

DEVELOPING TOWNSCAPES: A METHODOLOGY
FOR IMPROVED VISUAL QUALITY

by

BRIAN L. ROTHMAN

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A MASTER'S THESIS

submitted in partial fulfillment of the

requirements for the degree

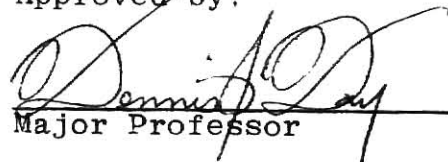
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Approved by:


Major Professor

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TABLE OF CONTENTS

LIST OF PLATES.....	iv
LIST OF TABLES.....	v
LIST OF FIGURES.....	vi
ACKNOWLEDGEMENTS.....	viii
PROLOGUE.....	ix
CHAPTER 1 - NORTHEAST MINNESOTA AS A REGION.....	1
Section 1 - Introduction to the Region.....	2
Section 2 - Definition of Boundaries.....	4
Section 3 - Physiography of the Region.....	7
Section 4 - History of the Region.....	12
Section 5 - Economy of the Region.....	15
Section 6 - Population of the Region.....	24
Section 7 - Regional Plan.....	26
CHAPTER 2 - TOWNSCAPES OF THE REGION.....	30
Section 1 - Growth Patterns and Population Parameters.....	31
Section 2 - Cultural Heritage and Economy.....	33
Section 3 - Regional Townscape Character.....	35
CHAPTER 3 - ELY AS PROTOTYPE.....	45
Section 1 - Physiography of the Ely Area.....	46
Section 2 - Non-Industrial Economy of Ely.....	48
Section 3 - Past Transcends Present.....	50
Section 4 - Positive Steps: History of Town Planning.....	57
CHAPTER 4 - DESIGN PRINCIPLES FOR SMALL TOWN ENTRANCES.....	81
Section 1 - Developing the Strategy for Better Townscapes.....	82
Section 2 - Introduction to the Methodology for Townscape Revitalization.....	85
Section 3 - Townscape Studies: Entrances.....	87
• Roadside Maintenance.....	88
• Buildings.....	91
• Private Property.....	94
• Public Property.....	95
• View and Visual Sequence.....	100
• Information Signs.....	103
• Tourist Information Centers.....	105

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TABLE OF CONTENTS (Continued)

Section 4 - Selected Entrance Examples.....	107
Section 5 - Recommended Plant Materials for Entrance Revitalization.....	114
Section 6 - Procedure for Laymen: Entrance Revitalization.....	117
CHAPTER 5 - DESIGN PRINCIPLES FOR SMALL TOWN COMMERCIAL STRIP AREAS.....	119
Section 1 - Townscape Studies: Commercial Strip....	120
Section 2 - Selected Commercial Strip Examples.....	129
Section 3 - Recommended Plant Materials for Commercial Strip Revitalization....	132
Section 4 - Procedure for Laymen: Commercial Strip Revitalization.....	135
CHAPTER 6 - DESIGN PRINCIPLES FOR SMALL TOWN CENTRAL BUSINESS DISTRICTS.....	137
Section 1 - Townscape Studies: Central Business District.....	138
Section 2 - Buildings (Architectural Style and Facades).....	148
Section 3 - Vacant Lots.....	153
Section 4 - Business Signs.....	158
Section 5 - Streetside Public Space.....	164
•Vegetation.....	165
•Amenities.....	170
Section 6 - Selected Central Business District Examples.....	176
Section 7 - Recommended Plant Materials for Central Business District Revitalization.....	177
Section 8 - Procedure for Laymen: Central Business District Revitalization.....	180
CHAPTER 7 - CONCLUSION: Points Upon Which to Build.....	182
BIBLIOGRAPHY.....	188
ABSTRACT.....	191

LIST OF PLATES

PLATE

I	Vicinity Map: Minnesota.....	5
II	Vicinity Map: Minnesota Political Planning Boundaries.....	6
III	Arrowhead: Major Forest Types.....	8
IV	Arrowhead: Temperature Extremes.....	11
V	Arrowhead: Tri-State Iron Mining.....	16
VI	Silver Bay: First Taconite Plant.....	17
VII	Copper Holdings.....	18
VIII	Parks and Public Forests.....	22
IX	Location and Recreation: General Trends.....	23
X	Regional Concept Plan.....	29
XI	Ely Trading Area.....	49
XII	Existing Land-Use Pattern.....	56
XIII	Land-Use Zoning.....	60
XIV	Brubaker and Caudill Plaza Concept.....	77
XV	Brubaker and Caudill Recommendations.....	79
XVI	Brubaker and Caudill Recommendations.....	80
XVII	Entrance Vicinity Map: Main Entrance.....	108
XVIII	Screening Principles Applied.....	109
XIX	Screening Principles Applied.....	110
XX	Entrance Vicinity Map: Highway No. 1.....	111
XXI	Design Principles Applied.....	112
XXII	Entrance Revitalization: New Image.....	113
XXIII	Commercial Strip Vicinity Map.....	130

LIST OF PLATES (Continued)

XXIV	Design Principles Applied.....	131
XXV	C.B.D. Vicinity Map.....	177
XXVI	Prototype Building Recommendations.....	178
XXVII	Prototype Vacant Lot Recommendations.....	179

LIST OF TABLES

TABLE

I	Population Projection.....	25
II	Structural Conditions.....	69

LIST OF FIGURES

Figure

1	Main Street Town:Early Chapman Street.....	31
2	Concentric Growth Patterns.....	32
3	Immigrants.....	33
4	Early "Lumberjacks".....	34
5	Mining Town Image.....	35
6	Buhl Entrance.....	36
7	C.B.D.s: A "Sense of the Past".....	37
8	Eveleth C.B.D.....	38
9	Remodeled C.B.D. Building.....	39
10	Visually Discordant Building Group.....	40
11	New Buildings Make a Positive Statement.....	41
12	Visual Chaos.....	42
13	Strip Commercial.....	43
14	Growth and Development Pattern.....	51
15	"Edge" - Zone of Transition.....	87
16	Ely Entrance: Existing Visual Qualities.....	94
17	Entrance from Babbitt: Highway No. 21.....	99
18	Commercial Strip Schematic.....	121
19	C.B.D. Townscape Concerns.....	139
20	Vertin Building.....	140
21	Typical Remodeling Schematic.....	141
22	Biwabic Streetscape.....	142
23	Chisholm and Ely Streetscapes.....	143

LIST OF FIGURES (Continued)

Figure

24	Ely Building Group.....	144
25	Ely Building Group.....	145
26	Ely Building Group.....	146
27	Ely Building Group.....	147
28	Typical C.B.D. Vacant Lot.....	153
29	Preservation of Charming Old Signs.....	159

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PROLOGUE

Laymen and professional planners frequently emphasize long-range community planning programs. To investigate and define the parameters for community development, planning firms prepare inventories, surveys, and "guide plans" at considerable citizen expense. Although the volumes of written information that stem from these investigations (comprehensive and well-designed reports, charts, graphs, and general information) relate data for use by community inhabitants, all too often these statistics and broad recommendations cannot be used to generate either specific direction or problem resolution within the community.

This investigation will examine planning data and typical resource information in order to provide the critical next step: direct applications of design principles for both improved function and enhanced visual quality. From guide plan concepts to transformation of townscape quality is a giant step, but it is one that a designer can help communities take. The integrated, planned townscape increases both visual identity and community function, and is the logical conclusion of long-range planning investigations. Such specific recommendations are too seldom made.

Scope of the Problem

Complexity usually relates directly to size. Kevin Lynch, Lawrence Halprin, and Gordon Cullen among others provide some clear proposals for identifying, attacking and resolving large scale urban problems. Minimal effort has been made for smaller, less financially capable towns in rural America. It is this community environment, rich in heritage, tradition and visual appeal, to which this research is directed.

Certainly there are commonalities among most small townscapes in the United States. All share mutual problems and possess similar human-scale appeal. The small towns in northeast Minnesota project similar character and visual quality as well.

An examination of small communities of the Arrowhead Region of northeastern Minnesota is used as a broad base for the identification and resolution of common community design problems and visual blights.

Ely, Minnesota has been selected as the specific small town case study representative of the region for several reasons. First, it represents an average community cross section of physical structure, culture and economy. Second, a great deal of base information is readily available. And finally, the people--specifically the City Planning Commission and Mayor J. P. Grahek, M. D. --have asked for specific direction beyond the generalities of a guide-zoning plan.

Process

Through analytic minification of general planning concepts detrimental visual qualities of the case study will be isolated and a framework formulated by which other small communities (populations under 7,000) of the region might evaluate their townscapes and effectively take action toward improvement. Where applicable, planning principles for large metropolitan assessment may be used. This information is not unique. Design concepts for very specific small town problems of the Arrowhead Region, however, can be isolated and suggestions for their resolution shared. Herein, methods and incentives by which such communities can examine, appreciate and evaluate their environments are presented.

Premise

With minimal direction and support, small communities in northeastern Minnesota are capable of formulating community goals and design implementation without the involvement of outside planning agencies. These communities are the result of complex relationships and can be guided only through citizen awareness of community heritage, character and civic responsibility; these communities must inventory visual assets and liabilities before initiating design projects aimed at improving the visual qualities within a community.

Limitations

This investigation provides design principles, alternatives and plans of action for improving the visual qualities and usability of specified communities. Despite the fact that the palette of design principles can be assumed a rough model for other locales, the specific base of application is the Arrowhead Region of Minnesota.

Although social impact, variation in design perception, and historical preservation are worthwhile considerations for townscape appraisal, they will not be emphasized in this investigation.

Goals

1. To identify and isolate common functional problems associated with small towns of the Arrowhead Region.
2. To study the impact of visual blight on townscape quality in communities of the Region.
3. To identify historical and cultural aspects of community evolution as a necessary part of the development of the visual townscape quality.
4. To reinforce the potential visual quality of the communities of the Region.
5. To extend guide plan information to community development concepts within the case study area.
6. To provide a self-help program that can be used by concerned citizens to identify problems, to evaluate

priorities and values, and to propose improvement
for the communities of the Region.

CHAPTER 1 - NORTHEAST MINNESOTA AS A REGION

Section 1 - Introduction to the Region

Section 2 - Definition of Boundaries

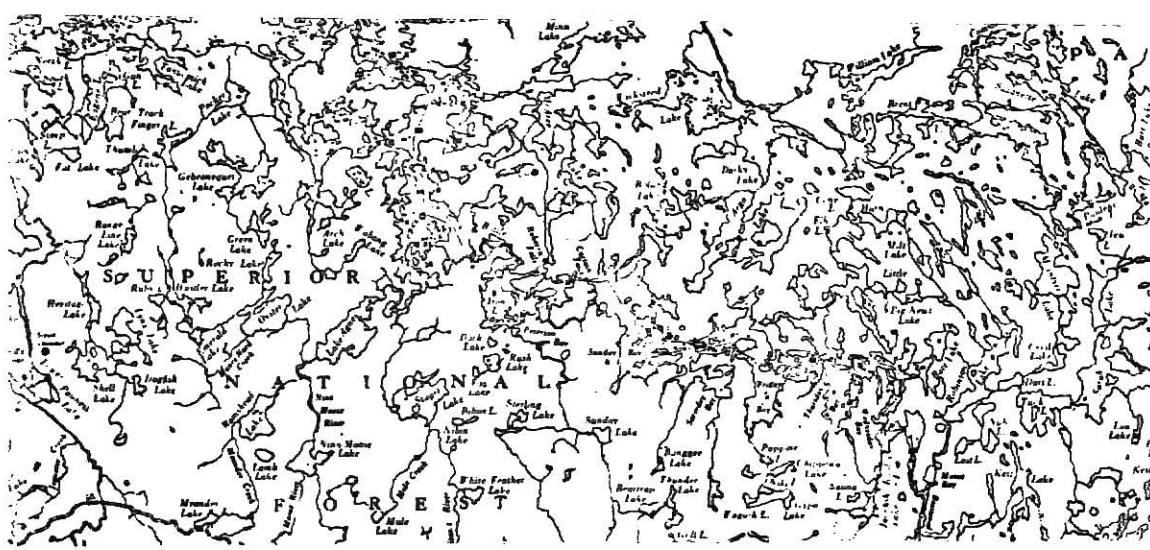
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Section 4 - History of the Region

Section 5 - Economy of the Region

Section 6 - Population of the Region

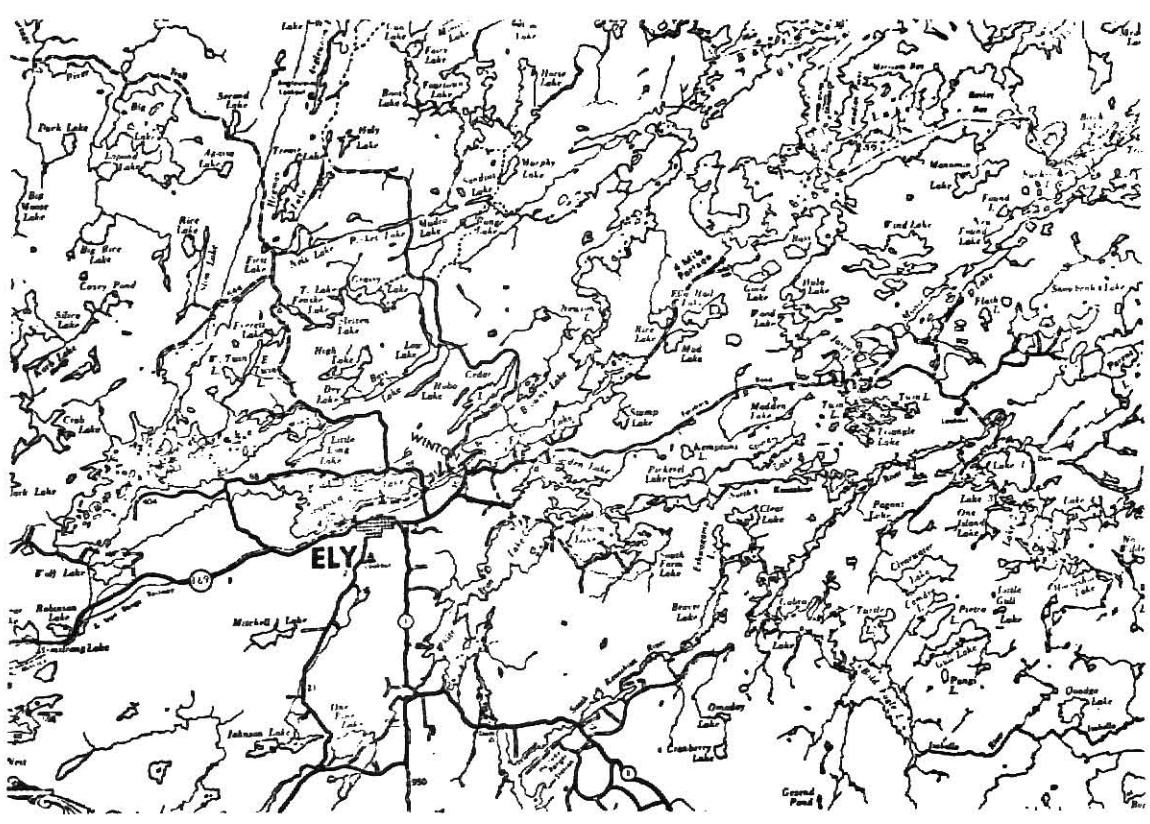
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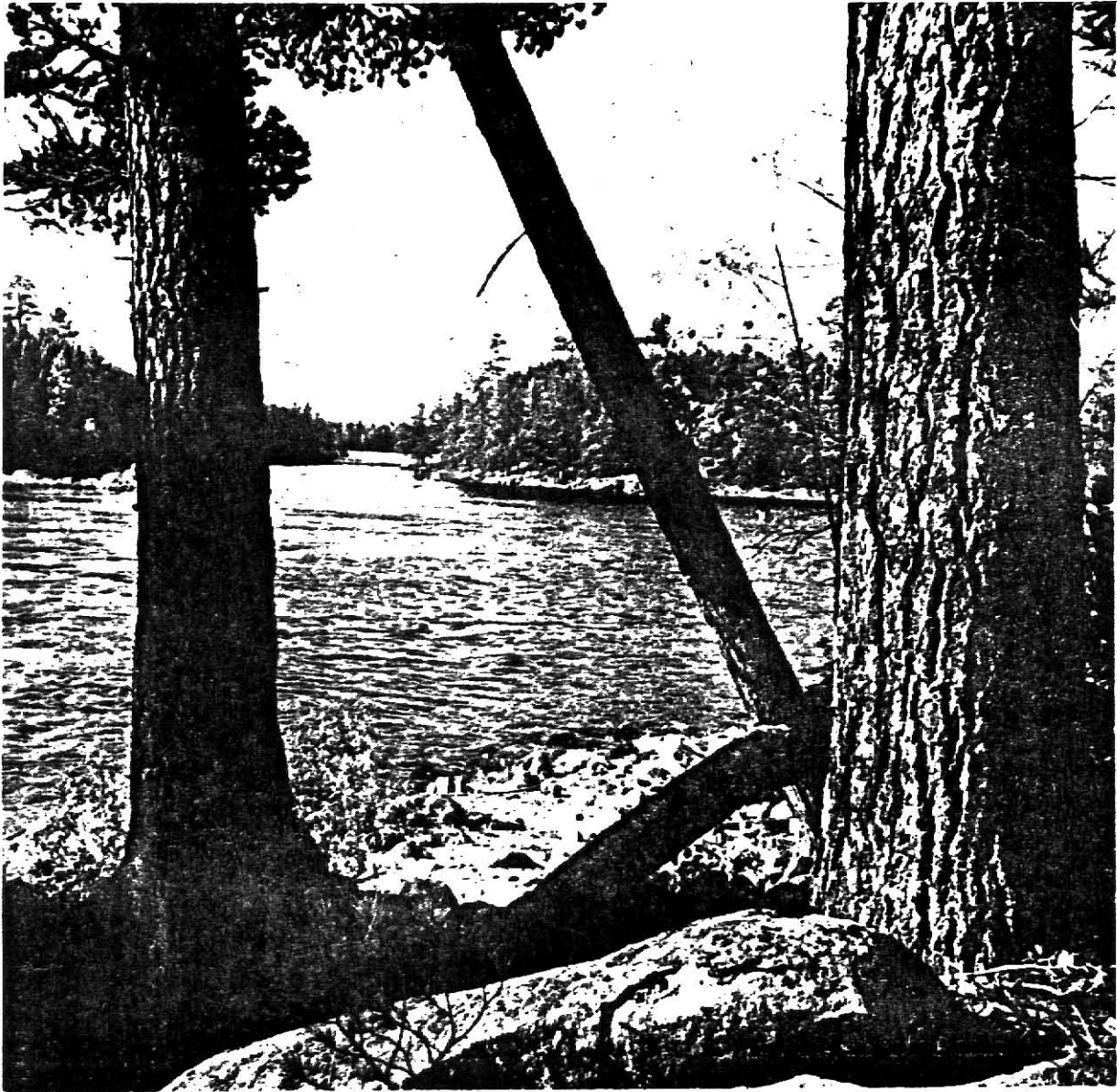


CHAPTER 1

SECTION 1: INTRODUCTION TO THE REGION

Northeastern Minnesota exemplifies the "Land of 10,000 Lakes." Wilderness lands give this region a distinctly rugged, primitive beauty.





A wide variety of visual qualities exist. Granite outcroppings are found among timber-capped hills, while birch and aspen saplings encroach upon boggy swamps and marshlands. Thousands of natural lakes interconnected by head-water streams provide unique regional character and desirable community sites.

The need for preservation and considerate community planning within the region is paramount to the survival of this visually rich environment.

SECTION 2. DEFINITION OF BOUNDARIES

Several political boundaries have been established for Northeastern Minnesota. Although the entire region is referred to as the Arrowhead Region, within this region there are several other divisions made for economic or planning reasons. While some of these sub-regions are definitive, others are ambiguous, used casually and often incorrectly.

The Arrowhead Region is roughly synonymous with the economic planning region designated as Planning Region Number 3 by the Department of Agricultural Economics of the University of Minnesota.¹ In studies by the Arrowhead Planning Commission, Region Number 3 is also referred to as Planning Area B.² The Arrowhead Region of Northeastern Minnesota contains Itaska, St. Louis, Lake and Cook Counties.

Smaller regions with over-lapping boundaries also occur within the Arrowhead Region. Most of the communities of the area are referred to as the "range communities" because they are located within one of the iron ore ranges. Thus, the

¹"Community Improvement Program--Part II: Guide Plan--Ely, Minnesota," Report prepared for the City of Ely Planning Commission by Aguar, Jyring, Whitman, Moser, Inc., Duluth, Minnesota, July 1968, p. 8.

²John S. Holt, "Regional Development Systems in Minnesota," Minnesota State Planning Agency, Agricultural Extension Service, St. Paul, Minnesota: University of Minnesota Press, August 1969, p. 87.

general term "Iron Range Region" is in common usage by non-planners. The mining companies in addition to state, county and federal agencies also provide their own vocabulary for regional districts. Superior and Bearhead are two such sub-regional designations sometimes used to describe the Arrowhead Region.

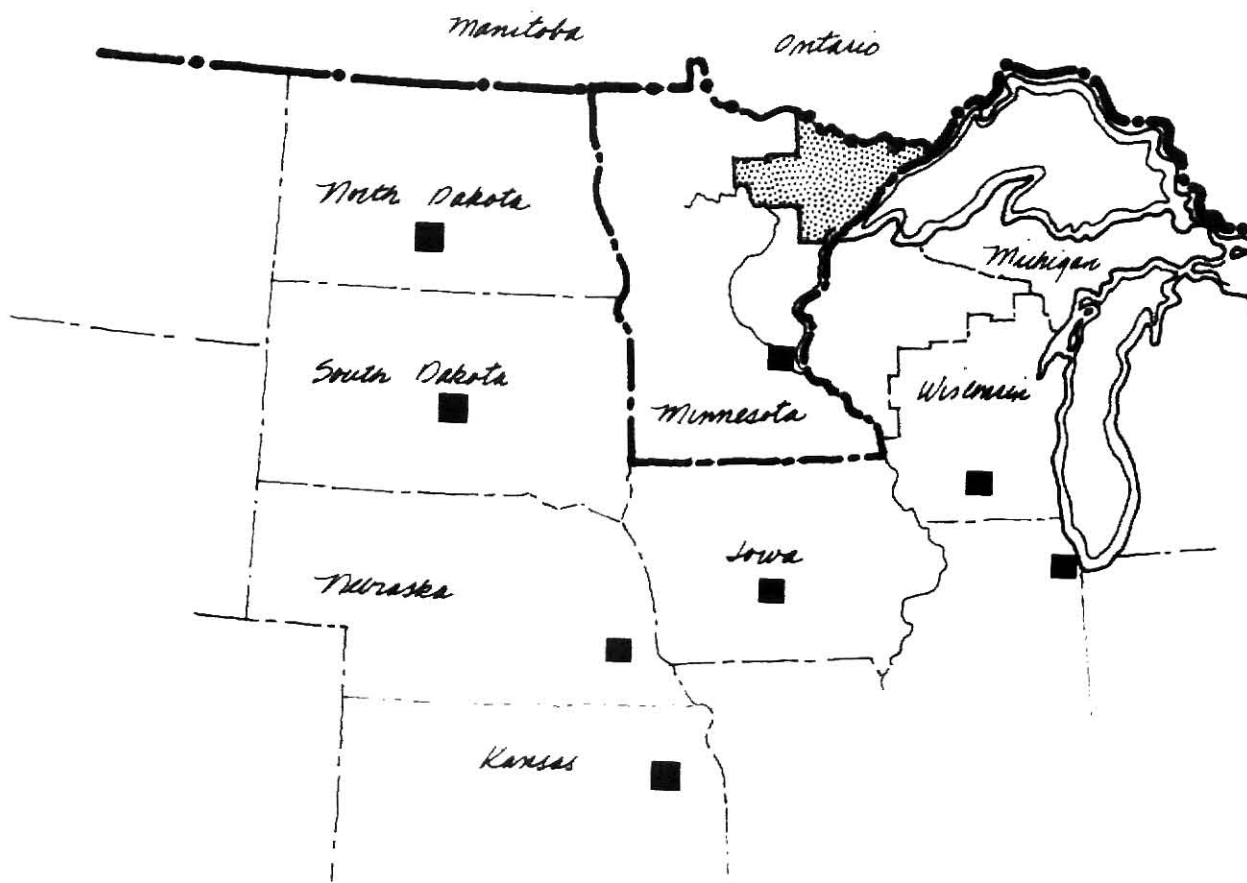
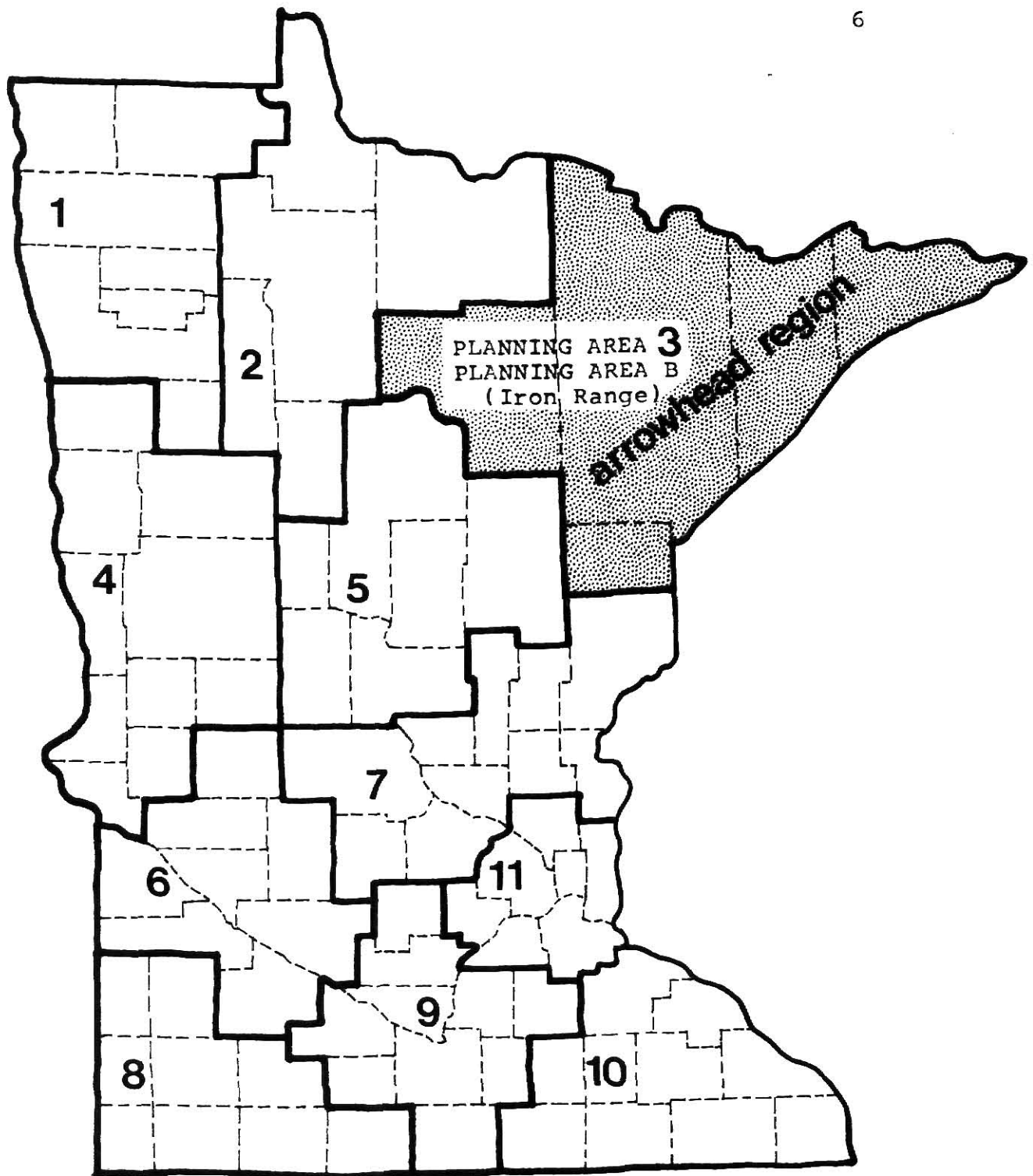


PLATE I
VICINITY MAP: MINNESOTA



Source: Minnesota State Planning Agency

PLATE II
VICINITY MAP:
MINNESOTA POLITICAL PLANNING BOUNDARIES

SECTION 3. PHYSIOGRAPHY OF THE REGION

Forests and Vegetation

Since the turn of the century, the forests of Minnesota have been greatly transformed from conifers to deciduous softwoods. Now only three percent of the commercial forest lands contain stands of White and Red Pine sawtimber.³

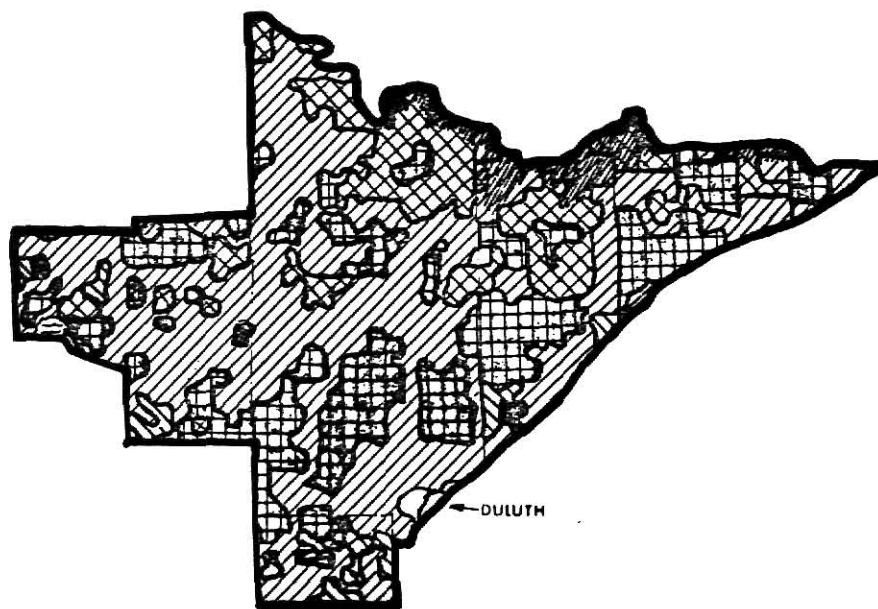
At present approximately thirty-two percent of all commercial forest land of the region is aspen.⁴ Remaining forest lands include ash, birch, red maple, red and white cedar, jack pine, white and red pine, white and black spruce, balsam fir, and a wide variety of fruit trees including chokecherry, pincherry and wild plums. Major hardwood species dominant in Wisconsin, Upper Michigan and southern Minnesota (e.g., sugar maple, basswood) are absent.⁵

The plant communities cover the entire range of types and ages, from lichens to trees, from seedlings to stands of red pine approaching 380 years of age. Some of the more dramatic herbaceous vegetation (such as the Lady Slipper) is found almost exclusively in this Region.

³"Community Improvement Program," op. cit., p. 16.

⁴Ibid.

⁵"Boundary Waters Canoe Area Management Plan and Environmental Statement," Superior National Forest, Eastern Region, Duluth, Minnesota: U.S. Department of Agriculture, June 1974.



EXPLANATION



Source: Minnesota Water
Resources Planning
Committee, State
Planning Agency



PLATE III
ARROWHEAD: MAJOR FOREST TYPES

Geologic Features, Soils

The entire region was carved by glaciers during the Ice Age. Its topography is marked by numerous granite outcrops, and littered with glacial gravel deposits (tills) and boulders. In addition to the lake basins, swamps, humus peat beds and extensive clay deposits are typical topographic features.

The dominant subsurface feature of the region is abundance of iron ore. Other valuable deposits of copper and nickel (predominantly around the Ely area) also exist.⁶

The soils have extremely limited agricultural potential,⁷ being generally shallow and high in sand and stone content. Over one-half of the region contains coarse textured soils among rock outcroppings.⁸ Because of its texture, the soils generally have low water retention capacities, are subject to nutrient leaching, and are therefore not very fertile.⁹

Climate

The entire region has a harsh climate, subject to extremes in temperature and weather types. Sub-zero

⁶"Community Improvement Program," op. cit., p. 20.

⁷Ibid.

⁸"Economic Potential--Iron Range Regional Plan," Report by Aguilar, Jyring, Whitman, Moser, Inc., Duluth, Minnesota, 1968, p. 17.

⁹Ibid., p. 18.

temperatures prevail through January and March, and summer heat often reaches 95 degrees in July and August.

The growing season is short, since the average number of frost free days is between 100 and 120.¹⁰ While early springs and "Indian summers" do occur, they are rare phenomena.

