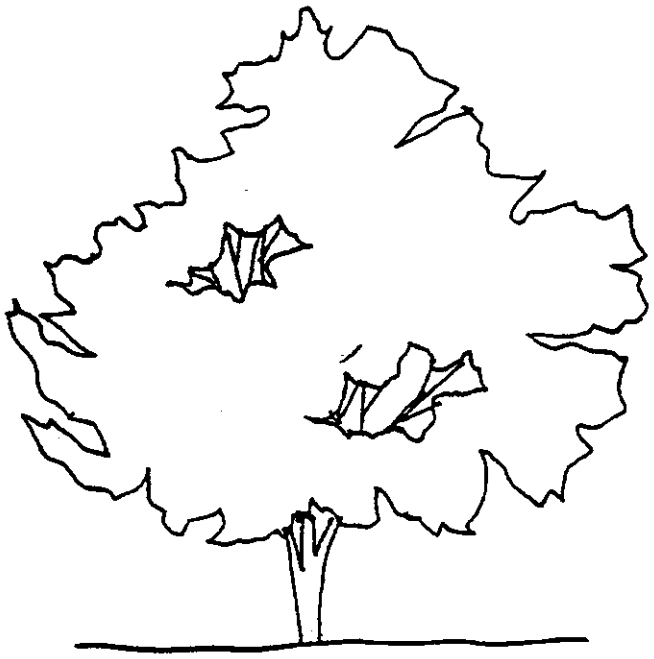
Some of these, such as the light poles, fire alarm, and mail boxes have a period of time in common and they fit into the architectural character of downtown. The tree grates have connection to individual people, though the materials may not be the safest or best selection for paving areas. Much of the street furniture, like the trash receptacles, does not contribute to a positive pedestrian atmosphere. A palette or selection of appropriate street furniture needs to be available for future development of downtown improvements. The materials list from the new Bierman Plaza will be the starting point.



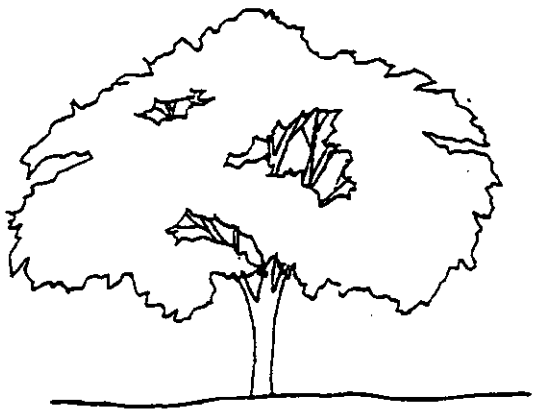
LIRIODENDRON TULIPFERA



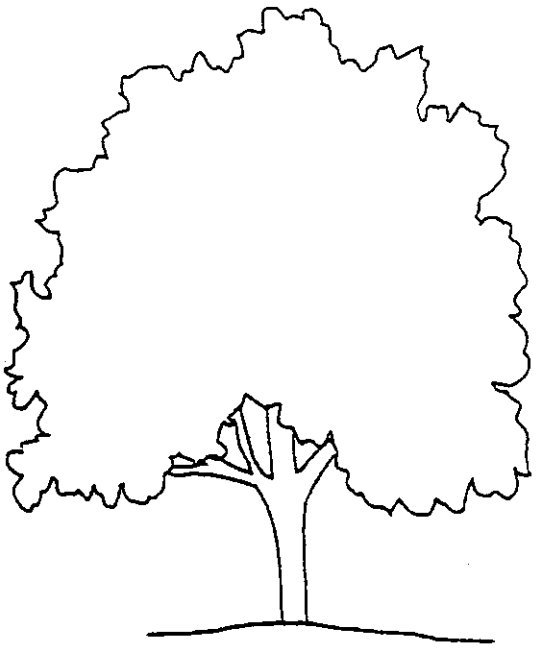
PYRUS CALLERYANA



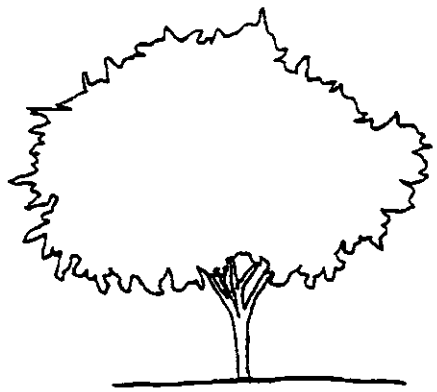
PLATANUS ACERIFOLIUS



PISTACIA CHINENSIS

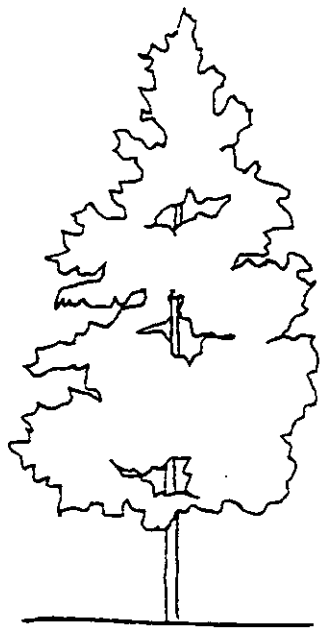


JUGLANS HINDSII



KOELREUTERIA PANICULATA

ULMUS PARVIFOLIA



LIQUIDAMBAR STYRACIFLUA

E. Wesley Conner, ASLA
Landscape Architect
Lic. #1272

MEMORANDUM **AUGUST 18, 1991**

TO: Jeff Ferber, ASLA
From: Wes Conner, ASLA
Subject: Trees in Lincoln, CA

As promised, I drove through Lincoln to inspect the trees on streets we had discussed, and found your identifications all correct But to refresh our discussion, I'll detail the trees observed, then mention some that were observed but not discussed. Finally I'll give a list of trees which could be used, species of which I observed somewhere in town.

✓ There are a large number of Modesto ash, *Fraxinus velutina glabra 'Modesto'*, all of which are mature, diseased with mistletoe, 'yellows', or wilt. This species is being phased out of use throughout the San Joaquin and Sacramento valleys due to their poor resistance to disease, and their high maintenance cost caused by weak, narrow angled branching which results in limb breakage. My recommendation is to remove them over a period of time, and replace with a more favorable species - see below for suggestions.

✓ The elms, *Ulmus spp. (probably americana)* all seem to be healthy in spite of the incedence of Dutch Elm Disease in other communities in the valley. They are of good scale for most locations where planted, and provide much needed shade. However, it might be well to suggest a species for replanting in case DED should wipe out this one.

✓ There are a fair number of large and mature Pecan *Carya illinoiensis*, which are in good condition and serving thier purpose well. Some are in need of height reduction by drop-crotching, or crown reduction (not topping), a method recommended in the Pruning Standards of International Society of Arboriculture. I recommend this be done to avoid unnecessary breakage.

✓ Probably the most dominant species in town is the London plane tree, *Platanus x acerifolia* , which are, as might be expected, poorly trained by an attempt at pollarding. I do not recommend this method of pruning except in restricted-space locations, such as downtown. All others should be allowed to grow more naturally, with some crown reduction when they reach mature size. These might be supplemented with the newer cultivars 'Yarwood' or 'Bloodgood which are superior in their disease resistance.

✓ There are a small number of Camphor trees *Cinnamomum camphora*. which are in poor shape - they are diseased with verticillium wilt. This disease eventually kills the species under these conditions, and cannot be effectively controlled. I recommend their replacement

✓ *Magnolia grandifolia*, Southern magnolia, a species which has merit for this region and could be effective if increased in numbers. However, it is evergreen, and its location would have to carefully selected in relation to winter shade production.

✓ *Morus alba cv's.*,Fruitless mulberry is a valid tree for selected locations in this requires regular and proper pruning, something the city maintenance staff may wish to avoid.

✓ *Acer saccharinum*, Silver maple is represented in several, sporadic locations. It is not a well recommended tree because of its well known weak branches and sidewalk and curb-lifting ability.

✓ *Quercus suber*, Cork oak has excellent adability to this environment. It has good scale, is slow growing, needing little maintenance, and provides an interesting texture with the bark. However, it too is evergreen, and would have to located carefully.

I observed several other species which should be mentioned, but which have little merit for our purposes. They include:
Catalpa bignonioides, Common Caltalpa
Melia azaderach umbraculiforma, Texas umbrella tree
Juglans regia, English walnut
Crataegus laevigata, English hawthorn

Here is a list of species which might be considered as replacement for, or in addition to the above:

✓ *Lagerstroemia indica*, Crepe myrtle, a good selection for small scale spaces, i.e. downtown. There are many cvs. which have a wide range of colors. I recommend those which have Indian Tribe names, such as *'Cherokee'*, *'Potomac'*, and *'Seminole'*.

Pyrus calleryana, Ornamental pear; a good medium scale tree with strong branches, the original cvs. such as *'Bradford'* had horizontal branches, later cvs. such as *'Aristocrat'*, *'Capital'*, *"Whitehouse'*, and *'Redspire'* all have vertical or columnar branching habits; *'Trinity'* has a round head. All are readily available and are in widespread use throughout the valley. There are several specimens already in use in Lincoln.

Gleditsia triacanthos, Honeylocust, but only cvs. *'Skyline'*, *Shademaster'* and .they do very well in this climate, provide filtered shade, and have fine texture. I recommend they be planted with root controls adjacent to sidewalks and curbs.

Fraxinus oxycarpa 'Raywood', Raywood or Claret ash is a compact, round headed tree, has purple-red fall color, with fine-textured green lacy look in spring and summer.

Pistache – Very large, messy

LA. *Anacardiaceae.* PISTACHE. Deciduous or semievergreen trees. Divided leaves. Flowers not showy. Female trees bear several years if male tree is by. Of species described, only P. vera has edible fruit (nuts). Others are ornamentals.

Verticillium wilt (see page 109) may strike these trees. Minimize susceptibility by planting in well-drained soil, watering deeply occasionally.

Pistacia chinensis

P. chinensis. CHINESE PISTACHE. Deciduous. Zones 4–16, 18–23; best in Zones 4–7. Moderate growth to 60 ft. tall, 50 ft. wide. Young trees often gawky and lopsided, but older trees become rounded, shapely with reasonable care. Leaves with 10–16 paired leaflets, 2–3 in. long by ¾ in. wide. Foliage colors beautifully in fall: crimson, orange, sometimes yellow tones. Only tree to color scarlet in desert. Fruit on female trees bright red, turning blue. Not fussy as to soil or water; accepts moderately alkaline soil. Needs lawn watering (though verticillium wilt is a danger), other watering at all (this only in deep soils). Resistant to oak root fungus. Stake young trees and prune for first few years to have head high enough to walk under. Reliable tree for street planting, patio or garden corner planting.

...dii. CALIFORNIA BLACK WALNUT. Zones 5–9, 14–20. Native scattered localities in northern California. To 30–60 ft. tall, with sturdy trunk and broad crown. Leaves have 15–19 leaflets, each 2–3 in. long. Widely used as rootstock for English walnut in California. Tree is drought tolerant and resistant to oak root fungus.

KOELREUTERIA. *Sapindaceae.* Deciduous trees. Small yellow flowers in large, loose clusters in summer. Colorful fruits are fat, papery capsules which seem to resemble the lanterns of little Japanese lanterns; used in dried arrangements.

Koelreuteria paniculata

K. paniculata. GOLDENRAIN TREE. Zones 2–21. Slow to moderate growth to 20–35 ft. with 10–40-ft. spread. Open branching, giving light shade. Leaves to 15 in. long, with 7–15 toothed or lobed leaflets, each 1–3 in. long. Flower clusters in summer, 8–14 in. long. Fruit buff to brown in fall, hanging late. Takes cold, heat, light, wind, alkaline soil; needs regular watering when young. Prune to shape; can be gawky without pruning. Valuable as street, lawn, or terrace tree in difficult soils and climates. The variety 'Fastigiata' is erect and narrow—3 ft. wide by 25 ft. tall.

L. styraciflua. AMERICAN SWEET GUM. Zones 1–11, 14–24. Grow to 60 ft. (much taller in its native eastern U.S.). Narrow and erect in youth, with lower limbs eventually spreading to 20–25 ft. Tolerates damp soil; resistant to oak root fungus. Good all-year tree. In winter, branching pattern, furrowed bark, corky wings on twigs, and hanging fruit give interest; in spring and summer, leaves (5–7 lobed, 3–7 in. wide) are deep green; in fall, leaves turn purple, yellow, or red. Even seedling trees give good color (which may vary somewhat from year to year), but for uniformity, match trees while they are in fall color or buy budded trees of a named variety, such as the following:

'Burgundy'. Leaves turn deep purple red, hang late into winter or even early spring if storms are not heavy.

'Festival'. Narrow, columnar. Light green foliage turns to yellow, peach, pink, orange, and red.

'Palo Alto'. Turns orange red to bright red in fall.

Liquidambar styraciflua

U. parvifolia (often sold as *U. p.* 'Sempervirens'). CHINESE ELM, CHINESE EVERGREEN ELM. Zones 8, 9, 12–24. Evergreen or deciduous according to winter temperatures and tree's individual heredity. So-called evergreen elm usually sold as 'Sempervirens'; this may be evergreen most winters, lose its leaves in unusual cold snap (new leaves come on fast). Very fast growth to 40–60 ft., with 50–70-ft. spread. Often reaches 30 ft. in 5 years. Extremely variable in form, but generally spreading, with long, arching, eventually weeping branchlets. Trunks of older trees have bark which sheds in patches somewhat like sycamore. Leaves leathery, ¾–2½ in. long, ½–1½ in. wide, oval, evenly toothed. Round fruit forms in fall while leaves are still on tree.

Stake young trees until trunks can carry weight of branches. Stake and head leading shoot higher than other shade trees to compensate for weeping. Rub or cut out small branches along trunk for first few years. Shorten overlong branches or strongly weeping branches to strengthen tree scaffolding. Older trees may need thinning to lessen chance of storm damage. Very little bothered by pests or diseases except Texas root rot in desert.

Good for patio shade in milder portions of West. Useful for sun screening. With careful pruning, useful as a street tree.

Varieties are 'Brea', with larger leaves, more upright habit; and 'Drake', with small leaves, weeping habit. Both are more or less evergreen. 'True Green' has small deep green leaves, is round headed, more evergreen than others.

Word of caution: Siberian elm (*U. pumila*) is sometimes sold as Chinese elm. Siberian elm flowers in spring, has stiffer habit and thinner, less glossy leaves.

LIRIODENDRON tulipifera. *Magnoliaceae.* TULIP TREE. Deciduous tree. Zones 1–12, 14–23. Native to eastern U.S. Fast growth to 60–80 ft., with eventual spread to 40 ft. Straight columnar trunk, with spreading, rising branches that form tall pyramidal crown. Lyre-shaped leaves, 5–6 in. long and wide, turn from bright yellow green to bright yellow (or yellow and brown) in fall. Tulip-shaped flowers in late spring are 2 in. wide, greenish yellow, orange at base. Handsome at close range, they are not showy on the tree, being high up and well-concealed by leaves. They are not usually produced until tree is 10–12 years old.

Liriodendron tulipifera

Give this tree room; deep, rich, well-drained neutral or slightly acid soil; and plenty of summer water. Best where constant wind from one direction won't strike it. Control scale insects and aphids as necessary. Not bothered by oak root fungus.

Good large shade, lawn, or roadside tree. One of the best deciduous trees for southern California: it turns yellow there most autumns. Spreading root system makes it hard to garden under.

TE ZONES. PAGES 33–55

A. karataviense. TURKESTAN A… clusters in May, varying in colo… lilac. Broad, flat, recurving leavi…

A. moly. GOLDEN GARLIC. B… open clusters on 9–18-in.-tall stems; June bloom. … wide, almost as long as flower stems.

A. narcissiflorum. Foot-tall stems with loose clusters of ½-in., bell-shaped bright rose flowers, May or June.

A. neapolitanum. Spreading clusters of large white flowers on 1-ft. stems bloom in May. Leaves 1 in. wide. Variety 'Grandiflorum' is larger, blooms earlier. A form of 'Grandiflorum' listed as 'Cowanii' is considered superior. Grown commercially as cut flowers; pot plant in cold climates.

A. ostrowskianum (*A. oreophilum ostrowskianum*). Large, loose clusters of rose-colored flowers in June on 8–12-in. stems; 2–3 narrow, gray green leaves. Variety 'Zwanenburg' has deep carmine red flowers, 6-in. stems. Rock gardens, cutting.

A. porrum. See Leek.

A. pulchellum. See *A. carinatum pulchellum*.

A. rosenbachianum. Similar to *A. giganteum* but slightly smaller; blooms earlier.

A. sativum. See Garlic.

A. schoenoprasum. See Chives.

A. scorodoprasum. See Garlic.

A. sphaerocephalum. DRUMSTICKS, ROUND-HEADED GARLIC. Tight, dense, spherical red purple flower clusters on 2-ft. stems, May or June. Spreads freely.

A. tuberosum. CHINESE CHIVES, GARLIC CHIVES, ORIENTAL GARLIC. Spreads by tuberous rootstocks and by seeds. Clumps of gray green, flat leaves ¼ in. wide, 1 ft. or less long. Abundance of 1–1½ ft.-tall stalks bear clusters of white flowers in summer. Flowers have scent of violets, are excellent for fresh or dry arrangements. Leaves have mild garlic flavor, are useful in salads, cooked dishes. Grow like chives. Dormant in winter.

A. unifolium. California native with extremely handsome, satiny, lavender pink flowers on 1–2-ft. stems; June bloom.

ALLOPLECTUS nummularia (*Hypocyrta nummularia*). *Gesneriaceae*. GOLDFISH PLANT. Related to African violet, with similar cultural needs. Foot-long, arching branches closely set with shiny oval or roundish leaves to 2¼ in. long. Flowers about 1 in. long, orange, puffy and roundish, pinched at tip into pursed mouth like that of goldfish.

With ample warmth and humidity, this plant will bloom the year around. Easy to root from tip cuttings; stems may root when in contact with damp soil mix. Because of arching, trailing growth, best in hanging pot.

Alloplectus nummularia

ALLSPICE, CAROLINA. See *Calycanthus floridus*.

ALMOND. *Rosaceae*. Deciduous tree. For ornamental relatives, see *Prunus*. Zones 8–10, 12, 14–16, 19–21. As trees, almonds are nearly as hardy as peaches, but as nut producers they are more exacting in climate adaptation. Zones listed are for best nut production. Frost during the trees' early blooming period cuts the crop, and if they escape that a late (April) frost will destroy small fruits that are forming. Nuts will not develop properly in areas with cool summers and high humidity. To experiment in areas where frost is a hazard, choose late-blooming varieties.

Tree grows to 20–30 ft. high, erect when … white. Fruit looks like …each. The hull splits to … harvest.

…is stage, you may need …ound. Remove leathery hull and spread hulled nuts in sun for day or two to dry. To test for adequate dryness, shake nuts—kernels should rattle in shells. Store dried nuts indoors.

Almonds do well in any type of soil except heavy, poorly drained soil, where they are subject to root rot. Need deep soil—at least 6 ft. Will exist on less water than most fruit trees. Water deeply but infrequently. Almonds need spraying to control mites, which cause premature yellowing and falling of leaves and may also cause weakening or eventual death. Brown rot makes fruit rot and harden; it also attacks twigs, killing them back and forming cankers on main trunk and branches.

Unless you choose a self-fertile strain, 2 varieties must be planted for pollination. (If you don't have room, plant 2 or 3 in one hole.) These are the varieties you may find in nurseries:

'All-in-One'. Semidwarf tree blooms with 'Texas' and 'Nonpareil'. Medium to large sweet, soft-shell nuts, September–October. Self-fertile.

'Carmel'. A regular heavy bearer of small nuts with good flavor. Pollinates 'Nonpareil' and 'Texas'.

'Garden Prince'. Dwarf tree with showy pink bloom, medium-sized soft-shell nuts. Self-fertile.

'Hall' ('Hall's Hardy'). Hard-shell nut of good size and quality. Pink bloom comes late—an advantage in late frost regions. Tree is as hardy as a peach. Partially self-fertile, but better with 'Jordanolo' or 'Texas' as pollinators.

'Jordanolo'. High-quality nut, but subject to bud failure in areas of extreme summer heat. 'Ne Plus Ultra' and 'Nonpareil' are pollinators.

'Kapareil'. Small, soft-shell nuts. Pollinator for 'Nonpareil'.

'Ne Plus Ultra'. Large kernels in attractive soft shells. Pollinator for 'Nonpareil'.

'Nonpareil'. Best all-around variety. Easily shelled by hand. Some bud failure in very-hot-summer regions. Pollinate with 'Jordanolo', 'Ne Plus Ultra', 'Kapareil'.

'Texas' ('Mission'). Small, semihard-shell nut. Regular, heavy producer. Late bloomer, one of safest for cold-winter, late frost areas. Use 'Nonpareil' or 'Hall' as pollinators.

ALMOND, FLOWERING. See *Prunus*.

ALNUS. *Betulaceae*. ALDER. Deciduous tree. Moisture loving; of remarkably rapid growth. All give interesting display of tassel-like, greenish yellow male flower catkins (in clusters) before leaves. Female flowers develop into small woody cones that decorate bare branches in winter; these delight flower arrangers. Seeds attract birds. Roots are invasive—less troublesome if deep watering practices are followed.

Alnus rhombifolia

A. cordata. ITALIAN ALDER. Zones 8, 9, 14–24. Native to Italy, Corsica. Young growth vertical; older trees to 40 ft., spreading to 25 ft. Heart-shaped, 4-in. leaves, glossy rich green above, paler beneath. Short deciduous period. More restrained than *A. rhombifolia*. Favored in Southwest, except high desert.

A. glutinosa. BLACK ALDER. Zones 1–10, 14–24. Native to Europe, North Africa, Asia. Not as fast growing as *A. rhombifolia*. Probably best as multistemmed tree. Grows to 70 ft. Roundish, 2–4-in., coarsely toothed leaves, dark lustrous green. Makes dense mass from ground up. Good for screen.

A. oregona (*A. rubra*). RED ALDER. Zones 4–6, 15–17. Native to streambanks and marshy places. Most common alder of lowlands …from Alaska south to Santa Cruz

ADD A NOTE TO USE ROOT BARRIER IN NARROW PLANTING STRIPS

A

...y, California; rarely found more than 10 miles from coast in ...fornia. Grows to 90 ft. high, but usually 45–50 ft. Attractive ...nooth, light gray bark. Dark green, 2–4-in. leaves, rust colored ...iry beneath; coarsely toothed margins are rolled under. Can ...urprising amount of brackish water and is useful wherever ...ground water is somewhat saline. Generally disliked in ...orthwest because it's a favorite of tent caterpillars.

A. rhombifolia. WHITE ALDER. Zones 1–9, 14–21. Native along ...s throughout most of California's foothills except along ...mountains of Oregon, Washington, north to British Colum... east to Idaho. Very fast growing to 50–90 ft., with 40-ft. spread. ...ry tolerant of heat and wind. Spreading or ascending branches ...pendulous at tips. Coarsely toothed. 2½–4½-in. leaves dark ...above, paler green beneath. In its native areas, it's susceptible ...tent caterpillars.

A. tenuifolia. MOUNTAIN ALDER, THINLEAF ALDER. Zones 1–3, 10. ...ub or small tree to 20–25 ft. Extremely hardy to cold.

...CASIA. *Araceae*. ELEPHANT'S EAR. Perennials. Outdoors in Zones 22–24; indoor/outdoor plants anywhere. Native to tropical ... Handsome, lush plants for tropical ... Flowers like those of calla (*Zantedeschia*). Plant in filtered sunlight, in wind-protected places. Provide ample organic matter ... lots of water and light, frequent feeding. Tropical plant specialists sell many kinds ... leaves in coppery and purplish tones, ...ten with striking white veins.

Alocasia macrorrhiza

A. amazonica. AFRICAN MASK. House plant. ...ry, deep bronzy green leaves to 16 in. ...have wavy edges, heavy white main ...ins.

A. macrorrhiza. Evergreen at 29°F.; loses leaves at lower temper... but comes back in spring if frosts not too severe. Large, ...-shaped leaves to 2 ft. or longer, on stalks to 5 ft. tall, form a ...e-shaped plant 4 ft. across. Tiny flowers on spike surrounded ...greenish white bract. Flowers followed by reddish fruit, giving ...the look of corn on the cob.

...odora. Similar to above, but not quite as hardy. Flowers ...ant.

... *Liliaceae*. Succulents. Zones 8, 9, 12–... ...oes range from 6-inch miniatures to ...s; all form clumps of fleshy, pointed leaves ...d bear branched or unbranched clusters ...nge, yellow, cream, or red flowers. ...re South African. Showy, easy to grow, ...drought tolerant, they rate among ...uthern California's most valuable ornamentals. Most kinds make outstanding container plants. Some species in bloom every ...h; biggest show February–September. Leaves may be green ...gray green, often strikingly banded or streaked with contrasting ...lors. Aloes grow easily in well-drained soil in reasonably frost-free areas. Sun or light shade in hot-summer areas. Where winters ...colder, grow in pots and shelter from frosts. Aloes listed here ...only a few of the many kinds.

Aloe arborescens

A. arborescens. TREE ALOE. Older clumps may reach 18 ft. ...Branching stems carry big clumps of gray green, spiny-edged ... Flowers (December–February) in long, spiky clusters, bright ...vermilion to clear yellow. Withstands drought, sun, salt spray. ...Tolerates shade. Foliage damaged at 29°F., but plants have survived 17°F.

A. aristata. Dwarf species for pots, edging, ground covers. ...Rosettes 8–12 in. tall and wide. Rosettes densely packed with 4-... long, ¾-in.-wide leaves ending in whiplike threads. Flowers ...orange red in 1–1½-ft.-tall clusters, winter.