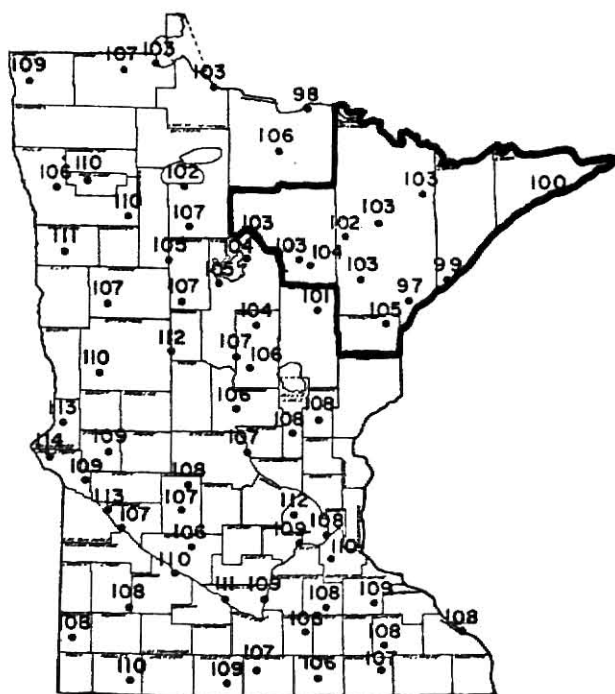
The majority of the precipitation arrives in the form of rain during the summer months. The region shows a consistent 17 to 20 inches of rain from April through September.¹¹ The months of May and June are usually rainy, while July through September is relatively dry. Winter months produce an average of 70 inches of snow, equivalent to 5-6 inches of moisture.¹²

Tornadic and other cyclonic activity is rare for this region. Serious flooding is also rare since the numerous lake basins and river channels have remarkable capacities to absorb the surface run-off.

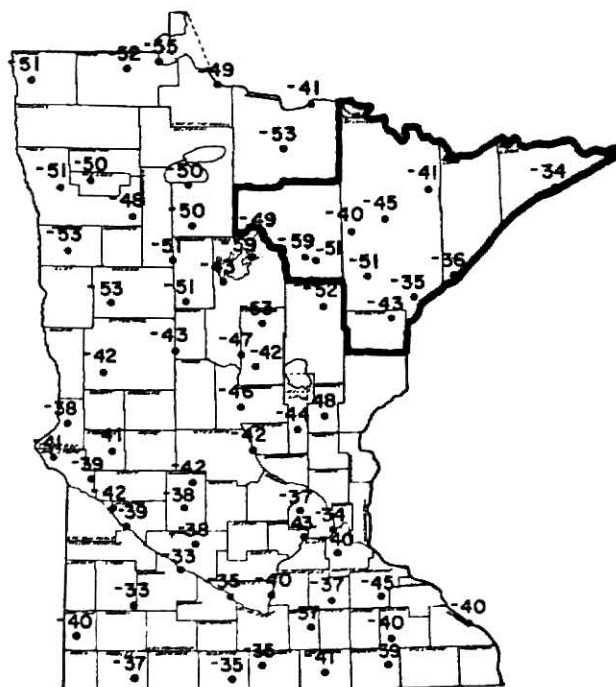
¹⁰"Community Improvement Program," op. cit., p. 14.

¹¹Ibid., p. 13.

¹²Ibid.



Extreme maximum air temperatures, °F.



Extreme-minimum air temperatures, °F.

Source: Minnesota Water
Resources Planning
Committee, State
Planning Agency

PLATE IV
ARROWHEAD: TEMPERATURE EXTREMES

SECTION 4. HISTORY OF THE REGION-SIGNIFICANT EVENTS

The Arrowhead Region is diverse in economy, physiography and history. Past events that provide a clearer regional understanding of historical development of the area are as follows:

- 1778-1812 The North West Company carries on large scale fur-trading activities in northern Minnesota.
- 1817 The American Fur Company begins operations in Minnesota and establishes its headquarters at Fond du Lac post.
- 1826 The treaty of Fond du Lac turns over mineral rights in the area to the United States government.
- 1852 David Owen, early explorer/engineer, publishes the results of his survey.
- 1858 Minnesota becomes the thirty-sixth state.
- 1865-1866 The Vermilion Lake Gold Rush occurs and George Stuntz, while prospecting for gold, discovers by accident the first bed of iron ore to be worked in Minnesota. This prospecting point became the Breitung Mine and is now part of the Soudan mine.
- 1873 Panic and depression occur and slow down the development of mining on the Vermilion Range.
- 1882 The Minnesota Iron Company is formed by Charlemagne Tower, George Stone, George Stuntz and others. The town of Tower is built and preparations are made to open a mine at Soudan.
- 1884 The first trainload of ore from the Soudan mine reaches Agate Bay (Two Harbors).
- 1880's-
1890's The Iron Range Region becomes a major supplier of wood for the lumber mills of Duluth and Virginia.

- 1889 The first mining camp on the Mesabi is built at Mt. Iron.
- 1891 The Biwabik Mine opens.
- 1893 The first bank in the region is formed at Mt. Iron.
- 1900 Ely is the largest community in the area, and the Vermilion district is the largest producer of ore.
- 1901 The U.S. Steel Corporation is formed. Over thirty mines are active on the Mesabi Range by this time.
- 1903 Immigration into the Iron Range continues at a rapid pace.
- 1914 Bus operations initiated in Hibbing were started.
- 1914-1918 World War I stimulates mining expansion and the population of the Iron Range continues to grow.
- 1916 A great strike occurs, and much violence breaks out across the Range.
- 1922 The Mesabi Iron Company is formed and produces the first commercial taconite pellets. Problems beset the operation, and production ceases in 1924.
- 1930's The Great Depression deals the economy a severe blow.
- 1939 The Reserve Mining Company is formed.
- 1940 The Erie Mining Company is formed.
- 1941-1945 World War II stimulates the economy.
- 1951 Iron ore shipments reach a record 79,968,689 tons; 82% of the nation's total.
- 1953 Erie Mining Company begins a \$300,000,000.00 project at Hoyt Lakes. Production begins in 1957.

- 1953 U.S. Steel builds its Pilotac Plant at Mt. Iron and its Extaca Plant at Virginia. A different process produces nodules and sinters instead of pellets.
- 1959 The St. Lawrence Seaway is opened.
- 1960 By this date 2,484,854,372 tons of natural ore had been mined from the region.
- 1964 The Taconite Amendment is passed, and second generation taconite plants enter construction states on the Iron Range. The new era had begun.¹³

The highlights of the Arrowhead history reflect a dominant dependence on the heavy industries of both the state and the nation. Since the Arrowhead communities relate so strongly to their economic heritage, a more thorough investigation of these economic bases appears important for better townscape understanding.

¹³"Economic Potential," op. cit., pp. 3-4.

SECTION 5. ECONOMY OF THE REGION

Mining Industry

The traditional economic base for the Arrowhead Region has been the mining of iron ore. Increased costs and changes in technology have resulted in the closing of most underground mines, although the iron ore reserves have not been depleted. Estimates on the Mesabi Range alone credit iron ore reserves of more than 50 billion tons which could provide an economic employment base for at least an additional 200 years.¹⁴

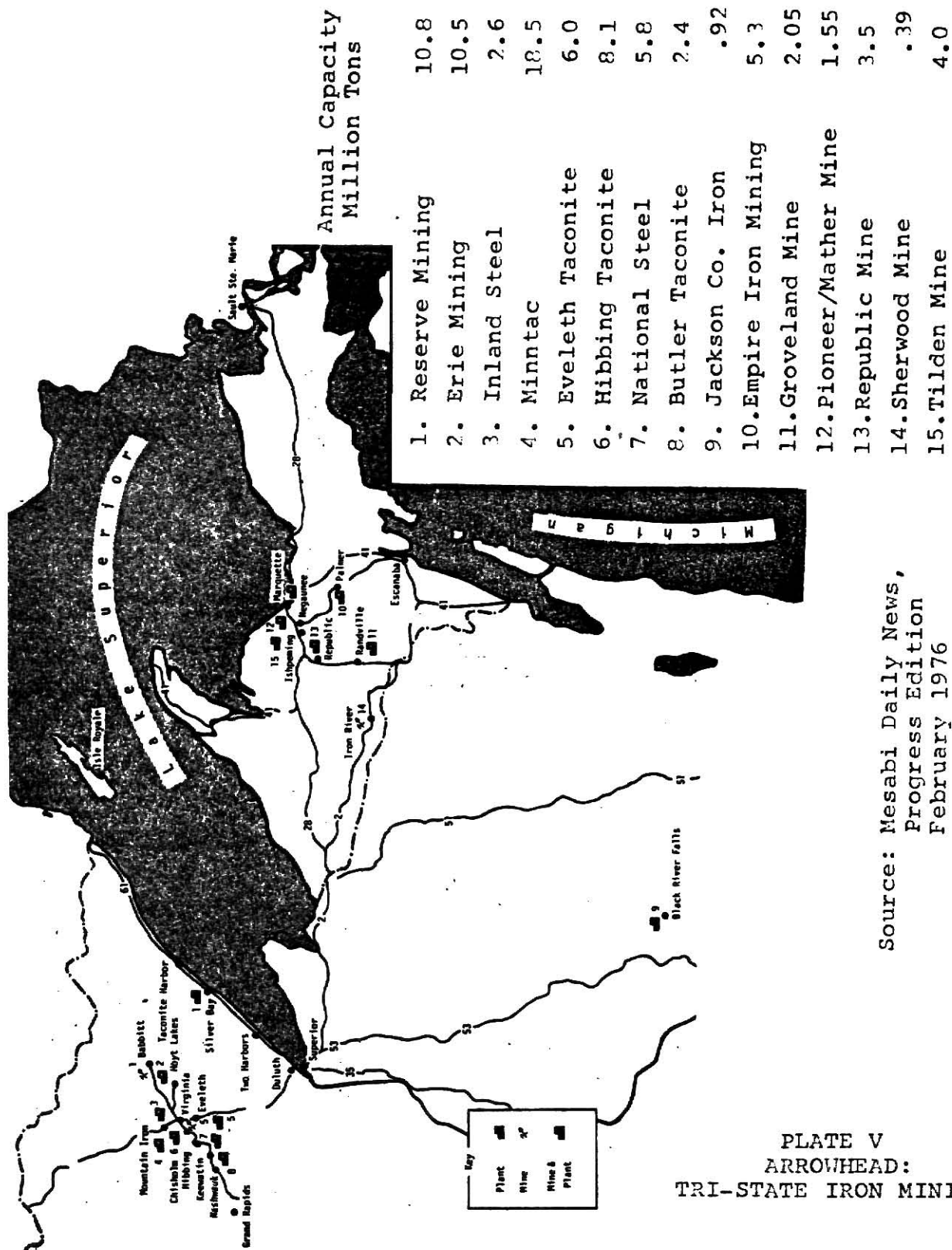
Because of the taconite industry, the emphasis has shifted from traditional ore mining operations. The taconite industry is actually a mining-manufacturing process with emphasis on the manufacturing portion.¹⁵ The process is beneficial to the region due to the economic diversification of the mining base.

The taconite industry is now the region's economic base, and future projections indicate that taconite processing will play an even greater role in the regional future. Though available statistics include all of Minnesota, the greatest portion of tonnage would be mined from the Mesabi Range of the Arrowhead Region.¹⁶

¹⁴Ibid., p. 10.

¹⁵Ibid., p. 5.

¹⁶Ibid.



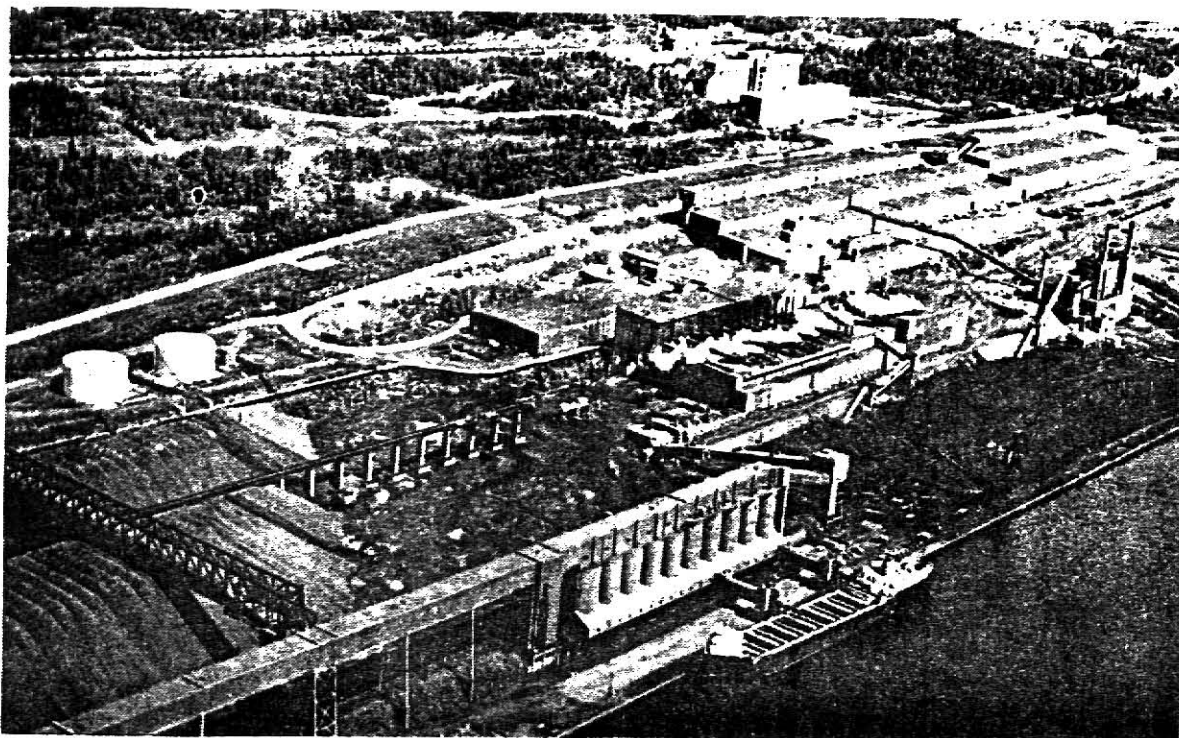


PLATE VI
SILVER BAY:
FIRST TACONITE PLANT

Source: Mesabi Daily News,
Progress Edition,
February 1976

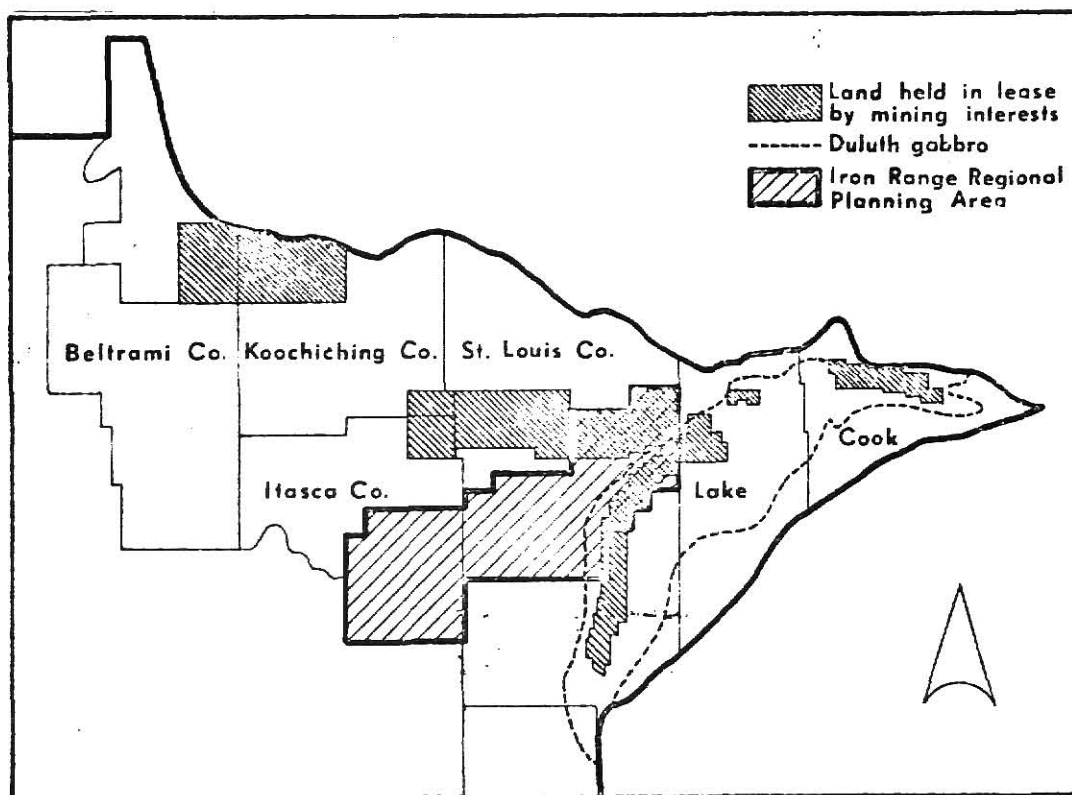
At present, about 15,000 persons are directly employed in statewide mining operations.¹⁷ An additional 1700 persons are employed in railroad, power and construction projects directly related to taconite mining expansion.¹⁸ Annual payrolls for the mining related industries are expected to be \$150,000,000 by the year 1990.¹⁹

¹⁷Ibid., p. 6.

¹⁸Ibid.

¹⁹Ibid.

There are also vast deposits of copper and nickel within this Arrowhead Region. In 1966 the International Nickel Company negotiated a mining lease for 4,945 acres of land in the Superior National Forest near Ely.²⁰ Over 181,000 additional acres have been leased to other private mining companies by both state and local governments.²¹ While at present significant copper and nickel mines are not yet in operation, this potential represents a significant economic base for the future of the region.



Source: NEMDA, The Emerging Copper-Nickel Industry in Northeastern Minnesota
 Minneapolis News Tribune, "Nickel, Copper Boom is on", December 22, 1968.

PLATE VII
 COPPER HOLDINGS

²⁰Ibid., p. 11.

²¹Ibid., p. 12.

Forest Products Industry

In addition to mining related industries the region depends significantly upon the production of forestry products. Just as underground mining evolved to taconite processing, the large-timber industry has given way to the pulpwood industry.

In 1968 Itaska and St. Louis Counties produced approximately 38,915,000 cords of timber.²² There are over 150 sawmills in this area processing this wood with approximately 315,000 cords of pulpwood being cut annually in St. Louis County.²³

Tourist Industry

As a supplement to the mining and forestry industries of the Arrowhead Region, the tourist industry represents a growing factor within the economic base. Ten years ago the Minnesota Arrowhead Association reported that there were over 2,100 resorts, 90 hotels, 400 motels, and over 150 trailer camps operating in the region.²⁴ Tourists then spent over \$45,000,000 annually in this Arrowhead Region.²⁵

²²Ibid., p. 13.

²³"Regional Development Plan-Regional Planning Area, Mesabi and Vermilion Ranges," report by Aguar, Jyring, Whitman, Moser, Inc., January 1963.

²⁴"Economic Potential," op. cit., p. 20.

²⁵Ibid.

At present, Itaska and St. Louis Counties have over 62,000 tourist accommodations including hotels, motels, resorts and recreational tourist camps.²⁶

The greatest single attraction for the area is the three million acre Superior National Forest. Some of Minnesota's most scenic areas (over 2,000 lakes) are found in this forest.²⁷ The Region also includes the Boundary Waters Canoe Area, a restricted no-motor area. Adjacent to the B.W.C.A. is the Quetico Provincial Park operated by the Canadian government. In the northwest corner is the 1.3 million acre Chippewa National Forest.²⁸ Grand Portage National Monument is located at the extreme tip of the Arrowhead Region, from which a twenty-minute boat ride leads to Isle Royal National Park.²⁹ The Mesabi Iron Range with its dramatic pits and mesas attracts thousands of visitors each year.³⁰ The 4,403-acre Bear Head Lake Park and 1000-acre Tower-Soudan State Park also support active tourist trade.³¹

Planning consultants have stated that the tourist industry offers greater potential for development than any other

²⁶Ibid., p. 21.

²⁷Ibid., p. 19.

²⁸Ibid., p. 18.

²⁹Ibid., p. 19.

³⁰Ibid., p. 20.

³¹Ibid.

segment of the Arrowhead economy. One report describes the qualities of that potential:

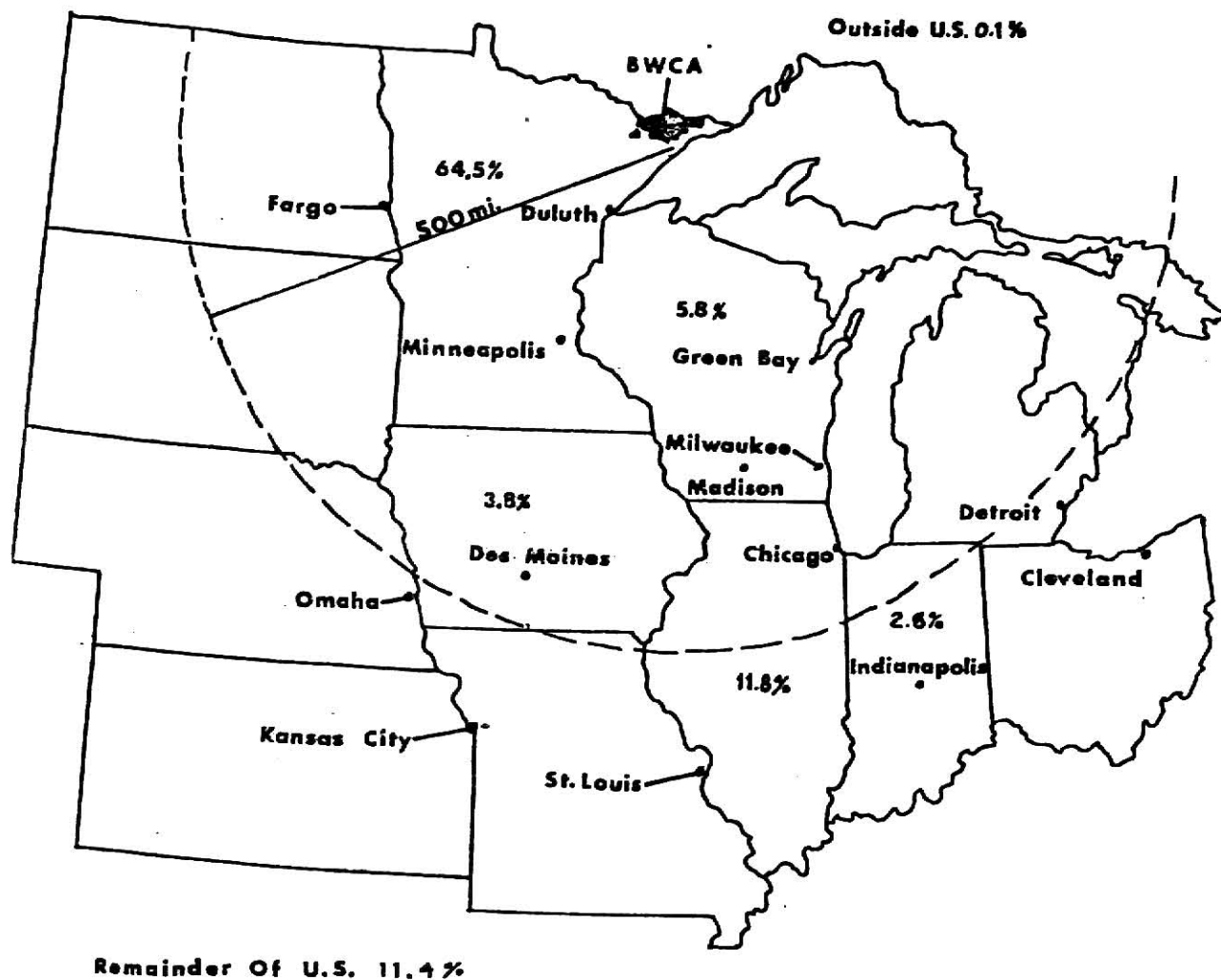
The Iron Range Region contains thousands of lakes and streams for fishing, boating, canoeing, and swimming. The region's forests, notable for their beauty alone, provide habitat for deer, moose, grouse, and a host of other wildlife species. Roads and trails, including many miles of old logging tote-roads and railroad grades, provide access for hunters, hikers, fishermen, and sightseers. Facilities ranging from primitive campgrounds and fishing camps to plush luxury resorts offer accommodations to suit the tastes and means of any visitor. During the winter months, several ski resorts offer some of the best skiing opportunities in the Midwest.

For those who are interested in our area's history, the Region provides a colorful and very significant past to explore. Ghost towns, abandoned mines, logging camps and roads, ancient Indian villages, prehistoric archaeological sites, fur trading posts, and rugged homesteads dot the landscape of Northeastern Minnesota.

The Arrowhead Country is rich in Indian lore and was the center of the North American fur trade for many decades. Its forests and mines have provided the raw material which built a nation. Geologically, the region is as old as the earth. The numerous rock outcroppings which form part of the Canadian Shield are billions of years old. By contrast the many lakes were carved by glaciers only a few thousand years ago. ... With the advent of longer vacations the area has become increasingly popular as a vacation center.³²

³²Ibid., p. 28.

LOCATION & RECREATION USE



Source: U.S. Department of Agriculture

PLATE IX
LOCATION AND RECREATION USE:
GENERAL TRENDS 1974

SECTION 6. POPULATION OF REGION

The Minnesota Department of Health, Section of Vital Statistics has calculated that by 1985 the region would support a population of 170,000.³³

As a region, the Arrowhead shows consistent population growth. Though characteristic of national statistics, many of the smaller towns are being depopulated as the younger people migrate to larger urban centers (e.g., Duluth, Hibbing, Minneapolis).³⁴

³³Ibid., p. 30.

³⁴"Background Information for Framework Statewide Water and Related Land Resources Planning in Minnesota," report #2, St. Paul, Minn.: Water Resources Coordinating Committee, State Planning Agency, June 1969, p. 34.

IRON RANGE REGION POPULATION FORECASTS BY GEOGRAPHICAL DISTRIBUTION (1975-1985)

	State of Minnesota	Total		Iron Range Region				St. Louis Co. Portion	
		Itasca County	St. Louis County	Itasca County Portion		St. Louis Co. Portion		Total	
				Urban	Rural	Urban	Rural	Urban	Total
1900	1,751,394	4,573	82,932	1,516	1,348	2,864	15,501	7,510	23,011
1910	2,075,708	17,208	163,274	10,245	4,019	14,264	47,278	20,544	67,822
1920	2,382,165	23,876	206,391	12,122	5,438	17,560	66,309	17,978	84,287
1930	2,563,953	27,224	204,596	13,278	5,440	19,018	61,708	17,564	79,272
1940	2,792,300	34,996	206,917	14,579	8,313	22,892	60,379	17,448	77,827
1950	2,982,483	33,321	206,062	15,349	9,574	24,923	56,762	16,076	72,838
1960	3,413,864	38,006	231,588	16,211	13,728	29,939	68,686	21,560	90,246
1968	3,582,000	32,266	223,235	15,275	14,100	29,375	66,134	22,044	88,178
1975									
Low		33,000	249,200	13,850	13,850	27,700	73,279	26,426	99,700
Mean	3,753,000	35,500	249,600	14,900	14,900	29,800	73,353	26,447	99,800
High		37,600	267,500	15,800	15,800	31,600	78,645	28,355	107,000
1985									
Low		32,200	267,000	13,584	14,716	28,300	77,887	31,813	109,700
Mean	4,176,991	37,000	281,500	15,648	16,952	32,600	82,147	33,553	115,700
High		40,100	312,000	16,944	18,356	35,300	95,637	39,063	134,700

Source: U.S. Bureau of the Census. U.S. Census of Population: 1900-1960. Staff Calculations.
Minnesota Department of Health, Section of Vital Statistics.

TABLE I
POPULATION PROJECTIONS

SECTION 7. REGIONAL PLAN

A report and concept plan by Aguar, Jyring, Whitman, Moser, Inc. for the Iron Range Planning Board gives direction for comprehensive planning activities within the Vermilion and Mesabi Ranges of the Arrowhead Region.³⁵ This is a significant undertaking that represents the first effort of its kind for northern Minnesota.

The regional analysis culminated in an extensive report and regional land use plan. Realistic goals for the region were outlined to provide a basis on which decisions affecting land development and economic renewal efforts could be made by communities within the region. The goals are particularly important to the smaller towns that need to encourage economic and population stability if they are to survive. For example, the Commercial Development Goals stated by the firm are particularly relevant to small town needs:

1. Promote a variety of commercial establishments related to the population and income level of the trade area.
2. Provide a climate for expansion of the vacation-travel industry by encouraging the establishment of businesses oriented to the tourist.
3. Encourage resorts and commercial recreational businesses to expand their operations into year-round activities.

³⁵"Regional Development Plan," op. cit., p. 44.

4. Promote renewal of downtown shopping districts by large scale remodeling, renewal and development.

General Regional Goals are meaningful to small towns:

1. Make available suitable land and facilities in order to further the economic growth of the region and its political subdivisions in preparation for better living conditions and expanded job opportunities.
2. Preserve and maintain a sound investment in land and buildings on the Iron Range,
3. Improve and enlarge the cultural and social opportunities in the Region.
4. Further the proper development of all human and natural resources in a manner which will assure the advancement of the Region's economy.
5. Develop an economic base which is flexible enough to adapt to changing market demands and technological advances.
6. Make optimum use of the inherent endowments of the Region's natural beauty, climate and uncrowded conditions so unique to today's world.
7. Develop new economic activities and encourage the expansion of existing enterprises in order to continue economic diversification and expansion of the economic base.
8. Promote cooperation and communication among area development and promotional groups while creating a new local-state-federal partnership in economic renewal.³⁶


While these goals are general and conceptual, they can effectively serve as a framework for developing community structure. Clarity of purpose and regional identity are

³⁶Ibid.

MAJOR LAND USES

MINING

▲ INDUSTRIAL

PARKS & RECREATION

RECREATIONAL RIVERS

CIRCULATION FACILITIES

 FREEWAY

EXPRESSWAY

— — — THOROUGHFARE

© AIRPORT

..... WATERWAY

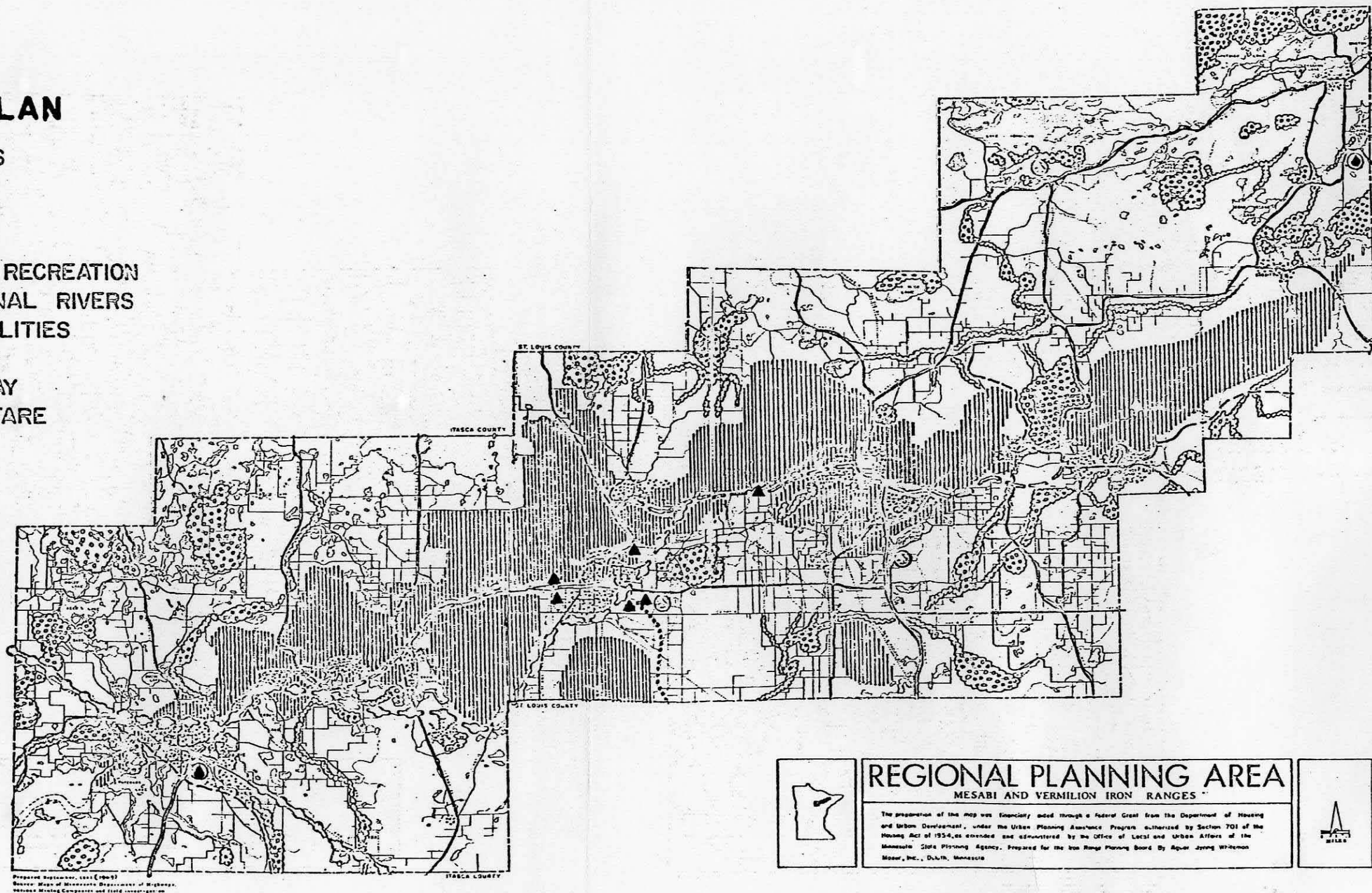


PLATE X
REGIONAL CONCEPT PLAN

paramount to the specialized planning efforts required for the Arrowhead's individual communities.

CHAPTER 2 - TOWNSCAPES OF THE REGION

Section 1 - Growth Patterns and Population Parameters

Section 2 - Cultural Heritage and Economy

Section 3 - Regional Townscape Character

CHAPTER 2

SECTION 1. GROWTH PATTERNS AND POPULATION PARAMETERS OF ARROWHEAD COMMUNITIES

The communities, like the region, show many points of townscape similarity. Several communities of 7,000 or less lie within the Iron Range of the Arrowhead Region. These communities all developed because of the mining and forestry that flourished after the Civil War.

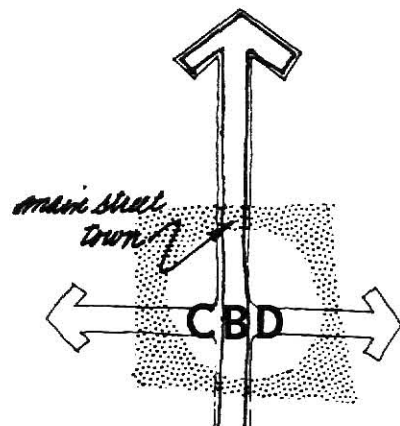


Figure 1: Main Street Town
(Early Chapman Street)
Ely, Minnesota

Because they are all main street towns, city and through traffic always pass through the central business district, and as a result set up a linear growth pattern extending in both directions from the main avenue. The city platting of all Arrowhead communities is consistently

a grid-pattern, regardless of topographic features and slope of the land.

The communities relate strongly to the railroads and nearby mining facilities. In each community it was the iron ore mine that first served as the economic nucleus of the town; from that nucleus all commercial and residential districts were expanded. As the population increased and additional mines opened, new satellite communities erupted across the Arrowhead Region.

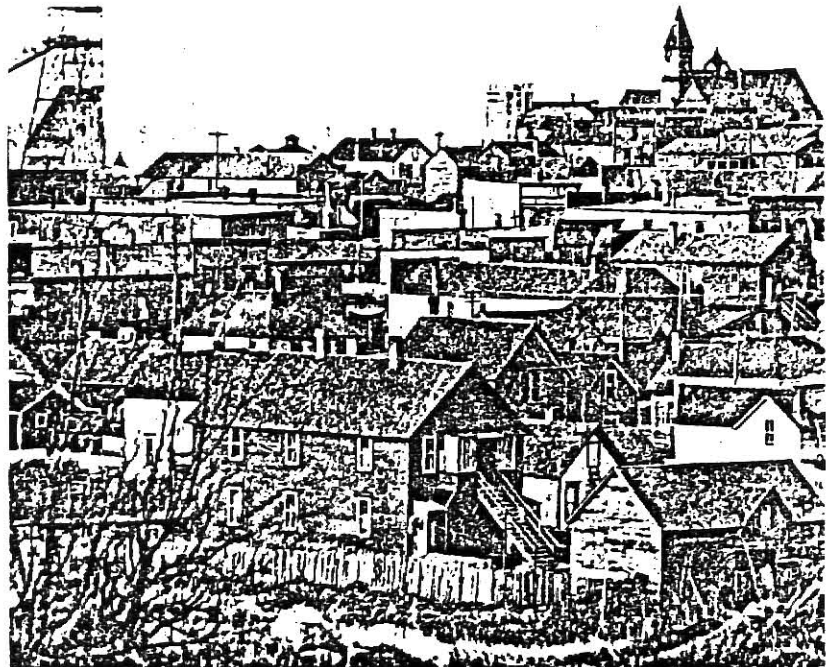
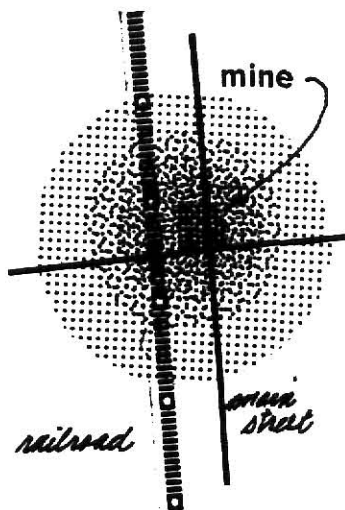


Figure 2: Concentric growth patterns with the iron ore mine as the point of origin are typical of all Arrowhead communities.

SECTION 2. CULTURAL HERITAGE AND ECONOMY

The region's communities were populated by the great influx of immigrants from Europe during the late 1800's, attracted to the area because of the employment opportunities in the mines and lumbering camps. They were an adventurous people, hard workers and a dependable cog in the capitalistic ventures of the Iron Range.

Figure 3: Immigrants by the thousands came to work the mines and forests of the Arrowhead region.

Source: J. Somrock
Ely, Minnesota



While some Chippewa Indians have migrated to the towns and have been assimilated by the white culture, most of this group remains on the reservations near Tower and Chisholm. There are few, if any, other non-Caucasian minority groups inhabiting the small towns of the Arrowhead Region.



Figure 4: Early "Lumberjacks", 1900

Source: Lee Brownell
Ely, Minnesota

John Somrock, historian, paints a typical picture of the early regional economy and people:

As Northeast Minnesota attained its puberty and roared into full-throated manhood, immigrants from the 'old country' of Europe--a homogeneous humanity of assorted nationalities and temperaments--made up the rough-and-tumble army that invaded the erstwhile serenity of the area, to dig out the iron ore, to fell its forest, to brawl in its booze, to pamper its prostitutes, to brave deep snows and bitter cold winters, to mock at black flies and mosquitos, to endure hardships, to fight for fun and, most important, to become the founding fathers of its communities.³⁷

³⁷John W. Smrock, "Incredible Ely," reprinted by American Forests, Washington, D.C.: American Forestry Association, September 1974, p. 4.

SECTION 3. REGIONAL TOWNSCAPE CHARACTER

Constant reminders of the mining days are still present within these Arrowhead communities. Mining shafts and iron ore pits are probably the strongest suggestion of visual identity. The close relationship of the central business districts to the railroad and shipment yards also provide a discernable pattern within the townscape. Even the city, street and neighborhood names reinforce the mining heritage. With the exception of Biwabic (an Indian name) all of the range towns are named in honor of "iron ore men" or their discoveries. Street names such as Chapman and White honor the early mining superintendents, while town locations such as Pioneer and Sibley commemorate the individual mine from which the location evolved.

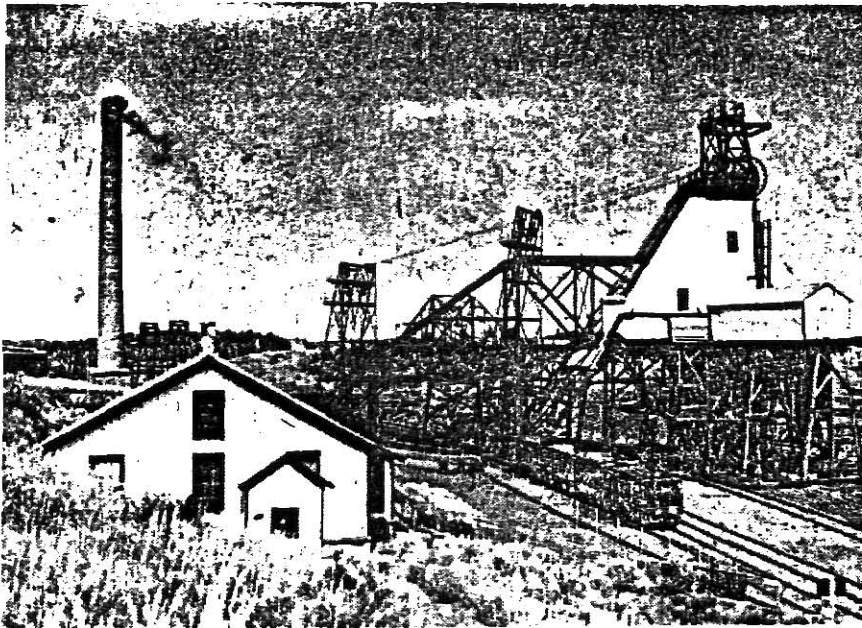


Figure 5: Mining town image

Source: L. Brownell

Entrances

In all cases little evidence of conscious entrance to the communities is present. Sometimes the entrance point is quite inviting because of a distant landmark or because of vegetative interest.



Figure 6: Buhl Entrance

In most instances the entrances are visually dull, often littered and conspicuously non-functional. They are usually cluttered with conflicting notices, outdated political slogans and neglected advertisements. Certainly none of the entrances to the Arrowhead communities have capitalized on the significance of entrance imagery.

Central Business Districts

The visual qualities of the C.B.D. townscapes provide a feeling of both transience and permanence. While most Arrowhead communities have several vacant buildings and unkept city lots in the business district, it is not difficult to imagine the days when each business was flourishing. The older areas provide a consistent rhythm, a conservative-town conformity, that earmarks the town as decidedly a "range community."

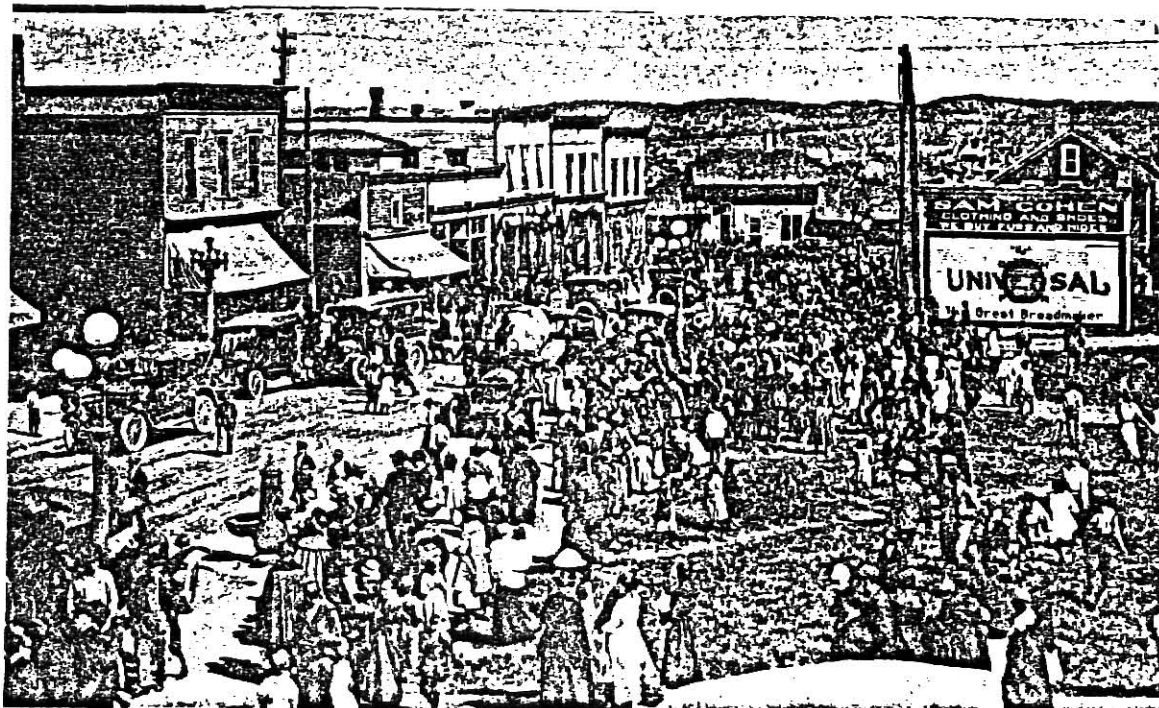


Figure 7: C.B.D.s project a "sense of the past."

Source: Lee Brownell

The central business structures are uniform in size, scale, and proportion. Many of the buildings have common walls that structurally as well as visually tend to support each other. At least three additional elements appear characteristic of the older commercial structures; they are two-story, usually built of wood, and have pitched roofs often with false, square-faced facades.



Figure 8: Eveleth C.B.D.

The newer or remodeled buildings within the Central Business Districts of the Arrowhead communities show the usual preponderance of aluminum siding, fake rock and marble. Unfortunately, tar paper "brick" has been used extensively to 'restore' many of the older structures. Very little attention has been placed on developing a visual continuity with adjacent structures.



Figure 9: Remodeled C.B.D. building
Aurora, Minnesota

The cedar-shake "mansard roof," a design form completely alien to the region, seems to be transforming all the range communities. The Central Business Districts also have their share of concrete "cubes," as well as ingenious manipulations of the "Swiss chalet" theme. The combination of these design forms, coupled with an unlimited variety of commercial signs, has minimized townscape unity and identity.



Figure 10: Visually discordant building group
Tower, Minnesota

Sometimes the visual qualities of the townscape are improved through sensitive, contemporary design. Canadian Waters, Inc. is one new structure that has been sensibly designed to correspond with the skyline, climate and adjacent buildings. While other examples of visual harmony do exist, the merging of new and old structures has not been generally supportive of townscape design.



Figure 11: New buildings can make a positive statement.



All too often the tendency has been to timidly mimic other architectural materials and forms with little attention given to the way all the design elements relate as a unit, or relate to other C.B.D. structures.



brick
concrete
fiberglass awnings
yellow window trim
metal
pink door
white picture
pipe
metal
false marble
asphalt
glass block
aluminum siding
window
red brick

Figure 12: Visual Chaos
Aurora, Minnesota

Strip Commercial

Problems of strip commercial development are not unique to the Arrowhead communities. To a limited extent all communities are experiencing commercial strip expansion at the expense of the original business district. The trend is most prevalent among the tourist-oriented trades, since they generally require greater amount of land to store canoes and other rental equipment.

The success of these commercial ventures that promote the tourist industries is critical to the economy of all the Arrowhead communities. Therefore, the most supportive trade environment needs to be created. Currently, the presence of these newer businesses is considered an asset to the small town environment in spite of residential land encroachment.



Figure 13: Strip Commercial
Ely, Minnesota

Visual qualities are important, but the reality of how a townscape functions is even more critical. Unfortunately, many of the basic townscape amenities (e.g., shade trees, trash containers and benches) are characteristically lacking in the small towns of the Arrowhead. In practical terms this suggests an incomplete utilization of public space, and in a very real sense, it diminishes public identity with the townscape.

Certainly visual and functional extremes attract the greatest amount of attention. It is not the author's intention to imply that all communities of the Arrowhead Region have unacceptable environments. There are many townscape qualities that are favorable; there are still more qualities that require varying degrees of design remedy.

CHAPTER 3 - ELY AS PROTOTYPE

Section 1 - Physiography of the Ely Area

Section 2 - Non-Industrial Economy of Ely

Section 3 - Past Transcends Present

Section 4 - Positive Steps - History of Town Planning

CHAPTER 3

ELY AS PROTOTYPE

SECTION 1. PHYSIOGRAPHY OF THE ELY AREA

Communities of the Arrowhead region possess many points of commonality. The community of Ely has been selected as the prototype community for the application of this research.

Ely is situated in northeastern St. Louis County at a longitude of 95 degrees 47 minutes west, and a latitude of 47 degrees 48 minutes north, and at an elevation of 1,450 feet above sea level.³⁸ Beyond Ely to the north and east are wilderness areas, reflected in the Boundary Waters Canoe Area and the Quetico Provincial Park of Ontario. To the south and east is the Superior National Forest.

Located in the southern part of the Canadian Shield, the terrain around Ely provides clear evidence of glacial scarification typical of the Arrowhead Region. Low, irregularly shaped bedrock hills and ridges separated by low lands or lakes dominate the landscape.³⁹ While the terrain around

³⁸"Economic Adjustment--Ely, Minnesota," report by Walter Butler Company, Consulting Engineers, St. Paul, Minnesota, March 1968, p. 6.

³⁹"Boundary Waters Canoe Area Plan," Superior National Forest, Eastern Region, Duluth, Minnesota: U.S. Department of Agriculture, August 1973, p. 3.

Ely shows some topographic variation, the Arrowhead region is essentially flat.⁴⁰

A wide variety of forest specimens surround Ely. The major forest type to the north is white, red, and jack pine; to the south it is aspen and birch.

Most soils within the Ely area are shallow glacial tills and drift.⁴¹ The soils are suitable only for supporting softwood forests and miscellaneous hardwoods.⁴²

Physiographic features of the Ely area provide a unique but sensitive environment for community development. Because the soils are shallow and the vegetation cover so critical to its protection, any disturbance of the natural drainage patterns and soil horizons will have detrimental effects for future vegetative restoration. The forests are one of the region's greatest resources; the physical protection of the soil layer as well as the economic and visual qualities of the vegetation necessitate conservative land development with minimal alteration by man.

⁴⁰"Economic Adjustment," op. cit., p. 15.

⁴¹Ibid.

⁴²"Boundary Waters," op. cit., p. 3.

SECTION 2. NON-INDUSTRIAL ECONOMY OF THE ELY AREA

The Ely trading area is not supported by an extensive rural or agricultural community. The commercial trades draw minimally from Babbitt, Winton, Tower and Soudan, and the Isabella area.

Although the surrounding area is a minimal trade source, a growing tourist industry draws people from all fifty states. Over five million people live within a day's drive.⁴³ In 1977 it was estimated that more than 380,000 people vacationed in the Ely area.⁴⁴

Ely supports more than fifty resorts, twelve canoe outfitters, and a wide variety of service-oriented businesses for the tourist industry. With the growing interest in cross-country skiing and other winter sports, including dog sled racing, the Ely community is benefited by tourists not only in the summer, but also during the winter months.

⁴³"Community Improvement Program," op. cit., p. 3.

⁴⁴J. P. Granek, M.D., interview in Ely, Minnesota, December 1976.

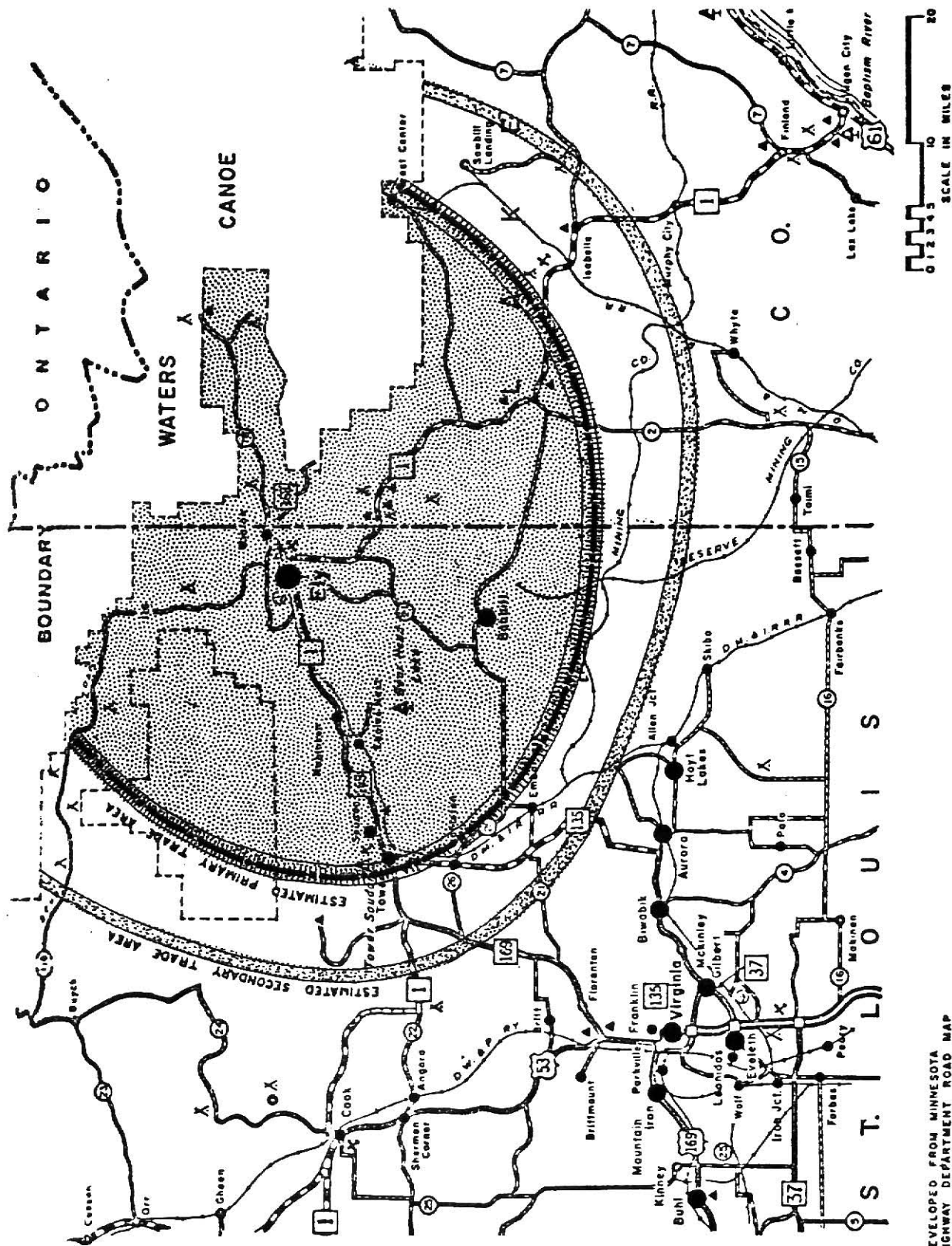


PLATE XI
ELY TRADING AREA

DEVELOPED FROM MINNESOTA
HIGHWAY DEPARTMENT ROAD MAP

SECTION 3. PAST TRANSCENDS PRESENT

The members of a community cannot be fully understood unless their collective past is known. A comprehensive understanding of a community cannot take place without thorough acquaintance with its origin.

The history of Ely is rich in human drama and culture. Although the French Voyageurs traveled the border lakes nearly two hundred and fifty years ago, the principal settlers arrived in the Lake Vermilion region to search for gold. The explorers found only iron pyrite or "fool's gold." As rich deposits of iron ore were discovered, the prospectors moved northeasterly, where a massive iron ore vein was tapped on the shore of Shagewa Lake.⁴⁵ This iron ore discovery was made in approximately 1883 in a pit about 200 yards north of where the railroad depot of Ely now stands.⁴⁶

A group of traders and Indians had already formed a small settlement on the eastern shore of Shagewa Lake in the area now known as Spalding. With the discovery of iron ore to the west, another settlement near the new mine was established. This resulted in the establishment of Chandler

⁴⁵"Seven Decades of Progress," report by Ely Chamber of Commerce, July 1958, p. 1.

⁴⁶Ibid.

location, Lawrence Street, West Chapman and Central Avenue sections of what is presently known as Ely.⁴⁷

Originally the community was named Florence, but the name was changed to Ely in honor of Samuel B. Ely, a wealthy prospector from Ishpeming, Michigan.⁴⁸

The first iron ore discovery, the Chandler Mine, was followed by five mines to the east. As the mines opened, the people built their homes nearby resulting in the Savoy, Sibley, Zenith and Pioneer locations,⁴⁹

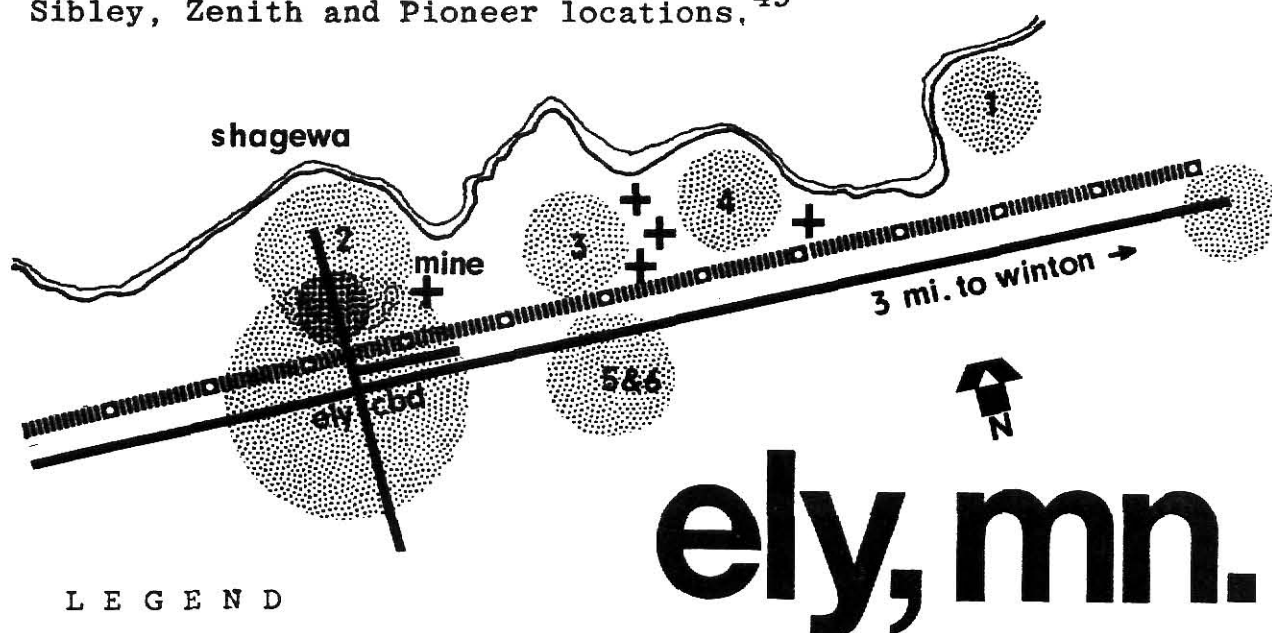


Figure 14: Growth and Development Pattern
Ely, Minnesota

⁴⁷ Ibid., p. 2.

⁴⁸ Ibid.

⁴⁹ Ibid.

Since the mines were of the underground type, timber shaft supports were needed, which resulted in the development of the timber industry. The lumbering camps and big sawmills were operated by the St. Croix and Swallow-Hopkins companies, located concentrically around the village now known as Winton.⁵⁰

In 1900 Ely was the largest community (population: 3200) on the Iron Range, boasting at least ten lumbering camps and five iron ore mines in full operation.⁵¹

An investigation of old editorials from "Iron Home" and the "Ely Miner" reveals further insight into the community development process. The city is rich in ethnic heritage and tradition.

The promise of employment brought a wide diversity of nationalities into Ely, though by far the greatest percentage of ethnic extractions are either Slavic or Finnish. The British (Cornishmen from the tin mines of England) were also numerous.⁵² Because of their ability to speak English, they often held superintendent and managerial positions within the mining operations.

⁵⁰Ibid.

⁵¹"Community Improvement Program," op. cit., p. 2.

⁵²Smrock, op. cit., p. 1.

The Slavs were attracted by employment in the Ely mines. The Finnish were drawn to the area because of the many similarities of the region to native Finland. They, with some Swedes, were quickly assimilated into the lumbering industries. Other nationalities included Bulgarians, Swedes and a few Germans, Greeks, and Irish.⁵³

Times were not easy. Mrs. Giovanica Artisonsi, pioneer resident recalls: "Hardly a day went by that a fatality or some serious injury to miners" did not occur.⁵⁴ Mrs. Vida James' reflections upon her impressions of Ely when she arrived as one of the first school teachers of the area provide a vivid picture of the original Ely townscape:

It took all day to get to Ely, for the train stopped every few miles, taking on or off lumberjacks or working men. I was a very tired, disheveled-looking young girl.... The next morning, after a refreshing night's sleep, I looked out the window. Such a contrast to what I had been used to greeted my eyes! Instead of rolling hills, cultivated farms, and beautiful maple trees, I saw log cabins, large boulders, winding paths, and a mining shaft appearing above dark pointed-topped pine trees. For Ely was a typical new mining town. The Chandler Mine was in full operation. There were two streets with high board walks. The trees in town had been cut but the stumps left standing. Paths led from house to house around the stumps and large boulders. Many people lived in one room log cabins. There was one hotel and several boarding houses. Saloons were many and provided a meeting place for miners and lumberjacks. Men greatly out-numbered the women. I was terribly homesick. I knew I was at the end of the railroad but I felt I was at the end of the world.⁵⁵

⁵³Ibid., p. 2.

⁵⁴"Seven Decades," op. cit., p. 36.

⁵⁵Ibid., p. 42.

Very distinct settlement districts developed. Competition and territorial niches existed for the various ethnic groups. The Slavian factions and the Finnish community, located predominantly on Finn Hill of Chandler location, were continually at odds.

Colorful stories of conflict are told by the early settlers of Ely: the English and Irish fought with 'rough and tumble fists,' the Austrians with knives and clubs, and the Finns with knives. Lawlessness was rampant during the early days. Private quarrels were often to the death with fists, knives, clubs, and guns.⁵⁶ The following description of business district activities gives a clear picture of early Ely:

Saloons and houses of prostitution were hangouts for sharpies, toughs and gamblers, some being real dives where shootings and knifings were common. Picturesque saloon names included Fist and Last Chance, Bucket of Blood, Poker Chip Casey's, Faro Mike's, and U & I Bar. Fancy houses were Maggie's, Josie's, Daisy's, Bessie's Halfway House, and Chippy House.

There was a daily arrival and departure of toughs, sharpies and gamblers. 'Scarcely a day goes by,' commented the "Iron Home" 'that Marchall Hopperton does not have a batch to escort to the train.'⁵⁷

In the business district most of the early structures were built of wood, cut and dried by the Winton lumber

⁵⁶Smrock, op. cit., p. 3.

⁵⁷Ibid., p. 4.

mills. Several of the buildings still remain intact. The two story false-fronts give continuous testimony to the "rough-and-tough era" in which they were built.

The original town plot was laid out in a mechanical grid system due north-south and east-west. With the exception of Chandler Location all streets within the legal city limits are forced and arbitrary paths oblivious to the topographic features. Since neither modern technology nor machinery were available when the road system of Chandler was developed, the road layout for this area evolved naturally. Roads avoided low lands, rock outcroppings were skirted, and the end result is a topographically responsive street system.

The effect of the grid street system for the community of Ely has been costly in terms of street construction, maintenance and vehicular and pedestrian safety during the winter months.

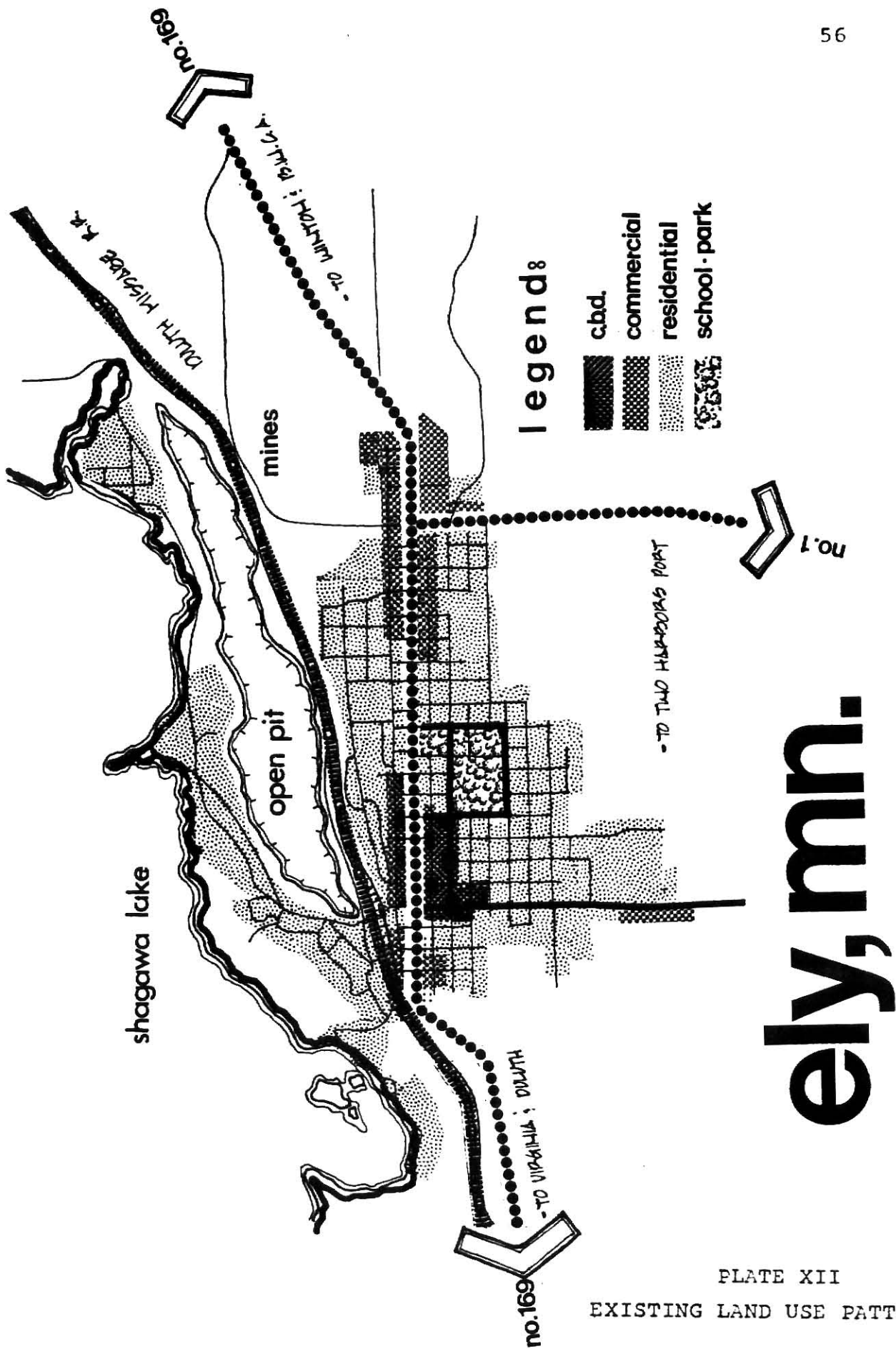


PLATE XII
EXISTING LAND USE PATTERN

SECTION 4. POSITIVE STEPS-HISTORY OF THE TOWN PLANNING

With the exception of the grid street pattern, systematic town planning did not begin until August of 1960 when the City Council of Ely adopted Ordinance No. 84 establishing the City Planning Commission.⁵⁸ The ordinance spelled out the duties of the Planning Commission and included instructions for the preparation of a plan for the physical development of the city.