A. bainesii. Slow-growing tree with heavy, forking trunk and ...ches. Rosettes of 2–3-ft. leaves, spikes of rose pink flowers on 1½–2-ft. stalks. Used for stately, sculpturesque pattern in landscape. Hard to find in nurseries.

A. barbadensis. See *A. vera*.

A. brevifolia. Low clumps of blunt, thick, gray green, spiny-edged leaves 3 in. long. Clusters of red flowers, 20 in. tall, intermittent all year.

A. ciliaris. Climbing, sprawling, with pencil-thick stems to 10 ft. long. Leaves small, thick, soft green. Long-stalked, 3–6-in. flower clusters with 20–30 green- or yellow-tipped scarlet flowers, intermittent all year. Takes some shade, little frost.

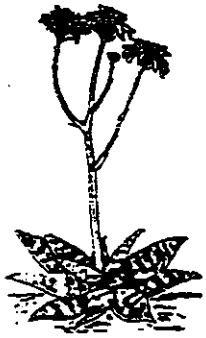
A. distans. JEWELED ALOE. Running, rooting, branching stems make clumps of 6-in., fleshy, blue green leaves with scattered whitish spots and white teeth along edges. Forked flower stems 1½–2 ft. tall carry clusters of red flowers.

A. marlothii. When small, use in pots or dish gardens. When mature, a tree type with 2½-ft.-long, spiny leaves and red flowers in large candelabra.

A. nobilis. Dark green leaves edged with small hooked teeth grow in rosettes to 1 ft. across and about as tall. Clustered orange red flowers appear on 2-ft. stalks in June, last for 6 weeks. Good container subject ... takes limited root space.

A. plicatilis. Slow growing, with thick, forking trunks crowned with fans (not rosettes) of smooth, gray green, foot-long leaves. Clusters of scarlet flowers 1½ ft. tall. Sculpturesque container plant when young; reaches 3–5 ft. in 10 years.

A. saponaria. Short-stemmed, broad clumps. Broad, thick, 8-in.-long leaves variegated with white spots. Clumps spread rapidly and may become bound together—take up too-thick clumps and separate them. Branched flower stalk 1½–2½ ft. tall. Orange red to shrimp pink flowers over long period.



Aloe saponaria

A. striata. CORAL ALOE. Leaves broad, 20 in. long, spineless, gray green, with narrow pinkish red edge. They grow in rosettes 2 ft. wide on short trunk. Brilliant coral pink to orange flowers in branched clusters. February–May. Handsome, tailored plant. Keep it from hottest sun in desert areas.

A. variegata. PARTRIDGE-BREAST ALOE, TIGER ALOE. Foot-high, triangular rosette of fleshy, trianguiar, dark green, 5-in.-long leaves strikingly banded and edged with white. Loose flower clusters of pink to dull red flowers, intermittent all year.

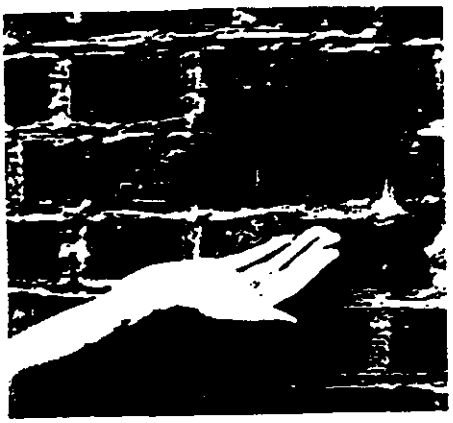
A. vera (*A. barbadensis*). MEDICINAL ALOE, BARBADOS ALOE. Clustering rosettes of narrow, fleshy, stiffly upright leaves 1–2 ft. long. Yellow flowers in dense spike atop 3-ft. stalk. Favorite folk medicine plant used to treat burns, bites, inflammation, and a host of other ills. One of best for Zones 12, 13. Survives without extra water, but needs some to look good.

ALOYSIA triphylla (*Lippia citriodora*). *Verbenaceae*. LEMON VERBENA. Deciduous or partially evergreen herb-shrub. Zones 9, 10, 14–24. Borderline hardy as far north as Seattle if planted against warm wall. Legginess is the natural state of this plant; it's the herb that grew like a gangling shrub in grandmother's garden. Prized for its lemon-scented leaves. Used in potpourri, iced drinks; leaf put in bottom of jar when making apple jelly. Grows to 6 ft. or taller; narrow leaves to 3 in. long are arranged in whorls of 3 or 4 along branches. Bears open clusters of very small lilac or whitish flowers in summer. By pinch-pruning, you can shape to give interesting tracery against wall. Or let it grow among lower plants to hide its legginess. Give full sun, good drainage, average water.

Aloysia triphylla

"PRESERVATION BRIEFS"

6 PRESERVATION BRIEFS



Dangers of Abrasive Cleaning to Historic Buildings

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"The surface cleaning of structures shall be undertaken with the gentlest means possible. Sandblasting and other cleaning methods that will damage the historic building materials shall not be undertaken."—The Secretary of the Interior's "Standards for Historic Preservation Projects."

Abrasive cleaning methods are responsible for causing a great deal of damage to historic building materials. To prevent indiscriminate use of these potentially harmful techniques, this brief has been prepared to explain abrasive cleaning methods, how they can be physically and aesthetically destructive to historic building materials, and why they generally are not acceptable preservation treatments for historic structures. There are alternative, less harsh means of cleaning and removing paint and stains from historic buildings. However, careful testing should preceed general cleaning to assure that the method selected will not have an adverse effect on the building materials. A historic building is irreplaceable, and should be cleaned using only the "gentlest means possible" to best preserve it.

What is Abrasive Cleaning?

Abrasive cleaning methods include all techniques that physically abrade the building surface to remove soils, discolorations or coatings. Such techniques involve the use of certain *materials* which impact or abrade the surface under pressure, or abrasive *tools and equipment*. Sand, because it is readily available, is probably the most commonly used type of grit material. However, any of the following materials may be substituted for sand, and all can be classified as abrasive substances: ground slag or volcanic ash, crushed (pulverized) walnut or almond shells, rice husks, ground corncobs, ground coconut shells, crushed eggshells, silica flour, synthetic particles, glass beads and micro-balloons. Even *water* under pressure can be an abrasive substance. Tools and equipment that are abrasive to historic building materials include wire brushes, rotary wheels, power sanding disks and belt sanders.

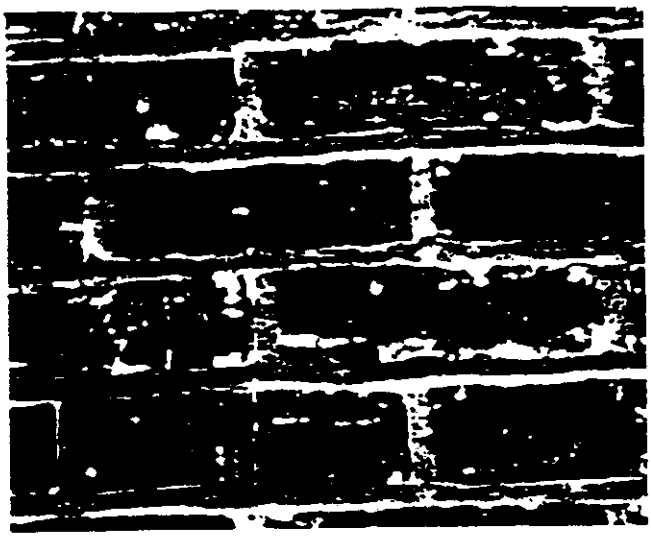
The use of water in combination with grit may also be classified as an abrasive cleaning method. Depending on the manner in which it is applied, water *may* soften the impact of the grit, but water that is too highly pressurized can be very abrasive. There are basically two different methods which can be referred to as "wet grit," and it is important to differentiate between the two. One technique involves the addition of a stream of water to a regular sandblasting nozzle. This is done primarily to cut down dust, and has very little, if any, effect on reducing the aggressiveness, or cutting action of the grit particles. With the second technique, a very small amount of grit is added to a pressurized water stream. This method may be controlled by regulating the amount of grit fed into the water stream, as well as the pressure of the water.

Why Are Abrasive Cleaning Methods Used?

Usually, an abrasive cleaning method is selected as an expeditious means of quickly removing years of dirt accumulation, unsightly stains, or deteriorating building fabric or finishes, such as stucco or paint. The fact that sandblasting is one of the best known and most readily available building cleaning treatments is probably the major reason for its frequent use.

Many mid-19th century brick buildings were painted immediately or soon after completion to protect poor quality brick or to imitate another material, such as stone. Sometimes brick buildings were painted in an effort to produce what was considered a more harmonious relationship between a building and its natural surroundings. By the 1870s, brick buildings

Abrasively Cleaned vs. Untouched Brick. *Two brick rowhouses with a common façade provide an excellent point of comparison when only one of the houses has been sandblasted. It is clear that abrasive blasting, by removing the outer surface, has left the brickwork on the left rough and pitted, while that on the right still exhibits an undamaged and relatively smooth surface. Note that the abrasive cleaning has also removed a considerable portion of the mortar from the joints of the brick on the left side, which will require repointing.*



Abrading the Surface without Removing the Paint. *Even though the entire outer surface layer of the brick has been sandblasted off, spots of paint still cling to the masonry. Sandblasting or other similarly abrasive methods are not always a successful means of removing paint.*

were often left unpainted as mechanization in the brick industry brought a cheaper pressed brick and fashion decreed a sudden preference for dark colors. However, it was still customary to paint brick of poorer quality for the additional protection the paint afforded.

It is a common 20th-century misconception that all historic masonry buildings were initially unpainted. If the intent of a modern restoration is to return a building to its original appearance, removal of the paint not only may be historically inaccurate, but also harmful. Many older buildings were painted or stuccoed at some point to correct recurring maintenance problems caused by faulty construction techniques, to hide alterations, or in an attempt to solve moisture problems. If this is the case, removal of paint or stucco may cause these problems to reoccur.

Another reason for paint removal, particularly in rehabilitation projects, is to give the building a "new image" in response to contemporary design trends and to attract investors or tenants. Thus, it is necessary to consider the purpose of the intended cleaning. While it is clearly important to remove unsightly stains, heavy encrustations of dirt, peeling paint or other surface coatings, it may not be equally desirable to remove paint from a building which originally was painted. Many historic buildings which show only a slight amount of soil or discoloration are much better left as they are. A thin layer of soil is more often protective of the building fabric than it is harmful, and seldom detracts from the building's architectural and/or historic character. Too thorough cleaning of a historic building may not only sacrifice some of the building's character, but also, misguided cleaning efforts can cause a great deal of damage to historic building fabric. Unless there are stains, graffiti or dirt and pollution deposits which are destroying the building fabric, it is generally preferable to do as little cleaning as possible, or to repaint where necessary. It is important to remember that a historic building does not have to look as if it were newly constructed to be an attractive or successful restoration or rehabilitation project. For a more thorough explanation of the philosophy of cleaning historic buildings see Preservation Briefs: No. 1 "The Cleaning and Waterproof Coating of Masonry Buildings," by Robert C. Mack, AIA.

Problems of Abrasive Cleaning

The crux of the problem is that abrasive cleaning is just that—abrasive. An abrasively cleaned historic structure may be physically as well as aesthetically damaged. Abrasive methods "clean" by eroding dirt or paint, but at the same time they also tend to erode the surface of the building material. In this way, abrasive cleaning is destructive and causes irreversible harm to the historic building fabric. If the fabric is brick, abrasive methods remove the hard, outer protective surface, and therefore make the brick more susceptible to rapid weathering and deterioration. Grit blasting may also increase the water permeability of a brick wall. The impact of the grit particles tends to erode the bond between the mortar and the brick, leaving cracks or enlarging existing cracks where water can enter. Some types of stone develop a protective patina or "quarry crust" parallel to the worked surface (created by the movement of moisture towards the outer edge), which also may be damaged by abrasive cleaning. The rate at which the material subsequently weathers depends on the quality of the inner surface that is exposed.

Abrasive cleaning can destroy, or substantially diminish, decorative detailing on buildings such as a molded brickwork or architectural terra-cotta, ornamental carving on wood or stone, and evidence of historic craft techniques, such as tool marks and other surface textures. In addition, perfectly sound and/or "tooled" mortar joints can be worn away by abrasive techniques. This not only results in the loss of historic craft detailing but also requires repointing, a step involving con-

siderable time, skill and expense, and which might not have been necessary had a gentler method been chosen. Erosion and pitting of the building material by abrasive cleaning creates a greater surface area on which dirt and pollutants collect. In this sense, the building fabric "attracts" more dirt, and will require more frequent cleaning in the future.

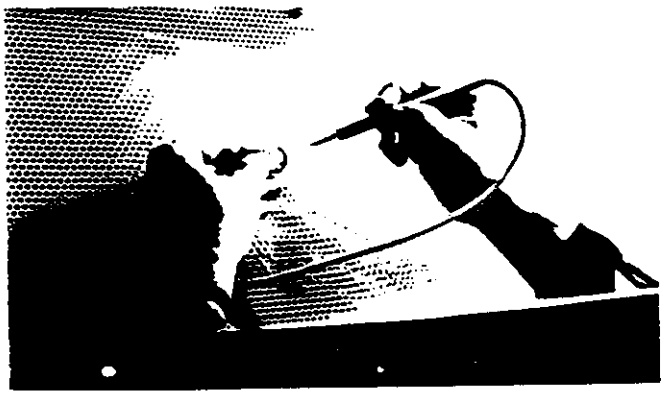
In addition to causing physical and aesthetic harm to the historic fabric, there are several adverse environmental effects of dry abrasive cleaning methods. Because of the friction caused by the abrasive medium hitting the building fabric, these techniques usually create a considerable amount of dust, which is unhealthy, particularly to the operators of the abrasive equipment. It further pollutes the environment around the job site, and deposits dust on neighboring buildings, parked vehicles and nearby trees and shrubbery. Some adjacent materials not intended for abrasive treatment such as wood or glass, may also be damaged because the equipment may be difficult to regulate.

Wet grit methods, while eliminating dust, deposit a messy slurry on the ground or other objects surrounding the base of the building. In colder climates where there is the threat of frost, any wet cleaning process applied to historic masonry structures must be done in warm weather, allowing ample time for the wall to dry out thoroughly before cold weather sets in. Water which remains and freezes in cracks and openings of the masonry surface eventually may lead to spalling. High-pressure wet cleaning may force an inordinate amount of water into the walls, affecting interior materials such as plaster or joist ends, as well as metal building components within the walls.

Variable Factors

The greatest problem in developing practical guidelines for cleaning any historic building is the large number of variable and unpredictable factors involved. Because these variables make each cleaning project unique, it is difficult to establish specific standards at this time. This is particularly true of abrasive cleaning methods because their inherent potential for causing damage is multiplied by the following factors:

— the type and condition of the material being cleaned;
— the size and sharpness of the grit particles or the mechanical equipment;
— the pressure with which the abrasive grit or equipment is applied to the building surface;
— the skill and care of the operator; and
— the constancy of the pressure on all surfaces during the cleaning process.



Micro-Abrasive Cleaning. *This small, pencil-sized micro-abrasive unit is used by some museum conservators to clean small objects. This particular micro-abrasive unit is operated within the confines of a box (approximately 2 cubic feet of space), but a similar and slightly larger unit may be used for cleaning larger pieces of sculpture, or areas of architectural detailing on a building. Even a pressure cleaning unit this small is capable of eroding a surface, and must be carefully controlled.*

"Line Drop." *Even though the operator of the sandblasting equipment is standing on a ladder to reach the higher sections of the wall, it is still almost impossible to have total control over the pressure. The pressure of the sand hitting the lower portion of the wall will still be greater than that above, because of the "line drop" in the distance from the pressure source to the nozzle. (Hugh Miller)*

Pressure: The damaging effects of most of the variable factors involved in abrasive cleaning are self evident. However, the matter of pressure requires further explanation. In cleaning specifications, pressure is generally abbreviated as "psi" (pounds per square inch), which technically refers to the "tip" pressure, or the amount of pressure at the nozzle of the blasting apparatus. Sometimes "psig," or pressure at the gauge (which may be many feet away, at the other end of the hose), is used in place of "psi." These terms are often incorrectly used interchangeably.

Despite the apparent care taken by most architects and building cleaning contractors to prepare specifications for pressure cleaning which will not cause harm to the delicate fabric of a historic building, it is very difficult to ensure that the same amount of pressure is applied to all parts of the building. For example, if the operator of the pressure equipment stands on the ground while cleaning a two-story structure, the amount of force reaching the first story will be greater than that hitting the second story, even if the operator stands on scaffolding or in a cherry picker, because of the "line drop" in the distance from the pressure source to the nozzle. Although technically it may be possible to prepare cleaning specifications with tight controls that would eliminate all but a small margin of error, it may not be easy to find professional cleaning firms willing to work under such restrictive conditions. The fact is that many professional building cleaning firms do not really understand the extreme delicacy of historic building fabric, and how it differs from modern construction materials. Consequently, they may ac-

cept sandblasting projects for which they have no experience.

The amount of pressure used in any kind of cleaning treatment which involves pressure, whether it is dry or wet grit, chemicals or just plain water, is crucial to the outcome of the cleaning project. Unfortunately, no standards have been established for determining the correct pressure for cleaning each of the many historic building materials which would not cause harm. The considerable discrepancy between the way the building cleaning industry and architectural conservators define "high" and "low" pressure cleaning plays a significant role in the difficulty of creating standards.

Nonhistoric Industrial: A representative of the building cleaning industry might consider "high" pressure *water* cleaning to be anything over 5,000 psi, or even as high as 10,000 to 15,000 psi! Water under this much pressure may be necessary to clean industrial structures or machinery, but would destroy most historic building materials. Industrial *chemical* cleaning commonly utilizes pressures between 1,000 and 2,500 psi.

Spalling Brick. *This soft, early 19th-century brick was sandblasted in the 1960s; consequently, severe spalling has resulted. Some bricks have almost totally disintegrated, and will eventually have to be replaced. (Robert S. Gamble)*

Historic: By contrast, conscientious dry or wet abrasive cleaning of a historic structure would be conducted within the range of 20 to 100 psi at a range of 3 to 12 inches. Cleaning at this low pressure requires the use of a very fine 00 or 0 mesh grit forced through a nozzle with a ⅛ inch opening. A similar, even more delicate method being adopted by architectural conservators uses a micro-abrasive grit on small, hard-to-clean areas of carved, cut or molded ornament on a building facade. Originally developed by museum conservators for cleaning sculpture, this technique may employ glass beads, micro-balloons, or another type of micro-abrasive gently powered at approximately 40 psi by a very small, almost pencil-like pressure instrument. Although a slightly larger pressure instrument may be used on historic buildings, this technique still has limited practical applicability on a large scale building cleaning project because of the cost and the relatively few technicians competent to handle the task. In general, architectural conservators have determined that only through very controlled conditions can most historic building material be abrasively cleaned of soil or paint without measurable damage to the surface or profile of the substrate.

Yet some professional cleaning companies which specialize in cleaning historic masonry buildings use chemicals and water at a pressure of approximately 1,500 psi, while other cleaning firms recommend lower pressures ranging from 200 to 800 psi for a similar project. An architectural conservator might decide, *after testing*, that some historic structures could be cleaned properly using a moderate pressure (200–600 psi), or even a high pressure (600–1500 psi) water rinse. However, cleaning historic buildings under such high pressure should be considered an exception rather than the rule, and would require *very careful* testing and supervision to assure that the historic surface materials could withstand the pressure without gouging, pitting or loosening.

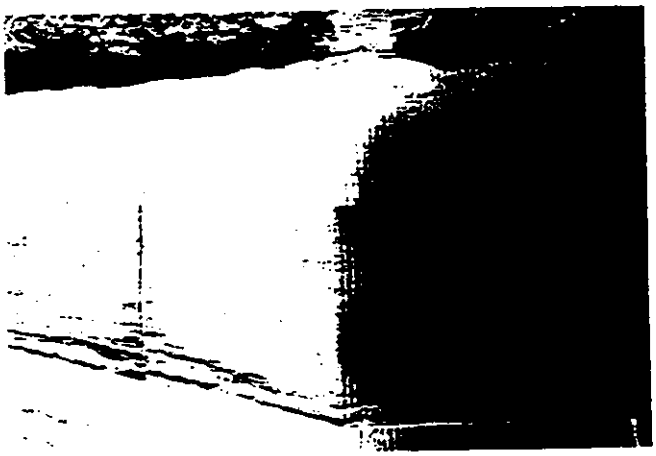
These differences in the amount of pressure used by commercial or industrial building cleaners and architectural conservators point to one of the main problems in using abrasive means to clean historic buildings: misunderstanding of the potentially fragile nature of historic building materials. There is no one cleaning formula or pressure suitable for all situations. Decisions regarding the proper cleaning process for historic structures can be made only after careful analysis of the building fabric, and testing.

How Building Materials React to Abrasive Cleaning Methods

Brick and Architectural Terra-Cotta: Abrasive blasting does not affect all building materials to the same degree. Such techniques quite logically cause greater damage to softer and more porous materials, such as brick or architectural terra-cotta. When these materials are cleaned abrasively, the hard, outer layer (closest to the heat of the kiln) is eroded, leaving the soft, inner core exposed and susceptible to accelerated weathering. Glazed architectural terra-cotta and ceramic veneer have a baked-on glaze which is also easily damaged by abrasive cleaning. Glazed architectual terra-cotta was designed for easy maintenance, and generally can be cleaned using detergent and water; but chemicals or steam may be needed to remove more persistent stains. Large areas of brick or architectural terra-cotta which have been painted are best left painted, or repainted if necessary.

Plaster and Stucco: Plaster and stucco are types of masonry finish materials that are softer than brick or terra-cotta; if treated abrasively these materials will simply disintegrate. Indeed, when plaster or stucco is treated abrasively it is usually with the intention of removing the plaster or stucco from whatever base material or substrate it is covering. Obviously, such abrasive techniques should not be applied to clean sound plaster or stuccoed walls, or decorative plaster wall surfaces.

Building Stones: Building stones are cut from the three main categories of natural rock: dense, igneous rock such as granite; sandy, sedimentary rock such as limestone or sandstone; and crystalline, metamorphic rock such as marble. As op-



Abrasive Cleaning of Tooled Granite. *Even this carefully controlled "wet grit" blasting has erased vertical tooling marks in the cut granite blocks on the left. Not only has the tooling been destroyed, but the damaged stone surface is now more susceptible to accelerated weathering.*

posed to kiln-dried masonry material such as brick and architectural terra-cotta. Building stones are generally homogeneous in character at the time of a building's construction. However, as the stone is exposed to weathering and environmental pollutants, the surface may become friable, or may develop a protective skin or patina. These outer surfaces are very susceptible to damage by abrasive or improper chemical cleaning.

Building stones are frequently cut into ashlar blocks or "dressed" with tool marks that give the building surface a specific texture and contribute to its historic character as much as ornately carved decorative stonework. Such detailing is easily damaged by abrasive cleaning techniques; the pattern of tooling or cutting is erased, and the crisp lines of moldings or carving are worn or pitted.

Occasionally, it may be possible to clean small areas of rough-cut granite, limestone or sandstone having a heavy dirt incrustation by using the "wet grit" method, whereby a small amount of abrasive material is injected into a controlled, pressurized water stream. However, this technique requires very careful supervision in order to prevent damage to the stone. Polished or honed marble or granite should *never* be treated abrasively, as the abrasion would remove the finish in much the way glass would be etched or "frosted" by such a process. It is generally preferable to underclean, as too strong a cleaning procedure will erode the stone, exposing new and increased surface area to collect atmospheric moisture and dirt. Removing paint, stains or graffiti from most types of stone may be accomplished by a chemical treatment carefully selected to best handle the removal of the particular type of paint or stain without damaging the stone. (See section on the "Gentlest Means Possible".)

Abrasive Cleaning of Wood. *This wooden window surround, molding and paneling have been sandblasted to remove layers of paint in the rehabilitation of this commercial building. Not only is some paint still embedded in cracks and crevices of the woodwork, but more importantly, grit blasting has actually eroded the softer wood, in effect raising the grain, and resulting in a rougher surface.*

Wood: Most types of wood used for buildings are soft, fibrous and porous, and are particularly susceptible to damage by abrasive cleaning. Because the softer wood between the lines of the grain is softer than the grain itself, it will be worn away by abrasive blasting or power tools, leaving an uneven surface with the grain raised and often frayed or "fuzzy." Once this has occurred, it is almost impossible to achieve a smooth surface again except by extensive hand sanding, which is expensive and will quickly negate any costs saved earlier by sandblasting. Such harsh cleaning treatment also obliterates historic tool marks, fine carving and detailing, which precludes its use on any interior or exterior woodwork which has been hand planed, milled or carved.

Metals: Like stone, metals are another group of building materials which vary considerably in hardness and durability. Softer metals which are used architecturally, such as tin, zinc, lead, copper or aluminum, generally should not be cleaned abrasively as the process deforms and destroys the original surface texture and appearance, as well as the acquired patina. Much applied architectural metal work used on historic buildings—tin, zinc, lead and copper—is often quite thin and soft, and therefore susceptible to denting and pitting. Galvanized sheet metal is especially vulnerable, as abrasive treatment would wear away the protective galvanized layer.

In the late 19th and early 20th centuries, these metals were often cut, pressed or otherwise shaped from sheets of metal into a wide variety of practical uses such as roofs, gutters and flashing, and façade ornamentation such as cornices, friezes, dormers, panels, cupolas, oriel windows, etc. The architecture of the 1920s and 1930s made use of metals such as chrome, nickel alloys, aluminum and stainless steel in decorative exterior panels, window frames, and doorways. Harsh abrasive blasting would destroy the original surface finish of most of these metals, and would increase the possiblity of corrosion.

However, conservation specialists are now employing a sensitive technique of glass bead peening to clean some of the harder metals, in particular large bronze outdoor sculpture. Very fine (75–125 micron) glass beads are used at a low pressure of 60 to 80 psi. Because these glass beads are completely spherical, ther are no sharp edges to cut the surface of the metal. After cleaning, these statues undergo a lengthy process of polishing. Coatings are applied which protect the surface from corrosion, but they must be renewed every 3 to 5 years. A similarly delicate cleaning technique employing glass beads has been used in Europe to clean historic masonry structures without causing damage. But at this time the process has not been tested sufficiently in the United States to recommend it as a building conservation measure.

Sometimes a very fine *smooth* sand is used at a low pressure to clean or remove paint and corrosion from copper flashing and other metal building components. Restoration architects recently found that a mixture of crushed walnut shells and copper slag at a pressure of approximately 200 psi was the only way to remove corrosion successfully from a mid-19th century terne-coated iron roof. Metal cleaned in this manner must be painted immediately to prevent rapid recurrence of corrosion. It is thought that these methods "work harden" the surface by compressing the outer layer, and actually may be good for the surface of the metal. But the extremely complex nature and the time required by such processes make it very expensive and impractical for large-scale use at this time.

Cast and wrought iron architectural elements may be gently sandblasted or abrasively cleaned using a wire brush to remove layers of paint, rust and corrosion. Sandblasting was, in fact, developed originally as an efficient maintenance procedure for engineering and industrial structures and heavy machinery—iron and steel bridges, machine tool frames, engine frames, and railroad rolling stock—in order to clean and prepare them for repainting. Because iron is hard, its surface,

which is naturally somewhat uneven, will not be noticeably damaged by controlled abrasion. Such treatment will, however, result in a small amount of pitting. But this slight abrasion creates a good surface for paint, since the iron must be repainted immediately to prevent corrosion. Any abrasive cleaning of metal building components will also remove the caulking from joints and around other openings. Such areas must be recaulked quickly to prevent moisture from entering and rusting the metal, or causing deterioration of other building fabric inside the structure.

When is Abrasive Cleaning Permissible?

For the most part, abrasive cleaning is destructive to historic building materials. A limited number of special cases have been explained when it may be appropriate, if supervised by a skilled conservator, to use a delicate abrasive technique on some historic building materials. The type of "wet grit" cleaning which involves a small amount of grit injected into a stream of low pressure water may be used on small areas of stone masonry (i.e., rough cut limestone, sandstone or unpolished granite), where milder cleaning methods have not been totally successful in removing harmful deposits of dirt and pollutants. Such areas may include stone window sills, the tops of cornices or column capitals, or other detailed areas of the façade.

This is still an abrasive technique, and without proper caution in handling, it can be *just as harmful to the building surface as any other abrasive cleaning method.* Thus, the decision to use this type of "wet grit" process should be made only after consultation with an experienced building conservator. Remember that *it is very time consuming and expensive to use any abrasive technique on a historic building in such a manner that it does not cause harm to the often fragile and friable building materials.*

At this time, and only under certain circumstances, abrasive cleaning methods may be used in the rehabilitation of interior spaces of warehouse or industrial buildings for contemporary uses.

Interior spaces of factories or warehouse structures in which the masonry or plaster surfaces do not have significant design, detailing, tooling or finish, and in which wooden architectural features are not finished, molded, beaded or worked by hand, may be cleaned abrasively in order to remove layers of paint and industrial discolorations such as smoke, soot, etc. It is expected after such treatment that brick surfaces will be rough and pitted, and wood will be somewhat frayed or "fuzzy" with raised wood grain. These nonsignificant surfaces will be damaged and have a roughened texture, but because they are interior elements, they will not be subject to further deterioration caused by weathering.

Permissible Abrasive Cleaning. *In accordance with the Secretary of the Interior's* Guidelines for Rehabilitation Projects, *it may be acceptable to use abrasive techniques to clean an industrial interior space such as that illustrated here, because the masonry surfaces do not have significant design, detailing, tooling or finish, and the wooden architectural features are not finished, molded, beaded or worked by hand.*

Historic Interiors that Should Not Be Cleaned Abrasively

Those instances (generally industrial and some commercial properties), when it may be acceptable to use an abrasive treatment on the interior of historic structures have been described. But for the majority of historic buildings, the Secretary of the Interior's *Guidelines for Rehabilitation* do not recommend "changing the texture of exposed wooden architectural features (including structural members) and masonry surfaces through sandblasting or use of other abrasive techniques to remove paint, discolorations and plaster. . . ."

Thus, it is not acceptable to clean abrasively interiors of historic residential and commercial properties which have *finished* interior spaces featuring milled woodwork such as doors, window and door moldings, wainscoting, stair balustrades and mantelpieces. Even the most modest historic *house* interior, although it may not feature elaborate detailing, contains plaster and woodwork that is architecturally significant to the original design and function of the house. Abrasive cleaning of such an interior would be destructive to the historic integrity of the building.

Abrasive cleaning is also impractical. Rough surfaces of abrasively cleaned wooden elements are hard to keep clean. It is also difficult to seal, paint or maintain these surfaces which can be splintery and a problem to the building's occupants. The force of abrasive blasting may cause grit particles to lodge in cracks of wooden elements, which will be a nuisance as the grit is loosened by vibrations and gradually sifts out. Removal of plaster will reduce the thermal and insulating value of the walls. Interior brick is usually softer than exterior brick, and generally of a poorer quality. Removing surface plaster from such brick by abrasive means often exposes gaping mortar joints and mismatched or repaired brickwork which was never intended to show. The resulting bare brick wall may require repointing, often difficult to match. It also may be necessary to apply a transparent surface coating (or sealer) in order to prevent the mortar and brick from "dusting." However, a sealer may not only change the color of the brick, but may also compound any existing moisture problems by restricting the normal evaporation of water vapor from the masonry surface.

"Gentlest Means Possible"

There are alternative means of removing dirt, stains and paint from historic building surfaces that can be recommended as more efficient and less destructive than abrasive techniques. The "gentlest means possible" of removing dirt from a building surface can be achieved by using a low-pressure water wash, scrubbing areas of more persistent grime with a natural bristle (never metal) brush. Steam cleaning can also be used effectively to clean some historic building fabric. Low-pressure water or steam will soften the dirt and cause the deposits to rise to the surface, where they can be washed away.

A third cleaning technique which may be recommended to remove dirt, as well as stains, graffiti or paint, involves the use of commercially available chemical cleaners or paint removers, which, when applied to masonry, loosen or dissolve the dirt or stains. These cleaning agents may be used in combination with water or steam, followed by a clear water wash to remove the residue of dirt and the chemical cleaners from the masonry. A natural bristle brush may also facilitate this type of chemically assisted cleaning, particularly in areas of heavy dirt deposits or stains, and a wooden scraper can be

Do not Abrasively Clean these Interiors. *Most historic residential and some commercial interior spaces contain finished plaster and wooden elements such as this stair balustrade and paneling which contribute to the historic and architectural character of the structure. Such interiors should not be subjected to abrasive techniques for the purpose of removing paint, dirt, discoloration or plaster.*

useful in removing thick encrustations of soot. A limewash or absorbent talc, whiting or clay poultice with a solvent can be used effectively to draw out salts or stains from the surface of the selected areas of a building facade. It is almost impossible to remove paint from masonry surfaces without causing some damage to the masonry, and it is best to leave the surfaces as they are or repaint them if necessary.

Some physicists are experimenting with the use of pulsed laser beams and xenon flash lamps for cleaning historic masonry surfaces. At this time it is a slow, expensive cleaning method, but its initial success indicates that it may have an increasingly important role in the future.

There are many chemical paint removers which, when applied to painted wood, soften and dissolve the paint so that it can be scraped off by hand. Peeling paint can be removed from wood by hand scraping and sanding. Particularly thick layers of paint may be softened with a heat gun or heat plate, providing appropriate precautions are taken, and the paint film scraped off by hand. Too much heat applied to the same spot can burn the wood, and the fumes caused by burning paint are dangerous to inhale, and can be explosive. Furthermore, the hot air from heat guns can start fires in the building cavity. Thus, adequate ventilation is important when using a heat gun or heat plate, as well as when using a chemical stripper. A torch or open flame should never be used.

Preparations for Cleaning: It cannot be overemphasized that [illegible] should always be tested with cau-

tion. When using any of these procedures which involve water or other liquid cleaning agents on masonry, it is imperative that *all* openings be tightly covered, and all cracks or joints be well pointed in order to avoid the danger of water penetrating the building's facade, a circumstance which might result in serious moisture related problems such as efflorescence and/or subflorescence. Any time water is used on masonry as a cleaning agent, either in its pure state or in combination with chemical cleaners, it is very important that the work be done in warm weather when there is no danger of frost for several months. Otherwise water which has penetrated the masonry may freeze, eventually causing the surface of the building to crack and spall, which may create another conservation problem more serious to the health of the building than dirt.

Each kind of masonry has a unique composition and reacts differently with various chemical cleaning substances. Water and/or chemicals may interact with minerals in stone and cause new types of stains to leach out to the surface immediately, or more gradually in a delayed reaction. What may be a safe and effective cleaner for certain stain on one type of stone, may leave unattractive discolorations on another stone, or totally dissolve a third type.

Testing: Cleaning historic building materials, particularly masonry, is a technically complex subject, and thus, should never be done without expert consultation and testing. No cleaning project should be undertaken without first applying the intended cleaning agent to a representative test patch area in an inconspicuous location on the building surface. The test patch or patches should be allowed to weather for a period of time, preferably through a complete seasonal cycle, in order to determine that the cleaned area will not be adversely affected by wet or freezing weather or any by-products of the cleaning process.

Mitigating the Effects of Abrasive Cleaning

There are certain restoration measures which can be adopted to help preserve a historic building exterior which has been damaged by abrasive methods. Wood that has been sandblasted will exhibit a frayed or "fuzzed" surface, or a harder wood will have an exaggerated raised grain. The only way to remove this rough surface or to smooth the grain is by laborious sanding. Sandblasted wood, unless it has been extensively sanded, serves as a dustcatcher, will weather faster, and will present a continuing and ever worsening maintenance problem. Such wood, after sanding, should be painted or given a clear surface coating to protect the wood, and allow for somewhat easier maintenance.

There are few successful preservative treatments that may be applied to grit-blasted exterior masonry. Harder, denser stone may have suffered only a loss of crisp edges or tool marks, or other indications of craft technique. If the stone has a compact and uniform composition, it should continue to weather with little additional deterioration. But some types of sandstone, marble and limestone will weather at an accelerated rate once their protective "quarry crust" or patina has been removed.

Softer types of masonry, particularly brick and architectural terra-cotta, are the most likely to require some remedial treatment if they have been abrasively cleaned. Old brick, being essentially a soft, baked clay product, is greatly susceptible to increased deterioration when its hard, outer skin is removed through abrasive techniques. This problem can be minimized by painting the brick. An alternative is to treat it with a clear sealer or surface coating but this will give the masonry a glossy or shiny look. It is usually preferable to paint the brick rather than [illegible] apply a transparent sealer since

Hazards of Sandblasting and Surface Coating. *In order to "protect" this heavily sandblasted brick, a clear surface coating or sealer was applied. Because the air temperature was too cold at the time of application, the sealer failed to dry properly, dropping in places, and giving the brick surface a cloudy appearance.*

sealers reduce the transpiration of moisture, allowing salts to crystallize as subflorescence that eventually spalls the brick. If a brick surface has been so extensively damaged by abrasive cleaning and weathering that spalling has already begun, it may be necessary to cover the walls with stucco, if it will adhere.

Of course, the application of paint, a clear surface coating (sealer), or stucco to deteriorating masonry means that the historical appearance will be sacrificed in an attempt to conserve the historic building materials. However, the original color and texture will have been changed already by the abrasive treatment. At this point it is more important to try to preserve the brick, and there is little choice but to protect it from "dusting" or spalling too rapidly. As a last resort, in the case of severely spalling brick, there may be no option but to replace the brick—a difficult, expensive (particularly if custom-made reproduction brick is used), and lengthy process. As described earlier, sandblasted interior brick work, while not subject to change of weather, may require the application of a transparent surface coating or painting as a maintenance procedure to contain loose mortar and brick dust. (See Preservation Briefs: No. 1 for a more thorough discussion of coatings.)

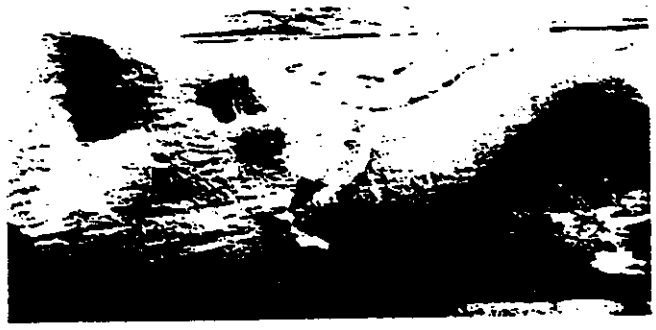
Metals, other than cast or wrought iron, that have been pitted and dented by harsh abrasive blasting usually cannot be smoothed out. Although fillers may be satisfactory for smoothing a painted surface, exposed metal that has been damaged usually will have to be replaced.

Summary

Sandblasting or other abrasive methods of cleaning or paint removal are by their nature destructive to historic building materials and should not be used on historic buildings except in a few well-monitored instances. There are exceptions when certain types of abrasive cleaning may be permissible, but only if conducted by a trained conservator, and if cleaning is necessary for the preservation of the historic structure.

There is no one formula that will be suitable for cleaning all historic building surfaces. Although there are many commercial cleaning products and methods available, it is impossible to state definitively which of these will be the most effective without causing harm to the building fabric. It is often difficult to identify ingredients or their proportions contained in cleaning products; consequently it is hard to predict how a product will react to the building materials to be cleaned. Similar uncertainties affect the outcome of other cleaning methods as they are applied to historic building materials. Further advances in understanding the complex nature of the many variables of the cleaning techniques may someday provide a better and simpler solution to the problems. But until that time, the process of cleaning historic buildings must be approached with caution through trial and error.

It is important to remember that historic building materials are neither indestructible, nor are they renewable. They must be treated in a responsible manner, which may mean little or no cleaning at all if they are to be preserved for future generations to enjoy. If it is in the best interest of the building to clean it, then it should be done "using the gentlest means possible."



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This Preservation Brief was written by Anne E. Grimmer, Architectural Historian, Technical Preservation Services Division. Valuable suggestions and comments were made by Hugh C. Miller, AIA, Washington, D.C.; Martin E. Weaver, Ottawa, Ontario, Canada; Terry Bryant, Downers Grove, Illinois; Daniel J. Scanlon, McLean, Virginia; and the professional staff of Technical Preservation Services Division. Deborah Cooney edited the final manuscript.

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SECRETARY OF INTERIOR'S, "STANDARDS FOR REHABILITATION"

The Secretary of the Interior's

Standards for Rehabilitation

and Guidelines for Rehabilitating Historic Buildings

U.S. Department of the Interior
National Park Service
Preservation Assistance Division
Washington, D.C.

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Washington, D.C. 20402

INTRODUCTION

The Secretary of the Interior is responsible for establishing standards for all program under Departmental authority and for advising Federal agencies on the preservation of historic properties listed or eligible for listing in the National Register of Historic Places. In partial fulfillment of this responsibility, the Secretary of the Interior's Standards for Historic Preservation Projects have been developed to guide work undertaken on historic buildings—there are separate standards for acquisition, protection, stabilization, preservation, rehabilitation, restoration, and reconstruction. The Standards for Rehabilitation (codified in 36 CFR 67) comprise that section of the overall preservation project standards and addresses the most prevalent treatment. "Rehabilitation" is defined as "the process of returning a property to a state of utility, through repair or alteration, which makes possible an efficient contemporary use while preserving those portions and features of the property which are significant to its historic, architectural, and cultural values."

Initially developed by the Secretary of the Interior to determine the appropriateness of proposed project work on registered properties within the Historic Preservation Fund grant-in-aid program, the Standards for Rehabilitation have been widely used over the years—particularly to determine if a rehabilitation qualifies as a Certified Rehabilitation for Federal tax purposes. In addition, the Standards have guided Federal agencies in carrying out their historic preservation responsibilities for properties in Federal ownership or control; and State and local officials in reviewing both Federal and nonfederal rehabilitation proposals. They have also been adopted by historic district and planning commissions across the country.

The intent of the Standards is to assist the long-term preservation of a property's significance through the preservation of historic materials and features. The Standards pertain to historic buildings of all materials, construction types, sizes, and occupancy and encompass the exterior and interior of the buildings. They also encompass related landscape features and the building's site and environment, as well as attached, adjacent, or related new construction. To be certified for Federal tax purposes, a rehabilitation project must be determined by the Secretary to be consistent with the historic character of the structure(s), and where applicable, the district in which it is located.

GUIDELINES FOR REHABILITATING HISTORIC BUILDINGS

The Guidelines were initially developed in 1977 to help property owners, developers, and Federal managers apply the Secretary of the Interior's "Standards for Rehabilitation" during the project planning stage by providing general design and technical recommendations. Unlike the Standards, the Guidelines are *not* codified as program requirements. Together with the "Standards for Rehabilitation" they provide a model process for owners, developers, and Federal agency managers to follow.

It should be noted at the outset that the Guidelines are intended to assist in applying the Standards to projects generally; consequently, they are not meant to give case-specific advice or address exceptions or rare instances. For example, they cannot tell an owner or developer which features of their own historic building are important in defining the historic character and must be preserved—although examples are provided in each section—or which features could be altered, if necessary, for the new use. This kind of careful case-by-case decisionmaking is best accomplished by seeking assistance from qualified historic preservation professionals in the planning stage of the project. Such professionals include architects, architectural historians, historians, archeologists, and others who are skilled in the preservation, rehabilitation, and restoration of historic properties.

The Guidelines pertain to historic buildings of all sizes, materials, occupancy, and construction types; and apply to interior and exterior work as well as new exterior additions. Those approaches, treatments, and techniques that are consistent with the Secretary of the Interior's "Standards for Rehabilitation" are listed in the "Recommended" column on the left; those approaches, treatments, and techniques which could adversely affect a building's historic character are listed in the "Not Recommended" column on the right.

To provide clear and consistent guidance for owners, developers, and federal agency managers to follow, the "Recommended" courses of action in each section are listed in order of historic preservation concerns so that a rehabilitation project may be successfully planned and completed—one that, first, assures the preservation of a building's important or "character-defining" architectural materials and features and, second, makes possible an efficient contemporary use. Rehabilitation guidance in each section begins with protection and maintenance, that work which should be maximized in every project to enhance overall preservation goals. Next, where some deterioration is present, repair of the building's historic materials and features is recommended. Finally, when deterioration is so extensive that repair is not possible, the most problematic area of work is considered: replacement of historic materials and features with new materials.

To further guide the owner and developer in planning a successful rehabilitation project, those complex design issues dealing with new use requirements such as alterations and additions are highlighted at the end of each section to underscore the need for particular sensitivity in these areas.

Identify, Retain, and Preserve

The guidance that is basic to the treatment of all historic buildings—***identifying, retaining, and preserving*** the form and detailing of those architectural materials and features that are important in *defining the historic character*—is always listed first in the "Recommended" column. The parallel "Not Recommended" column lists the types of actions that are most apt to cause the diminution or even loss of the building's historic character. It should be remembered, however, that such loss of character is just as often caused by the cumulative effect of a series of actions that would seem to be minor interventions. Thus, the guidance in *all* of the "Not Recommended" columns must be viewed in that larger context, e.g., for the total impact on a historic building.

Protect and Maintain

After identifying those materials and features that are important and must be retained in the process of rehabilitation work, then ***protecting and maintaining*** them are addressed. Protection generally involves the least degree of intervention and is preparatory to other work. For example, protection includes the maintenance of historic material through treatments such as rust removal, caulking, limited paint removal, and re-application of protective coatings; the cyclical cleaning of roof gutter systems; or installation of fencing, protective plywood, alarm systems and other temporary protective measures. Although a historic building will usually require more extensive work, an overall evaluation of its physical condition should always begin at this level.

Repair

Next, when the physical condition of character-defining materials and features warrants additional work ***repairing*** is recommended. Guidance for the repair of historic materials such as masonry, wood, and architectural metals again begins with the least degree of intervention possible such as patching, piecing-in, splicing, consolidating, or otherwise reinforcing or upgrading them according to recognized preservation methods. Repairing also includes the limited replacement in kind—or with compatible substitute material—of extensively deteriorated or missing *parts* of features when there are surviving prototypes (for example, brackets, dentils, steps, plaster, or portions of slate or tile roofing). Although using the same kind of material is always the preferred option, substitute material is acceptable if the form and design as well as the substitute material itself convey the visual appearance of the remaining parts of the feature and finish.

Replace

Following repair in the hierarchy, guidance is provided for ***replacing*** an entire character-defining feature with new material because the level of deterioration or damage of materials precludes repair (for example, an exterior cornice; an interior staircase; or a complete porch or storefront). If the essential form and detailing are still evident so that the physical evidence can be used to re-establish the feature as an integral part of the rehabilitation project, then its replacement is appropriate. Like the guidance for repair, the preferred option is always replacement of the entire feature in kind, that is, with the same material. Because this approach may not always be technically or economically feasible, provisions are made to consider the use of a compatible substitute material.

It should be noted that, while the National Park Service guidelines recommend the replacement of an entire character-defining feature under certain well-defined circumstances, they *never* recommend removal and replacement with new material of a feature that—although damaged or deteriorated—could reasonably be repaired and thus preserved.

Design for Missing Historic Features

When an entire interior or exterior feature is missing (for example, an entrance, or cast iron facade; or a principal staircase), it no longer plays a role in physically defining the historic character of the building unless it can be accurately recovered in form and detailing through the proc-

THE SECRETARY OF THE INTERIOR'S STANDARDS FOR REHABILITATION

The following Standards are to be applied to specific rehabilitation projects in a reasonable manner, taking into consideration economic and technical feasibility.

(1) A property shall be used for its historic purpose or be placed in a new use that requires minimal change to the defining characteristics of the building and its site and environment.

(2) The historic character of a property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property shall be avoided.

(3) Each property shall be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or architectural elements from other buildings, shall not be undertaken.

(4) Most properties change over time; those changes that have acquired historic significance in their own right shall be retained and preserved.

(5) Distinctive features, finishes, and construction techniques or examples of craftsmanship that characterize a historic property shall be preserved.

(6) Deteriorated historic features shall be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature shall match the old in design, color, texture, and other visual qualities and, where possible, materials. Replacement of missing features shall be substantiated by documentary, physical, or pictorial evidence.

(7) Chemical or physical treatments, such as sandblasting, that cause damage to historic materials shall not be used. The surface cleaning of structures, if appropriate, shall be undertaken using the gentlest means possible.

(8) Significant archeological resources affected by a project shall be protected and preserved. If such resources must be disturbed, mitigation measures shall be undertaken.

(9) New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.

(10) New additions and adjacent or related new construction shall be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

As stated in the definition, the treatment "rehabilitation" assumes that at least some repair or alteration of the historic building will be needed in order to provide for an efficient contemporary use; however, these repairs and alteration must not damage or destroy materials, features or finishes that are important in defining the building's historic character. For example, certain treatments—if improperly applied—may cause or accelerate physical deterioration of historic building. This can include using improper repointing or exterior masonry cleaning techniques, or introducing insulation that damages historic fabric. In almost all of these situations, use of these materials and treatments will result in a project that does not meet the Standards. Similarly, exterior additions that duplicate the form, material, and detailing of the structure to the extent that they compromise the historic character of the structure will fail to meet the Standards.

Technical Guidance Publications

The National Park Service, U.S. Department of the Interior, conducts a variety of activities to guide Federal agencies, States, and the general public in historic preservation project work. In addition to establishing standards and guidelines, the Service develops, publishes, and distributes technical information on appropriate preservation treatments, including Preservation Briefs, case studies, and Preservation Tech Notes.

A Catalog of Historic Preservation Publications with stock numbers, prices, and ordering information may be obtained by writing: Preservation Assistance Division, Technical Preservation Services, P.O. Box 37127, Washington, D.C. 20013-7127.

ess of carefully documenting the historical appearance. Where an important architectural feature is missing, its recovery is always recommended in the guidelines as the *first* or preferred, course of action. Thus, if adequate historical, pictorial, and physical documentation exists so that the feature may be accurately reproduced, and if it is desireable to re-establish the feature as part of the building's historical appearance, then designing and constructing a new feature based on such information is appropriate. However, a *second* acceptable option for the replacement feature is a new design that is compatible with the remaining character-defining features of the historic building. The new design should always take into account the size, scale, and material of the historic building itself and, most importantly, should be clearly differentiated so that a false historical appearance is not created.

Alterations/Additions to Historic Buildings

Some exterior and interior alterations to the historic building are generally needed to assure its continued use, but it is most important that such alterations do not radically change, obscure, or destroy character-defining spaces, materials, features, or finishes. Alterations may include providing additional parking space on an existing historic building site; cutting new entrances or windows on secondary elevations; inserting an additional floor; installing an entirely new mechanical system; or creating an atrium or light well. Alteration may also include the selective removal of buildings or other features of the environment or building site that are intrusive and therefore detract from the overall historic character.

The construction of an exterior addition to a historic building may seem to be essential for the new use, but it is emphasized in the guidelines that such new additions should be avoided, if possible, and considered *only* after it is determined that those needs cannot be met by altering secondary, i.e., non character-defining interior spaces. If, after a thorough evaluation of interior solutions, an exterior addition is still judged to be the only viable alternative, it should be designed and constructed to be clearly differentiated from the historic building and so that the character-defining features are not radically changed, obscured, damaged, or destroyed.

Additions to historic buildings are referenced within specific sections of the guidelines such as Site, Roof, Structural Systems, etc., but are also considered in more detail in a separate section, NEW ADDITIONS TO HISTORIC BUILDINGS.