Aguar, Jyring and Whitman, Planning Associates, Duluth, Minnesota, were retained to prepare the "Guide Plan." Preparation of the study was financed in part through an Urban Planning Grant from the Housing and Home Finance Agency under the provisions of Section 101 of the Housing Act of 1954, and by the Minnesota Department of Business Development in cooperation with the Iron Range Resources and Rehabilitation Department, State of Minnesota.⁵⁹ The Guide Plan was adopted by the City Planning Commission following a public hearing in August, 1962.⁶⁰

⁵⁸"Community Improvement Program," op. cit., p. 1.

⁵⁹"Guide Plan for Community Development--Ely Minnesota," report by Aguar, Jyring and Whitman, Planning Associates, Duluth, Minnesota, December 1962.

⁶⁰"Community Improvement Program," op. cit.

Notations on the plan were provided to indicate where special attention was needed to reverse undesirable impressions and improve appearance.⁶¹ General recommendations made by the planning team were adequate, but specific design recommendations were lacking. (Perhaps they were not within the scope of the study). Conceptual suggestions such as the need for good visitor orientation centers and "well designed road signs" were tactfully established. Additional features of the 1962 plan are included as follows:

Space and facilities are provided for the tourist-vacation convention industry as well as for an attractive limited industrial development that might include offices for commercial and governmental research in forestry and other environmental resources.

The present caved mine area would be converted to a protected boat basin by a narrow channel to Shagawa Lake. This basin could then become a testing ground for water-related sport equipment, as well as a natural area for demonstrations and pageants. The shoreline of the new basin and frontage on Shagawa Lake would become public open space providing convenient access to the water and both active and passive recreation. Picnic and camping sites, a convention center and neighborhood playgrounds would be provided. A historical park containing a museum and outdoor exhibits of mining and logging equipment, nature trails and natural history examples from the region would be an important feature of the future lakefront development.

Provision is made for heavy industry as well as a large industrial reserve in the event that there is a demand for such site locations in the future. The central business district (CBD) is proposed to be completely rehabilitated with old frame structures removed, off-street parking added and the addition of street trees, paving stones and flowers introduced to brighten the area and give it a resort "flavor."

⁶¹"Guide Plan," op. cit., p. 4.

New motels, eating establishments, outfitters and other commercial recreation facilities would be confined to locations along Sheridan Street adjacent to the CBD and at the division of State Routes 1 and 169. Non-conforming business and industries would eventually be relocated into proper districts or eliminated by zoning enforcement.

Traffic circulation is handled by classifying streets as major or secondary thoroughfares and collector streets so that priority of improvements will result in a system adequate to handle expected volume increases. A tree planting program using approved varieties of street trees should be incorporated into each street or highway project. A system of scenic drives would be developed from existing roads so that a visitor, using Ely as a base, could spend one-half day or more following specially marked routes to points of scenic and historical interest.⁶²

The 1962 Land Use Plan, with a detailed survey of the structural condition of all buildings and map overlays showing the extent of existing utilities and traffic volumes, helped to identify and record existing problem areas. Numerous reports and charts filled the accompanying report and specifically described existing conditions.

Some interesting specifics of land use within Ely were presented with the Land Use Plan of 1962. Jyring stated that due to the gridiron plotting of small blocks throughout the city, an excessive amount of land was devoted to streets and alleys.⁶³ And, "more than one-third of the developed portion of the city (was) in unproductive space..."⁶⁴

⁶²Ibid., p. 9.

⁶³Ibid., p. 6.

⁶⁴Ibid.

ELY, MINNESOTA

ELY PLANNING COMMISSION

ZONING DISTRICTS

- RESIDENTIAL**
 R-1 SINGLE & TWO FAMILY
 R-2 MULTI-FAMILY
- COMMERCIAL**
 C-1 CENTRAL BUSINESS DISTRICT
 C-2 TOURIST SERVICES
 C-3 LIMITED INDUSTRY
- PUBLIC**
 P-1 PARKS, SCHOOLS & RELATED
 P-2 PUBLIC WORKS & RELATED
- OPEN SPACE**
 O OPEN SPACE

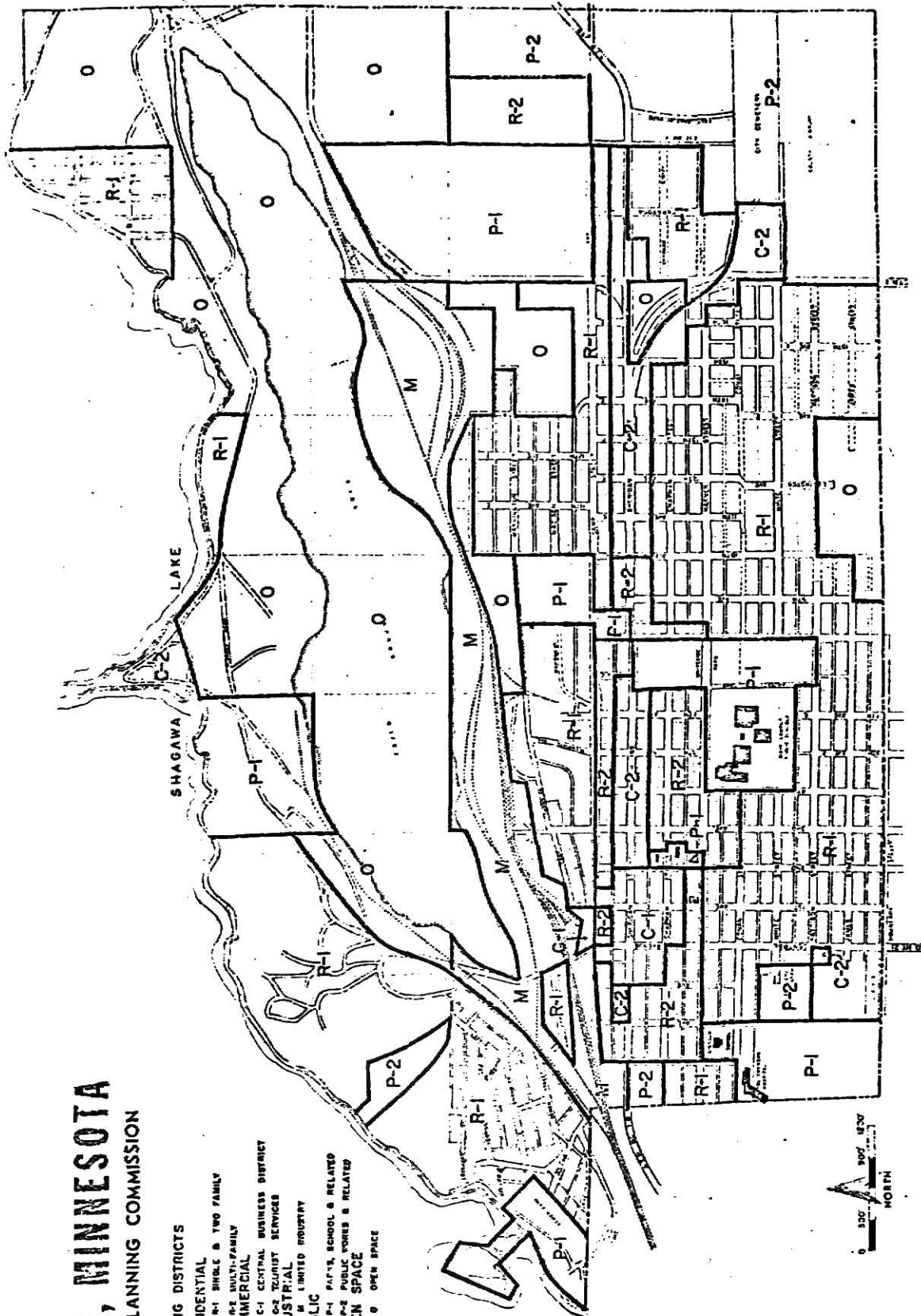


PLATE XIII
 LAND USE ZONING

ADAM, FRANK, WHITEHEAD, JOSEPH INC. JAN. 1960
 FROM CITY ENGINEER'S MAP - APRIL, 1961
 VERTICAL SCALE: 1" = 100' HORIZONTAL SCALE: 1" = 100'

Typical of the sixties planning approach, the study supported the belief that zoning would solve most problems. About the commercial pattern it stated: "A zoning ordinance can strengthen the central business district...and prevent further undesirable scattering and mixture of land uses."⁶⁵ Zoning was suggested to protect residential areas and "to preserve the best land for future industrial districts."⁶⁶

A guide plan, according to Aguar, Jyring and Whitman, is "a diagram that must be converted...(into) detailed plans and then to three-dimensional living environments if Ely is to become more satisfying to those who will live, work, or simply visit here."⁶⁷

This conversion process from concepts to three-dimensional design, however, still remains within the minds of the planning firm; unfortunately the citizens of Ely were not able to translate the concepts of the 1962 Guide Plan into graphic design, or to financially support the planning suggestions.

In 1967 a revised plan was purchased from Walter Butler Company, Consulting Engineers, Saint Paul, Minnesota. The firm attempted to provide a realistic expression of the desires of the Ely citizens in "proper relation to the

⁶⁵Ibid., p. 7.

⁶⁶Ibid.

⁶⁷Ibid., p. 28.

overall interests of the city and its region."⁶⁸ The major objectives of the new 1968 Guide Plan were to:

1. capitalize on the green forests, blue lakes, clear air and abundant wildlife so as to give particular attention to the position of Ely as a family vacation headquarters and the 'capital' of outdoor recreation activities for people of moderate means;
2. encourage the orderly and healthy development of each type of land use with appropriate separation of inharmonious uses;
3. guide the renewal of substandard housing and commercial properties along with the preservation and rehabilitation of sound developments;
4. make possible a safe and efficient traffic circulation system properly integrated with the land use pattern; and
5. maintain a balanced and stable municipal economy while creating a more pleasant and attractive living and working environment.⁶⁹

In preparing the Guide Plan of 1968 basic assumptions were analyzed. These assumptions further supported the belief that economic security and population stability of Ely could be achieved through systematic community planning.

Basic Assumptions:

1. Iron ore mining will continue to decrease in importance. While Ely must do everything in its power to prolong jobs in mining, this non-replaceable natural resource may become exhausted within the next two decades. Different uses for land now consumed by mining operations can be expected and Ely will give up its role as a mining town.

⁶⁸"Economic Adjustment," op. cit., p. 9.

⁶⁹Ibid.

2. The isolated location of Ely can be changed from a liability to an asset as the major headquarters for an ever expanding population seeking relief from the tensions of modern living.
3. The vacation-travel industry will play a much larger role in the local economy and there will be a demand for the expansion of facilities for family activities, small conventions and year-around recreation.
4. The permanent population will remain relatively stable with a maximum or "holding capacity" not to exceed 7500 persons. Seasonal population may reach 10,000 by 1980.
5. The community will learn to live with and make the most of restrictions, changes, and new trends caused by national policies. By charting its own goals and long-range plans, Ely will be able to provide a sense of direction and give notice of intent to outside interests.
6. Industrial expansion will be limited but with excellent future growth possibilities existing for research facilities and forest products industries. Industry will be expected to meet performance standards necessary to assure that the values of the Ely area as a vacationland are protected.⁷⁰

The strategy for implementation of the 1968 Guide Plan was packaged into two sequential steps. Phase One related the immediate short-range concerns of Ely; Phase Two was to build upon the concepts of the first phase in meeting long-term community goals. Of the eight recommendations made for Phase One, only four have been achieved.

1. The City Council will adopt the Zoning Ordinance and Subdivision Platting Regulations as recommended by the Planning Commission. (achieved: 1968)

⁷⁰Ibid., p. 10.

2. Construction of the visitors' information center by the U.S. Forest Service. (achieved: 1971)
3. Warehouse and storage facilities will be improved (strict E.P.A. restrictions have been imposed for fuel storage areas). (achieved: 1974)
4. The airport will be relocated to a more adequate site and modern facilities provided. (A new airport capable of landing small jets has been constructed on a site seven miles northeast of Ely). (achieved: 1974)⁷¹

The remaining recommendations expected to be implemented by 1970 have not been achieved:

5. Businessmen will develop and begin carrying out a detailed plan for the rehabilitation of the CBD.
6. Urban renewal tools will be used to begin the rebuilding of the Chandler and Spaulding neighborhoods.
7. The city will acquire frontage on Shagawa Lake as properties become available, and do all possible to make them public property through purchase and donation.
8. Landscaping and new site development plans will be carried out at Whiteside and Semer Parks, at the schools, water tower and other public properties.⁷²

Overall implementation of the Guide Plan was anticipated to be complete by 1980 or 1985.⁷³ Two of the intermediate steps advocated by the design team were realized: housing

⁷¹Ibid.

⁷²Ibid.

⁷³Ibid.

units for the senior citizens were built, and the new U.S. Forest Service Center and Administration Headquarters were designed and constructed.⁷⁴

During the intermediate stage (1970-75) the following additional steps were to be taken: (none have been achieved)

1. Additional lake frontage acquired.
2. Heavy industrial development of the Zenith Mine property.
3. A limited industrial development of the old airport. A forest plantation on that portion of the site not suitable for intensive development would serve as a suitable school or civic project.
4. Non-conforming uses gradually relocated into proper districts or eliminated by enforcement of the zoning ordinance. (minimally achieved)
5. A housing ordinance to upgrade existing housing requiring repairs, plumbing, electrical facilities and other minimum standards.
6. Off-street parking lots added in the CBD.⁷⁵

In spite of the fact that few of the suggestions made by Aguar, Jyring and Whitman were actually followed, the phased strategy of a Guide Plan was the most effective approach. Ultimately the responsibility of the Guide Plan implementation rested with the citizens of the community; they were to live with the planning decisions, and therefore,

⁷⁴Ibid.

⁷⁵Ibid., pp. 11-15.

they had the right to accept and reject planning proposals.

However, choosing not to implement proposals is entirely different than not implementing proposals because of a lack in community understanding. For most of the citizens, neither the 1962 or the 1968 Guide Plan had any real personal meaning, design principles which they could understand and use to carry out the design suggestions.

With the construction of the new State Junior College Campus in 1968, and a positive news release concerning a copper-nickel find near the Kawishiwi Lake Chain, the community of Ely once again became interested in community planning. But in order to receive urban renewal assistance Ely needed to participate in the "Workable Program" for community improvement.

The Workable Program included seven parts: 1) comprehensive plan, 2) neighborhood analysis, 3) financial capability, 4) administrative organization, 5) housing for relocated families, 6) citizen participation, and 7) adequate codes and ordinances.⁷⁶

The purpose of the report was to determine the extent of physical deterioration and to prescribe what measures

⁷⁶"Community Improvement Program--Part I: Neighborhood Analysis--Ely, Minnesota, report by Aguar, Jyring, Whitman, Moser, Inc., Duluth, Minnesota, May 1968, p. 1.

were necessary to stop blight and to upgrade substandard portions of neighborhoods.⁷⁷

In October of 1967 the planning consultants of Aguar, Jyring and Whitman made a lot-by-lot survey of environmental influences within the town. Aspects examined were condition of the lot, yard space, condition of the streets, and non-conforming land uses.⁷⁸

The city of Ely was divided into nine neighborhoods. The neighborhoods and their boundaries in the 1967 report were as follows:

- A. Chandler Addition and "Finn Hill" bounded by Shagawa Lake and the DM & IR railroad tracks.
- B. Spaulding Location and Savoy Road--located in north-east Ely.
- C. Pioneer Location--bounded by the railroad tracks, Camp Street, Oliver Avenue and the railroad depot.
- D. Central Business District--bounded by the western city limits, Camp Street, Conan Street and Third Avenue East.
- E. Sheridan Street--encompassed by Camp Street, White-side Park, Public School's Campus, and Third Avenue East.
- F. South Ely--bounded by Ninth Avenue East, Conan Street, and the city limits.
- G. Zenith Addition--encompassed by Sheridan Street, Seventeenth Avenue East, Tenth Avenue East, and the railroad tracks.
- H. Southeast Ely--bordered by Sheridan Street, State Highway #1, city limits, and Eighth Avenue East.

⁷⁷Ibid., p. 2.

⁷⁸Ibid., p. 3.

I. Robin's Gardens--bounded by Seventeenth Avenue East, Savoy Road, and city limits.⁷⁹

Of the total substandard structures in the city, 142 or 8.8 percent were considered deteriorated while 84 structures or 5.2 percent were noted as being dilapidated.⁸⁰ Spaulding Location (Neighborhood B) had the greatest percentage of substandard structures with 34 percent, and neighborhoods C and D had 26.7 and 23.6 percent substandard buildings. All of these neighborhoods were in the oldest sections of Ely with the greatest cultural and historical heritage. They also continue to be the neighborhoods most likely to be used and traveled by a tourist since they are adjacent to the main street.

The survey revealed that the most common deficiency was inadequate yard space. Since Ely was originally plotted on 25 foot wide lots, the result is that original buildings are without adequate setback from streets or sufficient separation between adjacent homes.⁸¹ The lack of paved roads was another significant problem for the older Spaulding and Chandler locations as well as the newer subdivisions.⁸² Ely also has residential sprawl with over fifty

⁷⁹Ibid., p. 7.

⁸⁰Ibid., p. 9.

⁸¹Ibid., p. 7.

⁸²Ibid.

TABLE II
STRUCTURAL CONDITIONS

ELY STRUCTURAL CONDITIONS

Neighborhood	Structures	Sound		Deteriorating		Dilapidated		Lots with more than one home	Substandard	
		#	%	#	%	#	%		Total	percent deteriorating or dilapidated
Chandler Addition/Finn Hill	145	117	80.7	15	10.3	13	9.0	1	19.3	
Spaulding Location/Savoy Road	47	31	66.0	4	8.5	12	25.5	0	34.0	
Pioneer Location	150	110	73.3	22	14.7	18	12.0	0	26.7	
Central Business District	399	305	76.4	74	18.5	20	5.1	16	23.6	
Sheridan Street	150	130	86.7	18	12.0	2	1.3	4	13.3	
South Ely	327	319	97.6	5	1.5	3	0.9	12	2.4	
Zenith Addition	187	181	96.8	2	1.1	4	2.1	7	3.3	
Southeast Ely	190	178	93.7	2	1.1	10	5.2	2	6.3	
Robin's Gardens	25	23	92.0	0	0	2	8.0	0	8.0	
Ely Total	1,620	1,394	86.0	142	8.8	84	5.2	42	14.0	

Source: Consultant field investigation and tabulation - 1967.
 Aguar, Jyring, Whitman, Moser, Inc., Program for Community Improvement,
 Hibbing, Minnesota. October, 1964.

percent of the in-city limits area not developed. This sprawl has proved costly for both the public and the private sectors of Ely.

Structural condition and visual quality are often directly related. Generally, a neighborhood of dilapidated structures, land use conflicts, inadequate streets, and over-crowding will not possess good visual quality, at least to the ordinary citizen. The opposite, a neighborhood with structurally sound buildings, low density, and adequate streets will not necessarily provide better visual quality. Some of the newer subdivisions and most trailer courts are cases in point.

In any event, the firm of Aguar, Jyring and Whitman proposed measures to prevent present and future physical and visual deterioration of these neighborhoods. Their proposals were meant to reduce both structural and environmental blight.⁸³

In 1968 the following recommendations for each neighborhood were given to the Ely Planning Commission:

Neighborhood A--Proposed Treatment

It is recommended that the Chandler and Finn Hill neighborhood be designated as an urban renewal rehabilitation area with spot clearance of dilapidated residential dwellings and a rehabilitation program for deteriorated structures. A concentrated code enforcement program should be undertaken to assure structural improvements.

⁸³Ibid., p. 16.

Neighborhood clean up and fix up projects should be encouraged by the city to remove dilapidated accessory buildings and improve yard maintenance.⁸⁴

Neighborhood B--Proposed Treatment

Spaulding Location set on the shores of Shagawa Lake could be an attractive area if a number of major improvements were undertaken. Sewer facilities is the most pressing need of the neighborhood as is the case with the Chandler and Finn Hill area. If a new sewage treatment plant is located in the eastern part of the city, as is under consideration, service lines should be extended at the same time to serve the residences of Spaulding. Again, it should be emphasized that federal monies are available for such public facility improvements.

The residents of Spaulding should also be encouraged by the planning commission to form a neighborhood improvement association with a view to cleaning up yards and vacant lots, removing unused, dilapidated accessory buildings and constructing a local playground facility. The city can aid in this effort by paving the streets in the Location.⁸⁵

Neighborhood C--Proposed Treatment

Poor streets, land use conflicts, and dilapidated housing are the most serious problems affecting this neighborhood. Street paving and improvement is badly needed for East Chandler Road and Milwaukee Avenue, as is the installation of sidewalks especially on the north side of Camp Street.

Land use conflicts could be significantly reduced by removal of two industrial buildings left over from mining days, and by screening the commercial uses on Sheridan Street from the homes across the alley. Again individual pride by homeowners could significantly improve the appearance of the area by simply cleaning up yards, painting homes, and removing dilapidated accessory buildings.

⁸⁴Ibid., p. 19.

⁸⁵Ibid., p. 23.

An urban renewal clearance project should be initiated in the Milwaukee Avenue area where 15 structures are totally dilapidated. Code enforcement should be stepped up in this area as well to keep already deteriorated structures from becoming dilapidated.⁸⁶

Neighborhood D--Proposed Treatment

The Central Business District dominates this neighborhood and requires the most drastic treatment. Total clearance through urban renewal is warranted for the area bordered by Camp Street, Central Avenue, Harvey Street and Third Avenue East. This area should be cleared and redeveloped according to a plan cognizant of off-street parking needs, traffic circulation and structures able to accommodate modern retailing requirements. The balance of the neighborhood should be considered for rehabilitation treatment with spot clearance of residential structures, concentrated code enforcement and an active beautification campaign. A number of scattered commercial enterprises blight surrounding residential homes and should be removed.⁸⁷

Neighborhoods E-I--Proposed Treatment

The remaining neighborhoods were deemed by the planning consultants to require only "necessary treatment to maintain these areas in sound condition."⁸⁸

Neighborhood Analysis: Summary of the Proposed Treatments

The consultants essentially believed that "stronger codes and zoning, enforceable by law" would help to improve the situation.⁸⁹ They encouraged citizens to develop "pride" and for the City to adopt an Urban Beautification and

⁸⁶Ibid., p. 26.

⁸⁷Ibid., p. 28.

⁸⁸Ibid., p. 29.

Improvement Program.⁹⁰ It was implied that the city could provide the leadership for kindling neighborhood renewal by providing public improvements including street paving, sidewalks, better utilities, and additional recreation areas.⁹¹

By 1968 very few of the design concepts of either the guide plans or the neighborhood analysis had been acted upon. For example, the "parks, playground, and play lots (that) should (have been) developed in the residential neighborhoods"⁹² still do not exist; neither do the proposed parks and recreation areas on Shagawa Lake, the landscaping and new site development for Whiteside and Semer Parks, and the entrance orientation signs for the tourist. Aside from the adoption of the zoning ordinance, townscape improvements have resulted not from the recommendations of the planners, but from the individual initiative of some elements of the private sector.

Perhaps insight as to why the townscape transformation has not taken place can be found in part by the opening

⁹⁰Ibid., p. 39.

⁹¹Ibid., p. 36.

⁹²Ibid., p. 18.

statements of the comprehensive planning report of 1968:

The Guide Plan detailed in this report is but a guide and should serve to direct efforts by public and private interests in the city to more detailed planning improvements.⁹³ Specific plans and programs for the Central Business District, new neighborhood playgrounds and play lots, community facilities, ...street improvements, community appearance and public works must still be resolved.⁹⁴

In Ely there is an ingredient of leadership and local pride that must be further stimulated into action. There are, of course, many people who are apathetic or indifferent to civic affairs and progress.⁹⁵

Finally, in an attempt to generate specific community design direction, the Mayor and City Council of Ely retained the urban design team of Charles Brubaker, Architect from Chicago, Illinois, and Sam Caudill, Architect from Aspen, Colorado.⁹⁶ The team met with the City Council and the Planning Commission, interviewed Ely residents and mapped their observations of the Ely townscape.

The group briefly restated the history of Ely, isolated areas of physical blight much as the Aguar, Jyring and Whitman

⁹³Ibid.

⁹⁴Ibid., p. 48.

⁹⁵Ibid., p. 19.

⁹⁶"Ely, Minnesota," Urban Design Team, Charles Brubaker and Sam Caudill, Architects, Chicago, Illinois, 1970, p. 1.

team had done, and then listed those people willing to work toward an improved townscape.⁹⁷ Their final suggestions were again conceptual; using the words of Mayor J. D. Grahek, M.D., "They didn't tell us anything we already didn't know."⁹⁸

Ely had, prior to the arrival of the Brubaker-Caudill team, established a Community Action Program with three subcommittees: tourism, education and civic improvement.⁹⁹ Also with the assistance of the Northwest Minnesota Development Association, the Ely Planning Commission had been convinced that "a face-lifting (was) needed for Ely."¹⁰⁰

The Brubaker-Caudill team met with these committees and attempted to solve Ely's townscape problems. Conceptual possibilities were presented to improve the visual quality and restore the deflated economy. Suggestions included:

1. Conversion of the "Pit" into **Sail** and Boat basin
2. Additional motel-lodge facilities in town and along Shagawa Lake and in the Finn Hill area
3. Build all year enclosed heated swimming pool
4. Provide excursions from downtown Ely
5. Promote cultural activities (music and drama) to attract people

⁹⁷Ibid.

⁹⁸J. P. Grahek, op. cit.

⁹⁹"Ely, Minnesota," op. cit., p. 4.

¹⁰⁰Ibid.

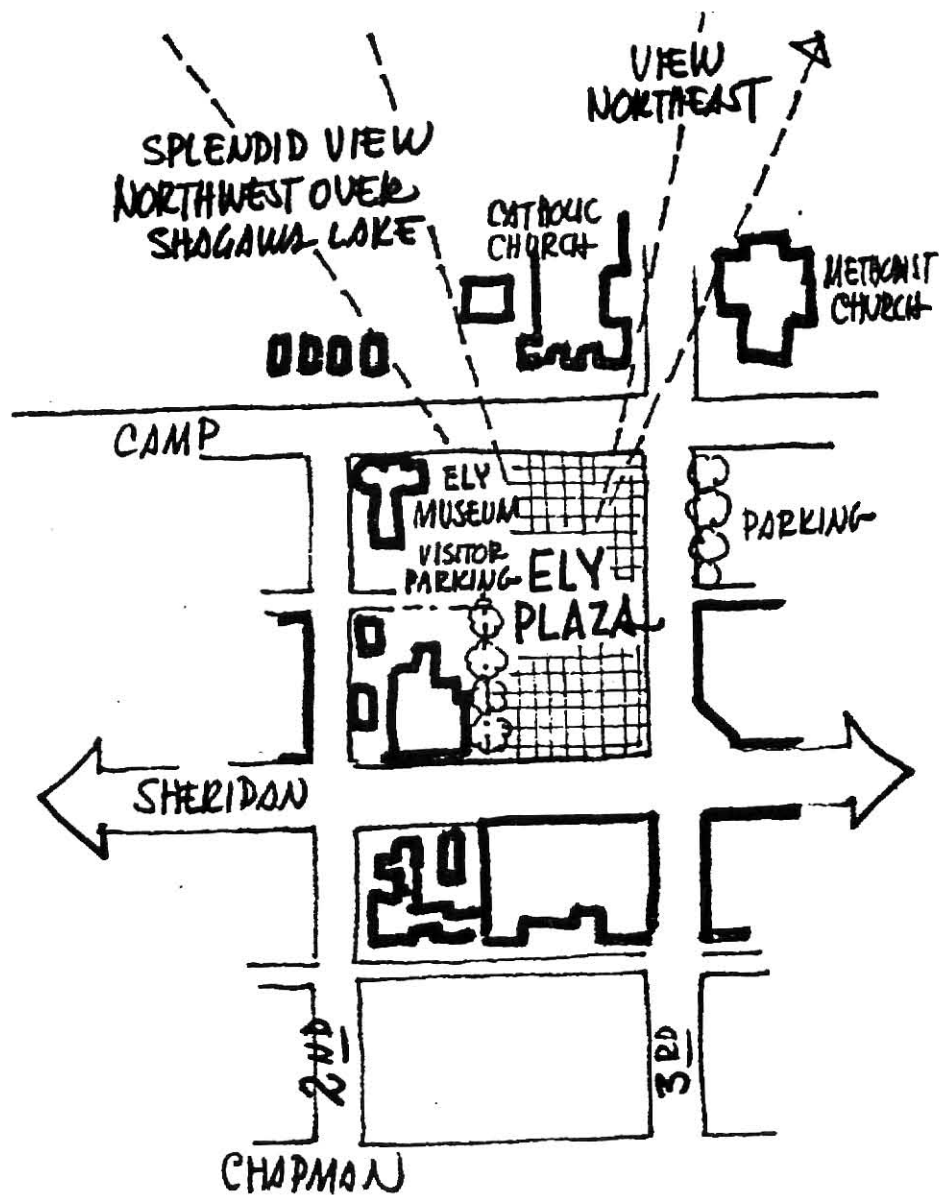
6. Provide convention facilities
7. Promote imaginative recreation, i.e. dog sled trips to remote lodges for dinner, etc.¹⁰¹

With the exception of the last item, these recommendations were not new; the guide plans prepared by Aguar, Jyring and Whitman gave the same suggestions to the Planning Commission six years earlier.

However, an attempt by Brubaker and Caudill was made to graphically show some concepts for community improvements. The plans, informally sketched, did at least provide a clearer framework for eventual implementation. While none of the suggestions has been achieved, the planning approach taken by Charles Brubaker and Sam Caudill had the best potential for being tangibly effective.

Whereas many proposals (such as the Plaza Concept) were beautiful in theory, most were not practical in terms of community priority or financial capability. The purpose of the C.B.D. Plaza with centralized tourist information and rest-areas is clearly ideal. But the Cardill team, like many outside planning consultants, failed to realize the significance of their proposal and to understand the community for which it was made.

¹⁰¹Ibid., p. 11.



"ELY PLAZA"

AT THE CROWN
OF THE HILL ...

3RD AVE
BETWEEN
CAMP & SHERIDAN

PLATE XIV

BRUBAKER AND CAUDILL PLAZA CONCEPT

Ely is predominantly Catholic. Eliminating the Catholic parking lot to provide a Plaza (no matter how beautiful or functionally necessary) revealed a lack of awareness that promoted alienation and distrust of planning efforts in general. The credibility that outside planning firms have had among the independent, proud people of Ely has always been questionable. And ill-timed progressive suggestions, such as the Ely Plaza, were laughingly declined. As a result, most citizen momentum for townscape improvement also declined.

And so, after fifteen years of planning efforts including over \$80,000 in planning fees and significant citizen energy, very little improvement in the townscape has been realized. One cannot help but wonder if this financial investment and effort might have been channeled to more productive ends.

It is the author's contention that the time for specific definitive proposals is now. Clear, inspirational projects are needed as examples for continued townscape refurbishment. Translation of concepts into design resolutions is the obvious next step for the Ely planning process.

GOOD SIGNS ...

Generally, they're not bad in Ely, downtown,
but to achieve a high quality business district
(essential to attract high quality tourists)
... sign control is essential ...

GOOD MATERIALS ...

Existing downtown buildings use a variety of materials =

- BRICK (notice beautiful brick wall on 1st Ave ... Ace Hardware)
- WOOD (the "Town & Country Shop" on Chapman is excellent ...)
- STUCCO (many satisfactory buildings ... often well painted)
- ... and, unfortunately, FAKE BRICK & STONE (... the worst possible material..

AND GOOD DESIGN ...

... always depress property..)

The painting idea, developed earlier, is
a good idea ...

We'd suggest a co-ordinated design
for colors.

PLATE: XV

BRUBAKER AND CAUDILL RECOMMENDATIONS

In the long run---

Ely needs simply good design =

- ... good judgement in the placement of new buildings..
- ... thoughtful preservation of old structures...
- ... good design of streets, signs, planting
- ... fine civic open spaces, interesting alleys, etc

Good luck!
— Bill Brubaker
+ Sam Caudill

PLATE: XVI -

BRUBAKER AND CAUDILL CONCLUSIONS

CHAPTER 4 - DESIGN PRINCIPLES FOR SMALL TOWN ENTRANCES

Section 1 - Developing the Strategy for Better Townscapes

Section 2 - Introduction to the Methodology for Townscape Revitalization

Section 3 - Townscape Studies: Entrance

- Roadside Maintenance
- Buildings
- Private Property
- Public Property
- View and Visual Sequence
- Information Signs
- Tourist Information Centers

Section 4 - Selected Entrance Examples

Section 5 - Recommended Plant Materials for Entrance Revitalization

Section 6 - Procedure for Laymen: Entrance Revitalization

Section 1 - Developing the Strategy for Better Townscapes

No discussion of town planning is complete without establishing the method for bringing about changes in the community. Design firms have traditionally determined what changes were needed. They solved the community's problems from drawing boards with limited personal involvement of the townspeople. These planning firms often misinterpreted the real problems or invented problems that in fact did not exist for the townspeople. Their method of bringing about change all too often overlooked the most appropriate alternatives and replaced them with much more complicated and costly solutions.