Health and Safety Code Requirements; Energy Retrofitting

These sections of the rehabilitation guidance address work done to meet health and safety code requirements (for example, providing barrier-free access to historic buildings); or retrofitting measures to conserve energy (for example, installing solar collectors in an unobtrusive location on the site). Although this work is quite often an important aspect of rehabilitation projects, it is usually not part of the overall process of protecting or repairing character-defining features; rather, such work is assessed for its potential negative impact on the building's historic character. For this reason, particular care must be taken not to radically change, obscure, damage, or destroy character-defining materials or features in the process of rehabilitation work to meet code and energy requirements.

Specific information on rehabilitation and preservation technology may be obtained by writing to the National Park Service, at the addresses listed below:

Preservation Assistance Division
National Park Service
P.O. Box 37127
Washington, D.C. 20013-7127

National Historic Preservation Programs
Western Regional Office
National Park Service
450 Golden Gate Ave.
Box 36063
San Francisco, CA 94102

Division of Cultural Resources
Rocky Mountain Regional Office
National Park Service
655 Parfet St.
P.O. Box 25287
Denver, CO 80225

Preservation Services Division
Southeast Regional Office
National Park Service
75 Spring St. SW., Room 1140
Atlanta, GA 30303

Office of Cultural Programs
Mid-Atlantic Regional Office
National Park Service
Second and Chestnut Streets
Philadelphia, PA 19106

Cultural Resources Division
Alaska Regional Office
National Park Service
2525 Gambell St.
Anchorage, AK 99503

BUILDING EXTERIOR

Masonry: Brick, stone, terra cotta, concrete, adobe, stucco and mortar

Masonry features (such as brick cornices and door pediments, stone window architraves, terra cotta brackets and railings) as well as masonry surfaces (modelling, tooling, bonding patterns, joint size, and color) may be important in defining the historic character of the building. It should be noted that while masonry is among the most durable of historic building materials, it is also the most susceptible to damage by improper maintenance or repair techniques and by harsh or abrasive cleaning methods. Most preservation guidance on masonry thus focuses on such concerns as cleaning and the process of repointing.

Recommended	*Not Recommended*
Identifying, retaining, and preserving masonry features that are important in defining the overall historic character of the building such as walls, brackets, railings, cornices, window architraves, door pediments, steps, and columns; and joint and unit size, tooling and bonding patterns, coatings, and color.	Removing or radically changing masonry features which are important in defining the overall historic character of the building so that, as a result, the character is diminished.
	Replacing or rebuilding a major portion of exterior masonry walls that could be repaired so that, as a result, the building is no longer historic and is essentially new construction.
	Applying paint or other coatings such as stucco to masonry that has been historically unpainted or uncoated to create a new appearance.
	Removing paint from historically painted masonry.
	Radically changing the type of paint or coating or its color.
Protecting and maintaining masonry by providing proper drainage so that water does not stand on flat, horizontal surfaces or accumulate in curved decorative features.	Failing to evaluate and treat the various causes of mortar joint deterioration such as leaking roofs or gutters, differential settlement of the building, capillary action, or extreme weather exposure.
Cleaning masonry only when necessary to halt deterioration or remove heavy soiling.	Cleaning masonry surfaces when they are not heavily soiled to create a new appearance, thus needlessly introducing chemicals or moisture into historic materials.
Carrying out masonry surface cleaning tests after it has been determined that such cleaning is necessary. Tests should be observed over a sufficient period of time so that both the immediate effects and the long range effects are known to enable selection of the gentlest method possible.	Cleaning masonry surfaces without testing or without sufficient time for the testing results to be of value.
Cleaning masonry surfaces with the gentlest method possible, such as low pressure water and detergents, using natural bristle brushes.	Sandblasting brick or stone surfaces using dry or wet grit or other abrasives. These methods of cleaning permanently erode the surface of the material and accelerate deterioration.
	Using a cleaning method that involves water or liquid chemical solutions when there is any possibility of freezing temperatures.
	Cleaning with chemical products that will damage masonry, such as using acid on limestone or marble, or leaving chemicals on masonry surfaces.
	Applying high pressure water cleaning methods that will damage historic masonry and the mortar joints.
Inspecting painted masonry surfaces to determine whether repainting is necessary.	Removing paint that is firmly adhering to, and thus protecting, masonry surfaces.
Removing damaged or deteriorated paint only to the next sound layer using the gentlest method possible (e.g., handscraping) prior to repainting.	Using methods of removing paint which are destructive to masonry, such as sandblasting, application of caustic solutions, or high pressure waterblasting.
Applying compatible paint coating systems following proper surface preparation.	Failing to follow manufacturers' product and application instructions when repainting masonry.
Repainting with colors that are historically appropriate to the building and district.	Using new paint colors that are inappropriate to the historic building and district.

Recommended	*Not Recommended*
Evaluating the overall condition of the masonry to determine whether more than protection and maintenance are required, that is, if repairs to the masonry features will be necessary.	Failing to undertake adequate measures to assure the preservation of masonry features.
Repairing masonry walls and other masonry features by repointing the mortar joints where there is evidence of deterioration such as disintegrating mortar, cracks in mortar joints, loose bricks, damp walls, or damaged plasterwork.	Removing nondeteriorated mortar from sound joints, then repointing the entire building to achieve a uniform appearance.
Removing deteriorated mortar by carefully hand-raking the joints to avoid damaging the masonry.	Using electric saws and hammers rather than hand tools to remove deteriorated mortar from joints prior to repointing.
Duplicating old mortar in strength, composition, color, and texture.	Repointing with mortar of high portland cement content (unless it is the content of the historic mortar). This can often create a bond that is stronger than the historic material and can cause damage as a result of the differing coefficient of expansion and the differing porosity of the material and the mortar.
	Repointing with a synthetic caulking compound.
	Using a "scrub" coating technique to repoint instead of traditional repointing methods.
Duplicating old mortar joints in width and in joint profile.	Changing the width or joint profile when repointing.
Repairing stucco by removing the damaged material and patching with new stucco that duplicates the old in strength, composition, color, and texture.	Removing sound stucco; or repairing with new stucco that is stronger than the historic material or does not convey the same visual appearance.
Using mud plaster as a surface coating over unfired, unstabilized adobe because the mud plaster will bond to the adobe.	Applying cement stucco to unfired, unstabilized adobe. Because the cement stucco will not bond properly, moisture can become entrapped between materials, resulting in accelerated deterioration of the adobe.
Repairing masonry features by patching, piecing-in, or consolidating the masonry using recognized preservation methods. Repair may also include the limited replacement in kind—or with compatible substitute material—of those extensively deteriorated or missing parts of masonry features when there are surviving prototypes such as terra-cotta brackets or stone balusters.	Replacing an entire masonry feature such as a cornice or balustrade when repair of the masonry and limited replacement of deteriorated or missing parts are appropriate.
	Using a substitute material for the replacement part that does not convey the visual appearance of the surviving parts of the masonry feature or that is physically or chemically incompatible.
Applying new or non-historic surface treatments such as water-repellent coatings to masonry only after repointing and only if masonry repairs have failed to arrest water penetration problems.	Applying waterproof, water-repellent, or non-historic coatings such as stucco to masonry as a substitute for repointing and masonry repairs. Coatings are frequently unnecessary, expensive, and may change the appearance of historic masonry as well as accelerate its deterioration.
Replacing in kind an entire masonry feature that is too deteriorated to repair—if the overall form and detailing are still evident—using the physical evidence to guide the new work. Examples can include large sections of a wall, a cornice, balustrade, column, or stairway. If using the same kind of material is not technically or economically feasible, then a compatible substitute material may be considered.	Removing a masonry feature that is unrepairable and not replacing it; or replacing it with a new feature that does not convey the same visual appearance.

The following work is highlighted to indicate that it represents the particularly complex technical or design aspects of rehabilitation projects and should only be considered after the preservation concerns listed above have been addressed.

Design for Missing Historic Features

	Creating a false historical appearance because the replaced masonry feature is based on insufficient historical, pictorial, and physical documentation.
	Introducing a new masonry feature that is incompatible in size, scale, material and color.

Wood: Clapboard, weatherboard, shingles, and other wooden siding and decorative elements

Because it can be easily shaped by sawing, planing, carving, and gouging, wood is the most commonly used material for architectural features such as clapboards, cornices, brackets, entablatures, shutters, columns and balustrades. These wooden features—both functional and decorative—may be important in defining the historic character of the building and thus their retention, protection, and repair are of particular importance in rehabilitation projects.

Recommended	*Not Recommended*
Identifying, retaining, and preserving wood features that are important in defining the overall historic character of the building such as siding, cornices, brackets, window architraves, and doorway pediments; and their paints, finishes, and colors.	Removing or radically changing wood features which are important in defining the overall historic character of the building so that, as a result, the character is diminished.
	Removing a major portion of the historic wood from a facade instead of repairing or replacing only the deteriorated wood, then reconstructing the facade with new material in order to achieve a uniform or "improved" appearance.
	Radically changing the type of finish or its color or accent scheme so that the historic character of the exterior is diminished.
	Stripping historically painted surfaces to bare wood, then applying clear finishes or stains in order to create a "natural look."
	Stripping paint or varnish to bare wood rather than repairing or reapplying a special finish, i.e., a grained finish to an exterior wood feature such as a front door.
Protecting and maintaining wood features by providing proper drainage so that water is not allowed to stand on flat, horizontal surfaces or accumulate in decorative features.	Failing to identify, evaluate, and treat the causes of wood deterioration, including faulty flashing, leaking gutters, cracks and holes in siding, deteriorated caulking in joints and seams, plant material growing too close to wood surfaces, or insect or fungus infestation.
Applying chemical preservatives to wood features such as beam ends or outriggers that are exposed to decay hazards and are traditionally unpainted.	Using chemical preservatives such as creosote which can change the appearance of wood features unless they were used historically.
Retaining coatings such as paint that help protect the wood from moisture and ultraviolet light. Paint removal should be considered only where there is paint surface deterioration and as part of an overall maintenance program which involves repainting or applying other appropriate protective coatings.	Stripping paint or other coatings to reveal bare wood, thus exposing historically coated surfaces to the effects of accelerated weathering.
Inspecting painted wood surfaces to determine whether repainting is necessary or if cleaning is all that is required.	Removing paint that is firmly adhering to, and thus, protecting wood surfaces.
Removing damaged or deteriorated paint to the next sound layer using the gentlest method possible (handscraping and handsanding), then repainting.	Using destructive paint removal methods such as a propane or butane torches, sandblasting or waterblasting. These methods can irreversibly damage historic woodwork.
Using with care electric hot-air guns on decorative wood features and electric heat plates on flat wood surfaces when paint is so deteriorated that total removal is necessary prior to repainting.	Using thermal devices improperly so that the historic woodwork is scorched.
Using chemical strippers primarily to supplement other methods such as handscraping, handsanding and the above-recommended thermal devices. Detachable wooden elements such as shutters, doors, and columns may—with the proper safeguards—be chemically dip-stripped.	Failing to neutralize the wood thoroughly after using chemicals so that new paint does not adhere.
	Allowing detachable wood features to soak too long in a caustic solution so that the wood grain is raised and the surface roughened.
Applying compatible paint coating systems following proper surface preparation.	Failing to follow manufacturers' product and application instructions when repainting exterior woodwork.
Repainting with colors that are appropriate to the historic building and district.	Using new colors that are inappropriate to the historic building or district.

ood (continued)

Recommended	Not Recommended
valuating the overall condition of the wood to determine whether ore than protection and maintenance are required, that is, if repairs to wood features will be necessary.	Failing to undertake adequate measures to assure the preservation of wood features.
epairing wood features by patching, piecing-in, consolidating, or herwise reinforcing the wood using recognized preservation methods. Repair may also include the limited replacement in kind—or with compatible substitute material—of those extensively eteriorated or missing parts of features where there are surviving rototypes such as brackets, moldings, or sections of siding.	Replacing an entire wood feature such as a cornice or wall when repair of the wood and limited replacement of deteriorated or missing parts are appropriate. Using substitute materials for the replacement part that does not convey the visual appearance of the surviving parts of the wood feature or that is physically or chemically incompatible.
eplacing in kind an entire wood feature that is too deteriorated to epair—if the overall form and detailing are still evident—using the physical evidence to guide the new work. Examples of wood features include a cornice, entablature or balustrade. If using the me kind of material is not technically or economically feasible, en a compatible substitute material may be considered.	Removing an entire wood feature that is unrepairable and not replacing it; or replacing it with a new feature that does not convey the same visual appearance.

The following work is highlighted because it represents the particularly complex technical or design aspects of rehabilitation projects and should only be considered after the preservation concerns listed above have been addressed.

Design for Missing Historic Features

Creating a false historic appearance because the replaced wood feature is based on insufficient historical, pictorial, and physical documentation.

Introducing a new wood feature that is incompatible in size, scale, material, and color.

Architectural Metals: Cast iron, steel, pressed tin, copper, aluminum, and zinc	Architectural metal features—such as cast-iron facades, porches, and steps; sheet metal cornices, roofs, roof cresting and storefronts; and cast or rolled metal doors, window sash, entablatures and hardware—are often highly decorative and may be important in defining the overall historic character of the building. Their retention, protection, and repair should be a prime consideration in rehabilitation projects.

Recommended	*Not Recommended*
Identifying, retaining, and preserving architectural metal features such as columns, capitals, window hoods, or stairways that are important in defining the overall historic character of the building; and their finishes and colors.	Removing or radically changing architectural metal features which are important in defining the overall historic character of the building so that, as a result, the character is diminished.
	Removing a major portion of the historic architectural metal from a facade instead of repairing or replacing only the deteriorated metal, then reconstructing the facade with new material in order to create a uniform, or "improved" appearance.
	Radically changing the type of finish or its historical color or accent scheme.
Protecting and maintaining architectural metals from corrosion by providing proper drainage so that water does not stand on flat, horizontal surfaces or accumulate in curved, decorative features.	Failing to identify, evaluate, and treat the causes of corrosion, such as moisture from leaking roofs or gutters.
	Placing incompatible metals together without providing a reliable separation material. Such incompatibility can result in galvanic corrosion of the less noble metal, e.g., copper will corrode cast iron, steel, tin, and aluminum.
Cleaning architectural metals, when necessary, to remove corrosion prior to repainting or applying other appropriate protective coatings.	Exposing metals which were intended to be protected from the environment.
	Applying paint or other coatings to metals such as copper, bronze, or stainless steel that were meant to be exposed.
Identifying the particular type of metal prior to any cleaning procedure and then testing to assure that the gentlest cleaning method possible is selected or determining that cleaning is inappropriate for the particular metal.	Using cleaning methods which alter or damage the historic color, texture, and finish of the metal; or cleaning when it is inappropriate for the metal.
	Removing the patina of historic metal. The patina may be a protective coating on some metals, such as bronze or copper, as well as a significant historic finish.
Cleaning soft metals such as lead, tin, copper, terneplate, and zinc with appropriate chemical methods because their finishes can be easily abraded by blasting methods.	Cleaning soft metals such as lead, tin, copper, terneplate, and zinc with grit blasting which will abrade the surface of the metal.
Using the gentlest cleaning methods for cast iron, wrought iron, and steel—hard metals—in order to remove paint buildup and corrosion. If handscraping and wire brushing have proven ineffective, low pressure dry grit blasting may be used as long as it does not abrade or damage the surface.	Failing to employ gentler methods prior to abrasively cleaning cast iron, wrought iron or steel; or using high pressure grit blasting.
Applying appropriate paint or other coating systems after cleaning in order to decrease the corrosion rate of metals or alloys.	Failing to re-apply protective coating systems to metals or alloys that require them after cleaning so that accelerated corrosion occurs.
Repainting with colors that are appropriate to the historic building or district.	Using new colors that are inappropriate to the historic building or district.
Applying an appropriate protective coating such as lacquer to an architectural metal feature such as a bronze door which is subject to heavy pedestrian use.	Failing to assess pedestrian use or new access patterns so that architectural metal features are subject to damage by use or inappropriate maintenance such as salting adjacent sidewalks.
Evaluating the overall condition of the architectural metals to determine whether more than protection and maintenance are required, that is, if repairs to features will be necessary.	Failing to undertake adequate measures to assure the preservation of architectural metal features.

Recommended	*Not Recommended*
Repairing architectual metal features by patching, splicing, or otherwise reinforcing the metal following recognized preservation methods. Repairs may also include the limited replacement in kind—or with a compatible substitute material—of those extensively deteriorated or missing parts of features when there are surviving prototypes such as porch balusters, column capitals or bases; or porch cresting.	Replacing an entire architectural metal feature such as a column or a balustrade when repair of the metal and limited replacement of deteriorated or missing parts are appropriate.
Replacing in kind an entire architectural metal feature that is too deteriorated to repair—if the overall form and detailing are still evident—using the physical evidence to guide the new work. Examples could include cast iron porch steps or steel sash windows. If using the same kind of material is not technically or economically feasible, then a compatible substitute material may be considered.	Using a substitute material for the replacement part that does not convey the visual appearance of the surviving parts of the architectural metal feature or that is physically or chemically incompatible.
	Removing an architectural metal feature that is unrepairable and not replacing it; or replacing it with a new architectural metal feature that does not convey the same visual appearance.

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Design for Missing Historic Features

Designing and installing a new architectural metal feature such as a sheet metal cornice or cast iron capital when the historic feature is completely missing. It may be an accurate restoration using historical, pictorial, and physical documentation; or be a new design that is compatible with the size, scale, material, and color of the historic building.	Creating a false historic appearance because the replaced architectural metal feature is based on insufficient historical, pictorial, and physical documentation.
	Introducing a new architectural metal feature that is incompatible in size, scale, material, and color.

Roofs

The roof—with its shape; features such as cresting, dormers, cupolas, and chimneys; and the size, color, and patterning of the roofing material—can be extremely important in defining the building's overall historic character. In addition to the design role it plays, a weathertight roof is essential to the preservation of the entire structure; thus, protecting and repairing the roof as a "cover" is a critical aspect of every rehabilitation project.

Recommended	*Not Recommended*
Identifying, retaining, and preserving roofs—and their functional and decorative features—that are important in defining the overall historic character of the building. This includes the roof's shape, such as hipped, gambrel, and mansard; decorative features such as cupolas, cresting, chimneys, and weathervanes; and roofing material such as slate, wood, clay tile, and metal, as well as its size, color, and patterning.	Radically changing, damaging, or destroying roofs which are important in defining the overall historic character of the building so that, as a result, the character is diminished.
	Removing a major portion of the roof or roofing material that is repairable, then reconstructing it with new material in order to create a uniform, or "improved" appearance.
	Changing the configuration of a roof by adding new features such as dormer windows, vents, or skylights so that the historic character is diminished.
	Stripping the roof of sound historic material such as slate, clay tile, wood, and architectural metal.
	Applying paint or other coatings to roofing material which has been historically uncoated.
Protecting and maintaining a roof by cleaning the gutters and downspouts and replacing deteriorated flashing. Roof sheathing should also be checked for proper venting to prevent moisture condensation and water penetration; and to insure that materials are free from insect infestation.	Failing to clean and maintain gutters and downspouts properly so that water and debris collect and cause damage to roof fasteners, sheathing, and the underlying structure.
Providing adequate anchorage for roofing material to guard against wind damage and moisture penetration.	Allowing roof fasteners, such as nails and clips to corrode so that roofing material is subject to accelerated deterioration.
Protecting a leaking roof with plywood and building paper until it can be properly repaired.	Permitting a leaking roof to remain unprotected so that accelerated deterioration of historic building materials—masonry, wood, plaster, paint and structural members—occurs.
Repairing a roof by reinforcing the historic materials which comprise roof features. Repairs will also generally include the limited replacement in kind—or with compatible substitute material—of those extensively deteriorated or missing parts of features when there are surviving prototypes such as cupola louvers, dentils, dormer roofing; or slates, tiles, or wood shingles on a main roof.	Replacing an entire roof feature such as a cupola or dormer when repair of the historic materials and limited replacement of deteriorated or missing parts are appropriate.
	Using a substitute material for the replacement part that does not convey the visual appearance of the surviving parts of the roof or that is physically or chemically incompatible.
Replacing in kind an entire feature of the roof that is too deteriorated to repair—if the overall form and detailing are still evidence—using the physical evidence to guide the new work. Examples can include a large section of roofing, or a dormer or chimney. If using the same kind of material is not technically or economically feasible, then a compatible substitute material may be considered.	Removing a feature of the roof that is unrepairable, such as a chimney or dormer, and not replacing it; or replacing it with a new feature that does not convey the same visual appearance.

The following work is highlighted to indicate that it represents the particularly complex technical or design aspects of rehabilitation projects and should only be considered after the preservation concerns listed above have been addressed.

Design for Missing Historic Features

Designing and constructing a new feature when the historic feature is completely missing, such as a chimney or cupola. It may be an accurate restoration using historical, pictorial and physical documentation; or be a new design that is compatible with the size, scale, material, and color of the historic building.	Creating a false historical appearance because the replaced feature is based on insufficient historical, pictorial, and physical documentation.
	Introducing a new roof feature that is incompatible in size, scale, material, and color.

Recommended	*Not Recommended*
Alterations/Additions for the New Use	
Installing mechanical and service equipment on the roof such as air conditioning, transformers, or solar collectors when required for the new use so that they are inconspicuous from the public right-of-way and do not damage or obscure character-defining features.	Installing mechanical or service equipment so that it damages or obscures character-defining features; or is conspicuous from the public right-of-way.
Designing additions to roofs such as residential, office, or storage spaces; elevator housing; decks and terraces; or dormers or skylights when required by the new use so that they are inconspicuous from the public right-of-way and do not damage or obscure character-defining features.	Radically changing a character-defining roof shape or damaging or destroying character-defining roofing material as a result of incompatible design or improper installation techniques.

Windows

A highly decorative window with an unusual shape, or glazing pattern, or color is most likely identified immediately as a character-defining feature of the building. It is far more difficult, however, to assess the importance of repeated windows on a facade, particularly if they are individually simple in design and material, such as the large, multi-paned sash of many industrial buildings. Because rehabilitation projects frequently include proposals to replace window sash or even entire windows to improve thermal efficiency or to create a new appearance, it is essential that their contribution to the overall historic character of the building be assessed together with their physical condition before specific repair or replacement work is undertaken.

Recommended	*Not Recommended*
Identifying, retaining, and preserving windows—and their functional and decorative features—that are important in defining the overall historic character of the building. Such features can include frames, sash, muntins, glazing, sills, heads, hoodmolds, panelled or decorated jambs and moldings, and interior and exterior shutters and blinds.	Removing or radically changing windows which are important in defining the overall historic character of the building so that, as a result, the character is diminished. Changing the number, location, size or glazing pattern of windows, through cutting new openings, blocking-in windows, and installing replacement sash which does not fit the historic window opening. Changing the historic appearance of windows through the use of inappropriate designs, materials, finishes, or colors which radically change the sash, depth of reveal, and muntin configuration; the reflectivity and color of the glazing; or the appearance of the frame. Obscuring historic window trim with metal or other material. Stripping windows of historic material such as wood, iron, cast iron, and bronze.
Protecting and maintaining the wood and architectural metal which comprise the window frame, sash, muntins, and surrounds through appropriate surface treatments such as cleaning, rust removal, limited paint removal, and re-application of protective coating systems.	Failing to provide adequate protection of materials on a cyclical basis so that deterioration of the windows results.
Making windows weathertight by recaulking and replacing or installing weatherstripping. These actions also improve thermal efficiency.	Retrofitting or replacing windows rather than maintaining the sash, frame, and glazing.
Evaluating the overall condition of materials to determine whether more than protection and maintenance are required, i.e. if repairs to windows and window features will be required.	Failing to undertake adequate measures to assure the preservation of historic windows.
Repairing window frames and sash by patching, splicing, consolidating or otherwise reinforcing. Such repair may also include replacement in kind of those parts that are either extensively deteriorated or are missing when there are surviving prototypes such as architraves, hoodmolds, sash, sills, and interior or exterior shutters and blinds.	Replacing an entire window when repair of materials and limited replacement of deteriorated or missing parts are appropriate. Failing to reuse serviceable window hardware such as brass lifts and sash locks. Using a substitute material for the replacement part that does not convey the visual appearance of the surviving parts of the window or that is physically or chemically incompatible.
Replacing in kind an entire window that is too deteriorated to repair—if the overall form and detailing are still evident—using the physical evidence to guide the new work. If using the same kind of material is not technically or economically feasible, then a compatible substitute material may be considered.	Removing a character-defining window that is unrepairable and blocking it in; or replacing it with a new window that does not convey the same visual appearance.

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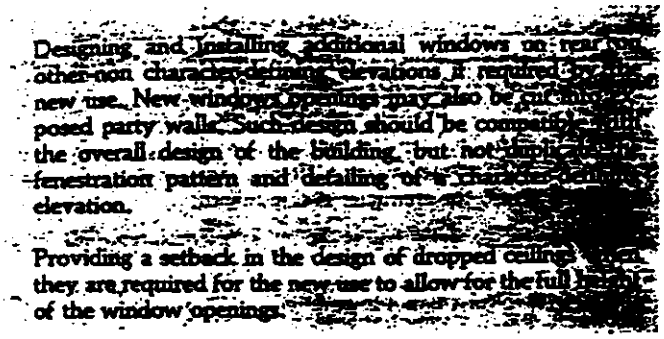
Design for Missing Historic Features

[redacted] and installing new windows when the historic windows are missing. The [redacted] restoration using [redacted] or be a [redacted] openings and [redacted]	Creating a false historical appearance because the replaced window is based on insufficient historical, pictorial, and physical documentation. Introducing a new design that is incompatible with the historic character of the building.

Recommended

Alterations/ Additions for the New Use



Designing and installing additional windows on rear or other non character-defining elevations if required by the new use. New window openings may also be cut into enclosed party walls. Such design should be compatible with the overall design of the building, but not duplicate the fenestration pattern and detailing of a character-defining elevation.

Providing a setback in the design of dropped ceilings where they are required for the new use to allow for the full height of the window openings.

Not Recommended

Installing new windows, including frames, sash, and muntin configuration that are incompatible with the building's historic appearance or obscure, damage, or destroy character-defining features.

Inserting new floors or furred-down ceilings which cut across the glazed areas of windows so that the exterior form and appearance of the windows are changed.

Entrances and Porches

Entrances and porches are quite often the focus of historic buildings, particularly when they occur on primary elevations. Together with their functional and decorative features such as doors, steps, balustrades, pilasters, and entablatures, they can be extremely important in defining the overall historic character of a building. Their retention, protection, and repair should always be carefully considered when planning rehabilitation work.

Recommended	*Not Recommended*
Identifying, retaining, and preserving entrances—and their functional and decorative features—that are important in defining the overall historic character of the building such as doors, fanlights, sidelights, pilasters, entablatures, columns, balustrades, and stairs.	Removing or radically changing entrances and porches which are important in defining the overall historic character of the building so that, as a result, the character is diminished.
	Stripping entrances and porches of historic material such as wood, iron, cast iron, terra cotta, tile and brick.
	Removing an entrance or porch because the building has been reoriented to accommodate a new use.
	Cutting new entrances on a primary elevation.
	Altering utilitarian or service entrances so they appear to be formal entrances by adding panelled doors, fanlights, and sidelights.
Protecting and maintaining the masonry, wood, and architectural metal that comprise entrances and porches through appropriate surface treatments such as cleaning, rust removal, limited paint removal, and re-application of protective coating systems.	Failing to provide adequate protection to materials on a cyclical basis so that deterioration of entrances and porches results.
Evaluating the overall condition of materials to determine whether more than protection and maintenance are required, that is, if repairs to entrance and porch features will be necessary.	Failing to undertake adequate measures to assure the preservation of historic entrances and porches.
Repairing entrances and porches by reinforcing the historic materials. Repair will also generally include the limited replacement in kind—or with compatible substitute material—of those extensively deteriorated or missing parts of repeated features where there are surviving prototypes such as balustrades, cornices, entablatures, columns, sidelights, and stairs.	Replacing an entire entrance or porch when the repair of material and limited replacement of parts are appropriate.
	Using a substitute material for the replacement parts that does not convey the visual appearance of the surviving parts of the entrance and porch or that is physically or chemically incompatible.
Replacing in kind an entire entrance or porch that is too deteriorated to repair—if the form and detailing are still evident—using the physical evidence to guide the new work. If using the same kind of material is not technically or economically feasible, then a compatible substitute material may be considered.	Removing an entrance or porch that is unrepairable and not replacing it; or replacing it with a new entrance or porch that does not convey the same visual appearance.

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Design for Missing Historic Features

Designing and constructing a new entrance or porch if the historic entrance or porch is completely missing. It may be a restoration based on historical, pictorial, and physical documentation; or be a new design that is compatible with the historic character of the building.	Creating a false historical appearance because the replaced entrance or porch is based on insufficient historical, pictorial, and physical documentation.
	Introducing a new entrance or porch that is incompatible in size, scale, material, and color.

Alterations/Additions for the New Use

Designing enclosures for historic porches when required by the new use in a manner that preserves the historic character of the building. This can include using large sheets of glass and recessing the enclosure wall behind existing scrollwork, posts, and balustrades.	Enclosing porches in a manner that results in a diminution or loss of historic character such as using solid materials such as wood, stucco, or masonry.

Recommended

Designing and installing additional entrances or porches when required for the new use in a manner that preserves the historic character of the building, i.e., limiting such alteration to non-character-defining elevations.

Not Recommended

Installing secondary service entrances and porches that are incompatible in size and scale with the historic building or obscure, damage, or destroy character-defining features.

Storefronts	Storefronts are quite often the focus of historic commercial buildings and can thus be extremely important in defining the overall historic character. Because storefronts also play a crucial role in a store's advertising and merchandising strategy to draw customers and increase business, they are often altered to meet the needs of a new business. Particular care is required in planning and accomplishing work on storefronts so that the building's historic character is preserved in the process of rehabilitation.

Recommended	*Not Recommended*
Identifying, retaining, and preserving storefronts—and their functional and decorative features—that are important in defining the overall historic character of the building such as display windows, signs, doors, transoms, kick plates, corner posts, and entablatures.	Removing or radically changing storefronts—and their features—which are important in defining the overall historic character of the building so that, as a result, the character is diminished.
	Changing the storefront so that it appears residential rather than commercial in character.
	Removing historic material from the storefront to create a recessed arcade.
	Introducing coach lanterns, mansard overhangings, wood shakes, nonoperable shutters, and small-paned windows if they cannot be documented historically.
	Changing the location of a storefront's main entrance.
Protecting and maintaining masonry, wood, and architectural metals which comprise storefronts through appropriate treatments such as cleaning, rust removal, limited paint removal, and reapplication of protective coating systems.	Failing to provide adequate protection to materials on a cyclical basis so that deterioration of storefront features results.
Protecting storefronts against arson and vandalism before work begins by boarding up windows and installing alarm systems that are keyed into local protection agencies.	Permitting entry into the building through unsecured or broken windows and doors so that interior features and finishes are damaged through exposure to weather or through vandalism.
	Stripping storefronts of historic material such as wood, cast iron, terra cotta, carrara glass, and brick.
Evaluating the overall condition of storefront materials to determine whether more than protection and maintenance are required, that is, if repairs to features will be necessary.	Failing to undertake adequate measures to assure the preservation of the historic storefront.
Repairing storefronts by reinforcing the historic materials. Repairs will also generally include the limited replacement in kind—or with compatible substitute material—of those extensively deteriorated or missing parts of storefronts where there are surviving prototypes such as transoms, kick plates, pilasters, or signs.	Replacing an entire storefront when repair of materials and limited replacement of its parts are appropriate.
	Using substitute material for the replacement parts that does not convey the same visual appearance as the surviving parts of the storefront or that is physically or chemically incompatible.
Replacing in kind an entire storefront that is too deteriorated to repair—if the overall form and detailing are still evident—using the physical evidence to guide the new work. If using the same material is not technically or economically feasible, then compatible substitute materials may be considered.	Removing a storefront that is unrepairable and not replacing it; or replacing it with a new storefront that does not convey the same visual appearance.

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Recommended	*Not Recommended*
Design for Missing Historic Features	
Designing and constructing a new storefront when the historic storefront is completely missing. It may be an accurate restoration using historical, pictorial, and physical documentation; or be a new design that is compatible with the size, scale, material, and color of the historic building. Such new design should generally be flush with the facade; and the treatment of secondary design elements, such as awnings or signs, kept as simple as possible. For example, new signs should fit flush with the existing features of the facade, such as the fascia board or cornice.	Creating a false historical appearance because the replaced storefront is based on insufficient historical, pictorial, and physical documentation. Introducing a new design that is incompatible in size, scale, material, and color. Using new illuminated signs; inappropriately scaled signs and logos; signs that project over the sidewalk unless they were a characteristic feature of the historic building; or other types of signs that obscure, damage, or destroy remaining character-defining features of the historic building.

BUILDING INTERIOR
Structural System

If features of the structural system are exposed such as loadbearing brick walls, cast iron columns, roof trusses, posts and beams, vigas, or stone foundation walls, they may be important in defining the building's overall historic character. Unexposed structural features that are not character-defining or an entire structural system may nonetheless be significant in the history of building technology; therefore, the structural system should always be examined and evaluated early in the project planning stage to determine both its physical condition and its importance to the building's historic character or historical significance. See also Health and Safety Code Requirements.

Recommended	*Not Recommended*
Identifying, retaining, and preserving structural systems—and individual features of systems—that are important in defining the overall historic character of the building, such as post and beam systems, trusses, summer beams, vigas, cast iron columns, above-grade stone foundation walls, or loadbearing brick or stone walls.	Removing, covering, or radically changing features of structural systems which are important in defining the overall historic character of the building so that, as a result, the character is diminished.
	Putting a new use into the building which could overload the existing structural system; or installing equipment or mechanical systems which could damage the structure.
	Demolishing a loadbearing masonry wall that could be augmented and retained and replacing it with a new wall (i.e., brick or stone), using the historic masonry only as an exterior veneer.
	Leaving known structural problems untreated such as deflection of beams, cracking and bowing of walls, or racking of structural members.
	Utilizing treatments or products that accelerate the deterioration of structural material such as introducing urea-formaldehyde foam insulation into frame walls.
Protecting and maintaining the structural system by cleaning the roof gutters and downspouts; replacing roof flashing; keeping masonry, wood, and architectural metals in a sound condition; and assuring that structural members are free from insect infestation.	Failing to provide proper building maintenance on a cyclical basis so that deterioration of the structural system results.
Examining and evaluating the physical condition of the structural system and its individual features using non-destructive techniques such as X-ray photography.	Utilizing destructive probing techniques that will damage or destroy structural material.
Repairing the structural system by augmenting or upgrading individual parts or features. For example, weakened structural members such as floor framing can be spliced, braced, or otherwise supplemented and reinforced.	Upgrading the building structurally in a manner that diminishes the historic character of the exterior, such as installing strapping channels or removing a decorative cornice; or damages interior features or spaces.
	Replacing a structural member or other feature of the structural system when it could be augmented and retained.
Replacing in kind—or with substitute material—those portions or features of the structural system that are either extensively deteriorated or are missing when there are surviving prototypes such as cast iron columns, roof rafters or trusses, or sections of loadbearing walls. Substitute material should convey the same form, design, and overall visual appearance as the historic feature; and, at a minimum, be equal to its loadbearing capabilities.	Installing a replacement feature that does not convey the same visual appearance, e.g., replacing an exposed wood summer beam with a steel beam.
	Using substitute material that does not equal the loadbearing capabilities of the historic material and design or is otherwise physically or chemically incompatible.

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Recommended	*Not Recommended*
Alterations/Additions for the New Use	
Limiting any new excavations adjacent to historic foundations to avoid undermining the structural stability of the building or adjacent historic buildings.	Carrying out excavations or regrading adjacent to or within a historic building which could cause the historic foundation to settle, shift, or fail; or could have a similar effect on adjacent historic buildings.
Correcting structural deficiencies in preparation for the new use in a manner that preserves the structural system and individual character-defining features.	Radically changing interior spaces or damaging or destroying features or finishes that are character-defining while trying to correct structural deficiencies in preparation for the new use.
Designing and installing new mechanical or electrical systems when required for the new use which minimize the number of cutouts or holes in structural members.	Installing new mechanical and electrical systems or equipment in a manner which results in numerous cuts, splices, or alterations to the structural members.
Adding a new floor when required for the new use if such an alteration does not damage or destroy the structural system or obscure, damage, or destroy character-defining spaces, features, or finishes.	Inserting a new floor when such a radical change damages a structural system or obscures or destroys interior spaces, features, or finishes. Inserting new floors or furred-down ceilings which cut across the glazed areas of windows so that the exterior form and appearance of the windows are radically changed.
Creating an atrium or a light well to provide natural light when required for the new use in a manner that assures the preservation of the structural system as well as character-defining interior spaces, features, and finishes.	Damaging the structural system or individual features; or radically changing, damaging, or destroying character-defining interior spaces, features, or finishes in order to create an atrium or a light well.

Interior: Spaces, Features, and Finishes	An interior floor plan, the arrangement of spaces, and built-in features and applied finishes may be individually or collectively important in defining the historic character of the building. Thus, their identification, retention, protection, and repair should be given prime consideration in every rehabilitation project and caution exercised in pursuing any plan that would radically change character-defining spaces or obscure, damage or destroy interior features or finishes.

Recommended	*Not Recommended*
Interior Spaces	
Identifying, retaining, and preserving a floor plan or interior spaces that are important in defining the overall historic character of the building. This includes the size, configuration, proportion, and relationship of rooms and corridors; the relationship of features to spaces; and the spaces themselves such as lobbies, reception halls, entrance halls, double parlors, theaters, auditoriums, and important industrial or commercial use spaces.	Radically changing a floor plan or interior spaces—including individual rooms—which are important in defining the overall historic character of the building so that, as a result, the character is diminished. Altering the floor plan by demolishing principal walls and partitions to create a new appearance. Altering or destroying interior spaces by inserting floors, cutting through floors, lowering ceilings, or adding or removing walls. Relocating an interior feature such as a staircase so that the historic relationship between features and spaces is altered.

Recommended	*Not Recommended*
Interior Features and Finishes	
Identifying, retaining, and preserving interior features and finishes that are important in defining the overall historic character of the building, including columns, cornices, baseboards, fireplaces and mantles, paneling, light fixtures, hardware, and flooring; and wallpaper, plaster, paint, and finishes such as stenciling, marbling, and graining; and other decorative materials that accent interior features and provide color, texture, and patterning to walls, floors, and ceilings.	Removing or radically changing features and finishes which are important in defining the overall historic character of the building so that, as a result, the character is diminished. Installing new decorative material that obscures or damages character-defining interior features or finishes. Removing paint, plaster, or other finishes from historically finished surfaces to create a new appearance (e.g., removing plaster to expose masonry surfaces such as brick walls or a chimney piece). Applying paint, plaster, or other finishes to surfaces that have been historically unfinished to create a new appearance. Stripping historically painted wood surfaces to bare wood, then applying clear finishes or stains to create a "natural look." Stripping paint to bare wood rather than repairing or reapplying grained or marbled finishes to features such as doors and paneling. Radically changing the type of finish or its color, such as painting a previously varnished wood feature.
Protecting and maintaining masonry, wood, and architectural metals which comprise interior features through appropriate surface treatments such as cleaning, rust removal, limited paint removal, and reapplication of protective coatings systems.	Failing to provide adequate protection to materials on a cyclical basis so that deterioration of interior features results.

Recommended	*Not Recommended*
Protecting interior features and finishes against arson and vandalism before project work begins, erecting protective fencing, boarding-up windows, and installing fire alarm systems that are keyed to local protection agencies.	Permitting entry into historic buildings through unsecured or broken windows and doors so that interior features and finishes are damaged by exposure to weather or through vandalism.
	Stripping interiors of features such as woodwork, doors, windows, light fixtures, copper piping, radiators; or of decorative materials.
Protecting interior features such as a staircase, mantel, or decorative finishes and wall coverings against damage during project work by covering them with heavy canvas or plastic sheets.	Failing to provide proper protection of interior features and finishes during work so that they are gouged, scratched, dented, or otherwise damaged.
Installing protective coverings in areas of heavy pedestrian traffic to protect historic features such as wall coverings, parquet flooring and panelling.	Failing to take new use patterns into consideration so that interior features and finishes are damaged.
Removing damaged or deteriorated paints and finishes to the next sound layer using the gentlest method possible, then repainting or refinishing using compatible paint or other coating systems.	Using destructive methods such as propane or butane torches or sandblasting to remove paint or other coatings. These methods can irreversibly damage the historic materials that comprise interior features.
Repainting with colors that are appropriate to the historic building.	Using new paint colors that are inappropriate to the historic building.
Limiting abrasive cleaning methods to certain industrial or warehouse buildings where the interior masonry or plaster features do not have distinguishing design, detailing, tooling, or finishes; and where wood features are not finished, molded, beaded, or worked by hand. Abrasive cleaning should *only* be considered after other, gentler methods have been proven ineffective.	Changing the texture and patina of character-defining features through sandblasting or use of other abrasive methods to remove paint, discoloration or plaster. This includes both exposed wood (including structural members) and masonry.
Evaluating the overall condition of materials to determine whether more than protection and maintenance are required, that is, if repairs to interior features and finishes will be necessary.	Failing to undertake adequate measures to assure the preservation of interior features and finishes.
Repairing interior features and finishes by reinforcing the historic materials. Repair will also generally include the limited replacement in kind—or with compatible substitute material—of those extensively deteriorated or missing parts of repeated features when there are surviving prototypes such as stairs, balustrades, wood panelling, columns; or decorative wall coverings or ornamental tin or plaster ceilings.	Replacing an entire interior feature such as a staircase, panelled wall, parquet floor, or cornice; or finish such as a decorative wall covering or ceiling when repair of materials and limited replacement of such parts are appropriate. Using a substitute material for the replacement part that does not convey the visual appearance of the surviving parts or portions of the interior feature or finish or that is physically or chemically incompatible.
Replacing in kind an entire interior feature or finish that is too deteriorated to repair—if the overall form and detailing are still evident—using the physical evidence to guide the new work. Examples could include wainscoting, a tin ceiling, or interior stairs. If using the same kind of material is not technically or economically feasible, then a compatible substitute material may be considered.	Removing a character-defining feature or finish that is unrepairable and not replacing it; or replacing it with a new feature or finish that does not convey the same visual appearance.

The following work is highlighted to indicate that it represents the particularly complex technical or design aspects of rehabilitation projects and should only be considered after the preservation concerns listed above have been addressed.

Design for Missing Historic Features

Designing and installing a new interior feature or finish if the historic feature or finish is completely missing. This could include missing partitions, stairs, elevators, lighting fixtures, and wall coverings; or even entire rooms if all historic spaces, features, and finishes are missing or have been destroyed by inappropriate "renovations." The design may be a restoration based on historical, pictorial, and physical documentation; or be a new design that is compatible with the historic character of the building, district, or neighborhood.	Creating a false historical appearance because the replaced feature is based on insufficient physical, historical, and pictorial documentation or on information derived from another building. Introducing a new interior feature or finish that is incompatible with the scale, design, materials, color, and texture of the surviving interior features and finishes.

Recommended	*Not Recommended*
Alterations/Additions for the New Use	
ommodating service functions such as bathrooms, echanical equipment, and office machines required by the building's new use in secondary spaces such as first floor service areas or on upper floors.	Dividing rooms, lowering ceilings, and damaging or obscuring character-defining features such as fireplaces, niches, stairways or alcoves, so that a new use can be accommodated in the building.
Reusing decorative material or features that have had to be removed during the rehabilitation work including wall and baseboard trim, door moulding, panelled doors, and simple wainscoting; and relocating such material or features in areas appropriate to their historic placement.	Discarding historic material when it can be reused within the rehabilitation project or relocating it in historically inappropriate areas.
Installing permanent partitions in secondary spaces; removable partitions that do not destroy the sense of space should be installed when the new use requires the subdivision of character-defining interior spaces.	Installing permanent partitions that damage or obscure character-defining spaces, features, or finishes.
Enclosing an interior stairway where required by code so that its character is retained. In many cases, glazed fire-rated walls may be used.	Enclosing an interior stairway with fire-rated construction so that the stairwell space or any character-defining features are destroyed.
Placing new code-required stairways or elevators in secondary and service areas of the historic building.	Radically changing, damaging, or destroying character-defining spaces, features, or finishes when adding new code-required stairways and elevators.
Creating an atrium or a light well to provide natural light when required for the new use in a manner that preserves character-defining interior spaces, features, and finishes as well as the structural system.	Destroying character-defining interior spaces, features, or finishes; or damaging the structural system in order to create an atrium or light well.
Adding a new floor if required for the new use in a manner that preserves character-defining structural features, and interior spaces, features, and finishes.	Inserting a new floor within a building that alters or destroys the fenestration; radically changes a character-defining interior space; or obscures, damages, or destroys decorative detailing.

Mechanical Systems: Heating, Air Conditioning, Electrical, and Plumbing

The visible features of historic heating, lighting, air conditioning and plumbing systems may sometimes help define the overall historic character of the building and should thus be retained and repaired, whenever possible. The systems themselves (the compressors, boilers, generators and their ductwork, wiring and pipes) will generally either need to be upgraded, augmented, or entirely replaced in order to accommodate the new use and to meet code requirements. Less frequently, individual portions of a system or an entire system are significant in the history of building technology; therefore, the identification of character-defining features or historically significant systems should take place together with an evaluation of their physical condition early in project planning.

Recommended	*Not Recommended*
Identifying, retaining, and preserving visible features of early mechanical systems that are important in defining the overall historic character of the building, such as radiators, vents, fans, grilles, plumbing fixtures, switchplates, and lights.	Removing or radically changing features of mechanical systems that are important in defining the overall historic character of the building so that, as a result, the character is diminished.
Protecting and maintaining mechanical, plumbing, and electrical systems and their features through cyclical cleaning and other appropriate measures.	Failing to provide adequate protection of materials on a cyclical basis so that deterioration of mechanical systems and their visible features results.
Preventing accelerated deterioration of mechanical systems by providing adequate ventilation of attics, crawlspaces, and cellars so that moisture problems are avoided.	Enclosing mechanical systems in areas that are not adequately ventilated so that deterioration of the systems results.
Repairing mechanical systems by augmenting or upgrading system parts, such as installing new pipes and ducts; rewiring; or adding new compressors or boilers.	Replacing a mechanical system or its functional parts when it could be upgraded and retained.
Replacing in kind—or with compatible substitute material—those visible features of mechanical systems that are either extensively deteriorated or are missing when there are surviving prototypes such as ceiling fans, switchplates, radiators, grilles, or plumbing fixtures.	Installing a replacement feature that does not convey the same visual appearance.

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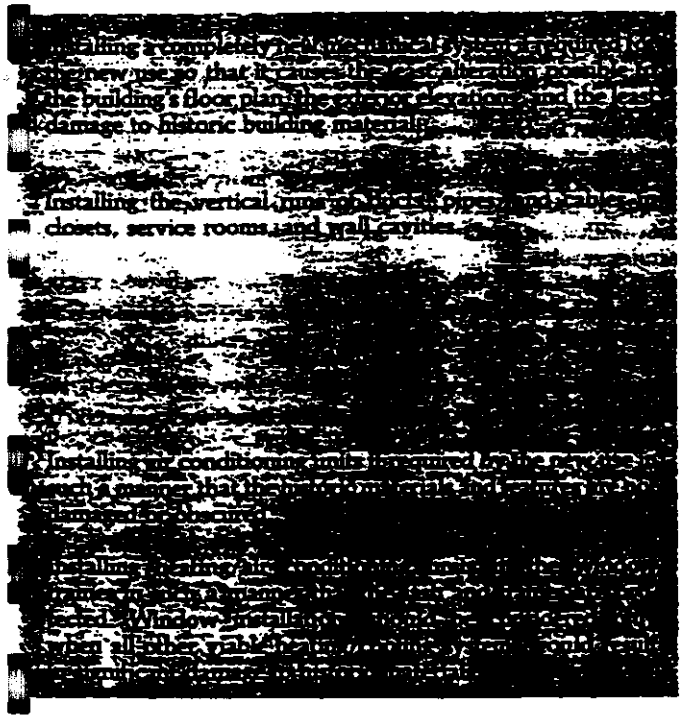
Recommended	*Not Recommended*
Alterations/Additions for the New Use	
	Installing a new mechanical system so that character-defining structural or interior features are radically changed, damaged, or destroyed.
	Installing vertical runs of ducts, pipes, and cables in places where they will obscure character-defining features.
	Concealing mechanical equipment in walls or ceilings in a manner that requires the removal of historic building material.
	Installing "dropped" acoustical ceilings to hide mechanical equipment when this destroys the proportions of character-defining interior spaces.
	Cutting through features such as masonry walls in order to install air conditioning units.
	Radically changing the appearance of the historic building or damaging or destroying windows by installing heating/air conditioning units in historic window frames.

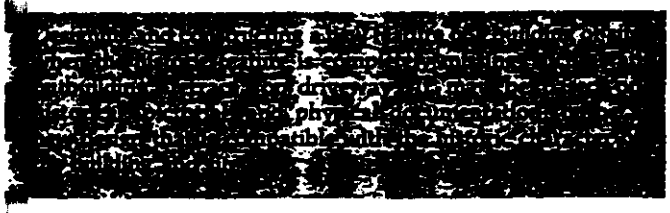
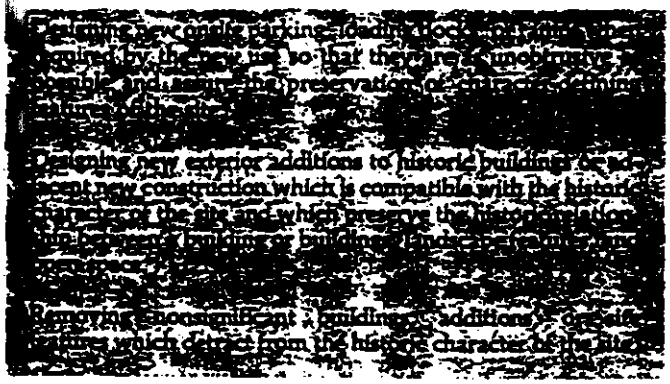
BUILDING SITE

The relationship between a historic building or buildings and landscape features within a property's boundaries—or the building site—helps to define the historic character and should be considered an integral part of overall planning for rehabilitation project work.