Unacceptable design recommendations by planning consultants are true for all the Arrowhead communities. For example, three towns (Chisholm, Eveleth, and Ely) have received design proposals for complex urban shopping malls in spite of the economic inappropriateness of a shopping mall for the small town environments and people. It is apparent that what is appropriate for one community may not be appropriate for another, yet the "interchangeable solution" appears to be a common practice among planning consultants without regard to the situation.

While the traditional planning methods can be effective, it seems that the real task of making changes belongs to the townspeople. They understand their community needs far better than a consultant. Ability to tap that understanding and make it come alive in physical designs is the real task

of planning efforts.

Townspeople contributing to the planning process is not new, yet it seems to be sadly forgotten. At one time whole communities were constructed without "professional aid". The people designed and built their own businesses, homes and roads. Groups of citizens in these towns got together and constructed parks, cleared beaches and built recreation halls. Some mistakes were made, but even the mistakes did not lessen the pride the town felt for the accomplishment, or the effectiveness of that addition to the community.

Surely it is impossible, and perhaps not even wise, to return to such intuitive town planning methods. But, the essence of simplistic planning can be continued today. If townspeople are to be given any real voice in the future of their townscapes there are two basic approaches applicable: 1. a consortium, and 2. a "self-help" program.

The consortium, a team-approach of designer and townspeople, has many advantages. The townspeople in effect provide all the information and make the design decisions through the leadership of a professional designer. Little time or public funds are spent in trying to acquaint the designer with the town problems, and little effort is wasted by the designer trying to communicate personal design solutions to the townspeople. This cooperative approach is ideal for communities with complex problems, for the professional can provide the necessary technical specifications to augment any concepts generated by the townspeople. This approach

has been used with great success by the Texas Rural Development Council for both regional and small-scale design problems. The campus planning at Oregon State University also uses a variation of the consortium design approach.

For many small towns the design needs do not require the consortium-team method. It may be true, because of the town size and financial resources, that any professional assistance would be too costly. These small communities with very real needs to preserve townscape character and to strengthen their economy can be given the direction through a comparative self-help program. Good examples of townscape design with specific design principles can be shared to serve as a reference for similar design modifications of related townscape problems.

It is in the best interest of the small town to present itself with the best possible image. Townspeople can make competent design decisions for their own community, improving both visual quality and economic stability. It is with this premise that I dedicate the emphasis of this thesis.

Section 2 -
Introduction to the Methodology for Townscape Revitalization

Small communities can be divided into several basic land uses extending along the main traffic route. These land uses include: 1. entrances, 2. service commercial, 3. central business district, and 4. residential.

The configuration of these land uses is determined by physical landscape characteristics and the transportation links, usually the road and railroad lines. The physical landscape considerations are specific to each community, but the relationship of land use to the transportation link is common to all. It is with this common thread in mind that the townscape concerns will be analyzed through the eyes of a tourist traveling along this transportation route.

This study is a strategy to aid town improvement by townspeople, without consultation by professional designers. It is hoped that the specific design examples illustrated by Ely will help other towns to develop personalized design decisions. Any critical comments concerning the visual or functional townscape qualities of the Arrowhead communities are stated to serve as constructive examples for improving the least desirable townscape qualities and supporting the most favorable features.

Furthermore, the strategy is intended to serve small communities with limited planning funds. For that reason, planning suggestions have been kept basic. Special effort has been made to reinforce simplistic solutions appropriate to special needs but supportive of the community as a whole.

Although the design recommendations do not apply solely to small towns, the content of this thesis is directed toward the design needs of small towns, and specifically toward the small tourist-towns within the Arrowhead Region of northeastern Minnesota.

Section 3 -
TOWNSCAPE STUDIES: Entrance

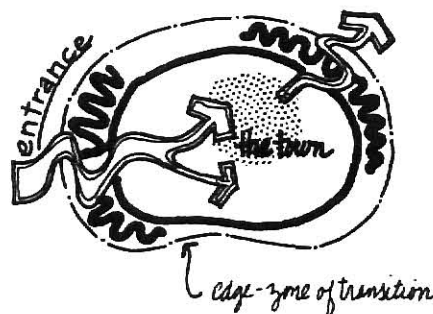
Each year thousands of tourists come to the Arrowhead communities. While some of these tourists are "return-visitors" many more have come to the area for the first time. These people know very little about their host community, and aside from an occasional brochure or advertisement, the communities have done little to effectively acquaint these visitors with the town.

It is obvious that the best place to start telling a first time visitor about a community is at the community entrance. The message is not only said in words and signs; much of the message about a town is told in abstract ways through the visual impression that the tourist receives. Is the town clean? Is it progressive? Does it look like a tourist trap? These questions start being answered at the community's entrance, and unfortunately the answers are often negative among Arrowhead towns.

What are the qualities of a community entrance that give either good or bad impressions to the tourist?

Figure 15:

The "edge" - the physical transition from country to town - provides the initial townscape image.



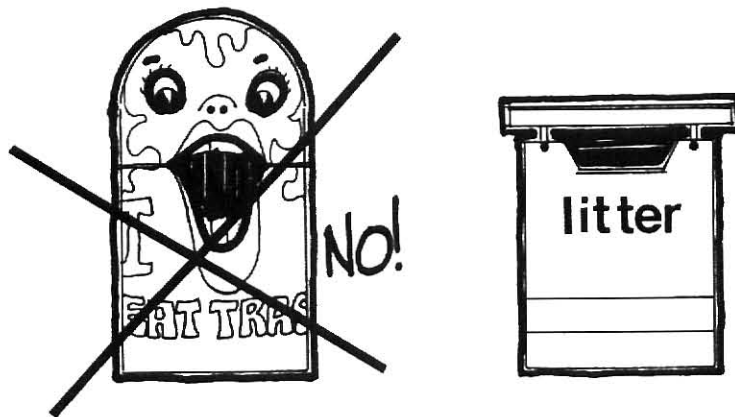
ENTRANCE :

Roadside Maintenance

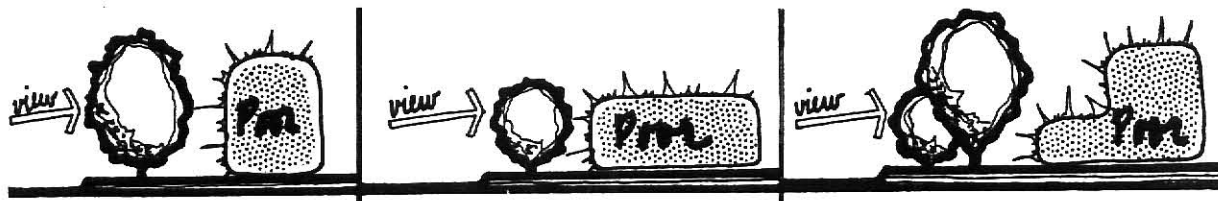
Quality of the road, road shoulder and visual right-of-way help to form the initial impression of the town. Property littered with paper debris, or random stockpiles of "junk" in public view reflect negligence. These littered areas, whether caused by carelessness or indifference, indicate a disinterest in the tourist trade.

design principles:

1. LITTER CONTAINERS NEED TO BE AVAILABLE AT ALL COMMUNITY ENTRANCES. COVERED METAL BARRELS LABELED "litter" MUST BE PLACED IN LOCATIONS THAT ARE EASILY NOTICED AND ACCESSIBLE TO THE TOURIST AND RESIDENT ALIKE.



2. "JUNK PILES" MUST BE REMOVED OR SCREENED FROM PUBLIC VIEW. NATIVE VEGETATION, TRANSPLANTED TO THE SITE, IS MOST SUITED FOR SCREENING OBJECTIONABLE ELEMENTS WITHIN THE "TRANSITION" ZONE OF ENTRANCE AREAS.



(concept)
Large Tree Screen:

Where space is available, plant trees that will grow to become large visual screens.

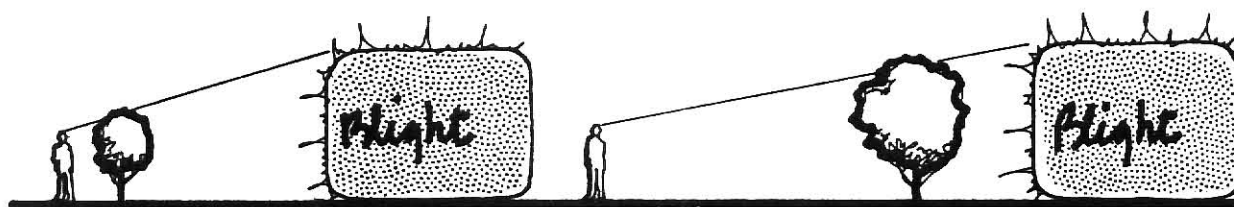
(concept)
Small Tree Screen:

In smaller areas plant trees with vertical form or smaller growth habit.

(concept)
Combination:

For fast screens plant both trees and quick-growing shrubs to provide temporary screens until trees have matured.

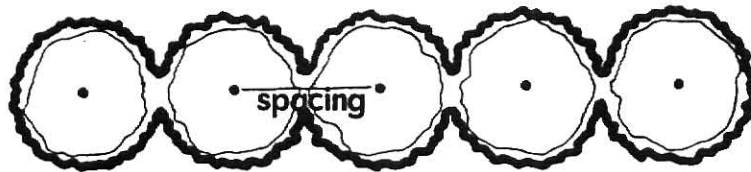
3. LOCATE TREE SCREENS APPROPRIATE TO THE NEED. THE CLOSER THE SCREEN IS TO THE VIEWER THE SMALLER THE TREES CAN BE. A TREE SCREEN CLOSE TO THE VIEWER WILL ALSO BE EFFECTIVE SOONER THAN A DISTANT TREE SCREEN.



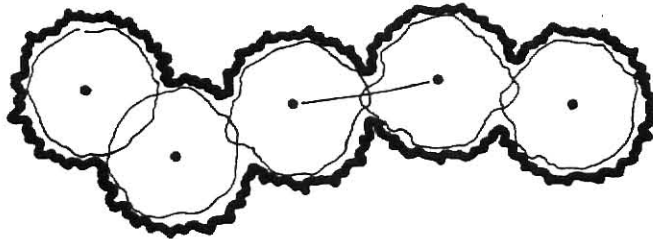
Close Screen

Distant Screen

4. DO NOT PLANT ENTRANCE TREE SCREENS IN PRECISE ROWS. A NATURALISTIC ENTRANCE PLANTING OF IRREGULAR PATTERNS WILL SUGGEST AN EFFECTIVE TRANSITION FROM THE COUNTRYSIDE TO THE URBAN SETTING.

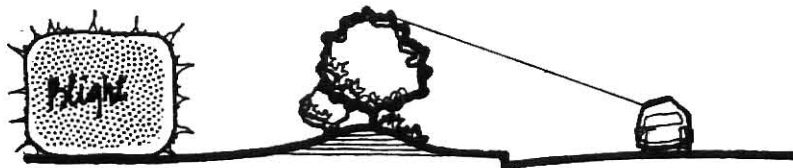


Unnatural screen

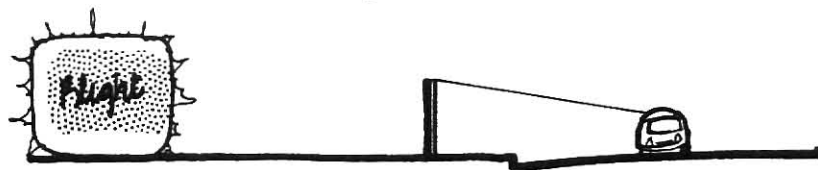


Natural screen

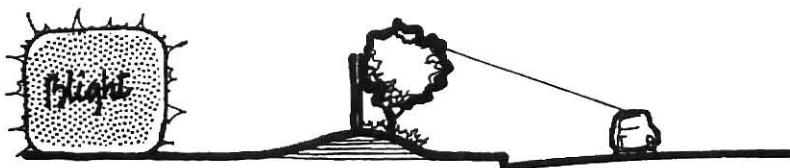
5. MOUNDS OF EARTH SERVE AS EFFECTIVE SCREENING DEVICES. COMBINING THIS EARTH MOUND WITH VEGETATION AND MAN-MADE ELEMENTS SUCH AS A FENCE INCREASE UTILITY OF THE SCREEN.



Mound with Vegetation



Fence or Wall



Mound, Fence and Vegetation

ENTRANCE : Buildings

If the buildings at the entrance are dilapidated or "run-down" the impression to the tourist will be negative. There are several ways that this entrance problem can be appropriately solved.

design principles:



only for: abandoned structures or structurally unsound buildings that are a public hazard

1. TRYING TO SAVE A DILAPIDATED, ROTTED STRUCTURE IS MORE COSTLY THAN BUILDING NEW. OLD IS NOT NECESSARILY GOOD.



usually for: brick and stone buildings, or structures that contain unusual or historically significant elements that can be salvaged

2. MATERIALS CAN ALMOST ALWAYS BE SALVAGED TO BE USED IN ANOTHER STRUCTURE. "USED BRICK" AND STONE OFTEN HAVE BOTH STRUCTURAL AND AESTHETIC VALUE.



Build New

only when: a new function can not be accommodated in the old structure, or the building is structurally unsound

3. A NEW STRUCTURE DOES NOT HAVE TO "LOOK NEW" OR BE CONTEMPORARY IN DESIGN. THE EMPHASIS OF THE BUILDING SHOULD BE ON ITS FUNCTION AS A PART OF THE ENTRANCE AREA. "FAKE BRICK" AND PLASTIC ROCK SHOULD ALWAYS BE AVOIDED WHEN AUTHENTIC MATERIALS ARE AVAILABLE.



Restore

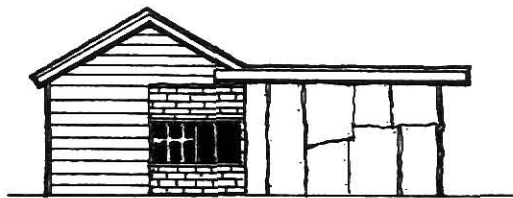
when: structure is sound and useful but it is in need of physical repair

4. RESTORING OR "FIXING-UP" AN OLD BUILDING WITHIN THE ENTRANCE AREA IS NOT DIFFICULT BECAUSE MINIMAL VISUAL RELATIONSHIP WITH OTHER ENTRANCE STRUCTURES IS GENERALLY REQUIRED. IF THE BUILDING IS STRUCTURALLY SOUND AND FUNCTIONS WELL, REPAIR OF EXTERIOR SURFACE WILL SOLVE MOST IMMEDIATE VISUAL PROBLEMS. A COAT OF PAINT IS OFTEN THE QUICKEST AND MOST ECONOMICAL MEANS TO "CLEAN-UP" THESE ENTRANCE STRUCTURES. NOTE THAT THE COLOR SELECTION NEEDS TO RELATE TO THE PURPOSE OF THE BUILDING: IF PUBLIC ATTENTION IS SOUGHT (AS FOR A BUSINESS OR SERVICE BUILDING) WARM COLORS SUCH AS YELLOW, ORANGE OR WHITE WILL ATTRACT ATTENTION. IF ATTENTION IS NOT WANTED, ALL "EARTH COLORS" INCLUDING BROWN TO OLIVE GREEN ARE SUGGESTED. OTHER RESTORATION SUGGESTIONS ARE DISCUSSED UNDER "C.B.D." OF THIS CHAPTER, AND MAY ALSO APPLY TO ENTRANCE STRUCTURES.

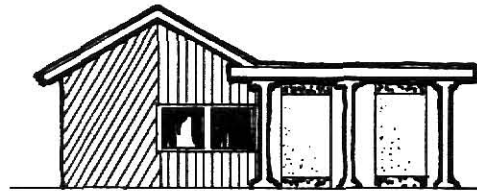


when: a new function is desired or
architectural additions are required

5. FACADES SHOULD BE ADDED ONLY TO UNIFY VISUAL ELEMENTS
OF A BUILDING, NEVER TO "MODERNIZE" OR "PRETEND A
VISUAL QUALITY".



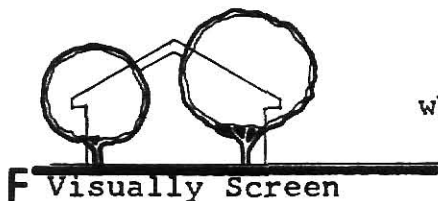
Original structure



New facade creates
visual chaos rather
than visual unity.



Building unified
through simplistic
facade treatment.



when: the function of the building
necessitates poor visual quality

6. MINIMIZE POOR VISUAL QUALITY BY PARTIALLY OR TOTALLY
SCREENING THE STRUCTURE FROM ROADSIDE VIEW.

ENTRANCE: Private Property

If the structures are sound but the property itself is poorly maintained visual quality is negative. Improving both buildings and landscape at the entrance is in the best interest of the total townscape. Usually solutions that require simple maintenance of turf areas and service drives will suffice.

design principles:

1. BASIC MAINTENANCE OF THE LANDSCAPE WILL BENEFIT VISUAL QUALITY OF THE ENTRANCE STRUCTURE.
2. ADDITION OF TREES AND SHRUBS ADD VISUAL DIMENSION AND REDUCE COMMON ARCHITECTURAL INCONSISTENCIES.

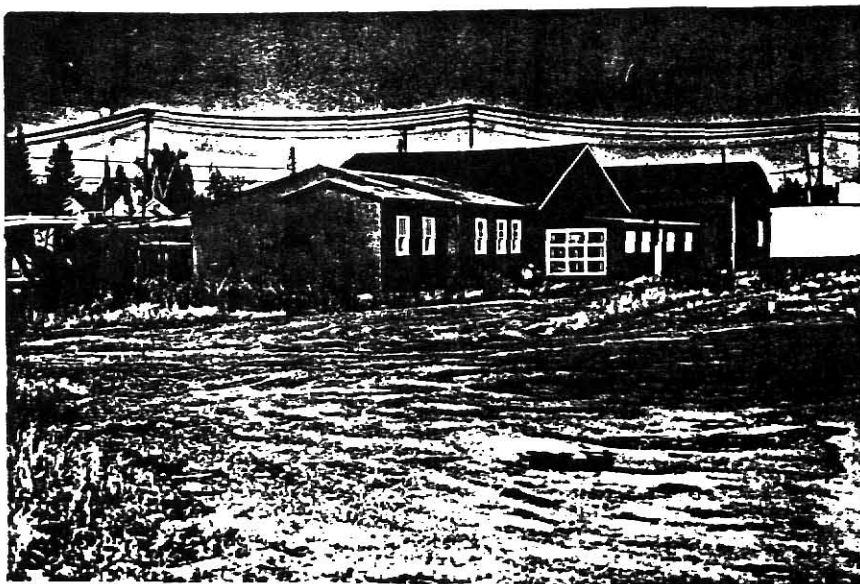


Figure 16

ENTRANCE :

Public Property

Visual quality of public lands adjoining the entrance to the town similarly influences the impression of the townscape. It is imperative that the best natural features dominate. For example, a grove of trees on public lands is an excellent focal point and needs to be seen by the tourist.



A rock outcropping, bluff or cliff can also provide visual appeal if they are allowed to be viewed. Often such dramatic elements are not noticed because advertisements and dense vegetative undergrowth hide the visual potential of these natural entrance features.

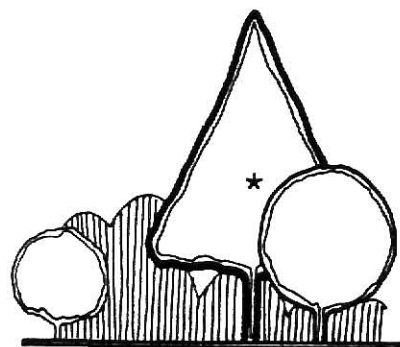
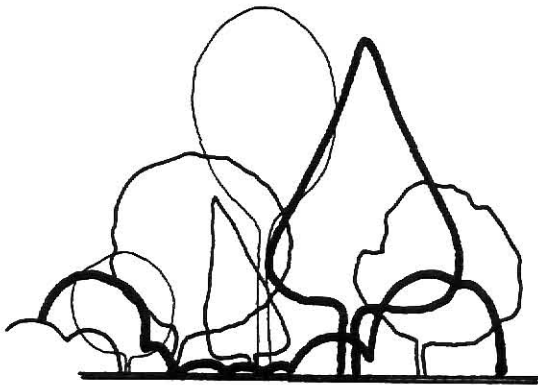


Deciding which natural features are best to be viewed is not a magical process requiring extensive perceptual training. Which is preferable, a green meadow or stagnant swamp, a clump of healthy trees or a grove of diseased saplings, a stream or a drainage ditch?

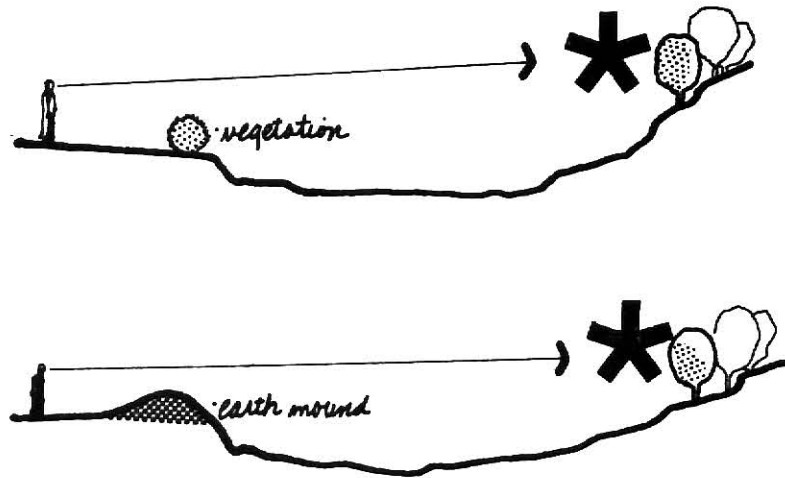
The best natural features need to be an integral part of the entrance image. By applying specific design principles these natural features can be made visually apparent.

design principles:

1. ACCENTUATE THE POSITIVE SO THAT THE "LESS POSITIVE" ELEMENTS WILL BE OVERLOOKED. USUALLY THIS IS ACHIEVED BY MAKING A FOCAL POINT FROM CHAOTIC GROUPINGS, OR BY CREATING A DOMINANT IMAGE BEYOND THE IMMEDIATE BLIGHT.



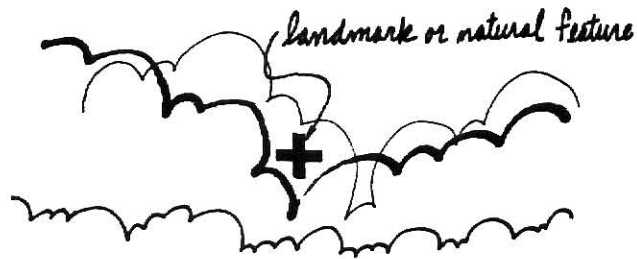
2. POOR VISUAL QUALITY IS OVERLOOKED IF POSITIVE ELEMENTS ARE PROVIDED TO ATTRACT VIEWER ATTENTION.



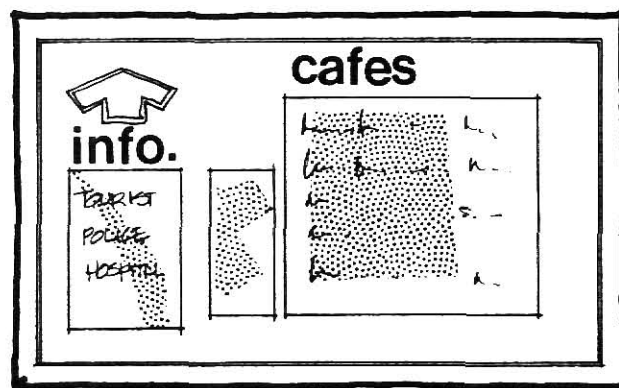
The negative impact of stagnant low areas common to all Arrowhead entrances can be reduced by implementing earth mounds and "cleaning-up" mid-range debris. The design principle can also be effective for concealing entrance drainage ditches that can not be economically covered.



3. REMOVE BRUSH AND SELECTED TREES TO MAKE SURE A STRIKING NATURAL FEATURE CAN BE SEEN BY THE TOURIST.



4. REMOVE BULLETIN BOARD ADVERTISING FROM THE ENTRANCE AREA IF THE ADVERTISEMENTS DO NOT INFORM THE TOURIST ABOUT COMMUNITY PLACES AND ACTIVITIES.
5. CONSOLIDATE SIGNING TO ONE OR TWO AREAS OF THE COMMUNITY ENTRANCE.
6. DESIGN SIGNING INTO THE NATURAL SCHEME OF TOPOGRAPHY AND COMMUNITY IMAGE. WOOD AND OTHER NATURAL SIGNING MATERIALS ARE CONSISTENT WITH THE "RUSTIC, WILDERNESS IMAGE" THAT INITIALLY ATTRACTS TOURISTS TO THE ARROWHEAD COMMUNITIES.
7. PLACE MULTIPLE ADVERTISING ABOUT COMMUNITY EVENTS ON ONE SIGN.

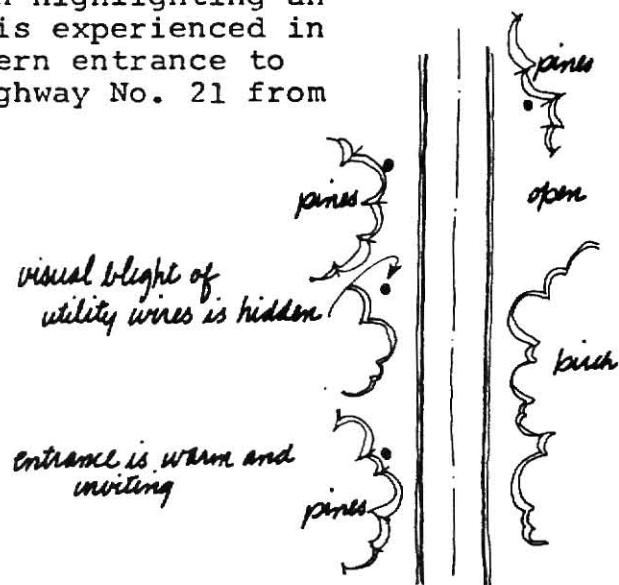


8. PLANT TURF TO COVER SCARIFICATION CAUSED BY ROAD CONSTRUCTION OR SOIL EROSION.



Figure 17:

A good example of natural vegetation highlighting an entrance is experienced in the southern entrance to Ely on Highway No. 21 from Babbitt.

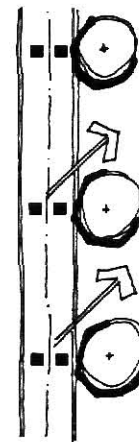
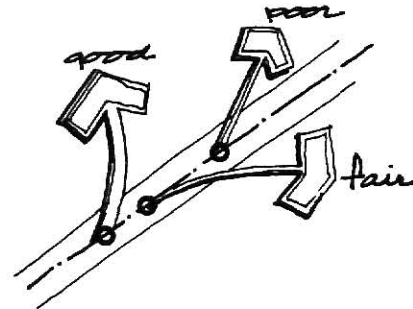


ENTRANCE:

View and Visual Sequence

The views from the road are constantly changing. Attention paid to the quality of these views in motion will ensure better visual quality.

In addition to the quality of entrance buildings and road-side features, the view along the road is determined by the composite visual relationship of these entrance units. Unity or disunity, order or nonorder, are suggested by the spatial arrangement and quality of roadside views. Since motorists are in motion efforts must be made to provide sequential view variety that promotes interests inherent to the town.

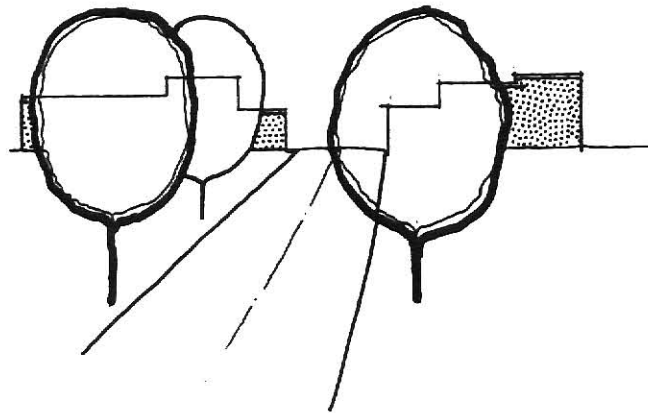


The visual rhythm of boulevard trees and light poles establishes entrance unity. Openings between the trees provide varied views of the townscape ahead.

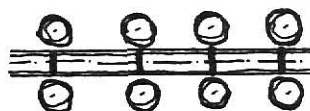
A formal entrance with flags, monuments and arches is not necessary. By consciously strengthening specific views supportive of the best townscape features both interest in the community and visual variety within the entrance are enhanced.

design principles:

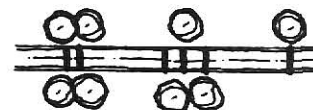
1. LOCATE TREES OR MAN-MADE DEVICES TO PARTIALLY BLOCK POOR, DISCHORDANT VISUAL QUALITIES.



2. LOCATE TREES TO ESTABLISH A VISUAL RHYTHM ALONG THE ENTRANCE ROADSIDE. THIS PRINCIPLE PROMOTES BOTH VIEW SEQUENCING AND VISUAL VARIETY.

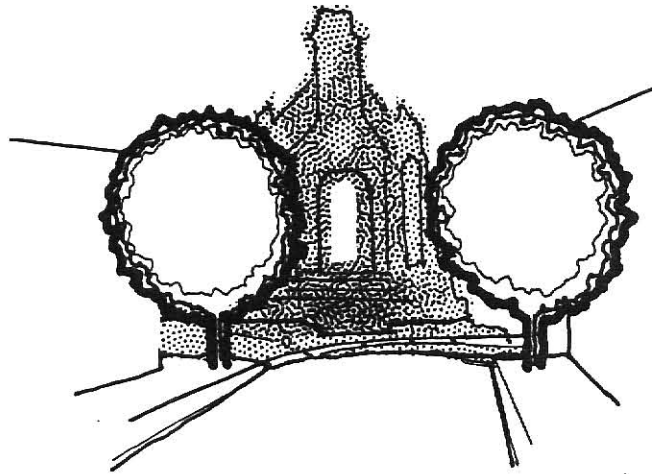


• consistent rhythm

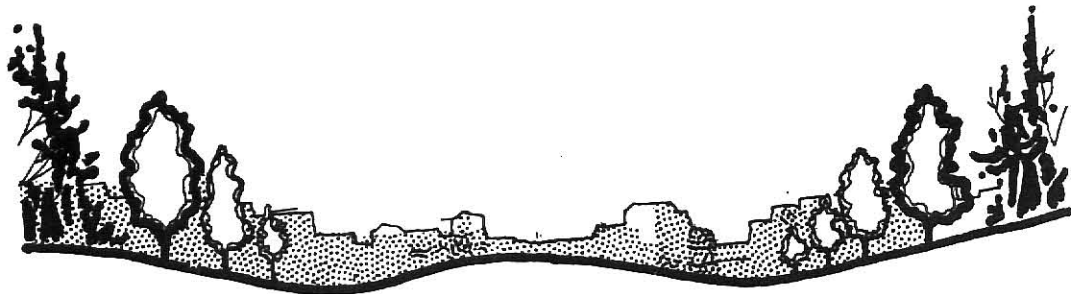


• syncopated rhythm

3. LOCATE TREES TO DIRECT GOOD VIEWS, SELECTIVELY SCREENING SOME ENTRANCE PARTS IN ORDER THAT OTHERS MIGHT BE SEEN MORE CLEARLY.



4. LOCATE TREES TO SERVE AS A TRANSITION FROM "WILDERNESS VIEWS" TO "TOWN VIEWS". THE ABRUPT EDGE BETWEEN URBAN AND RURAL CAN BE SOFTENED.



5. SUPPORT VIEW PRESERVATION WHEN SITING A NEW BUILDING OR ENTRANCE FEATURE.

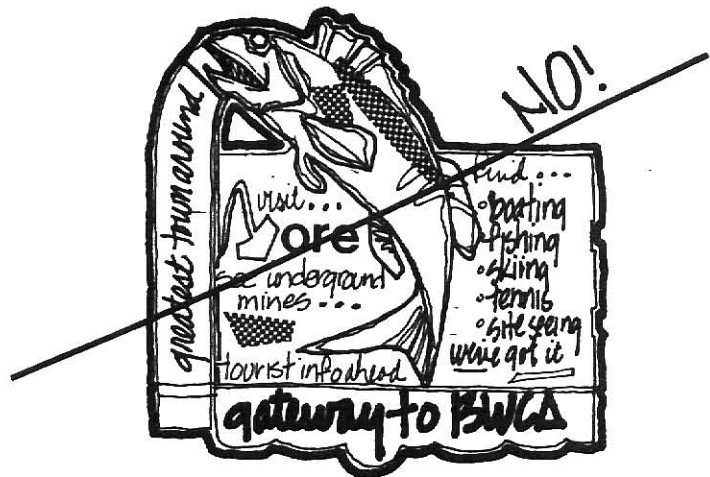
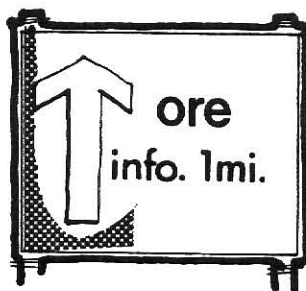
ENTRANCE:

Information Signs

The purpose of an entrance is not only to create a favorable visual impression for the tourist; it must also acquaint that tourist with vital information about the town ahead. This information must be absorbed in motion by the tourist as he enters the town. The information, therefore, must be stated without "frill" to clutter the message.