Recommended	*Not Recommended*
Identifying, retaining, and preserving buildings and their features as well as features of the site that are important in defining its overall historic character. Site features can include driveways, walkways, lighting, fencing, signs, benches, fountains, wells, terraces, canal systems, plants and trees, berms, and drainage or irrigation ditches; and archeological features that are important in defining the history of the site.	Removing or radically changing buildings and their features or site features which are important in defining the overall historic character of the building site so that, as a result, the character is diminished.
Retaining the historic relationship between buildings, landscape features, and open space.	Removing or relocating historic buildings or landscape features, thus destroying the historic relationship between buildings, landscape features, and open space.
	Removing or relocating historic buildings on a site or in a complex of related historic structures—such as a mill complex or farm—thus diminishing the historic character of the site or complex.
	Moving buildings onto the site, thus creating a false historical appearance.
	Lowering the grade level adjacent to a building to permit development of a formerly below-grade area such as a basement in a manner that would drastically change the historic relationship of the building to its site.
Protecting and maintaining buildings and the site by providing proper drainage to assure that water does not erode foundation walls; drain toward the building; nor erode the historic landscape.	Failing to maintain site drainage so that buildings and site features are damaged or destroyed; or, alternatively, changing the site grading so that water no longer drains properly.
Minimizing disturbance of terrain around buildings or elsewhere on the site, thus reducing the possibility of destroying unknown archeological materials.	Introducing heavy machinery or equipment into areas where their presence may disturb archeological materials.
Surveying areas where major terrain alteration is likely to impact important archeological sites.	Failing to survey the building site prior to the beginning of rehabilitation project work so that, as a result, important archeological material is destroyed.
Protecting, e.g. preserving in place known archeological material whenever possible.	Leaving known archeological material unprotected and subject to vandalism, looting, and destruction by natural elements such as erosion.
Planning and carrying out any necessary investigation using professional archeologists and modern archeological methods when preservation in place is not feasible.	Permitting unqualified project personnel to perform data recovery so that improper methodology results in the loss of important archeological material.
Protecting the building and other features of the site against arson and vandalism before rehabilitation work begins, i.e., erecting protective fencing and installing alarm systems that are keyed into local protection agencies.	Permitting buildings and site features to remain unprotected so that plant materials, fencing, walkways, archeological features, etc. are damaged or destroyed.
	Stripping features from buildings and the site such as wood siding, iron fencing, masonry balustrades; or removing or destroying landscape features, including plant material.
Providing continued protection of masonry, wood, and architectural metals which comprise building and site features through appropriate surface treatments such as cleaning, rust removal, limited paint removal, and re-application of protective coating systems; and continued protection and maintenance of landscape features, including plant material.	Failing to provide adequate protection of materials on a cyclical basis so that deterioration of building and site features results.

Recommended	*Not Recommended*
Evaluating the overall condition of materials to determine whether more than protection and maintenance are required, that is, if repairs to building and site features will be necessary.	Failing to undertake adequate measures to assure the preservation of building and site features.
Repairing features of buildings and the site by reinforcing the historic materials. Repair will also generally include replacement in kind—with a compatible substitute material—of those extensively deteriorated or missing parts of features where there are suviving prototypes such as fencing and paving.	Replacing an entire feature of the building or site such as a fence, walkway, or driveway when repair of materials and limited replacement of deteriorated or missing parts are appropriate. Using a substitute material for the replacement part that does not convey the visual appearance of the surviving parts of the building or site feature or that is physically or chemically incompatible.
Replacing in kind an entire feature of the building or site that is too deteriorated to repair—if the overall form and detailing are still evident—using the physical evidence to guide the new work. This would include an entrance or porch, walkway, or fountain. If using the same kind of material is not technically or economically feasible, then a compatible substitute material may be considered.	Removing a feature of the building or site that is unrepairable and not replacing it; or replacing it with a new feature that does not convey the same visual appearance.

The following work is highlighted to indicate that it represents the particularly complex technical or design aspects of rehabilitation project work and should only be considered after the preservation concerns listed above have been addressed.

Recommended	*Not Recommended*
Design for Missing Historic Features	
	Creating a false historical appearance because the replaced feature is based on insufficient historical, pictorial, and physical documentation. Introducing a new building or site feature that is out of scale or otherwise inappropriate. Introducing a new landscape feature or plant material that is visually incompatible with the site or that destroys site patterns or vistas.
Alterations/Additions for the New Use	
	Placing parking facilities directly adjacent to historic buildings where automobiles may cause damage to the buildings or landscape features or be intrusive to the building site. Introducing new construction onto the building site which is visually incompatible in terms of size, scale, design, materials, color and texture or which destroys historic relationships on the site. Removing a historic building in a complex, a building feature, or a site feature which is important in defining the historic character of the site.

DISTRICT/ NEIGHBORHOOD

The relationship between historic buildings, and streetscape and landscape features within a historic district or neighborhood helps to define the historic character and therefore should always be a part of the rehabilitation plans.

Recommended	*Not Recommended*
Identifying, retaining, and preserving buildings, and streetscape, and landscape features which are important in defining the overall historic character of the district or neighborhood. Such features can include streets, alleys, paving, walkways, street lights, signs, benches, parks and gardens, and trees.	Removing or radically changing those features of the district or neighborhood which are important in defining the overall historic character so that, as a result, the character is diminished.
Retaining the historic relationship between buildings, and streetscape and landscape features such as a town square comprised of row houses and stores surrounding a communal park or open space.	Destroying streetscape and landscape features by widening existing streets, changing paving material, or introducing inappropriately located new streets or parking lots. Removing or relocating historic buildings, or features of the streetscape and landscape, thus destroying the historic relationship between buildings, features and open space.
Protecting and maintaining the historic masonry, wood, and architectural metals which comprise building and streetscape features, through appropriate surface treatments such as cleaning, rust removal, limited paint removal, and reapplication of protective coating systems; and protecting and maintaining landscape features, including plant material.	Failing to provide adequate protection of materials on a cyclical basis so that deterioration of building, streetscape, and landscape features results.
Protecting buildings, paving, iron fencing, etc. against arson and vandalism before rehabilitation work begins by erecting protective fencing and installing alarm systems that are keyed into local protection agencies.	Permitting buildings to remain unprotected so that windows are broken; and interior features are damaged. Stripping features from buildings or the streetscape such as wood siding, iron fencing, or terra cotta balusters; or removing or destroying landscape features, including plant material.
Evaluating the overall condition of building, streetscape and landscape materials to determine whether more than protection and maintenance are required, that is, if repairs to features will be necessary.	Failing to undertake adequate measures to assure the preservation of building, streetscape, and landscape features.
Repairing features of the building, streetscape, or landscape by reinforcing the historic materials. Repair will also generally include the replacement in kind—or with a compatible substitute material—of those extensively deteriorated or missing parts of features when there are surviving prototypes such as porch balustrades, paving materials, or streetlight standards.	Replacing an entire feature of the building, streetscape, or landscape such as a porch, walkway, or streetlight, when repair of materials and limited replacement of deteriorated or missing parts are appropriate. Using a substitute material for the replacement part that does not convey the visual appearance of the surviving parts of the building, streetscape, or landscape feature or that is physically or chemically incompatible.
Replacing in kind an entire feature of the building, streetscape, or landscape that is too deteriorated to repair—when the overall form and detailing are still evident—using the physical evidence to guide the new work. This could include a storefront, a walkway, or a garden. If using the same kind of material is not technically or economically feasible, then a compatible substitute material may be considered.	Removing a feature of the building, streetscape, or landscape that is unrepairable and not replacing it; or replacing it with a new feature that does not convey the same visual appearance.

The following work is highlighted because it represents the particularly complex technical or design aspects of rehabilitation projects and should only be considered after the preservation concerns listed above have been addressed.

Recommended	*Not Recommended*
Design for Missing Historic Features	
Designing and constructing a new feature of the building, streetscape, or landscape when the historic feature is completely missing, such as row house steps, a porch, streetlight, or terrace. It may be a restoration based on historical, pictorial, and physical documentation; or be a new design that is compatible with the historic character of the district or neighborhood.	Creating a false historical appearance because the replaced feature is based on insufficient historical, pictorial and physical documentation. Introducing a new building, streetscape or landscape feature that is out of scale or otherwise inappropriate to the setting's historic character, e.g., replacing picket fencing with chain link fencing.
Alterations/Additions for the New Use	
Designing required new parking so that it is as unobtrusive as possible, i.e., on side streets or at the rear of buildings. "Shared" parking should also be planned so that several business can utilize one parking area as opposed to introducing random, multiple lots.	Placing parking facilities directly adjacent to historic buildings which cause the removal of historic plantings, relocation of paths and walkways, or blocking of alleys.
Designing and constructing new additions to historic buildings when required by the new use. New work should be compatible with the historic character of the district or neighborhood in terms of size, scale, design, material, color, and texture.	Introducing new construction into historic districts that is visually incompatible or that destroys historic relationships within the district or neighborhood.
Removing nonsignificant buildings, additions, or streetscape and landscape features which detract from the historic character of the district or the neighborhood.	Removing a historic building, building feature, or landscape or streetscape feature that is important in defining the overall historic character of the district or the neighborhood.

Although the work in these sections is quite often an important aspect of rehabilitation projects, it is usually *not* part of the overall process of preserving character-defining features (maintenance, repair, replacement); rather, such work is assessed for its potential negative impact on the building's historic character. For this reason, particular care must be taken not to obscure, radically change, damage, or destroy character-defining features in the process of rehabilitation work to meet new use requirements.

HEALTH AND SAFETY CODE REQUIREMENTS

As a part of the new use, it is often necessary to make modifications to a historic building so that it can comply with current health, safety and code requirements. Such work needs to be carefully planned and undertaken so that it does not result in a loss of character-defining spaces, features, and finishes.

Recommended

Identifying the historic building's character-defining spaces, features, and finishes so that code-required work will not result in their damage or loss.

Complying with health and safety code, including seismic codes and barrier-free access requirements, in such a manner that character-defining spaces, features, and finishes are preserved.

Working with local code officials to investigate alternative life safety measures or variances available under some codes so that alterations and additions to historic buildings can be avoided.

Providing barrier-free access through removable or portable, rather than permanent, ramps.

Providing seismic reinforcement to a historic building in a manner that avoids damaging the structural system and character-defining features.

Upgrading historic stairways and elevators to meet health and safety codes in a manner that assures their preservation, i.e., so that they are not damaged or obscured.

Installing sensitively designed fire suppression systems, such as a sprinkler system for wood frame mill buildings, instead of applying fire-resistant sheathing to character-defining features.

Not Recommended

Undertaking code-required alterations to a building or site before identifying those spaces, features, or finishes which are character-defining and must therefore be preserved.

Altering, damaging, or destroying character-defining spaces, features, and finishes while making modifications to a building or site to comply with safety codes.

Making changes to historic buildings without first seeking alternatives to code requirements.

Installing permanent ramps that damage or diminish character-defining features.

Reinforcing a historic building using measures that damage or destroy character-defining structural and other features.

Damaging or obscuring historic stairways and elevators or altering adjacent spaces in the process of doing work to meet code requirements.

Covering character-defining wood features with fire-resistant sheathing which results in altering their visual appearance.

HEALTH AND SAFETY CODE REQUIREMENTS (continued)

Recommended	*Not Recommended*
Applying fire-retardant coatings, such as intumescent paints, which expand during fire to add thermal protection to steel.	Using fire-retardant coatings if they damage or obscure character-defining features.
Adding a new stairway or elevator to meet health and safety codes in a manner that preserves adjacent character-defining features and spaces.	Radically changing, damaging, or destroying character-defining spaces, features, or finishes when adding a new code-required stairway or elevator.
Placing a code-required stairway or elevator that cannot be accommodated within the historic building in a new exterior addition. Such an addition should be located at the rear of the building or on an inconspicuous side; and its size and scale limited in relationship to the historic building.	Constructing a new addition to accommodate code-required stairs and elevators on character-defining elevations highly visible from the street; or where it obscures, damages or destroys character-defining features.

ENERGY RETROFITTING

Some character-defining features of a historic building or site such as cupolas, shutters, transoms, skylights, sun rooms, porches, and plantings also play a secondary energy conserving role. Therefore, prior to retrofitting historic buildings to make them more energy efficient, the first step should always be to identify and evaluate the existing historic features to assess their inherent energy conserving potential. If it is determined that retrofitting measures are necessary, then such work needs to be carried out with particular care to insure that the building's historic character is preserved in the process of rehabilitation.

Recommended	*Not Recommended*
District/Neighborhood	
Maintaining those existing landscape features which moderate the effects of the climate on the setting such as deciduous trees, evergreen wind-blocks, and lakes or ponds.	Stripping the setting of landscape features and landforms so that the effects of the wind, rain, and the sun result in acceierated deterioration of historic materials.
Building Site	
Retaining plant materials, trees, and landscape features, especially those which perform passive solar energy functions such as sun shading and wind breaks.	Removing plant materials, trees, and landscape features, so that they no longer perform passive solar energy functions.
Installing freestanding solar collectors in a manner that preserves the historic property's character-defining features.	Installing freestanding solar collectors that obscure, damage, or destroy historic landscape or archeological features.
Designing attached solar collectors, including solar greenhouses, so that the character-defining features of the property are preserved.	Locating solar collectors where they radically change the property's appearance; or damage or destroy character-defining features.
Masonry/Wood/Architectural Metals	
Installing thermal insulation in attics and in unheated cellars and crawlspaces to increase the efficiency of the existing mechanical systems.	Applying urea of formaldehyde foam or any other thermal insulation with a water content into wall cavities in an attempt to reduce energy consumption.
Installing insulating material on the inside of masonry walls to increase energy efficiency where there is no character-defining interior moulding around the window or other interior architectural detailing.	Resurfacing historic building materials with more energy efficient but incompatible materials, such as covering historic masonry with exterior insulation.
Installing passive solar devices such as a glazed "trombe" wall on a rear or inconspicuous side of all the historic building.	Installing passive solar devices such as an attached glazed "trombe" wall on primary or other highly visible elevations; or where historic material must be removed or obscured.
Roofs	
Placing solar collectors on noncharacter-defining roofs or roofs of nonhistoric adjacent buildings.	Placing solar collectors on roofs when such collectors change the historic roofline or obscure the relationship of the roof to character-defining roof features such as dormers, skylights, and chimneys.
Windows	
Utilizing the inherent energy conserving features of a building by maintaining windows and louvered blinds in good operable condition for natural ventilation.	Removing historic shading devices rather than keeping them in an operable condition.
Improving thermal efficiency with weatherstripping, storm windows, caulking, interior shades, and, if historically appropriate, blinds and awnings.	Replacing historic multi-paned sash with new thermal sash utilizing false muntins.
Installing interior storm windows with airtight gaskets, ventilating holes, and/or removable clips to insure proper maintenance and to avoid condensation damage to historic windows.	Installing interior storm windows that allow moisture to accumulate and damage the window.

HEALTH AND SAFETY CODE REQUIREMENTS (continued)

Recommended	*Not Recommended*
Installing exterior storm windows which do not damage or obscure ne windows and frames.	Installing new exterior storm windows which are inappropriate in size or color, which are inoperable.
	Replacing windows or transoms with fixed thermal glazing or permitting windows and transoms to remain inoperable rather than utilizing them for their energy conserving potential.
Considering the use of lightly tinted glazing on non-character-defining elevations if other energy retrofitting alternatives are not ossible.	Using tinted or reflective glazing on character-defining or other conspicuous elevations.
ntrances and Porches	
Utilizing the inherent energy conserving features of a building by aintaining porches, and double vestibule entrances in good con-tion so that they can retain heat or block the sun and provide natural ventilation.	Enclosing porches located on character defining elevations to create passive solar collectors or airlock vestibules. Such enclosures can destroy the historic appearance of the building.
nterior Features	
Retaining historic interior shutters and transoms for their inherent energy conserving features.	Removing historic interior features which play a secondary energy conserving role.
ew Additions to Historic Buildings	
Placing new additions that have an energy conserving function ich as a solar greenhouse on non-character-defining elevations.	Installing new additions such as multistory solar greenhouse additions which obscure, damage, destroy character-defining features.
Mechanical Systems	
nstalling thermal insulation in attics and in unheated cellars and rawlspaces to conserve energy.	Apply urea formaldehyde foam or any other thermal insulation with a water content or that may collect moisture into wall cavities.

NEW ADDITIONS TO HISTORIC BUILDINGS

An attached exterior addition to a historic building expands its "outer limits" to create a new profile. Because such expansion has the capability to radically change the historic appearance, an exterior addition should be considered only after it has been determined that the new use cannot be successfully met by altering non-character-defining *interior* spaces. If the new use cannot be met in this way, then an attached exterior addition is usually an acceptable alternative. New additions should be designed and constructed so that the character-defining features of the historic building are not radically changed, obscured, damaged, or destroyed in the process of rehabilitation. New design should always be clearly differentiated so that the addition does not appear to be part of the historic resources.

Recommended	*Not Recommended*
Placing functions and services required for the new use in non-character-defining interior spaces rather than installing a new addition.	Expanding the size of the historic building by constructing a new addition when the new use could be met by altering non-character-defining interior spaces.
Constructing a new addition so that there is the least possible loss of historic materials and so that character-defining features are not obscured, damaged, or destroyed.	Attaching a new addition so that the character-defining features of the historic building are obscured, damaged, or destroyed.
Locating the attached exterior addition at the rear or on an inconspicuous side of a historic building; and limiting its size and scale in relationship to the historic building.	Designing a new addition so that its size and scale in relation to the historic building are out of proportion, thus diminishing the historic character.
Designing new additions in a manner that makes clear what is historic and what is new.	Duplicating the exact form, material, style, and detailing of the historic building in the new addition so that the new work appears to be part of the historic building.
	Imitating a historic style or period of architecture in new additions, especially for contemporary uses such as drive-in banks or garages.
Considering the attached exterior addition both in terms of the new use and the appearance of other buildings in the historic district or neighborhood. Design for the new work may be contemporary or may reference design motifs from the historic building. In either case, it should always be clearly differentiated from the historic building and be compatible in terms of mass, materials, relationship of solids to voids, and color.	Designing and constructing new additions that result in the diminution or loss of the historic character of the resource, including its design, materials, workmanship, location, or setting.
	Using the same wall plane, roof line, cornice height, materials, siding lap or window type to make additions appear to be a part of the historic building.
Placing new additions such as balconies and greenhouses on non-character-defining elevations and limiting the size and scale in relationship to the historic building.	Designing new additions such as multistory greenhouse additions that obscure, damage, or destroy character-defining features of the historic building.
Designing additional stories, when required for the new use, that are set back from the wall plane and are as inconspicuous as possible when viewed from the street.	Constructing additional stories so that the historic appearance of the building is radically changed.

CALIFORNIA MAIN STREET PROGRAM

California MainStreet

A Program of the California Department of Commerce

Program Description

In October 1985, the Governor of California signed legislation (AB 2483, Peace) to create the California Main Street program within the Department of Commerce. The program was originally designed as a demonstration program for cities under 50,000 in population. Fifteen demonstration cities were selected between 1986 and 1988, to whom the state continues to provide technical assistance and training in the Main Street approach to downtown revitalization. As a result of demand for services, the state program recognizes and provides limited services to 13 independent Main Street programs as well.

In addition to providing services to the cities formally included in the network, the state program conducts many activities to disseminate state-of-the-art downtown revitalization expertise to all of California's communities. These include publishing a quarterly newsletter, sponsoring an annual downtown revitalization conference with the League of California Cities, providing periodic training opportunities, producing publications and training documents, and operating information and referral services.

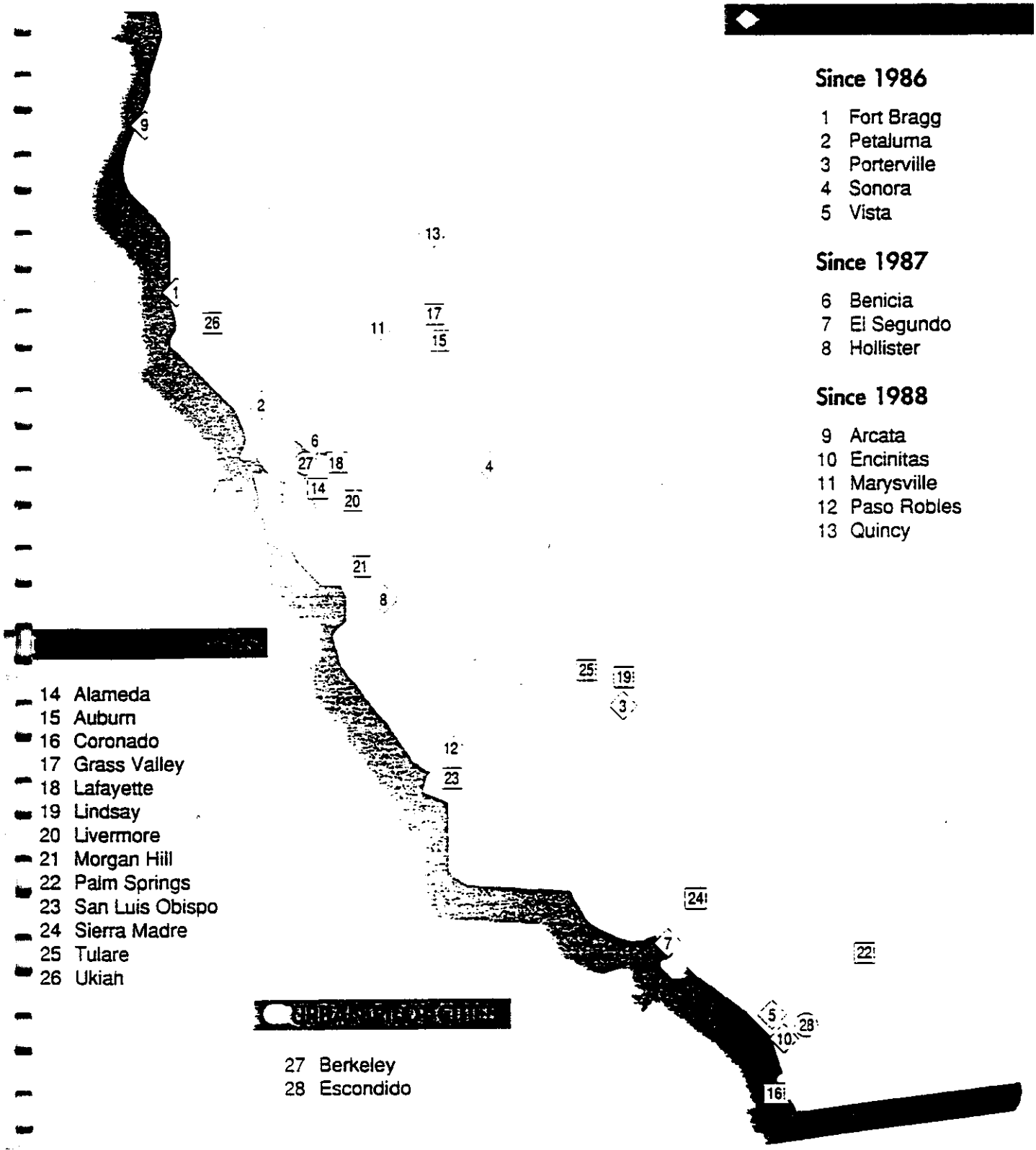
As the program for cities with populations of 50,000 and under has flourished, the Department of Commerce has received increasingly frequent requests to expand its efforts to larger cities and neighborhood business districts. In September 1988, AB 4462 (Harris) passed, authorizing the state program to initiate an urban pilot program, directing technical assistance services to the downtown areas and commercial neighborhoods of cities over 50,000 in population. In August 1990, the Department selected the cities of Berkeley and Escondido as the two urban pilots after a comprehensive competitive application process.

California Main Street communities have joined the ranks of the country's more than 700 cities in 31 states who follow the Main Street approach to downtown revitalization. This approach, developed by the National Trust for Historic Preservation in 1980, is a comprehensive management strategy organized around four points: Organization, Promotion, Design and Economic Restructuring.

◆ Sacramento, CA 95814 ◆ 916/322-1398 ◆ Pat Noyes, State Coordinator

California MainStreet

gram of the California Department of Commerce



Since 1986

1 Fort Bragg
2 Petaluma
3 Porterville
4 Sonora
5 Vista

Since 1987

6 Benicia
7 El Segundo
8 Hollister

Since 1988

9 Arcata
10 Encinitas
11 Marysville
12 Paso Robles
13 Quincy

14 Alameda
15 Auburn
16 Coronado
17 Grass Valley
18 Lafayette
19 Lindsay
20 Livermore
21 Morgan Hill
22 Palm Springs
23 San Luis Obispo
24 Sierra Madre
25 Tulare
26 Ukiah

27 Berkeley
28 Escondido

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Sierra Madre Main Street
Chamber of Commerce
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Sierra Madre, CA 91024
(818) 355-5111

Pete Smith, Chair (415) 283-7026
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Lafayette, CA 94549
(415) 284-1734

John Stevens
Tulare Improvement Program
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Tulare, CA 93274
(209) 685-2350

Rob Van Wagoner
New Lindsay Chamber of Commerce
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Lindsay, CA 93247
(209) 562-4929

Toby Hamby
Ukiah Main Street
P.O. Box 1044
Ukiah, CA 95482
(707) 463-1045

Resources
for *Commercial Building Rehabilitation*

Resources for Commercial Building Rehabilitation is a directory of contractors who provide materials and services in the field of commercial rehabilitation. Compiled with the assistance of Main Street architects, this 67-page publication lists contractors from throughout the United States and encompasses 26 different areas of expertise including awnings, glass and masonry as well as salvage, terracotta and windows. The directory is particularly useful to downtown revitalization programs specifically targeted to restoring historic older buildings in commercial areas.

$7.00

($4.52/directory, $0.35/CA sales tax, $2.13/first class postage)

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e send me a copy of *Resources for Commercial Building Rehabilitation.* I have enclosed a check for $7.00.

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ganization: _____

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Re your check payable to the California Department of Commerce
lease, no purchase orders). Allow two weeks for delivery.

d to: California Department of Commerce
Accounting Office
801 K Street, Suite 1600
[illegible] CA 95814

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Amount received _____
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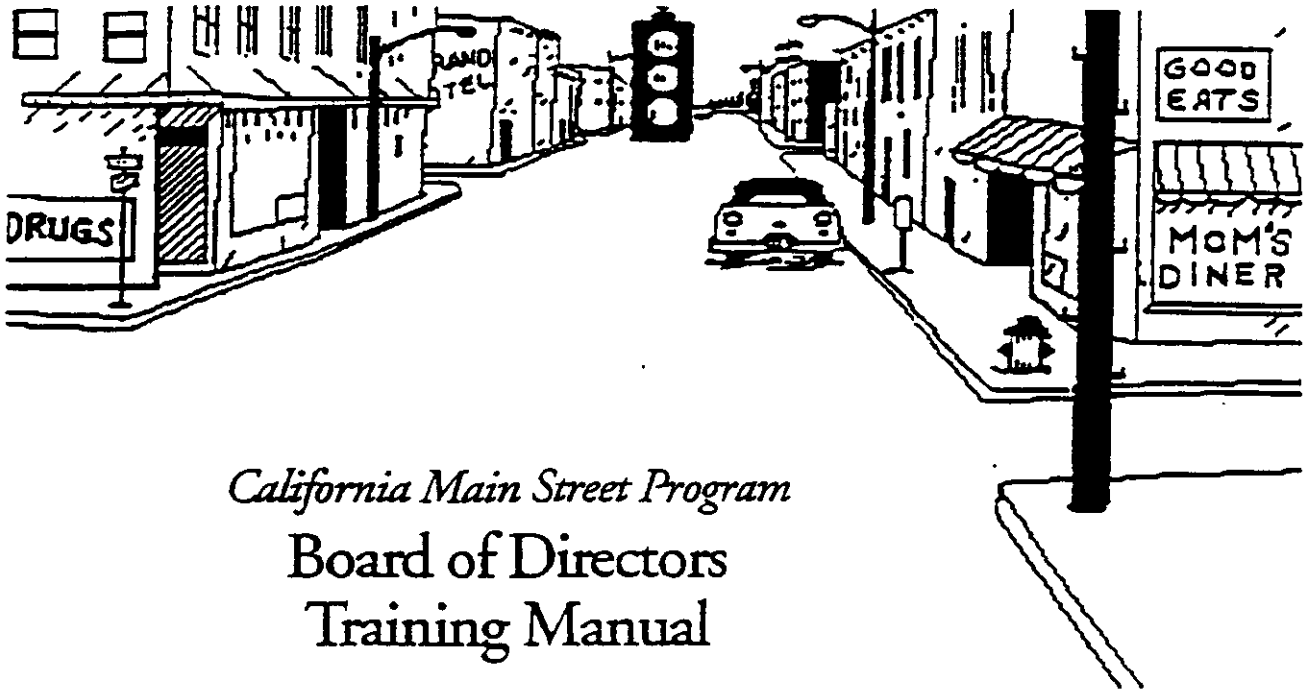
Date to Program Office _____



California Main Street Program

Board of Directors Training Manual

The California Main Street Program *Board of Directors Training Manual* contains workshop materials prepared for use by board members of Main Street programs in California. This manual was developed and initially presented by Jude Kaye of the Support Center of California, a private nonprofit organization under contract with the California Department of Commerce Main Street Program. The Support Center of California is part of the Support Centers of America, the nation's leading nonprofit assistance network providing consulting and training to nonprofit managers, staff and board members throughout the country.

$12.00

($8.91/manual, $0.69/CA sales tax, $2.40/first class postage)

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se send me a copy of *Board of Directors Training Manual*. I have enclosed a check for $12.00.

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FACADE IMPROVEMENT LOAN PROGRAM

City of El Paso de Robles

One of the major goals of the City of El Paso Robles is to enhance the visual image of the Redevelopment Area and revitalize the commercial core. To facilitate this goal, in 1989 the City of El Paso de Robles through the Community Redevelopment Agency and in conjunction with Main Street established the Facade Improvement Loan Program to assist owners and tenants with the renovation of their building facades. The aim is to improve the appearance of the commercial core in an effort to make it more appealing to consumers and potential business operators.

Increased business revenues, increased property values and renewed civic pride in many communities using similar programs verify the effectiveness of the investment. In anticipation of generating the same results in Paso Robles, the Agency commits $80,000 each year to the Facade Improvement Loan Program and a tremendous amount of staff time. In addition, careful consideration was given to the design of the program to insure that each project be evaluated on its own merits while assuring compatibility with program guidelines and goals. This program permits each project to receive the utmost consideration.

The terms of the loan are quite appealing. The loan is a zero percent interest loan which becomes due and payable twenty-five years from the date of the Note or when title on the property changes, which ever comes first. This loan is not charged interest except in the event of default. In the case of default, the loan in charged interest at the rate of ten percent per year.

The loan amount depends upon the number of facades and the building frontage. If a building fronts two or more streets, each facade will be eligible for funding.

Loan Eligibility Scheme:

Bldg Frontage	% of Cost	Max Amt Avail
25ft. or less	80%	$2,500
26ft. to 35ft.	75%	$3,500
36ft. to 45ft.	70%	$4,500
46ft. to 55ft.	65%	$5,500
56ft. to 65ft.	60%	$6,500
66ft. to 75ft.	55%	$7,500
75ft. or more	50%	$8,500

The process is kept as simple as possible. Therefore, no qualifying income documentation is requested and no application fee is charged. We do request a preliminary title report and verification of existing mortgages on the property to verify ownership and property encumbrance.

When the project is completed, the City inspects the site and reviews the actual project cost. Loan documents are drawn and funds are disbursed within 45 days from the date of

AGENCYS' ROLES AND RESPONSIBILITIES

Paso Robles Main Street (PRMS) is responsible for promoting the program and does do by discussing incentives with business owners. Emphasis is placed on those properties that are most visible and in need of improvement.

Once an application is completed, PRMS introduces the applicant to the Community Redevelopment Agency. The Agency previews the application for completeness. A complete application includes the following items: signed, original facade improvement application, mortgage verification and planning application forms, building elevations drawn to scale, color photograph of the building, and architectural renderings or colored elevations.

The City's Planning Department then takes a look at the proposed project and offers design comments which are discussed with the applicant in preparation for the Architectural Review Committee (ARC) hearing. ARC is composed of members of the Planning Commission. During the hearing, ARC offers design recommendations and determines whether or not the City should finance the proposed facade improvement project.

When the application is approved, the applicant signs the loan agreement and funds are allocated for the project. When the project is completed, the Promissory Note is signed and a Deed of Trust is written to name the City as beneficiary of the property for the duration of the loan. The funds are disbursed approximately forty-five (45) days after the project is completed.

PROGRAM SUCCESS

The program has met with much success. Eleven projects have been financed through the Facade Improvement Loan Program to date. These improvements range from exterior paint jobs to reopening transom windows to repairing entire clock towers. The loans range from $1,776 to $25,000 per project.

PROGRAM DISADVANTAGES AND BENEFITS

As with any program there are disadvantages and benefits. The Facade Improvement Loan Program is no exception. Listed are some of the main benefits and disadvantages the City of El Paso de Robles has experienced with the Facade Improvement Loan Program..

Disadvantages:

1. *Administration Costs*

The Facade Improvement Loan Program takes a great deal of staff time to adminis ter. For example, a $1,776 loan took well over 100 hours of staff time to process.

2. *Multiple Agency Involvement*

Since there are different entities involved in the program, the applicant tends to be confused as to who has what role.

3. *Deferred Maintenance*

Applicants tend to use the program for deferred maintenance projects and are are often unwilling to solve long-term design problems. The pro gram is not geared towards paint-and-patch jobs but quality design.

4. *Seismic Upgrades*

The anticipated expense of seismic retrofitting sometimes makes it difficult to justify large, immediate investment in some of the buildings applying to the program.

Benefits:

1. *Zero Interest*

The loan is a zero interest loan. The applicant pays no interest on this loan except in the case of default. At that time, interest is charged at the rate of 10% a year.

2. *Marketability*

The program tends to sell itself. Renovations financed through the program serve to sell the program to other businessmen and prompt them to renovate as well.

3. *Application Fee and Qualifying Documents*

There is no expensive application fee. There are no loan qualifying documents.

5. *Improvement of Commercial Core*

The improvement financed by the program serves to improve the commercial core of this City which increases revenue and property value.

6. *Redevelopment Benefits*

The program provides the community with an immediate and visible demonstra tion of the benefits of Redevelopment.

In summary, the City of El Paso de Robles has found the Facade Improvement Loan Program to be a viable program. The community benefits in several ways. Not only are buildings refurbished to expose original architectural design but consum ers are attracted and spending more in the newly revitalized area.

FINANCIAL ASSISTANCE SOURCES

ADDITIONAL SOURCES OF FINANCIAL ASSISTANCE

1. Farmers Home Administration

a. Water and Waste Disposal Loans and Grants. Provides loans to fund full costs, or grants to fund up to three-quarters of the costs, of central community domestic water and waste disposal systems in rural areas and towns of not more than 10,000 people. Eligible applicants are public entities such as municipalities, counties, special purpose districts, Indian tribes, and nonprofit corporations. Applicants must be unable to obtain needed funds from other sources at reasonable rates and terms. The interest rate on the loans, based on the median family income, is 5%.

b. Community Facilities Loans. Provides loans (no grants) to fund the construction, enlargement, or improvement of community facilities for public use in rural areas and towns of not more than 20,000 people. Eligible applicants are public entities such as municipalities, counties, special purpose districts, Indian tribes, and nonprofit corporations. Applicants must be unable to obtain needed funds from other sources at reasonable rates and terms.

Funds may be used for fire stations, libraries, hospitals, clinics, community buildings, industrial parks, or other community facilities that provide essential services to rural residents. Borrowers may also use the money for roads, bridges, utilities, and other improvements or to acquire interest in lands, leases, and rights-of-way necessary to the development of the facility.

c. Guaranteed Business and Industry Loans. Provides loan guarantees for loans made by commercial lenders to businesses and industries. The primary purpose of the program is to create and maintain employment in rural communities. FmHA may guarantee no more than 90% of the loan. Ineligible activities include loans for motels, hotels, or any tourist, recreation, or amusement facility.

Terms will not exceed 30 years for real estate, 15 years for equipment, and 7 years for working capital. Interest rates are negotiated and can be fixed or variable. Maximum loan is $10 million except for alcohol fuel plants ($20 million).

The borrower must have enough equity to provide reasonable assurance the project will be successful. Normally, FmHA will require at least 10% equity. More equity, such as in start-up operations, may be required.

Loans may be guaranteed in any location except in cities of 50,000 or more and their immediately adjacent urban or urbanizing areas.

Contact: Farmers Home Administration
459 Cleveland Street
Woodland, CA 95695
Attn: Larry Smith
(916) 666-3382

2. Economic Development Administration.

a. Grants and Loans for Public Works and Development Facilities. Grants are available for public facilities such as water and sewer systems, access roads to industrial areas, port facilities, railroad sidings/spurs, public tourism facilities, vocational schools, and site improvements for industrial parks. In order to qualify, a project must fulfill a pressing need of the area and: (1) stimulate long-term employment, (2) benefit the long-term unemployed, or (3) improve the opportunities for the successful establishment or expansion of industrial or commercial facilities.

b. Public Works Impact Projects (PWIP). The Public Works Impact Project funds the construction of public facilities projects which provide short-term and construction jobs in the project area. Construction must be completed within 12 months, and most of the PWIP funds must be spent in the project area.

c. Technical Assistance Grants. Technical assistance funds are available to provide information, planning, and evaluation expertise to facilitate economic growth in depressed areas. Funding may be used for local economic development feasibility studies and for planning. Implementing economic development programs and funding for specific projects is also available to assist quasi-public development groups, such as nonprofit economic development corporations. Technical assistance must be related to near-term job and income creation.

d. Special Economic Development and Adjustment Assistance Program - Long-Term Economic Deterioration. Grants are available to aid State and local areas in the development and implementation of strategies designed to arrest and reverse long-term economic decline. Funds may be used for public facilities, public services, business development, project technical assistance, training, and revolving loan funds. Loans, but not grants, may be made to a private firm.

e. Special Economic Development and Adjustment Assistance Program - Sudden and Severe Economic Dislocation. Financial assistance is available to help State and local areas facing actual or threatened unemployment as a result of sudden economic dislocation. Adjustment planning grants are available to applicants lacking an adjustment plan or the resources to prepare one. Adjustment implementation grants may be used for public facilities, public services, business development, planning rent supplements, mortgage payment assistance, research, technical assistance, training, relocation of individuals, unemployment compensation, and for other factors relating to carrying out an adjustment plan.

Contact: Deena R. Sosson, EDA
1510 "J" Street, Suite 150
Sacramento, CA 95814
(916) 551-1541

Bill Lewis, EDA
1333 Broadway, Suite 415
Oakland, CA 94612

(415) 273-7081

Charles Oaks, EDA
Federal Building, Room 11105
11000 Wilshire Boulevard
Los Angeles, CA 90024
(213) 209-7286

3. National Consumer Cooperative Bank. The Cooperative Bank makes loans at prevailing rates of interest to consumer cooperatives in a variety of industry sectors. The Bank also makes a very limited number of capital advances to start cooperatives and other cooperatives unable to qualify for market rate loans.

The Bank makes loans to many different types of cooperatives, including housing, food, health, producer, consumer goods and services, and student cooperatives.

Contact: Jerry Woodward
353 Sacramento Street, Suite 1820
San Francisco, CA 94111
(415) 986-1441

4. National Rural Development and Finance Corporation. The National Rural Development and Finance Corporation (NRDFC) borrows capital from public and private sources, particularly the Ford Foundation and the Rural Development and Loan Fund, and re-lends these funds at reasonable interest rates to community-based organizations and businesses.

Projects must be located in a rural area, defined as an area not within a city having a population of 20,000 or more, nor within such a city's immediately adjacent urbanized area having a population density of 100 persons or more per square mile. The rural area also must have substantial concentrations or numbers of low-income residents.

Eligible activities include a broad range of business facilities and community development projects which mobilize local resources, build capacity, strengthen rural institutions, enhance employment and ownership, and have income opportunities primarily for the benefit of low-income rural residents.

Assistance can take the form of:

- Direct Loans. Maximum $500,000. Terms are flexible depending on the nature of the project. Rates are at or slightly below prime, and repayment cannot exceed 10 years for real property, or 7 years for equipment and working capital. Loans may be used for working capital, acquisition, or construction of business activities which enhance employment and/or ownership opportunities for low-income people.

Contact: Raul Meyreles, President
California Rural Business Ventures, Inc.
2222 "N" Street
Sacramento, California 95816
(916) 442-4791

5. Small Business Administration. As authorized under the Small Business Investment Act of 1959, as amended, SBA provides assistance in the form of loan guarantees and second mortgage financing to help reduce the scarcity of affordable financing.

Eligibility requirements are based upon size standards which vary by industry.

a. SBA 502 and 504 Loan Programs. Both the 502 and 504 loan programs are designed to assist small businesses by providing long-term (maximum of 25 years), fixed-asset financing. Under the 502 and 504 loan programs, the small business must work through either a Local Development Corporation or a Certified Development Corporation.

Eligible uses of funds under the 502 and 504 loan programs are: land acquisition, construction of a building, purchase of existing buildings, and improvements, renovation, and restoration, and the purchase of equipment (if part of real property).

The financing methods differ between the 502 and 504 loan programs. Under the 502 loan program, a private lender provides 90% of the project costs at market interest rates and the SBA guarantees 90% of the private lender's loan (up to $500,000). The small business concern is required to inject 10% of the total project costs. Under the 504 loan program, a private lender provides 50% of the project cost at a market rate of interest and a fully guaranteed debenture is sold for 40% of the project costs (up to $500,000), and the funds are lent at a fixed rate of interest. The small business concern is required to inject 10% of the total project costs.

b. 7a - Working Capital. This program is designed to assist small businesses by providing working capital to meet both short-term and long-term financing needs. Eligible uses of funds under the 7a loan program are: working capital, inventory, supplies, and materials; equipment acquisition; some debt consolidation; business buy-outs; and construction conversion, rehabilitation, or expansion. A private lender provides the loan at market interest rates and SBA guarantees 90% of the loan, up to $500,000. The small business is required to inject 20% to 50% of the total project cost in cash or other assets to be utilized by the small business.

Contact: Barbara Vohryzek
Department of Commerce
1121 "L" Street
Sacramento, CA 95814
(916) 322-5000

6. Bond Authority.

a. Industrial Development Bonds (IDBs). As authorized under AB 74 and Charter City legislation, industrial development bonds give counties and cities the authority to issue tax-exempt bonds whose proceeds are used to offer low-interest financing to industries expanding or locating operations in the jurisdiction.

The present interest rate limit on IDBs is 12% with a 5% discount. Bonds may be used to finance 100% of the project's cost. Bonds are backed by

the credit worthiness of the firm obtaining the financing. A firm's total capital expenditure in the jurisdiction cannot exceed $10 million for a period three years before and three years after bonds are issued. Bonds can finance land acquisition, building construction, equipment purchases, architectural and engineering fees, and incidental costs associated with the project.

Eligible activities include: assembly, fabrication, manufacturing or processing, and energy development (such as production, collection, conversion, storage, or energy conservation).

Contact: Brian McMahon, Director
Office of Local Development
1121 "L" Street, Suite 600
Sacramento, CA 95814
(916) 322-3498

b. Special Assessment District Bonds. A "special assessment district" may be created to levy special assessment charges against properties benefiting from an improvement or service. Assessments may be paid over a number of years and used to secure bonds issued against the amount of unpaid assessments. Bonds are issued at municipal rates of interest.

This kind of financing may represent a local effort to increase the cost effectiveness of an application for State CDBG grant funds.

Eligible improvements include: basic infrastructure (roads, water, sewer, utilities, drainage), parking, landscaping, lighting, operation and maintenance of water service, electrical service, landscape maintenance, and street repair.

c. Lease Revenue Bonds. Lease revenue bonds are sold through a special authority, such as a redevelopment agency or a parking district, which constructs the facility and leases it to the local municipality. The lease payments secure the bonds, and once the bonds are retired, the municipality takes possession of the facility.

d. Tax-Exempt Revenue Bonds (SB 99 (Marks), Chapter 48 of 1975, California Community Redevelopment Law). The Community Redevelopment Law authorized redevelopment agencies to issue mortgage revenue bonds for financing housing and "mixed use" development (combination of residential and commercial use) judged to be an "integral part of a residential neighborhood."

e. Tax Increment or Tax Allocation Financing. Redevelopment agencies are authorized under the Community Redevelopment Law cited above to use tax increments for improving, rehabilitating, and redeveloping "blighted areas" as defined under the State law. Tax increment bonds can be sold to finance a project in the blighted area.

Once a jurisdiction adopts a redevelopment plan, property taxes are frozen at the current base. An increase in assessed value which may result from improvements in the project area is considered an "incremental assessed

value." Taxes collected on the increment are allocated to the redevelopment agency which, in turn, uses the funds to retire tax allocation bonds issued to provide up-front financing for the project.

7. State Resources.

a. Infrastructure Loans and Grants - Rural Economic Development Infrastructure Program (REDIP). Eligible projects are public infrastructure projects in rural areas which are necessary to serve a specific business on a specific site. The project must directly result in the creation of permanent, private sector jobs, or the retention of existing jobs. Eligible infrastructure projects will include new construction, rehabilitation, alteration, expansion, or improvement of wastewater treatment plants and distribution lines; water treatment plans and distribution lines; water treatment plans and distribution lines; roads, streets, highways plus curbs, gutters, and sidewalks; storm drains, bridges. REDIP is a loan and grant program. It offers the following funding amounts based on the borrower's ability to repay.

Where there is repayment ability:
Maximum loan amount: $1,000,000
Maximum grant amount: N/A
Loan term: Not to exceed 10 years.
Interest rate: 2% below the rate earned by the State Surplus Money Investment Fund.

Where it is determined that the applicant, or special district, cannot repay a loan under the above rate and term, and/or finance project costs in excess of $1,000,000, the Program is authorized to approve loans and grants as follows:

Maximum loan amount: $2,000,000
Maximum grant amount: $250,000
Loan term: Not to exceed 50 years.
Interest rate: Based on the documented ability of the borrower to repay.

Contact: Calvin Young
Office of Local Development
1121 "L" Street, Suite 600
Sacramento, CA 95814
(916) 322-1498

b. Loan Guarantees. The State has formed regional Small Business Development Corporations to receive and review applications for guarantees of financial assistance and to issue loan guarantees to qualified small businesses. Loan guarantees are available to businesses meeting federal Small Business Administration size criteria. The maximum preferred loan guarantee is $350,000, with a seven-year term. Limited technical assistance is available from development corporations to non-guaranteed loan clients. The State provides general assistance and information on starting, financing, and buying small businesses.

Contact: Rich Nelson, Director
Office of Small Business
1121 "L" Street, Suite 600
Sacramento, CA 95814
(916) 445-6545

c. Sudden and Severe Economic Distress (SSED). The State has requested funds from EDA to assist the following counties affected by plant closures: Butte, Humboldt, Imperial, Modoc, San Benito, San Joaquin, Santa Cruz, Shasta, Siskiyou, Stanislaus, Sutter, Tulare, and Yuba. The following assistance is available through the Department of Commerce, Office of Local Development.

1. Technical Assistance. The Office of Local Development will assist in all phases of economic adjustment in an SSED area: plant closure anticipation, business retention, new enterprise development and expansion, economic planning, and project proposal preparation.

2. Predevelopment Grants. Eligible cities, counties, and nonprofit organizations may apply for predevelopment grants of up to $30,000. These grants may be used to fund business retention, business development, and job development activities which result in the reemployment of displaced workers.

CASE STUDIES - ARTICLES ON DOWNTOWN REVITALIZATIONS

REDEVELOPMENT JOURNAL

NOVEMBER 1991 NUMBER 128

CALIFORNIA REDEVELOPMENT ASSOCIATION

1400 K Street
Suite 204
Sacramento
CA 95814
(916) 448-8760
Fax (916) 448-9397

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Affordable using

Profes- ial Services

The Town & Country Conference on Revitalizing Smaller Communities

BOOTSTRAPS, JOBS & NEW INITIATIVES

Rohnert Park, in the heart of the North Coast Wine Country, will host the Northern California Town & Country Conference on Revitalizing Smaller Communities on Saturday, November 16, 1991. Three dynamic sessions are focused on development issues for communities under 50,000 in population.

Walter E. Hill, Deputy Undersecretary for Small Community and Rural Development in the U.S. Department of Agriculture will speak on the emerging Rural Development Administration. Expected to begin operations late this year, the new Agency is part of President Bush's Rural Development Initiative. With a budget for 1992 exceeding $1 billion, smaller communities will benefit from a thorough understanding of the Rural Development Administration. This is the first major presentation about the new Agency.

Often lacking the fiscal resources to compete with major urban communities, small cities must draw upon all local resources in order to compete for sales, jobs and development. Two community efforts to "Get It All Together" will be highlighted - Sonora and Paso Robles. The combined efforts of the redevelopment agency, the Main Street Program, a business improvement district, community college resources and other grass roots programs can create a successful economic development program. In addition to key city officials, three well qualified speakers will discuss the "how-to's" of small city development: Kim Norris, Research Manager for the Agricultural Economic Cooperative Extension at UC Davis and one of the authors of "A Brighter Future for Rural America? Strategies for Communities and States." published by the National Governors' Association; Art Curry, Assistant Dean of Economic Development for Sierra College in Rocklin, which recently published, "Economic Development at the Grass Roots - A Guide for Creating Partnerships Between Main Street Programs and California Community Colleges;" and Pat Noyes, Senior Development Specialist overseeing the Main Street Program on behalf of the State Department of Commerce.

The conference will also feature case studies of job-creating activities in Mendota and Oakdale. These small cities have taken different approaches to industrial development and job creation for their citizens. Oakdale will describe its efforts to increase tourism through the expansion of the Hershey Chocolate Factory. Mendota will present its experience in the development of an industrial base in conjunction with the construction of a biomass plant.

Northern California Town & Country Conference on Revitalizing Smaller Communities

Saturday
November 16, 1991
Red Lion Hotel
Rohnert Park, CA
Registration Fees:
$95 (Memb.)
$125 (Non-memb.)
For information or
to register call
Keily Dunaway
CRA
(916) 448-8760

Watch for information about the Southern California Small Cities Conference scheduled for January 25, 1992 in Palm Springs.

CRA is an association of California redevelopment agencies and private firms involved in redevelopment. The Journal is published monthly by CRA. Executive Director William A. Carlsen may be contacted at the CRA office, 1400 K Street, Suite 204, Sacramento, California 95814. Telephone (916) 448-8760.

In 1985 the California Legislature appropriated $250,000 to establish the California Main Street Program, an adaptation of the National Trust program by the same name. The California Main Street Program is administered by the State Department of Commerce with specialized expertise provided by the National Trust. The OHP will house a full-time restoration architect to provide design assistance. The program, funded for a three year period beginning in 1986, will select five demonstration cities a year.

Cities must apply for the program and will be selected based on the economic and physical characteristics of their downtowns, their potential to benefit from the program, and on their commitment toward preserving the historic buildings. Cities must make a three-year commitment to the program, must have full political support, and must be able to fund a full time project manager and other expenses necessary to implement the program for the first year. The program is restricted to cities with populations under 50,000, but they may be located anywhere in the state. The city's downtown must have sufficiently intact historic building stock and must be centralized and physically and economically able to serve as the retail core.

The Main Street Program offers a four point approach to rebuilding the image of a declining downtown. These include: organizing groups within the city to better work together; promotion and advertising of downtown activities and stores; rehabilition and design to improve the image of buildings; and economic restructuring to provide the right mix of retail, offices, and housing.

Even though only 15 demonstration cities will be selected over the three year pilot period, all cities in California are entitled to make use of the resource materials and ideas offered by the program. Cities may wish to embark on the Main Street approach on their own or may wish to use it to complement economic and revitalization programs already underway.

NOTES ON THE 1986 CALIFORNIA MAIN STREET CITIES

FORT BRAGG– North Coast community with a population of approximately 5,000 with lumber and fishing as its economic base. It has strong organization and community support with a strong preservation component and fine building stock. It has the potential to be the retail center of the county. Half of its retail currently comes from tourism. The downtown is retail services and tourism mix.

PETALUMA– A community of 34,000 with an urban environment located about 60 miles north of San Francisco. It has a commitment to unify the many groups and organizations. There is a strong preservation component with good building stock. Downtown is full service retail and tourism with commercial competition and sales leakage.