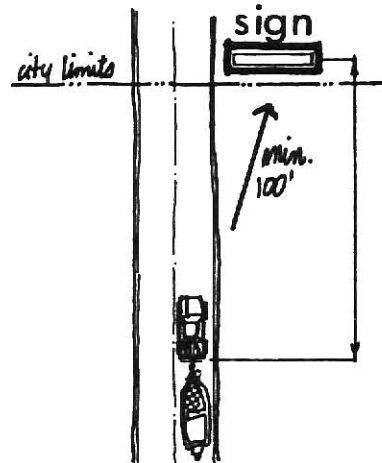
design principles:

1. STATE ONLY BASIC DIRECTION-FINDING INFORMATION ON TOURIST SIGNS: TOWN NAME PLUS THE LOCATION WHERE ADDITIONAL INFORMATION IS AVAILABLE.



2. USE A BLOCK LETTERING STYLE. AVOID LETTERING STYLES THAT HAVE POOR READABILITY.

3. LOCATE THE INFORMATION SIGN TO ALLOW ADEQUATE TIME FOR A TOURIST TO NOTICE ITS LOCATION AND UNDERSTAND ITS MESSAGE. AT 45 M.P.H. AT LEAST ONE-HUNDRED FEET WILL BE REQUIRED TO READ AN UNCOMPLICATED ENTRANCE MESSAGE.



4. AT ONE-HUNDRED FEET THE LETTERS ON THE SIGN NEED TO BE EIGHT INCHES TALL IN ORDER TO BE READ EASILY BY A TOURIST; AT FIFTY FEET THESE LETTERS COULD BE FOUR INCHES TALL. THEREFORE, A LETTER SIZE BETWEEN FOUR AND EIGHT INCHES IS RECOMMENDED.



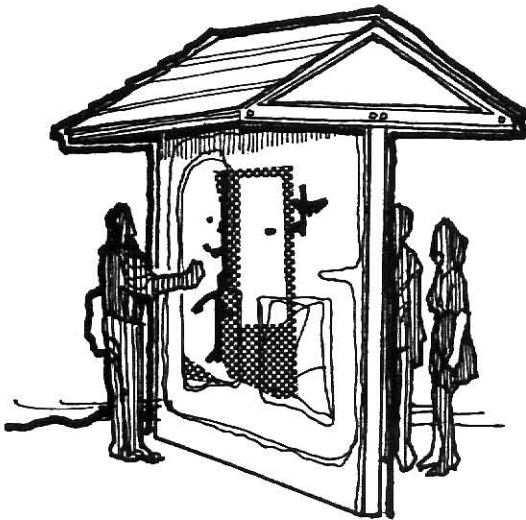
5. ISOLATE THE INFORMATION SIGN FROM ADVERTISEMENTS OR TRAFFIC SIGNS. VISUAL COMPETITION WILL REDUCE THE EFFECTIVENESS OF THE ENTRANCE SIGN.

ENTRANCE:

Tourist Information Centers

Entrance signs can direct people to places where tourist information is available. It may be appropriate to provide that information at one point in the town approach itself. An information center could effectively orient the tourist before reaching the actual town.

Selected tourist information can be unpretentiously provided in an entrance booth or shelter. For communities



that depend upon extensive tourist trade, an information center complete with service personnel and promotional literature is appropriate. Opportunities for tourists to relax in such information rest areas should

also be provided. Restrooms, tables, benches and shaded areas help to maximize utilization of the entrance feature.

The necessity for a tourist information center is based upon the number of tourists entering the community and the condition and location of existing information facilities. If the present facilities are functioning adequately, a new entrance information center may not be necessary; an entrance

sign directing people to "in-town" sources will suffice.

If, however, tourist flow is great and the present facilities are inadequate, effort should be made to locate a tourist information shelter at the town entrance of the major tourist routes.

Section 4 - Selected Examples

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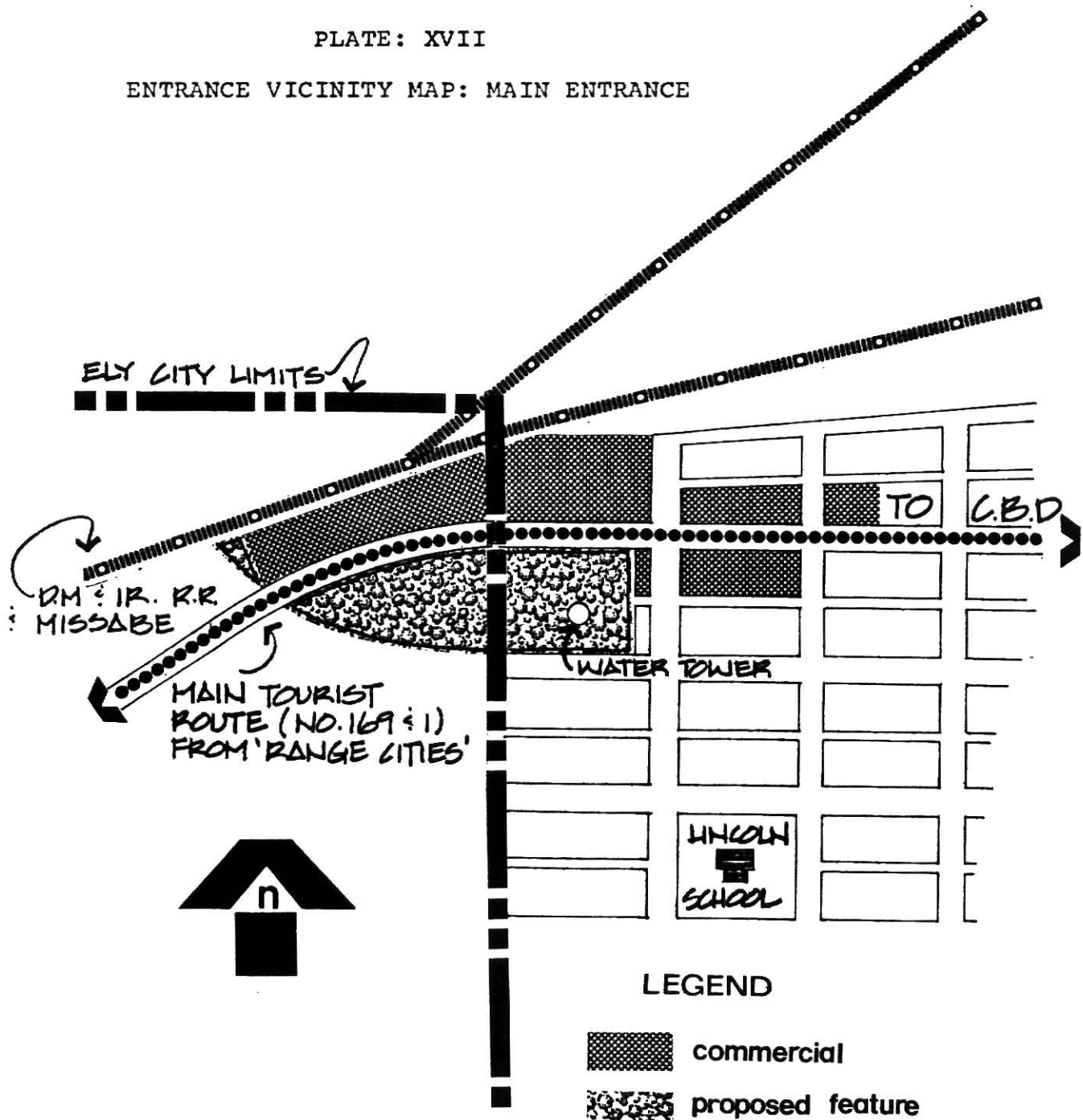
By using the entrance design principles and the following resource lists, the visual and functional problems of Ely's entrances are economically solved, appropriate to the small town regional character.

Plans and perspectives have been drawn only to illustrate the potential of the solutions; the real statement must be made on the actual entrance sites.

prototype

PLATE: XVII

ENTRANCE VICINITY MAP: MAIN ENTRANCE



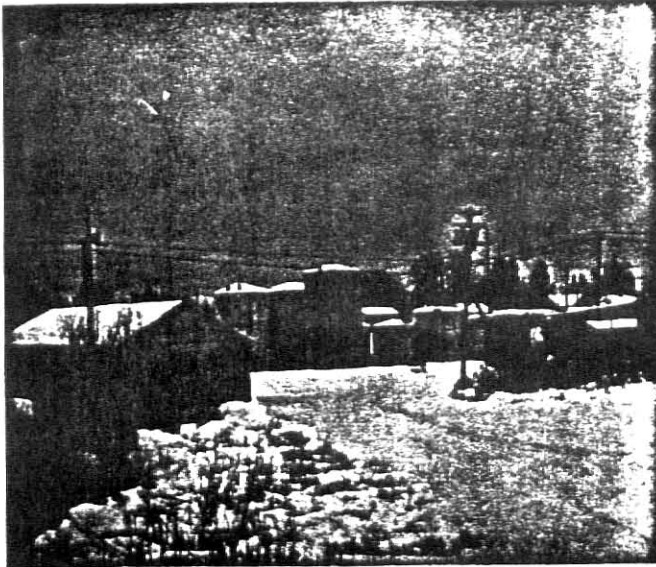
ely, mn.

prototype

PLATE: XVIII

SCREENING PRINCIPLES APPLIED

Design Principles Applied



Additions of four trees and two earth mounds effectively minimized the poor visual quality of highway 169 entrance into Ely. Total screening is usually not necessary to hide minor blight.



recommendations:



recommendations:

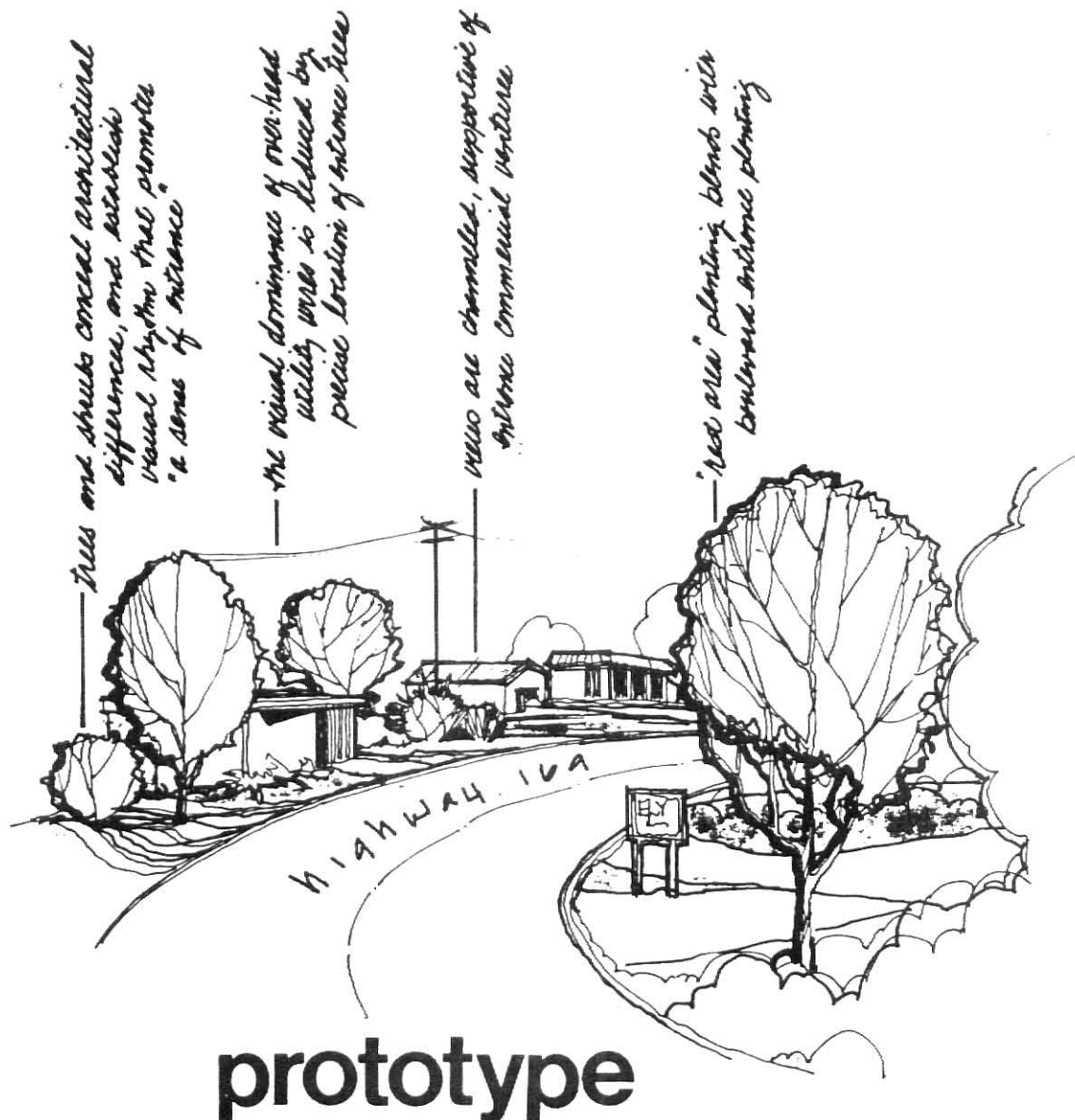
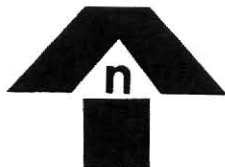
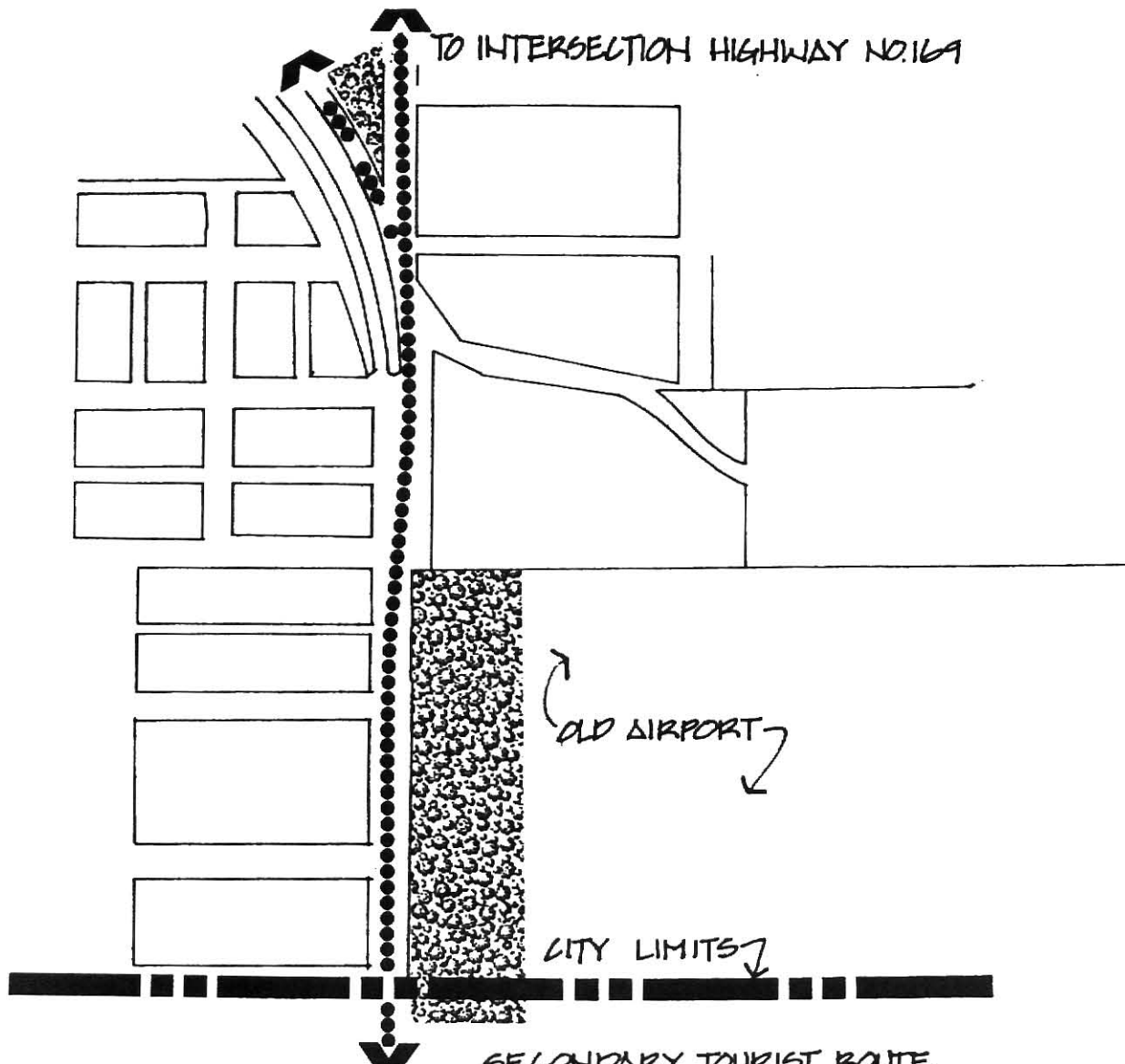


PLATE: XX

ENTRANCE VICINITY MAP: HIGHWAY NO. 1



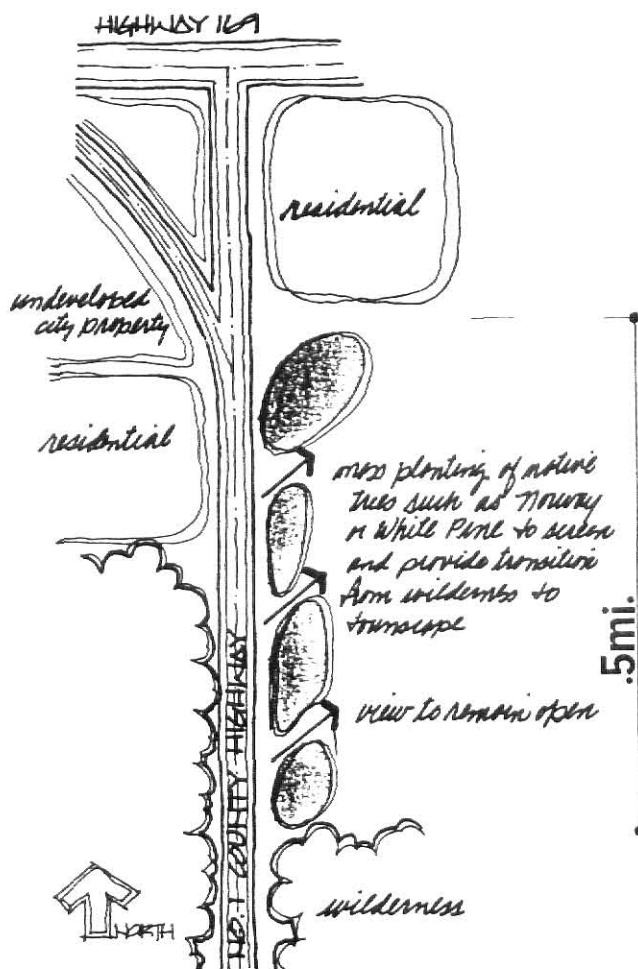
LEGEND

 proposed feature

ely, mn.



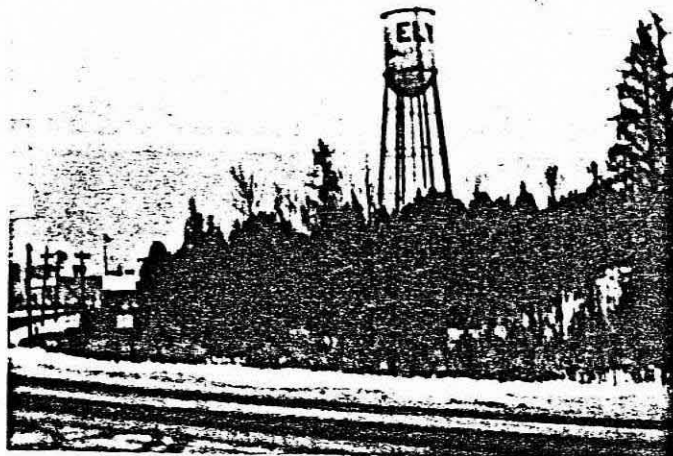
recommendations:



prototype

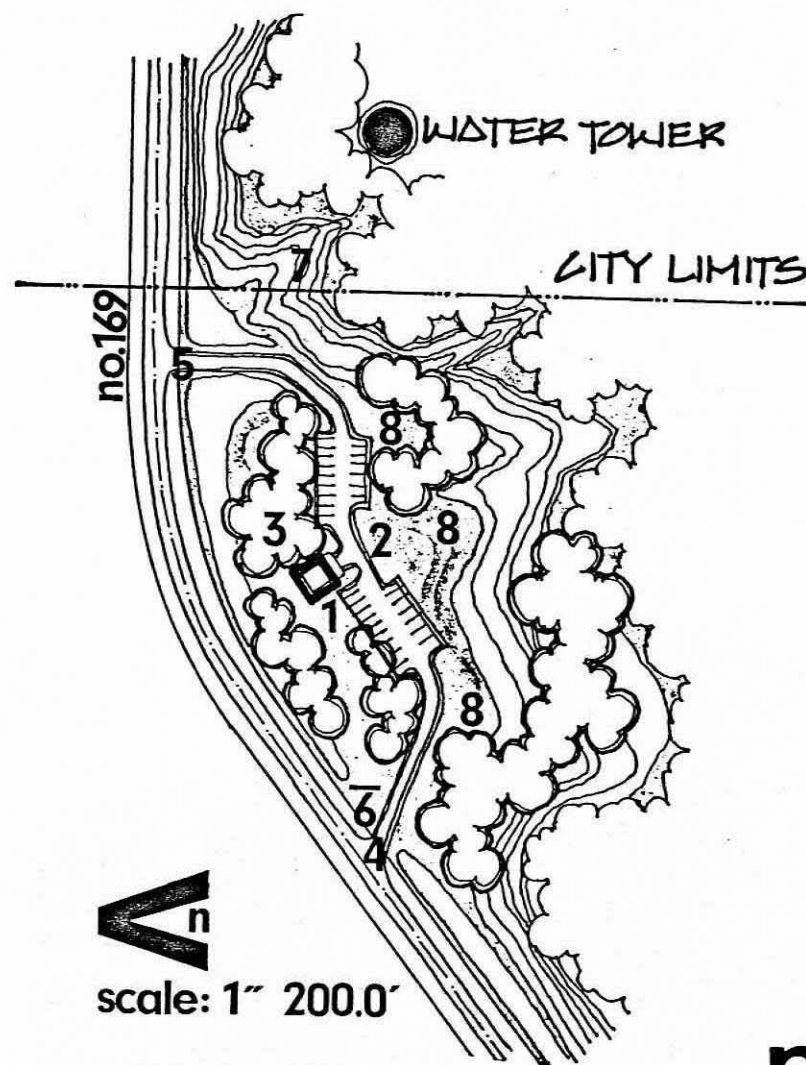
PLATE: XXI

DESIGN PRINCIPLES APPLIED



ely, mn.

recommendations:



scale: 1" = 200.0'

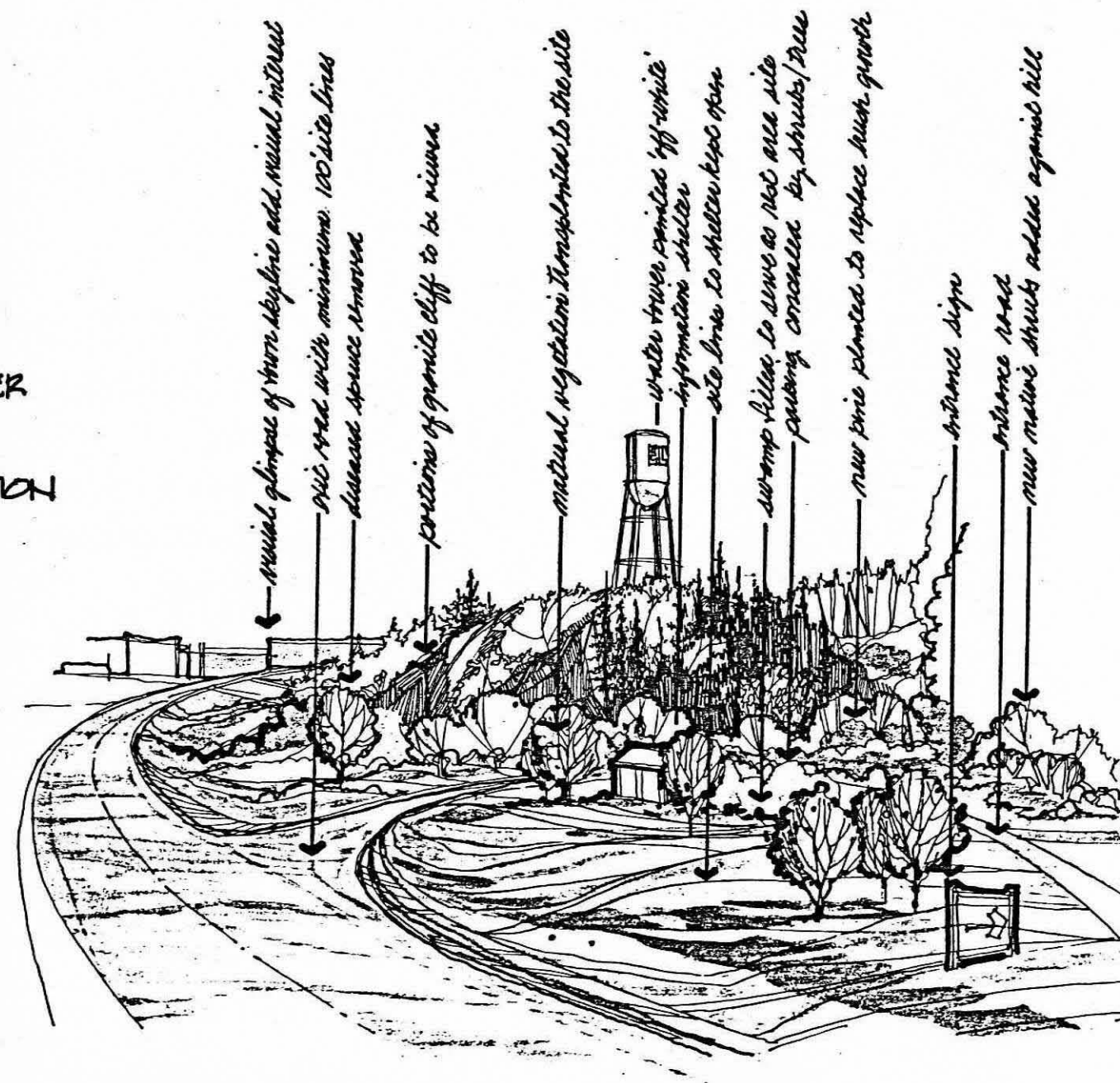
PLATE: XXII

ENTRANCE REVITALIZATION: NEW IMAGE

LEGEND

- 1—INFORMATION CENTER
- 2—PARKING
- 3—SCREENING VEGETATION
- 4—ENTRANCE ROAD
- 5—EXIT ROAD
- 6—ENTRANCE SIGN
- 7—NATURAL FEATURE
- 8—PICNIC TABLE

prototype



These native plants have been chosen for their hardiness and for their ability to serve as transition from the surrounding woodlands and forests to the town itself.

plant list:

LARGE NATIVE TREES			
evergreen	NORWAY PINE <i>Pinus resinosa</i>	5-10'	70' mature ht., med. to fast growth; prefers sandy soil and will not tolerate wet conditions or salt spray.
	WHITE PINE <i>Pinus strobus</i>	5-10'	70' mature ht., med. growth rate; prefers good drainage and is slightly more tolerant of salt.
	WHITE SPRUCE <i>Pinus glauca</i>	5-10'	40' mature ht., dense screening but slow growing, prefers good drainage.
	BLACK (SWAMP) SPRUCE <i>Picea mariana</i>	5-8'	30' mature ht., scraggly growth habit but tolerant of dry <u>or</u> wet soil conditions.
	BALSAM FIR <i>Abies balsamea</i>	5-10'	35' mature ht., fast growth; tolerates poor soil and drainage will not tolerate salt spray.
deciduous	WHITE ASH <i>Fraxinus americana</i>	10'	50' mature ht., fast growing, hardy, but seeds can be problem.
	RED MAPLE <i>Acer rubrum</i>	10'	50' mature ht., slow growth; needs deep soil, brilliant fall color; susceptible to cankers.
	SILVER MAPLE <i>Acer saccharinum</i> (naturalized to area)	15'	60' - fast growth, root system close to surface; should not be planted where sidewalks, underground utilities exist; seeds may also be a problem.
	LINDEN (BASSWOOD) <i>Tilia americana</i>	15'	70' - long lived, fast growth.

Tree seedlings are available from County Extension Service or they can be collected and transplanted to the Entrance site.

plant list:

evergreen	<u>SMALL TO MEDIUM NATIVE TREES</u>		
	WHITE (SWAMP) CEDAR	5-10'	25' mature ht., hardy, prefers moist conditions.
	RED CEDAR Juniperus virginiana	10'	30'- endures most conditions; tolerates wet soil.
deciduous	MOUNTAIN MAPLE Acer spicatum	5'	15' mature ht., moist conditions slow growth; prefers protection from larger trees.
	PAGODA DOGWOOD Cornus alternifolia	5-10'	10' mature ht., wide growth but slow; needs moist conditions and some wind protection.
	CHOKECHERRY Prunus virginiana	10'	25' mature ht., fast growing and tolerant of adverse conditions.
	STAGHORN SUMAC Rhus typhina	5-10'	15' m.h., hardy, spreads by root suckers.
	WILD PLUM Prunus americana	10'	15' m.h., med. growth, round shape.
	PINCHERRY Prunus pennsylvanica	10'	20' m.h., fast growth, tolerates poor soil.
	MOUNTAIN ASH Sorbus americana	5-10'	25' m.h., med. growth, dense globe shape, fall berries; needs good drainage.

plant list:

NATIVE SHRUBS

deciduous

REDTWIG DOGWOOD
Cornus stolonifera

5'

6' mature ht., tolerant of most soils but prefers moisture; fast grower that transplants easily.

HAZELNUT
Corylus americana

5-10'

8' m.h., medium growth rate; sun.

SNOWBERRY
*Symphoricarpos
albus*

5-10'

8' m.h., prefers well-drained soil and partial shade; fast.

ARROWWOOD
*Viburnum
rafinesquianum*

5-10'

6' m.h., fast growing, tolerant of adverse conditions.

NANNYBERRY
Viburnum lentago

5-10'

10' m.h., same conditions as Arrowwood above.

PROCEDURE FOR LAYMEN: ENTRANCE REVITALIZATION

1. Study the examples and design principles of this chapter cited for entrance treatment.
2. Visit an important entrance to the town and observe its good and bad qualities.
3. Record the good and bad qualities by making notes on a sketch pad or town map.
4. Discuss these entrance qualities with other concerned citizens. Refer to the design principles and imagine how the existing entrance might be improved.
5. Select one portion of the entrance that appears to have the most critical influence on the entrance quality.
6. In written form, define that problem and outline the method(s) by which it could be solved.
7. Check ownership of the entrance property. It is helpful to know in the beginning the people that might aid the entrance revitalization process.
8. Develop a "sketch plan." While it is possible to design directly on the site by using string and stakes to mark the concepts, it is a better idea to draw the solutions on paper. The plans do not need to be technical or extremely accurate; if precise drawings are needed, find a local contractor, carpenter or industrial arts teacher who could volunteer more detailed aid.
9. Determine what materials will be required to implement the project. Check resources and solicit donations from other townspeople. If items need to be purchased, determine exactly what they will cost.
10. With plans and estimates in hand, begin to persuade the mayor, councilmen, or civic organizations to provide a budget for the project.
11. Select a team leader to organize work groups and project tasks.
12. Gather the necessary materials and transport them to the site just prior to the time the project is scheduled to start.
13. Stake (locate) the exact locations where changes are to be made in the entrance area, i.e., where trees are to be planted or where signs are to be built.

14. Assign specific groups to each area of the total project, preferably with a responsible individual in charge of each smaller group.
15. Start. Have fun improving the entrance. Complete.
16. Remember to follow-up the project with proper maintenance of the improvements. For example, trees planted on the new site will require periodic watering during the first summer.

GUIDELINES FOR LAYMEN

- | |
|--|
| <ul style="list-style-type: none">•Spend effort improving areas that are most often observed and used by the public.•It is better to complete several small projects than never to begin a major one. |
|--|

CHAPTER 5 - DESIGN PRINCIPLES FOR SMALL TOWN COMMERCIAL
STRIP AREAS

Section 1 - Townscape Studies: Commercial Strip

Section 2 - Selected Commercial Strip Examples

Section 3 - Recommended Plant Materials for Commercial
Strip Revitalization

Section 4 - Procedure for Laymen: Commercial Strip
Revitalization

TOWNSCAPE STUDIES: Commercial Strip

Immediately after the entrance the property along the road in all Arrowhead communities becomes a mixture of commercial and residential land uses. These areas are commonly newer extensions of the older sections of the town along the major traffic link. They maintain unique characteristics of both the old and new town. Some of the best homes of the Arrowhead communities are found in these commercial strip areas, directly adjacent to thriving new business.