PORTERVILLE – A community of 20,000 located in the south central part of the state with agriculture as its economic base and new industrial development potential. Strong commitment to preservation with need for design. Downtown is full retail service

SANTA PAULA– A bedroom community of 23,000 in an urban area with an agriculture base. It has a good building stock with need for design and a need for a plan to retain and attract business.

SONORA– A small rural town of 3,500 and the only incorporated city in Tuolumne County. It is the retail center of the county but has a lot of vacancies. Mining and lumber are its economic base. Located in the foothills of the gold country, it is a tourist area. It has strong design and a commitment to preservation. Many buildings are on the National Register. A highway bypass is planned. Downtown is full service retail.

VISTA– A community of 36,000 population in an urban area. It has a strong need for preservation and urban design as well as for an economic development strategy because of its approximately 20% vacancy rate. It has good organization with strong community support and commitment between the City and downtown association.

RESOURCES

Alaska

Fort Egbert and Eagle, Alaska: A eservation Plan, published by the ational Trust for Historic Preservation, 740-748 Jackson Place, N.W., Washington, D.C., 20006, 1975; 101 .

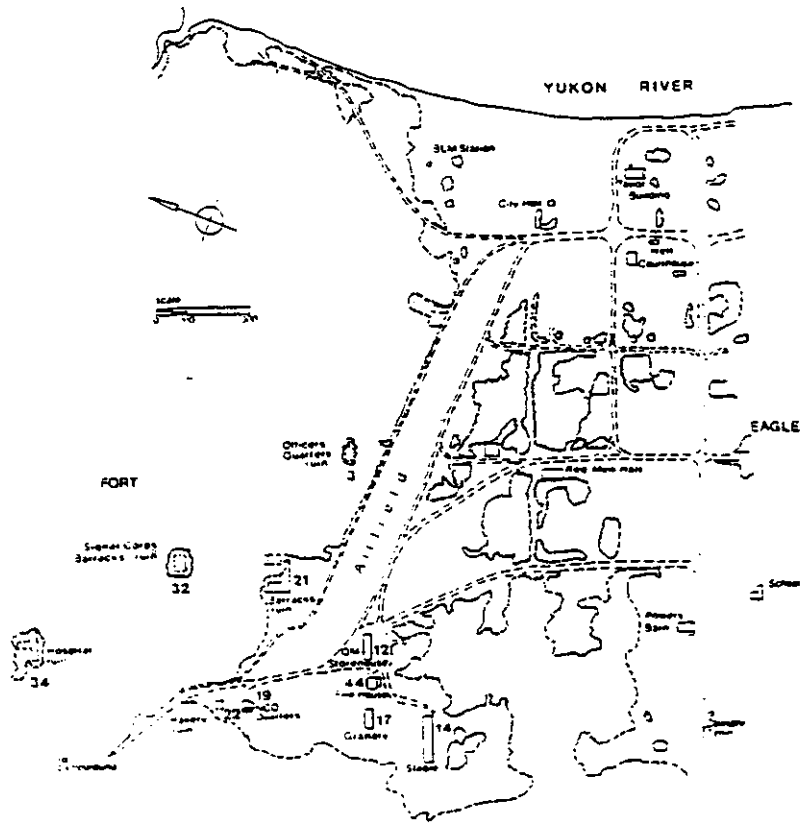
Maintenance and restoration of an historic fort and the small town of Eagle which adjoins it are covered in is interesting booklet.

Eagle City was founded in 1898 as the seat of the first civil government in the interior of Alaska, and the first icorporated town in the interior; Fort gbert played a significant role in the development of telegraph systems in the Far North. While Eagle has survived in a relatively unaltered (but omewhat deteriorated) state, Fort Egbert stands as "a fragment of an important military outpost." The urrent population of Eagle is about 75 during the winter, and 200 in the summer months.

The development of the Fort Egbert-Eagle plan demonstrates cooperation among federal, state, and local governments, as well as private individuals and organizations. In 1975 the Bureau of Land Management received congressional appropriations for stabilization work at Fort Egbert; at the same time they recognized the interrelationships between fort and town, and awarded a contract to the National Trust to provide architectural assistance for stabilization work and to develop preservation plans for the adjoining locations.

Steps have been taken to stabilize five standing structures and numerous ruins at Fort Egbert. Plans for Eagle emphasize the preservation of structures in addition to those of significant historic and architectural interest. These "background buildings," the report suggests, are crucial in that "the relationships of a grouping of structures of the same approximate period and appearance is far more important than any individual structure."

Fort Egbert and Eagle do not represent typical small community or rural settings, because of their size and location, but this preservation plan is historically significant and done with the usual readable professionalism of the National Trust. Elements of the plan—the historic building survey, future recommendations, and observations on history, land use, and legal and financial assistance—provide more generally useful models. —ASD



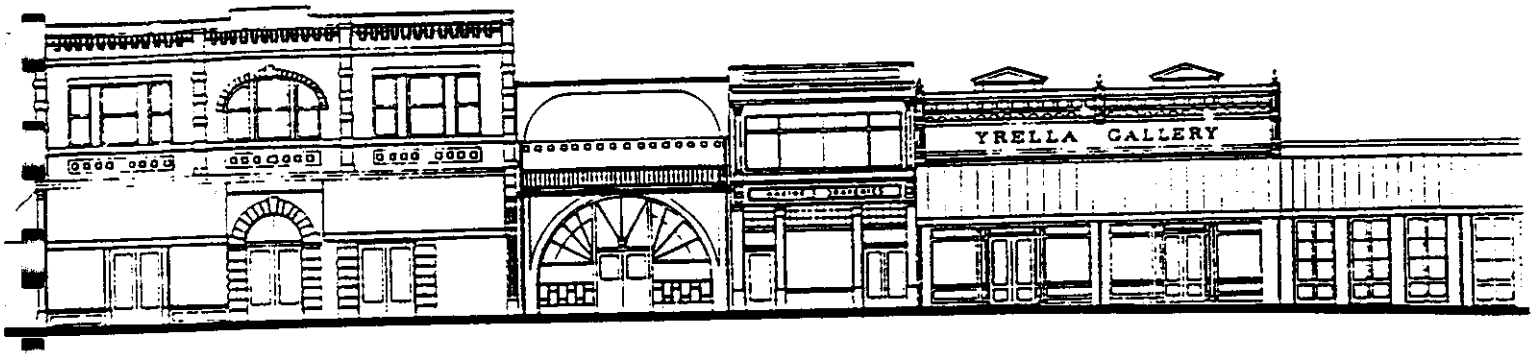
FORT EGBERT: 1975

California

Miner Street Historical District, Yreka, California: A Plan for Preservation, prepared by the Western Regional Office of the National Trust for Historic Preservation, available from The Preservation Press, 740-748 Jackson Place N.W., Washington, D.C., 20006: 1976, 92 pp., $7.00 postpaid.

Miner Street is an excellent manual detailing a study done in a small town (5,700 people) in Northern California. The study team from the National Trust for Historic Preservation, composed of economic and legal consultants, an architect and two planners, prepared economic analyses, a building-by-building visual survey, rehabilitation criteria, new construction guidelines and a draft ordinance for revitalizing Miner Street and two residential historic districts. The Trust has suggested that the study may be a "prototype" for small town revitalization through preservation.

One feature of the study team's recommendations was a discussion of ways to finance the revitalization program. Revolving funds, government assistance and incentives, private investment, grants and public-private combined efforts were detailed in the book. Also suggested were planning policies which would help to emphasize that the preservation, rehabilitation and restoration of Miner Street buildings were in the public interest. Consistent with this process, existing zoning



330-332

Remove wood siding and shingled overhang.

Reconstruct original storefront.

Reconstruct original awnings.

Conserve brick as needed.

328

Reconstruct original storefront.

Reconstruct band stand.

Paint appropriate colors.

326

Restore storefront and second floor windows.

Remove existing signage from the transom. Replace as shown above.

322-324

Remove wood siding and restore original facade material.

Repair/restore existing storefronts.

Reconstruct original porch.

320

Remove existing wood siding and restore original material.

Repair storefront or restore to double door configuration (shown).

Reconstruct original porch.

Suspend signage from the underside of the porch or attach in band above storefront.

affecting historic areas was called in for review and revision so it would provide incentives for rehabilitation and restoration as well as respect the special character of Yreka historic areas.

Miner Street is illustrated with photographs, maps, illustrations and two inserts of work drawings for the rehabilitation of the north and south sides of Miner Street. A proposed ordinance for the Miner Street Historic District and visual analysis and rehabilitation suggestions for commercial properties on Miner Street are the subjects of the two appendices. In addition to these, two tables showing new businesses and offices related to Interstate 5 and Miner Street businesses as of June, 1975, are presented to complete the study.

Perhaps best reflecting the results of the study are comments made by John L. Frisbee, III, Western Regional Office Director: "Miner Street, as one sees it today, is the result of 125 years of construction and remodeling. It cannot, nor should it be in the opinion of the City Options team, 'restored' to reflect a specific period in history or a single style of architecture."

"The goal should not be to establish Miner Street as 'the Williamsburg of the West,' but rather to accept each structure for what it is and to capitalize on the inherent merits of each." –LKW

-316

Reconstruct two-story gallery.

Restore existing storefronts to their original configuration or reconstruct original double door openings (shown).

Restore second floor windows to original double door configuration.

Suspend new signage under gallery or attach in a uniform band above storefronts.

Reconstruct the original Franco American sign and attach to roof of gallery.

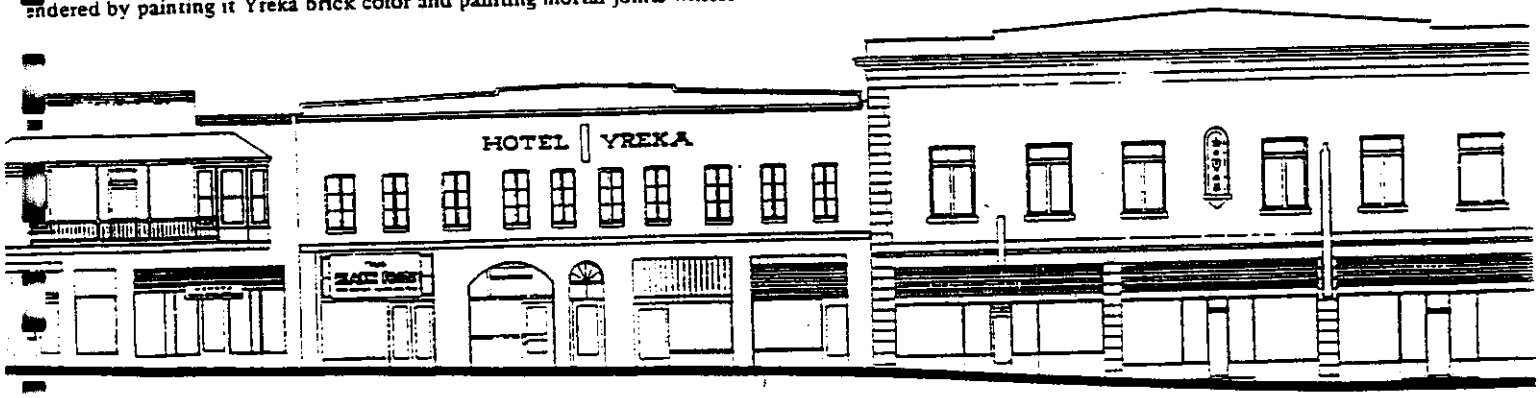
Visually unify brick facade by painting with one paint color. Facade may be rendered by painting it Yreka brick color and painting mortar joints white.

300

Remove signs attached to face of building.

New signs should be suspended in the recessed area below the transom.

Stuccoed wall surfaces and metal elements of the cornice should be repainted; terra cotta surfaces should not be painted.



PROJECT OF THE **MONTH**

FACADE REHABILITATION CORNERSTONE OF HEALDSBURG'S DOWNTOWN REVITALIZATION

By Kurt Hahn
Deputy Executive Director

Masonic Temple Building Renovation

During the last two-and-a-half years, over 80 businessmen have participated in our Redevelopment Agency's Facade Grant program. Close to $200,000 of Agency funds have been leveraged into $1,500,000 of private improvements.

The general appearance of the Downtown has undergone a dramatic change. Vacancies once approaching 20%, are virtually gone. Retail sales are dramatically higher. Business community enthusiasm is at an all time high.

Other aspects of the Downtown revitalization projects are proceeding in parallel. These include:

- Completion of needed underground work including drainage, water and sewer line replacement ahead of other work.
- Acquisition and development of public parking on three lots.
- Installation of street trees and repairs of hazardous sidewalks.
- Creation of a Downtown promotion district jointly funded by business assessments and Agency appropriations.
- Participation in development of an infill shopping center project in which the Agency is a 20% equity partner.
- Site acquisition and development of a square block office-retail project.
- Site acquisition and in-process development of a square block hotel project.

The Facade program remains, nevertheless, the cornerstone and driving force behind Downtown revitalization. Healdsburg's approach is unique in the number of participants, approval process, and the marketing of the program.

(Continued on Next Page)

HEALDSBURG *(Continued from Previous Page)*

The program itself is a participatory grant as versus the typical loan program. Grants are geared to provide a strong incentive to tenant as well as landowner. Agency participation is as follows:

	CRA Participation	
Building Front — feet	Percent of Improvement Cost	Maximum Grant
25 feet or less	80%	$2,500
26 to 35 feet	75%	3,500
36 to 45 feet	70%	4,500
46 to 55 feet	65%	5,500
56 to 65 feet	60%	6,500
66 to 75 feet	55%	7,500
more than 75 feet	50%	8,500

Agency payments to the participant may not exceed the original grant authorization and are made on completion

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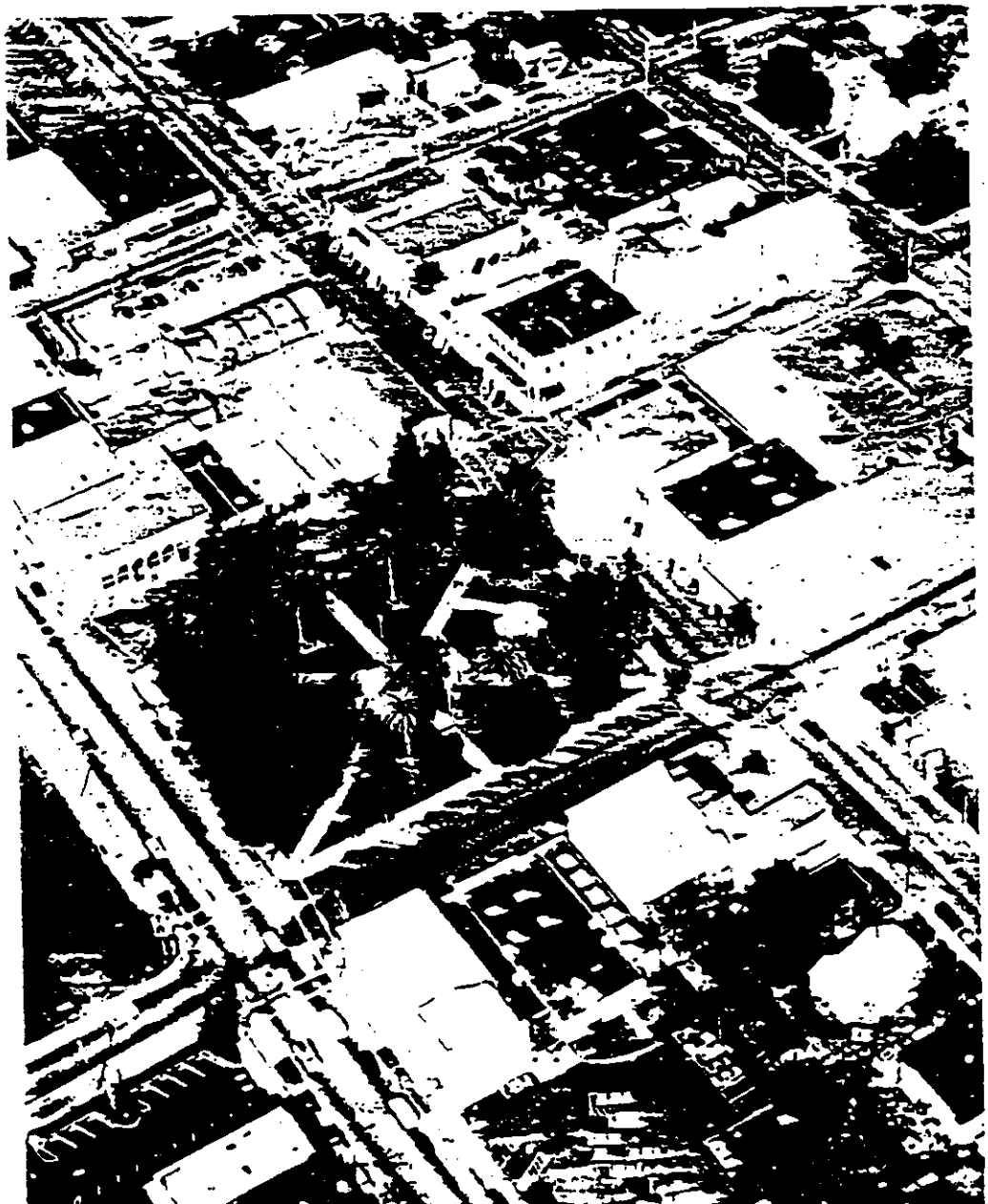

An overview of Healdsburg's Downtown Target Area.

Case Study

Healdsburg Revitalizes Its Downtown Area

Healdsburg, a city of 9,000 located in the middle of California's wine country, has embarked on an aggressive economic development program that is also seeking to preserve its small town character and historic past.

Historically dependent on timber, Healdsburg's economy has evolved from tourism to wine production, to prunes, back to grapes, and more recently to a more diversified economy -- small manufacturing, electronics, retailing and tourism. More than 10% of the state's wineries are located within a 30-minute drive of the downtown plaza.

Faced with creeping strip development in commercial corridors to the north and south, Healdsburg decided to utilize the initiative to encourage close-in development.

Developer Decides on Downtown

The initial project to revitalize the downtown area was to encourage a developer who was planning a shopping center for outside the downtown area to locate his project only two blocks from the downtown plaza.

That successful effort took a good deal of patience and perseverance, according to Kurt Hahn, the city's finance director and deputy executive director of the Community Redevelopment Agency.

But having accomplished that, the city was then successful in: creating a downtown promotional district; encouraging facade rehabilitation of Victorian areas through Redevelopment Agency grants; performing a major residential rehabilitation project in surrounding downtown neighborhoods; acquiring more than 15 acres of downtown property for parking and other commercial, industrial and open space development; and developing a major hotel and encouraging a growing number of bed-and-breakfast inns to augment the existing motels.

Now the Redevelopment Agency has embarked on its most aggressive endeavor yet. Having acquired four square blocks downtown, it negotiated an agreement with Barry Swenson, a San Jose builder, to develop a commercial/office project, and is currently negotiating with another developer to develop a 40-room hotel/restaurant on an adjacent acre. When completed, the two project will reflect about $8 million in new private investment, in addition to $1.4 million in public improvements.

Creative Financial Package

One of the more creative projects, for Vineyard Plaza Shopping Center, $5.2 million in Redevelopment Agency Certificates of Participation that were guaranteed by Safeway were matched with: $1 million of developer equity, $1 million of direct investment by Thrifty Drug, a $1.3 million UDAG grant loaned by the city to the developer, and $700,000 city investment in offsite improvements.

The city receives 20% of the center's rental income flow and 20% of the resale appreciation on the sale, coupled with full principle and interest on the loan.

Meanwhile, existing businesses have not been ignored, Hahn emphasizes. A downtown "Main Street" facade rehabilitation project includes new signs, painting, plastering, new windows, doors and awnings and street furniture. Existing businesses get aid on a sliding scale, tied to their frontage feet. About 90 projects are underway, with total public/private expenses pegged at more than $1.5 million.

Three Industrial Parks Added

In addition, three industrial parks have been created through efforts of the city's Industrial Development Authority. Foss Creek Place is a 20-acre business, industrial and residential area four blocks from downtown. Healdsburg Business Park recently added over 20,000 square feet of buildings. Another 20-acre industrial park caters primarily to geothermal firms.

These industrial projects have been supported by the authority's issuance of $4 million in industrial development bonds, and $2 million in assessment bonds issued by the city.

Joint Powers Agreements

The city has also played a key role in establishing three joint powers agreements to augment its own efforts. The Northern California Power Agency supplies most of the city's electric power generation and transmission. The Redwood Empire Finance Authority, the state's first credit pooling joint powers agreement, lets the city and the Redevelopment Agency finance projects at considerably less costs than acting alone. The Redwood Empire Muncipal Insurance Fund gets difficult-to-obtain coverage.

As a result of these and other efforts, Hahn said that Healdsburg has the fastest growing retail sales volume and assessed valuation growth in Sonoma County. During the last five years, several hundred new jobs have been created despite one plant closing.

A Reminder

Deadline for Nominations

Nominations for CUED's two annual awards must be postmarked by Dec. 31.

CUED's National Economic Development Partnership Awards recognize "outstanding and innovative urban real estate development projects that demonstrate the importance of the public/private partnership in economic development."

A new award, the Edward deLuca Memorial Award for Professional Excellence in Economic Development, will go to an individual "who has consistently exemplified the highest standards of professional excellence throughout their career in the field of economic development." It is named after CUED's first president.

While nominees need not be members of CUED, those who nominate them must be members.

Winners will be honored during the awards luncheon at CUED's 1989 Annual Conference in Washington April 23-26.

California Association for Local Economic Development

CALED BULLETIN

January 1990 Volume 10 Number 6

ealdsburg Launches Program to Preserve Affordable Housing to ment Nationally Recognized Downtown Revitalization

Healdsburg, population 9,500, is lo- in the center of Sonoma County's um wine growing region. ned in 1867, this historic north ast community has been a model for y other small and medium sized rma cities in its aggressive down- n revitalization and economic de- elopment.

is year the City's Redevelopment ncy is focusing much of its effort to serve older affordable housing stock thru a $600,000 neighborhood improve- program primarily utilizing CRA cing. Elements of the program ude:

1. A $135,000 Housing Rehabilita- Program administered cooperati- y by the County Community De- opment Commission. This project will augment a $400,000 effort in prior rs which resulted in the rehabilita- of 72 older homes, mostly historic ctures in the city's older neighbor- hoods. CDBG funding is utilized.

2. Minor exterior housing repairs rehabilitation for qualifying house- olds performed by a City crew headed by the City's assistant building inspec- .

3. A "self-help paint voucher" pro- am in which the Redevelopment Agency issues vouchers redeemable at e local stores for up to $250.00 of nt, brushes, rollers, and pans for ose agreeing to repaint the exterior of their homes. Participating merchants pply color consultation and other sistance.

4. A cooperative weatherization program with California Human De- elopment Corporation. CHDC crews ntail, for qualifying households, in- sulation, replace windows and doors when necessary and make other re- airs deemed to help low income ouseholds cut their utility bills and ake their homes more livable.

5. A self-help yard clean-up project n which the Redevelopment Agency n cooperation with Empire Waste Man- gement and its local subsidiary (Healdsburg Disposal) supply four cubic yard debris boxes to low and moderate income households undertaking home repairs and yard clean-up. The CRA rents the dumpsters.

6. A contractual project with Circuit Rider Productions, a private industry council funded job training agency, to provide the Redevelopment Agency a supervisor and crews consisting of local high school students to undertake yard clean-up, shrubbery trimming and minor exterior household repairs for the elderly and handicapped.

7. An agency tree trimming program for qualifying households, especially those cases where overgrown trees deter necessary housing repair maintenance.

8. Contracted sidewalk repairs for low and moderate income households.

9. Street overlays and slurry projects in those specific blocks when the majority of households and low and moderate income and affordable housing stock would be adversely affected by the creation of an assessment district.

To date, close to 300 households have been assisted.

City Finance Director Kurt Hahn administers the program. Hahn, who is also Deputy Executive Director of Healdsburg's Redevelopment Agency, is assisted by Rebecca Loehr, a redevelopment intern, and Cheryl Tarter, Senior Center Coordinator. Hahn stated, "Involvement of our Senior Center coordinator and Senior Center volunteers are a key element of the program because frequently those most in need don't benefit from governmental projects and programs designed for their benefit."

"Rules and regulations and approved processes for all projects and programs have been streamlined and simplified". Hahn added. "In most cases application for assistance will be approved the day reviewed". The Redevelopment Agency has directed its efforts in a 60 square block residential surrounding its historic downtown. That downtown has been the focus of a revitalization program attracting national attention in the recent Nations Business article. Among the Agency's revitalization projects have been:

- A commercial building, historic restoration, and facade rehab grant program which to date has assisted over 60 businesses and provided $300,000 of Agency funds, leveraged improvements exceed $2 million.
- A $450,000 utility undergrounding project which includes the installation of historic style street lights.
- A $500,000 8-year street scape project which has and will replace sidewalks and add street trees.
- A $10 million downtown shopping center project in which the City is 20% equity partner.
- The acquisition and development by the Agency of four parking lots.
- Creation of a downtown business promotion district half funded through assessments, half through the Agency.
- Acquisition by the Agency for private development of a two-square block site on the Plaza, with private development of 2 large office/retail buildings and a hotel.
- A comprehensive business assistance program to help small businesses obtain help with: SBA or SBIC financing, job training programs, energy conservation loans, export/import technical assistance and fundings, taxable and tax exempt bond financing as well as fast tract permitting.
- A $1 million flood mitigation project which encouraged areas previously subject to periodic flooding to improve their properties.
- Early replacing and relocating downtown sewer storm drains and water lines to avoid near term construction disruptions of businesses.
- Improvement to the town's historic plaza including a new gazebo where weekend concerts are now held.

Hahn said the cornerstone of Redevelopment program is to "pre- and enhance the small town char- of our community while expanding diversifying our business ba "Healdsburg in recent years has Sonoma County in assessed valua and retail sales percentage gro- "The City now has 4,800 employe- close to 800 employers".