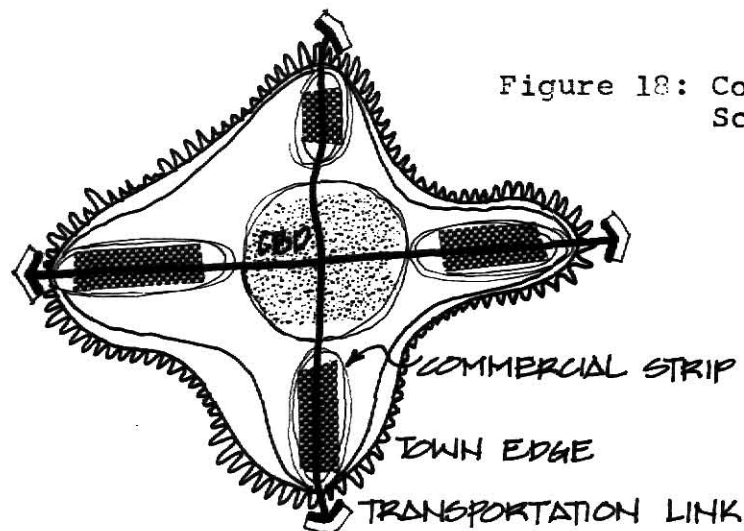
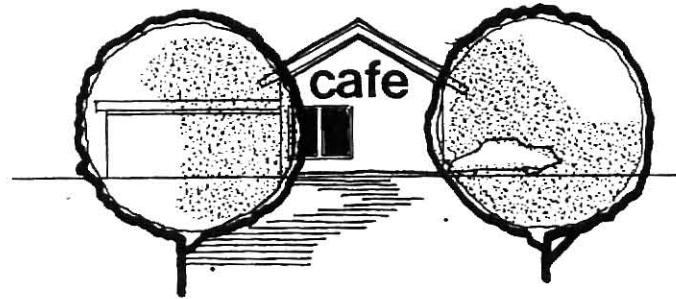


Figure 18: Commercial Strip Schematic

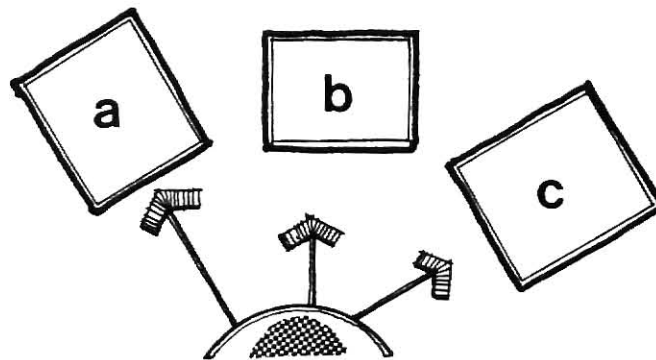
Often both the residential and commercial buildings possess visual character and structural soundness. However, the total image of these commercial strip areas is marred by the lack of visual unity between commercial and residential areas. Neither land use seems to recognize the presence of the other, and the lack of visual relationship greatly reduces the visual quality of each use. The total visual impact is both jarring and confusing to an unaccustomed tourist.

design principles:

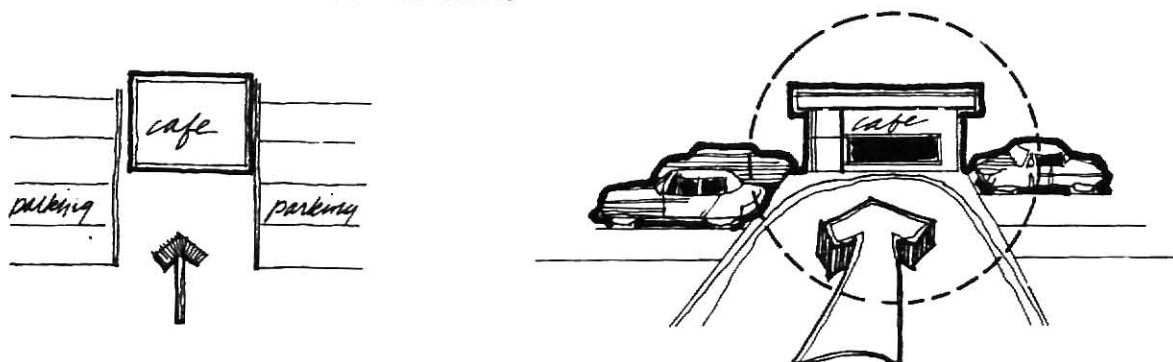
1. VISUALLY FRAME AND ACCENT COMMERCIAL VIEWS



Attention is brought to the best part of the building by using trees to visually frame a desired view.

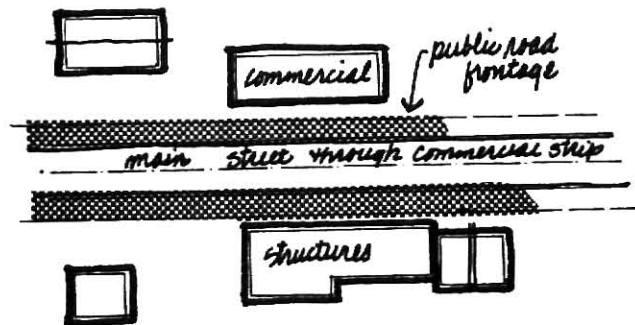


Building orientation directs views by partially enframing the viewer's field of vision.



Location and orientation of parking similarly directs views by partial enframement.

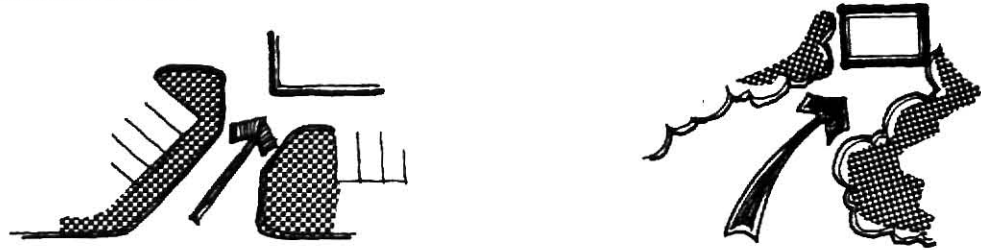
The character of the commercial strip in spite of the well-maintained buildings is usually barren and over-commercialized. Public roadsides are open, flat and treeless, projecting an impersonal image. This road frontage along the main vehicular route is presently unused, unkept and a waste of valuable town property.



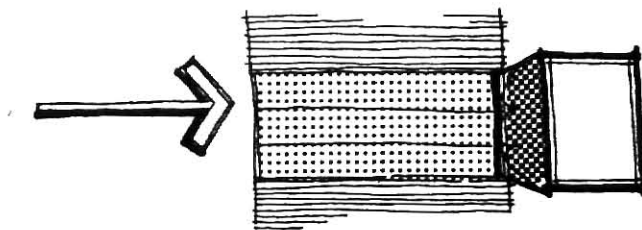
A variety of design principles can be applied to reduce the austerity of these commercial strip areas, improving visual quality and accessibility for the tourist.



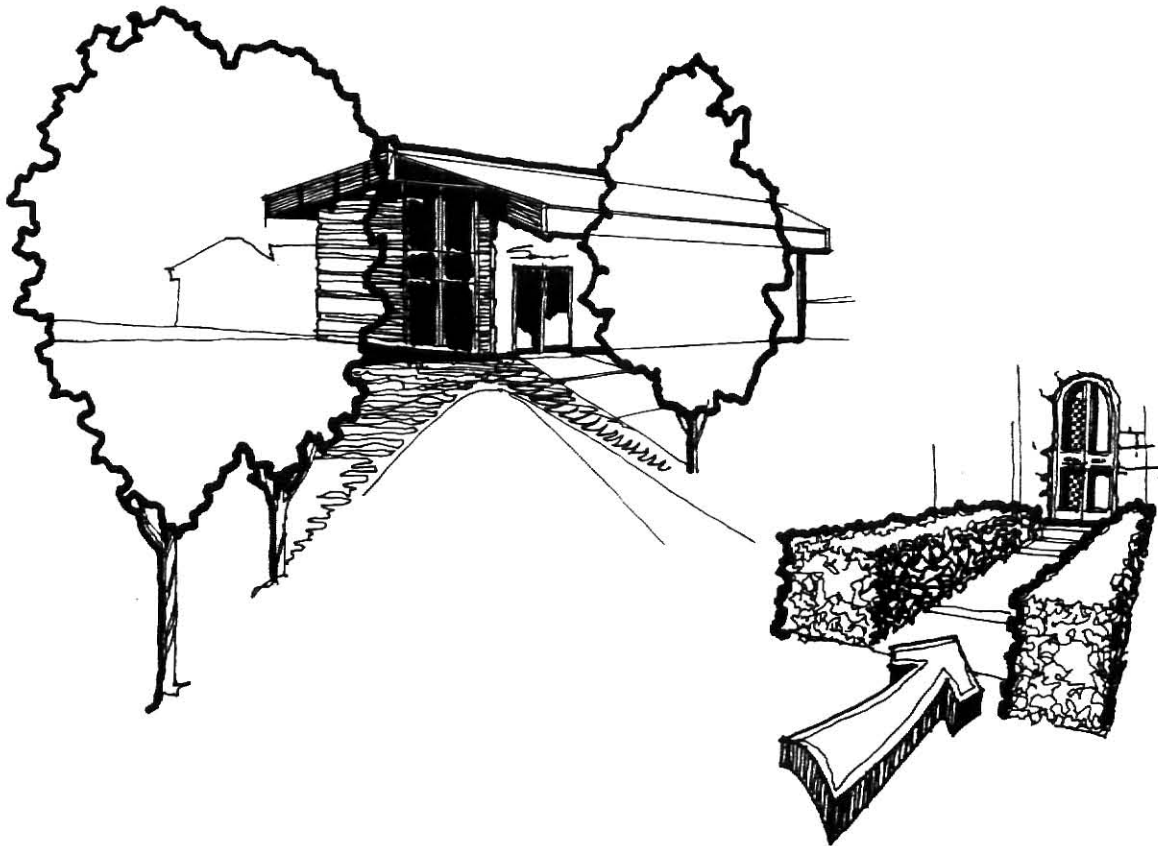
2. CHANNEL A VIEW WITHIN THE COMMERCIAL STRIP. SIMILAR TO ENFRAMEMENT, SPECIFIC VIEWS CAN BE CHanneLED BY CONSCIOUS DESIGN TECHNIQUES.



Entrance drive alignment can channel a view.

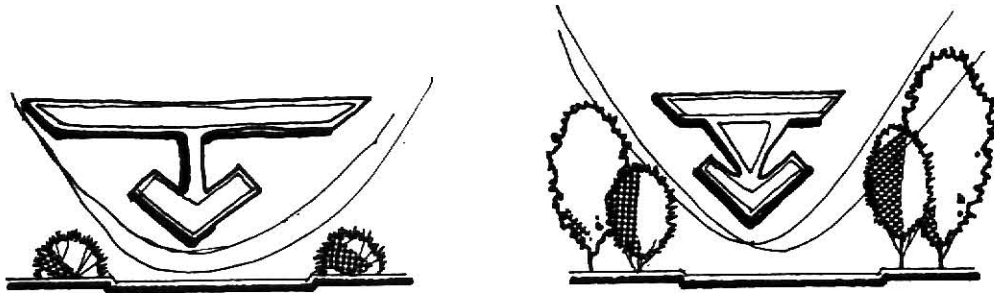


Changes in pavement materials help to channel views.

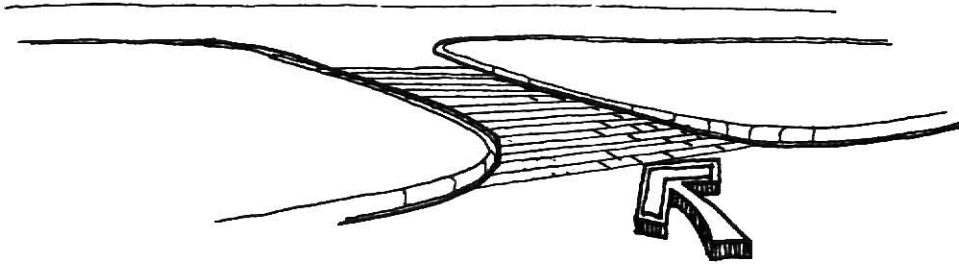


Plant materials can be used to channel views within the commercial strip area.

3. EMPHASIZE COMMERCIAL ENTRANCES WITHIN THE COMMERCIAL STRIP.



Plant materials within the commercial strip can accent business entrances either by location or scale of the materials.

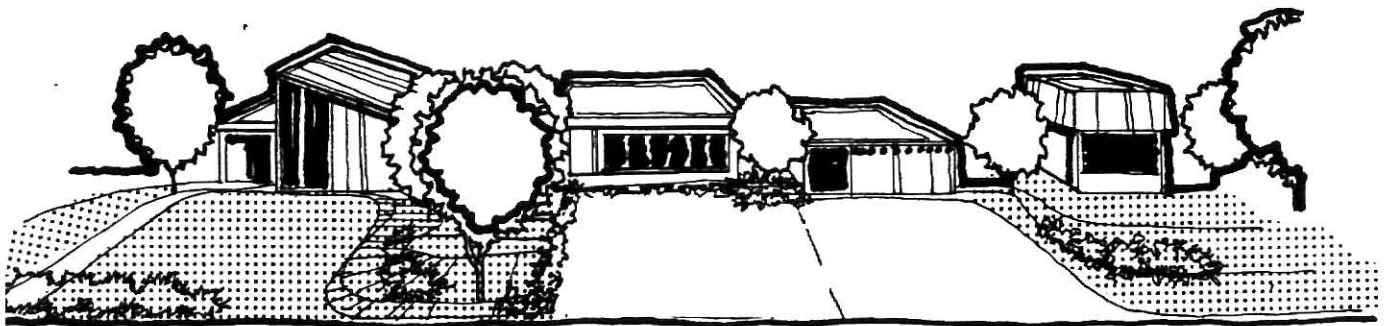
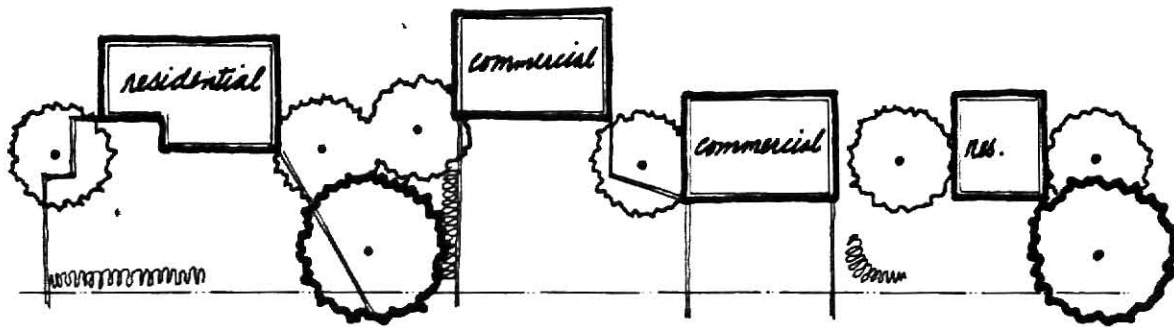


Pavement change can accentuate the entrances area.

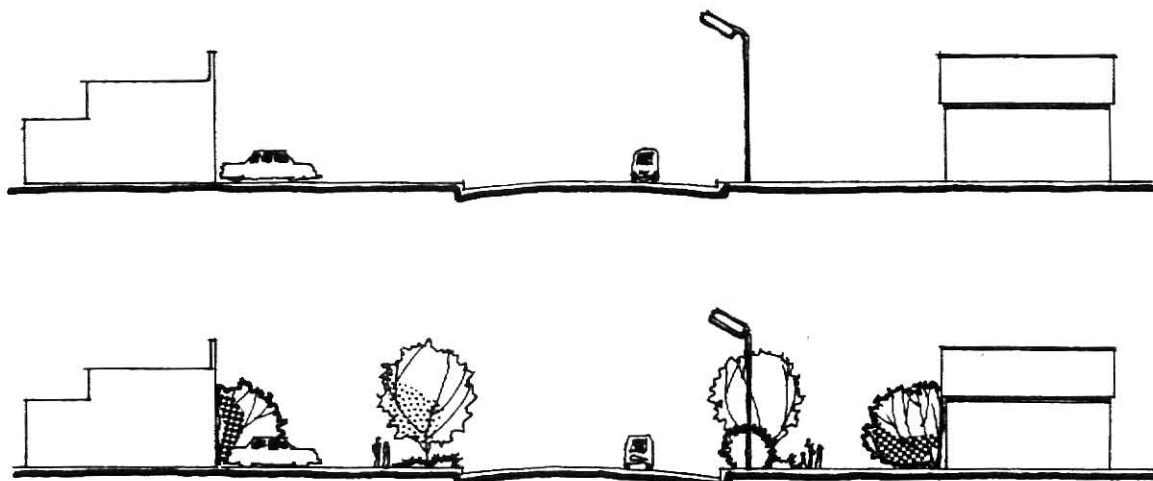


Fence or wall detailing may be appropriate to accent commercial property.

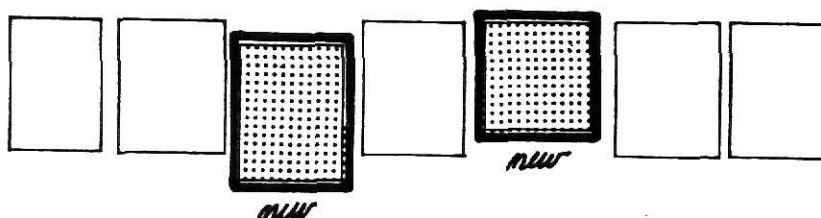
4. PLANT MATERIALS CAN SOFTEN ARCHITECTURAL DIFFERENCES AND AID VISUAL COMPATIBILITY OF RESIDENTIAL AND COMMERCIAL LAND USES.



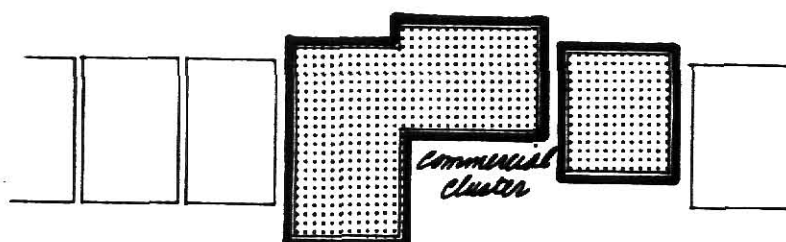
5. PROVIDE ELEMENTS THAT SUGGEST HUMAN SCALE WITHIN THE COMMERCIAL STRIP. VEGETATION, BENCHES, SIDEWALKS AND EVEN TRASH RECEPTACLES WILL INDICATE THAT THE COMMERCIAL STRIP IS PLANNED FOR HUMAN ACTIVITY. SUCH HUMAN AMENITIES WILL HELP TO RETAIN TOURISTS IN THE COMMERCIAL STRIP AREA.



6. WHEN NEW BUILDINGS ARE PROPOSED, VARY BUILDING SETBACKS TO CREATE TOWNSCAPE INTEREST AND ACCENTUATE BUILDING FUNCTION.

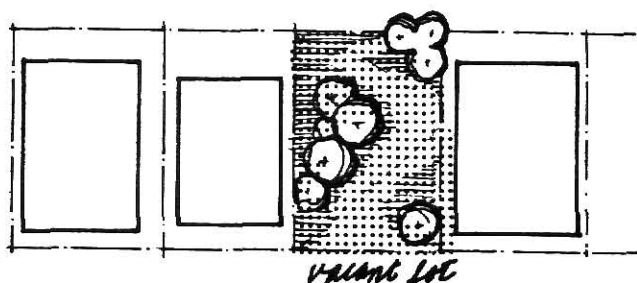


7. CLUSTER COMMERCIAL BUILDINGS WHEN FEASIBLE.

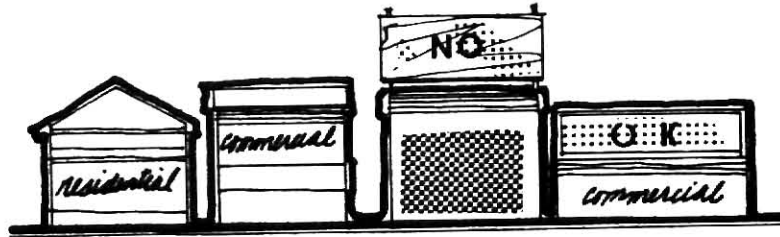


By clustering units, a stronger land-use image is made. Both commercial and residential patterns are preserved with characteristic visual identity. The cluster concept also provides several new options for automobile parking.

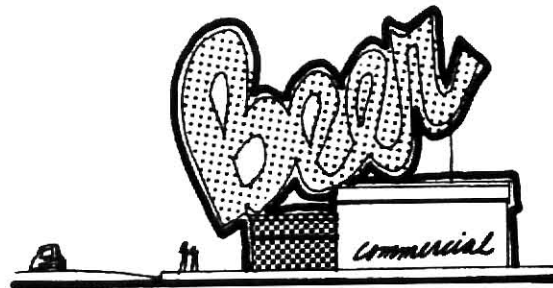
8. REHABILITATE VACANT LOTS FOR USE AS "MINI-OPEN SPACES".



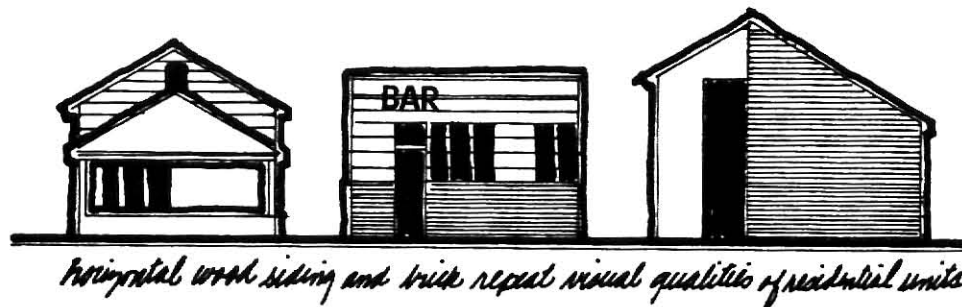
9. STRIVE FOR A UNIFIED IMAGE. A COMMERCIAL STRUCTURE HAS AN ENTIRELY DIFFERENT PURPOSE THAN A RESIDENTIAL STRUCTURE. IT IS NOT LIKELY THAT THESE TWO WILL EVER HAVE SIMILAR IMAGES, THOUGH THE TWO CAN BE MADE VISUALLY COMPATIBLE.



Commercial signs need to relate to the scale of adjacent buildings.



The letter size for a commercial message does not have to over-power the viewer. At 30 m.p.h. a 4 inch letter size can be easily read from the street.

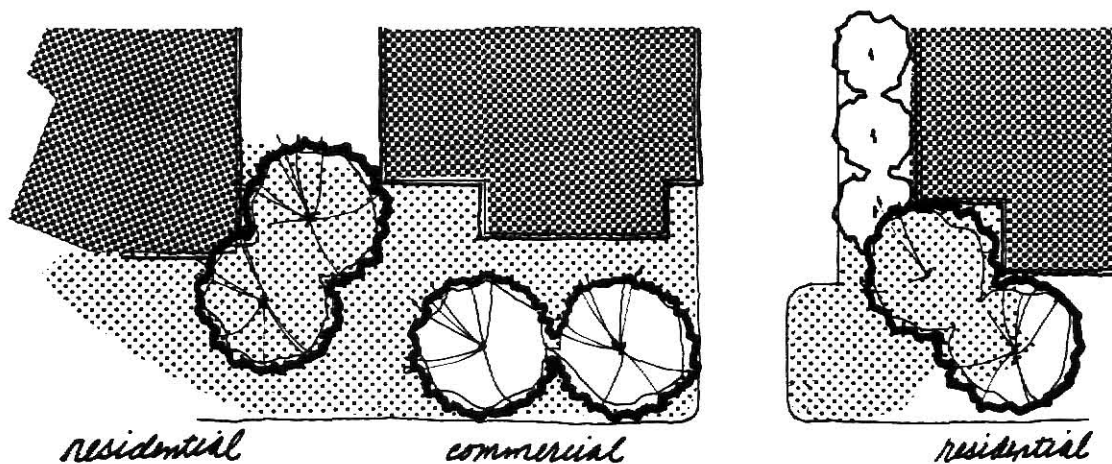


Limit the kinds of building materials and relate them to other structures. A commercial venture will be more visually compatible if it repeats at least some of the same building materials and scale used by adjacent structures.

10. REPEAT SIMILAR ARCHITECTURAL DESIGN LINES. WHILE A COMMERCIAL VENTURE DOES NOT NEED TO LOOK "RESIDENTIAL", REPETITION OF A FEW DESIGN ELEMENTS WILL ALLOW THE COMMERCIAL STRUCTURE TO BETTER RELATE WITH ADJACENT UNITS.



11. PLANT BOULEVARD STREET TREES. THE TREES WILL INCREASE COMPATIBILITY AND UNIFY DISCORDANT, VISUALLY CONFLICTING LAND USES WITHIN THE COMMERCIAL STRIP. THE BOULEVARD STREET TREES WILL, BY THEIR MASS AND FORM, REDUCE VISUAL INCONSISTENCIES.



Straight rows of street trees are more appropriate in highly commercialized areas of the strip, while more natural patterns of street trees are appropriate at less congested, residential locations.

Section 2 - Selected Commercial Strip Examples

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By using the commercial strip design principles and the following resource lists, the visual and functional problems of Ely's commercial strip areas are economically solved, appropriate to the small town regional character.

Plans and suggestions have been drawn only to illustrate the potential of the solutions; the real visual statement must be made on the actual commercial strip site.

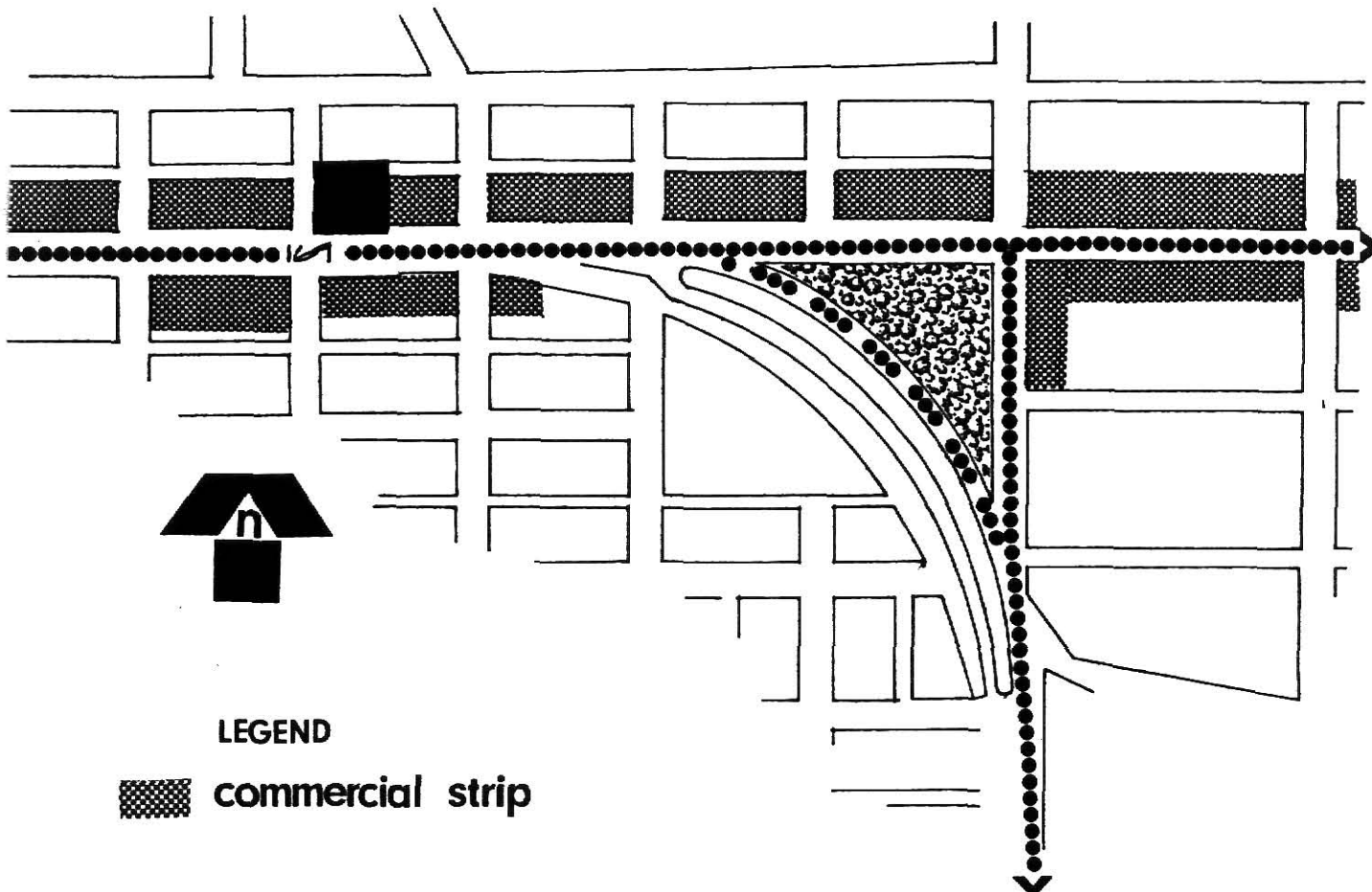
prototype

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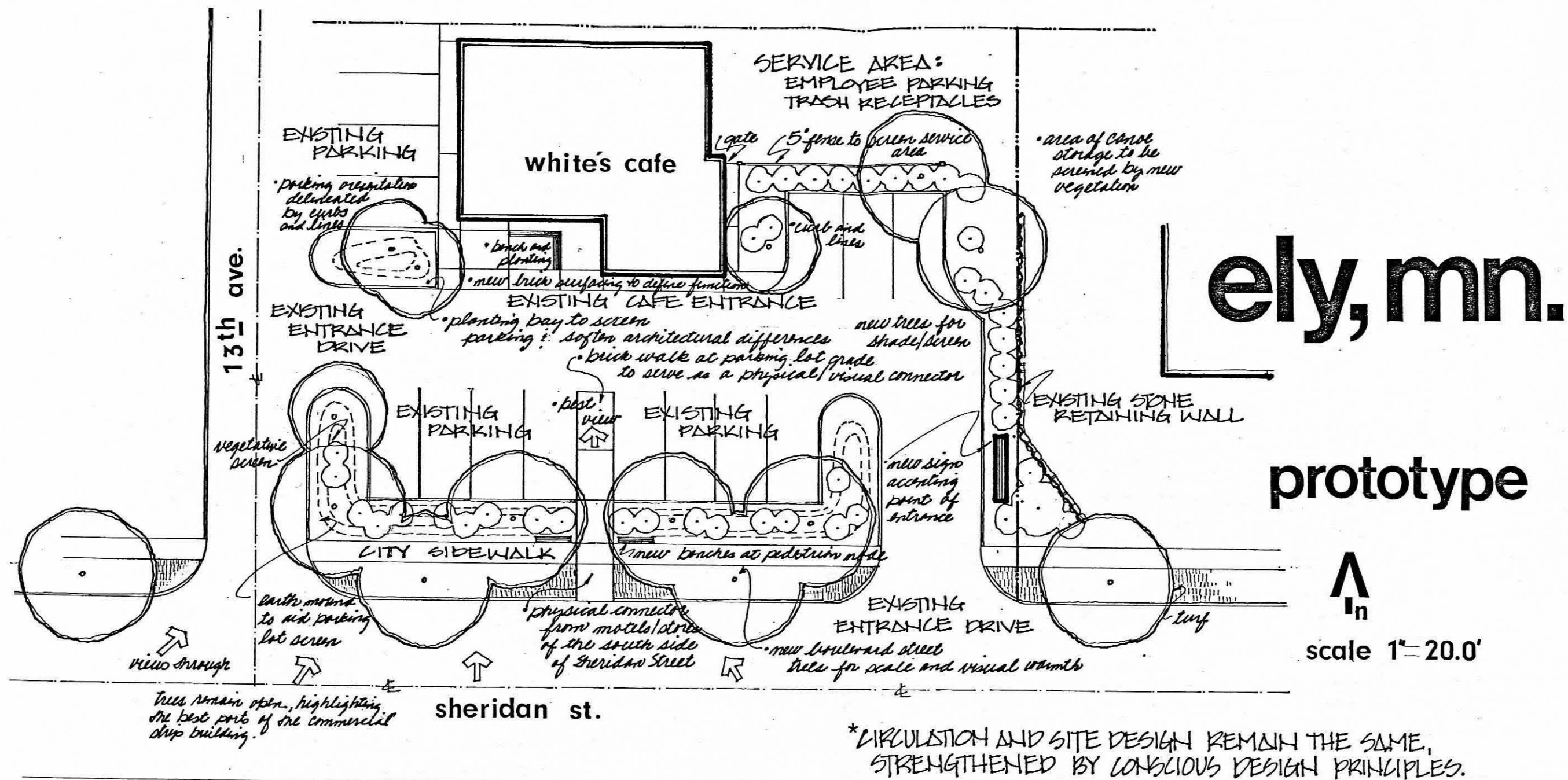
**THE FOLLOWING
DOCUMENT (S) IS
ILLEGIBLE DUE
TO THE
PRINTING ON
THE ORIGINAL
BEING CUT OFF**

ILLEGIBLE

PLATE: XXIII
COMMERCIAL STRIP VICINITY MAP



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Plant materials are selected for their visual qualities and tolerance of poor growing conditions. The list includes plant materials that are either "natives" or "hardy cultivars" which will adapt well to the harsh environment of strip commercial areas.

plant list:

<u>LARGE TREES</u>			
deciduous	*RED MAPLE Acer rubrum	10' min.	50' mature ht., bright red fall color, slow growing, needs deep soil.
	SUGAR MAPLE Acer saccharum	15' min.	60' m.h., orange-yellow fall color, med. growth rate, needs deep soil.
	MARSHALL ASH Fraxinus pennsylvanica 'Marshall'	15' min.	50' m.h., yellow fall color, fast growing, seedless and tolerant of poor soil conditions.
	SHADEMASTER HONEYLOCUST Gleditsia triacanthos 'Shade-master'	15' min.	50' m.h., fast growing, open branch structure produces "lace-like" shade, tolerant of sandy soils.
	*LINDEN Tilia americana	20'	60' m.h., fast growing, dense shade, tolerant of poor soil.
evergreen	BOLLEANA POPLAR Populus alba 'Pyramidalis'	5-10'	60' m.h., exceptionally fast growing but short lived, tolerant of poor soil.
	COLORADO GREEN SPRUCE Picea pungens	10'	60' m.h., dense green pyramidal shape, intolerant of wet, clay soil.
	*NORWAY PINE Pinus resinosa	10'	70' m.h., fast growth rate, will not tolerate wet soil though tolerant of poor soil.
	*WHITE PINE Pinus strobus	10'	70' m.h., and same as Norway pine above, except a slower growth rate.

*native trees

plant list:

<u>MEDIUM AND SMALL TREES</u>			
deciduous	CRABAPPLE Malus	10'	
	•Crimson Brilliant		Bright red flowers, bronze-green leaves; semi-upright form.
	•Hopa		Spreading growth habit, somewhat weeping branch structure.
	•Radiant		Early-blooming, upright.
	•Snowdrift		Blooms slightly after Radiant, upright, symmetrical growth.
	•Strathmore		A true upright, pale pink flowers.
	•Vanguard		Round shape, retains fruit in the winter; bronze-green leaves.
	*PAGODA DOGWOOD Cornus alternifolia	10'	Layered branch structure, protect from strong winds.
	AMUR MAPLE Acer ginnala	8-10'	Brilliant red fall color; seeds may be a problem if planted near walks and drives.
	RUSSIAN OLIVE Eleagnus angustifolia	10'	Grey-green foliage, tends to drop leaves if overwatered.
	IMPERIAL HONEYLOCUST Gleditsia triacanthos 'inermis'	10-15'	Small tree with lace-like leaves; excellent confined growth habit.
	GREENSPIRE LINDEN Tilia cordata 'Greenspire'	10-15'	Somewhat pyramidal, needs protection from North wind.
	*MOUNTAIN MAPLE Acer spicatum	5-10'	Brilliant red, excellent for informal screens.
	*IRONWOOD Ostrya virginiana	10'	Small-leaved tree, needs protection from summer winds, reflected heat.
	*CHOKECHERRY Prunus virginiana	10'	Dark-leaved, rounded shape; blue-black berries may be a problem if planted near walks and drives; prefers heavy watering.

*native trees

plant list:

deciduous	<u>MEDIUM AND SMALL TREES</u> (continued)	
	*WILD PLUM <i>Prunus americana</i>	10' Round shape; thorns require that it be used only for informal screen or barrier.
	*PIN CHERRY <i>Prunus pennsylvanica</i>	10' Pale green leaved tree, pyramidal, prefers sandy soil; berries require care when locating the tree.
	*MOUNTAIN ASH <i>Sorbus americana</i>	10' Bright orange berries often remain throughout winter; prefers sandy soil and eastern or western exposure
	<u>SHRUBS</u>	
	*REDTWIG DOGWOOD <i>Cornus stolonifera</i>	5-10' Red bark for winter color, prefers heavy watering, full sun or partial shade.
	*AMERICAN FLY HONEYSUCKLE <i>Lonicera canadensis</i>	5' Low shrub, ideal for informal screen
	*Highbush CRANBERRY <i>Viburnum americanum</i>	5-10' Bright cranberry-like berries, fast growing, tolerates full shade.
	*ARROWWOOD VIBURNUM <i>Viburnum rafinesquianum</i>	5-10' Hairy, grey-leaved, fast-growing shrub.
	*NANNYBERRY <i>Viburnum lentago</i>	5-10' Dark green, compact form; full sun or partial shade.
evergreen	PEKING COTONEASTER <i>Cotoneaster lucida</i>	5' Fast growing, tolerant of northern exposure, small blue-black berries, can be severely pruned.
	JAP GREEN BARBERRY <i>Berberis thunbergii</i>	5' Thorny screen, bright red fall foliage.
	PFITZER JUNIPER <i>Juniperus chinensis</i> 'Pfitzeriana'	5-10' Fast-growing, upright and spreading; tolerates shade or sun.
	BLAAUWS JUNIPER <i>Juniperus c. 'Blaauwi'</i>	5' Semi-upright, blue-grey color.
	SARGENTS JUNIPER <i>Juniperus c.</i> 'Sargentii'	5' Low spreader, grey-green color; full sun to partial shade

PROCEDURE FOR LAYMEN: REVITALIZATION OF COMMERCIAL STRIP

1. STUDY THE EXAMPLES AND DESIGN PRINCIPLES OF THIS SECTION.
2. OBSERVE THE COMMERCIAL STRIP AREAS OF THE TOWN AND RECORD THE GOOD AND BAD QUALITIES OF EACH AREA ON A SKETCH PAD OR CITY MAP.
3. DETERMINE WHICH ELEMENTS ARE PUBLIC PROBLEMS AND WHICH ARE PRIVATE. ENCOURAGE BOTH THE PUBLIC AND PRIVATE SECTORS TO PARTICIPATE IN THE REVITALIZATION PROCESS.
4. REFER TO THE COMMERCIAL STRIP DESIGN PRINCIPLES AND IMAGINE HOW THE COMMERCIAL STRIP PROBLEMS MIGHT BE SOLVED.
5. ADDRESS A PROBLEM AREA THAT IS CONSIDERED TO BE A PUBLIC CONCERN. FOR EXAMPLE, BOULEVARD STREET TREES OR A DESOLATE RIGHT-OF-WAY WITHIN THE COMMERCIAL STRIP ARE EXCELLENT INITIAL PROJECTS.
6. DETERMINE WHICH PORTION OF THE COMMERCIAL STRIP IS THE HIGHEST REVITALIZATION PRIORITY.
7. SKETCH THE POSSIBILITIES. DISCUSS THEM WITH OTHER CONCERNED CITIZENS AND FINALIZE THE SKETCH PLAN. FIND SPECIALIZED HELP WITHIN THE COMMUNITY IF MORE DETAILED DRAWINGS SEEM TO BE REQUIRED.
8. DETERMINE THE QUANTITIES OF MATERIALS THAT WILL BE REQUIRED TO IMPLEMENT THAT PROJECT. SOLICIT DONATIONS, FINANCIAL CONTRIBUTIONS OR COMMUNITY FUNDING.
9. SELECT A PROJECT LEADER TO OVERSEE SUB-GROUPS OF TOWNS-PEOPLE RESPONSIBLE FOR SPECIFIC PORTIONS OF THE PROJECT.
10. GATHER MATERIALS AND TRANSPORT THEM TO THE SITE JUST PRIOR TO BEGINNING ACTUAL IMPLEMENTATION OF THE PROJECT.
11. STAKE (LOCATE) THE EXACT PLACE WHERE THE TASKS ARE TO BE PERFORMED. THIS SHOULD NOT BE DONE TOO FAR IN ADVANCE, FOR MARKING STAKES ARE EASILY MOVED AND MIGHT INADVERTENTLY BE DESTROYED.
12. BEGIN. (HAVE FUN IMPROVING THE COMMERCIAL STRIP). COMPLETE.

Note: THIS PROCEDURE IS ALSO HELPFUL FOR MERCHANTS WISHING TO IMPROVE THEIR COMMERCIAL PROPERTY. A MERCHANT CAN WORK INDIVIDUALLY OR, BETTER YET, FORM A GROUP OF CONCERNED MERCHANTS TO PLAN AND BUILD COLLECTIVELY.

GENERAL GUIDELINES:

MOST CITIZENS ARE EAGER TO IMPROVE THE QUALITY OF THEIR TOWN SPACES OR COMMERCIAL VENTURE. ALWAYS INCLUDE THEM IN THE DESIGN PROCESS TO MAXIMIZE SUCCESS OF THE REVITALIZATION PROJECTS.

IT IS BETTER TO UNDERTAKE AND COMPLETE A SMALL PROJECT THAN TO NEVER BEGIN A LARGER ONE.

CHAPTER 6 - DESIGN PRINCIPLES FOR SMALL TOWN CENTRAL BUSINESS DISTRICTS

Section 1 - Townscape Studies: Central Business District

Section 2 - Buildings (Architectural Style and Facades)

Section 3 - Vacant Lots

Section 4 - Business Signs

Section 5 - Streetside Public Space

- Vegetation

- Amenities

Section 6 - Selected Central Business District Examples

Section 7 - Recommended Plant Materials for Central Business District Revitalization

Section 8 - Procedure for Laymen: Central Business District Revitalization

TOWNSCAPE STUDIES: Central Business District

The core of community activity revolves around the success of its central business district. Revitalization of the central business district to counteract "downtown" decline and deterioration will encourage tourist trade and inspire other economic benefits to townspeople.

As with the entrances and commercial strip areas, design recommendations for the central business district (C.B.D.) are made to better the townscape image. Special attention will be placed on the "streetscape" quality to encourage tourism, for the present C.B.D. areas are not maximizing their visual potential or supporting tourist conveniences. Attracting more tourists to the C.B.D. will enhance economic returns.

To achieve a favorable commercial environment the image and identity of the downtown area must be strengthened. This is possible by establishing coordination at the human level of perception. Unlike the entrances or commercial strip, buildings within the C.B.D. are close enough together to be viewed simultaneously. All difference, good or bad, among the C.B.D. structures and spaces are instantly obvious. These visual differences can be categorized into four groups of C.B.D. visual elements: 1. buildings (architectural style and facade treatment), 2. vacant lots, 3. C.B.D. business signs, and 4. streetside public space. While all visual elements are integral to the total image, the discussion of each group of visual elements is presented separately.

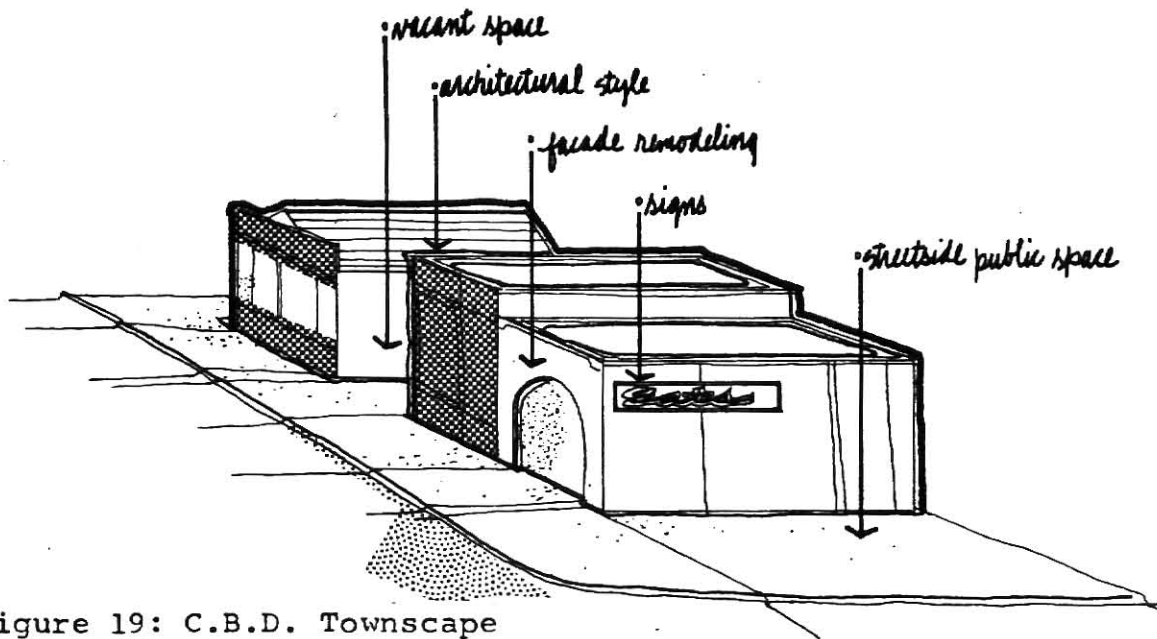


Figure 19: C.B.D. Townscape Concerns

C.B.D.: Buildings (Architectural Style and Facades)

It is not the intent of this study to emphasize architectural design, but rather to illustrate how C.B.D. architecture delineates townscape character, resulting in either a positive or negative impression. In basic form the architecture of Arrowhead C.B.D.s is aesthetically adequate, inviting because of its functional honesty and visual simplicity. Unfortunately so many of the C.B.D. structures have been physically altered that the original visual integrity has been lost.

Therefore, preservation of buildings which are significant, either architecturally or historically, is a foremost C.B.D. concern, for these buildings provide an important contribution to the community character.

In spite of the fact that Arrowhead communities lack a great number of early "period architecture" examples, there

are, nevertheless, a few original structures showing historic value. Without elaboration these C.B.D. buildings remain visually authentic, a viable asset to townscape quality. Most of these buildings, built before 1940, are in excellent condition, and to a large extent they remain in original form. The City Hall and Community Center of Ely, the Post Office of Chisholm, and the Town Hall of Iron are examples of significant architecture to be preserved as C.B.D. landmarks.

The majority of the Arrowhead structures can not be considered "architectural landmarks". Most of the C.B.D. structures have undergone such drastic cosmetic treatments that pure restoration would be economically impractical. However, a few good examples of adaptive restoration do exist. The Rickus Building, gutted by fire and remodeled by the Vertin family, is one of the better examples. While a case could be made for the inappropriateness of "false-beams" and the mansard roof, the effect is nevertheless a complete visual statement identifiably inviting to the tourists visiting Ely.

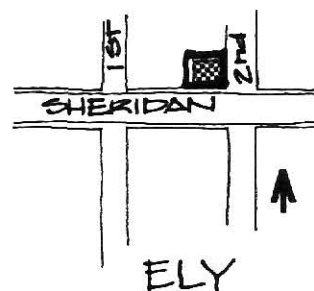
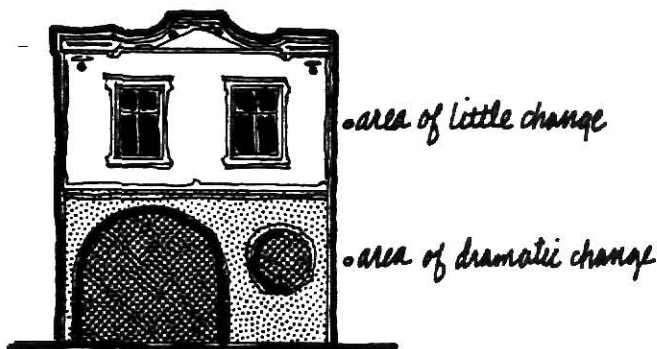


Figure 20:

Vertin Building
Ely, Minnesota

A visual analysis of the Arrowhead C.B.D. environments indicates a conspicuous lack of unity. Variety in architectural style, remodeling materials, and business signage blend into jarring commercialized images that neither inform the public or attract user participation. Visual potential is ultimately concealed by cosmetic "goop" that jeopardizes the advantageous qualities essential to a positive commercial image.

It is significant to note that while nearly all street level facades have been remodeled, the upper stories remain virtually untouched. It is not difficult to imagine the pleasant visual quality that could result if the structures were appropriately restored. Aluminum panels, tarpaper "brick", and plastic detailing are glaringly unrelated to the original architecture forms and functions.



TYPICAL FACADE

Figure 21: Typical Remodeling Schematic

Disunity results when there is poor visual continuity between adjacent buildings; it is even more apparent when the facade of a single building lacks image continuity.

Examples of visual problems could be illustrated by any C.B.D. of the Arrowhead Region. The following townscape examples have been selected because they represent qualities that are typical of the small towns.

While the scale and rhythm of the C.B.D. fabric is essentially good, the overall C.B.D. image is weakened by chaotic signing types and inappropriate remodeling efforts. Critical information about businesses are lost to 7-Up, Hamms, and Coke advertising. Viewer attention is often channeled to irrelevant facade detailing, and few of the structures show common design or material relationship.

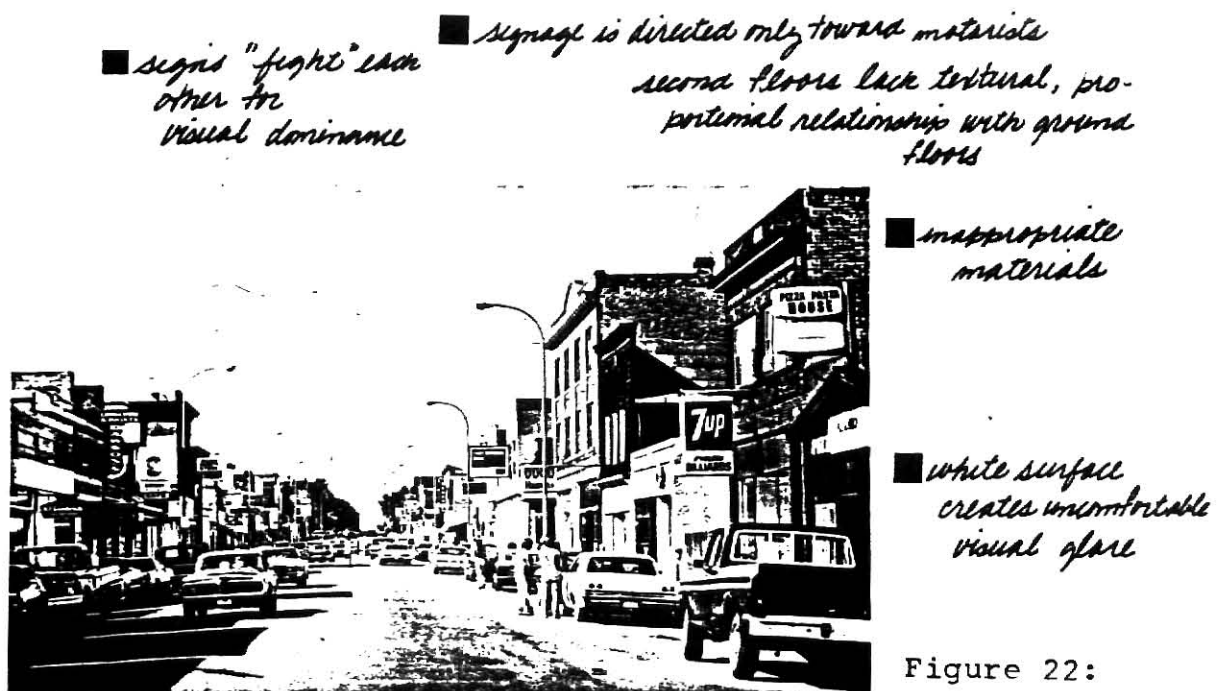


Figure 22:

BIWABIC C.B.D.

- as with the signs 'fighting' each other, so do the textures and colors of the storefront facades
- sign design creates visual tension reducing C.B.D. unity
- building levels as well as sides show little visual relationship. building groups indicate poor functional relationship



CHISHOLM

- "tarpaper brick" and simulated wood conceal natural brick structure
- aluminum sign dominates the storefront facade, covering authentic materials and reducing relationship with other buildings
- building facades do not suggest interior function
- mansard roof divides the building facade, its appearance being clearly "tacked-on".



- inappropriate window detailing minimizes visual quality

ELY

- signing is a mirage of chaotic images, difficult to read because of their visual competition

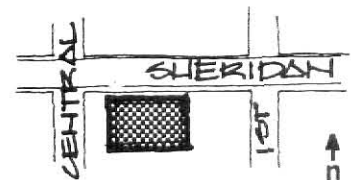
Figure 23:

A closer look at the C.B.D. structures gives clearer insight for understanding the visual problems. In this study yellow aluminum siding contrasts with red, white and blue vertical boards, while the adjoining facade makes its visual statement with fake-brick and cedar-shake siding.



- colors and textures visually conflict
- vertical and horizontal facade elements 'fight' for image dominance
- asphalt siding has connotations of "cheapness," thus giving pedestrians a false impression of the merchandise within

Figure 24:



prototype

The casual character of this building group could be a strong image maker for the Ely C.B.D., capitalizing on the "mining town character". These structures are so typical of the early mining days that not telling that story disregards an obvious opportunity.

Other building groups demonstrate similar visual disregard. In this case the problem is not inappropriate signing or

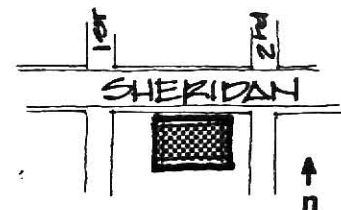
remodeling; rather, the problem involves the inappropriate relationship of three commercial structures. Maximizing the visual harmony among such dissimilar structures is a significant challenge, but clearly it is within the scope of this study. At present the combination does not maximize either individual images or the group image. Authentic yellow brick, pine siding, and pale green stucco contrast sharply with the unobtrusive yellow-ochre craft gallery. The third building combines red and green simulated wood and white trim. While it might appear that these buildings are vacant, they are open, dependent to a large extent upon the tourist business.



prototype

Figure 25:

- First floor windows have little proportional relationship with second floor windows
- architectural dissimilarities are emphasized by inappropriate color and material selection
- building function has not been emphasized



Developing a better image definitely does not require adding more detail for detail's sake. The following example clearly shows that well-intentioned efforts if inappropriately combined will actually reduce visual quality of the C.B.D.

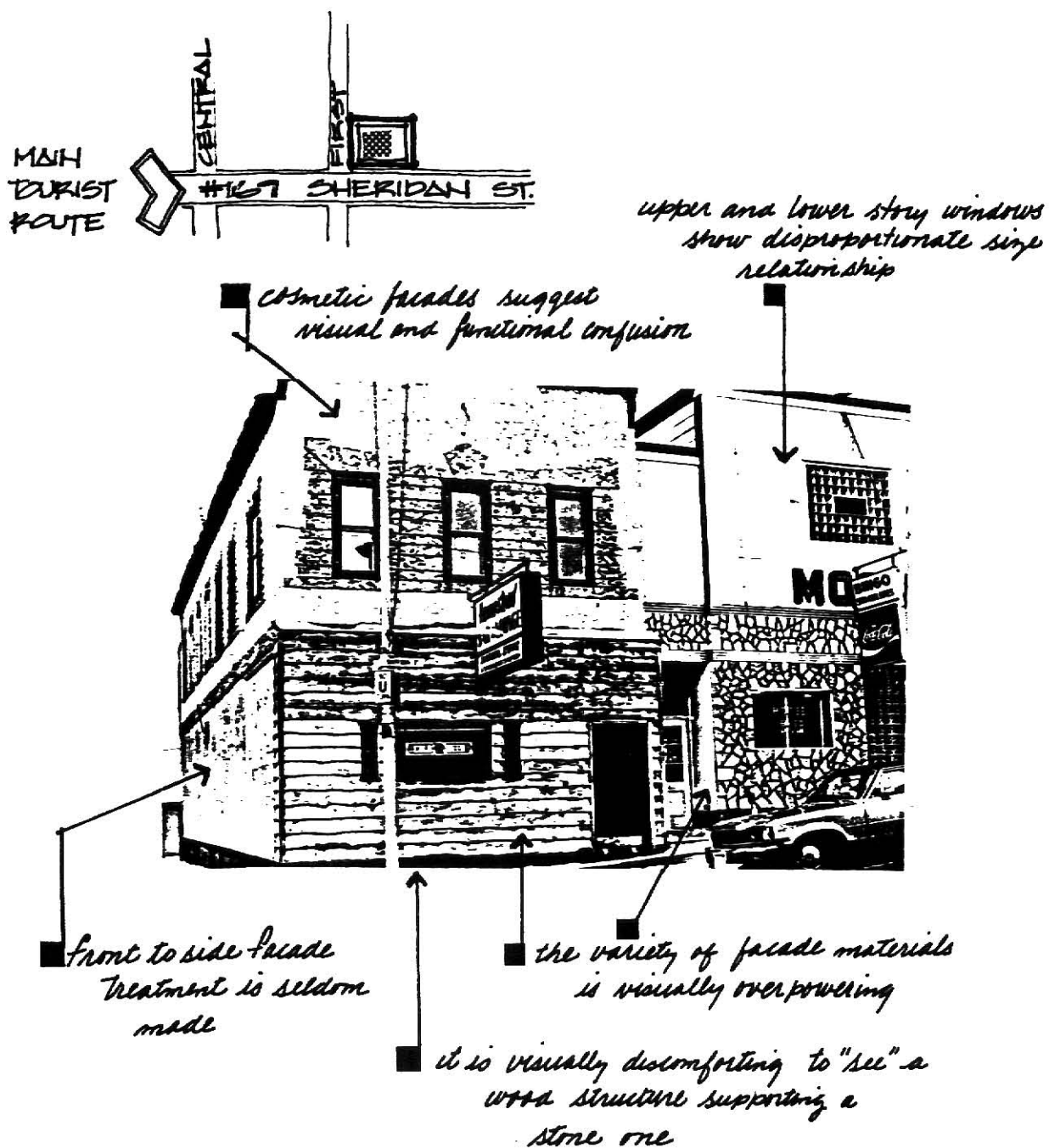


Figure 26:

prototype

- weathered board (casually fastened to block the pedestrian trail between buildings) is an inappropriate visual base for the intricately detailed lattice that it supports.
- the temporary appearance of plywood glass replacements contrast unfavorably with the ornate "castle facade"; entrance and corner sentinels are garishly highlighted by green wood and yellow stucco.



- brown paper is not a visually acceptable sun screen for southerly exposed streetside windows.
- the monumental aspirations of the streetside "castle facade" are lost in the scale and stature of adjacent building images.
- Red stained glass panels, intricate stone detailing and stained cedar shake siding contrast poorly with the tarpaper image of the buildings' side.

Figure 27:

prototype

C.B.D. Buildings (Architectural Style and Facades)



recommendations:

Providing continuity within the C.B.D. requires efforts to maintain individual building character as well as building group character. Individual remodeling can not be done without affecting the visual integrity of the whole C.B.D. townscape.

Improvement of one building may be felt to be the impetus for improving other building facades. Such a belief is reason enough to ensure that any C.B.D. design is an exemplary solution compatible with the town character, scale and function.

While it is true that constructing or altering business facades within the Arrowhead communities can benefit the visual C.B.D. quality, such projects should primarily help the building function as an individual unit, then as a part of the total C.B.D. townscape. Ideally the visual qualities indigenous to the best townscapes of the region will be reflected by each facade alteration or building addition.

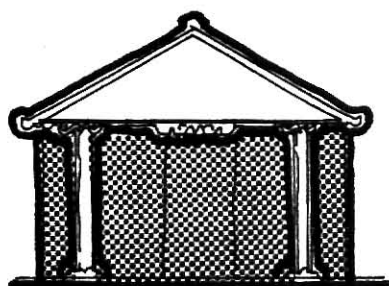
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design principles:

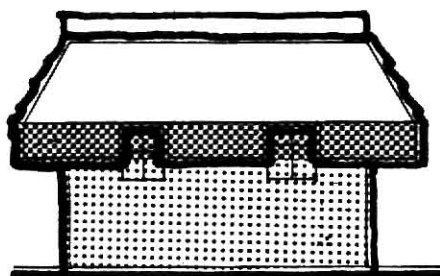
C.B.D. Buildings

1. STRIVE TO REPAIR ORIGINAL FACADE. REPAIR OR REPLACE WORN FACADE ELEMENTS RATHER THAN CONCEALING THEM WITH A SUPERFICIAL, COSMETIC TREATMENT. REPLACING SHINGLES AND WINDOW PANES WILL BE LESS COSTLY WITH BETTER RESULTS THAN A COMPLETE "FACE-LIFTING".
2. USE AUTHENTIC MATERIALS IN CREATING THE FACADE. "PLASTIC WOOD" AND "PAPER BRICK" ARE NOT ACCEPTABLE BUILDING MATERIALS. PLASTIC, PORCELAIN OR UNPAINTED ALUMINUM ARE NOT APPROPRIATE WINDOW FRAME MATERIALS.
3. LIMIT THE NUMBER OF MATERIAL TYPES USED: 1. BRICK, 2. BRICK AND WOOD, 3. WOOD, 4. WOOD AND STONE, 5. STONE, 6. STUCCO, 7. STUCCO AND WOOD ARE ACCEPTABLE COMBINATIONS. USING ALL THESE MATERIALS TOGETHER WILL REDUCE VISUAL UNITY OF THE FACADE.
4. UNIFY BOTH THE UPPER AND LOWER PORTIONS OF A BUILDING FACADE. THEY SHOULD NOT BE TREATED SEPARATELY.
5. TREAT THE SIDES OF A BUILDING WHEN THEY ARE IN PUBLIC VIEW.
6. MAJOR COMMERCIAL ENTRANCES SHOULD BE CLEARLY IDENTIFIABLE AND RELATE TO THE SCALE OF THE FACADE. IT IS IMPERATIVE THAT AN ENTRANCE IS NOT VISUALLY OBSCURED BY FACADE TREATMENT.
7. A BUILDING FACADE MUST PROJECT A VISUAL STATEMENT OF ITS PURPOSE. VISUAL HONESTY WILL SUPPORT IDENTIFICATION, e.g. A RESTAURANT SHOULD "LOOK" LIKE A RESTAURANT AND A HARDWARE STORE LIKE A HARDWARE STORE.
8. DEVELOP AN ACCEPTABLE C.B.D. COLOR SCHEME. RICH "EARTH COLOR" AND OFF-WHITE ARE THE MOST APPROPRIATE BASE COLORS WITH BRIGHTER PRIMARY COLORS RESTRICTED FOR SIGNAGE AND ENTRANCE AREAS. CHALKY PASTELS INCLUDING PINK AND LAVENDER SHOULD BE AVOIDED.
9. DO NOT PAINT NATURAL MATERIALS SUCH AS BRICK OR STONE UNLESS DIFFERENT BRICK TYPES OR COLORS ARE BEING UNIFIED.
10. AVOID PURE WHITE. VISUAL GLARE CAN BE REDUCED BY USING OFF-WHITE PAINT OR MATERIALS.

11. SELECT DETAILING APPROPRIATE TO THE REGION. ORNATE, COLONIAL DETAILS ARE NOT APPROPRIATE. OTHER STYLIZED DESIGN ELEMENTS SUCH AS THE FALSE MANSARD ROOF ARE SIMILARLY INAPPROPRIATE.

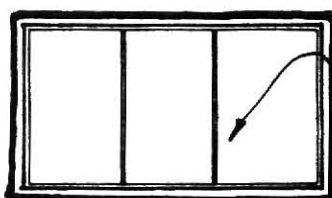


colonial



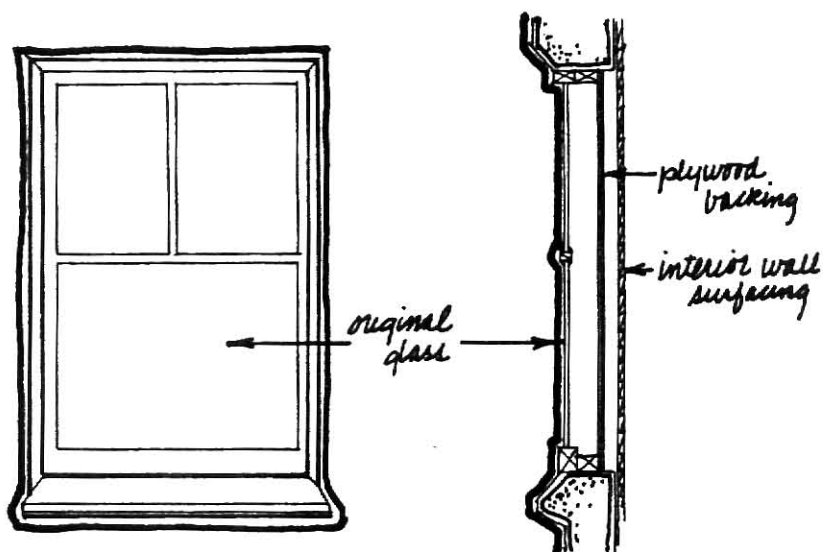
false mansard

12. LARGE HORIZONTAL WINDOW PANES ARE NOT APPROPRIATE. LARGE PANELS OF WINDOW GLASS CAN BE DESIGNED TO APPEAR VERTICAL.

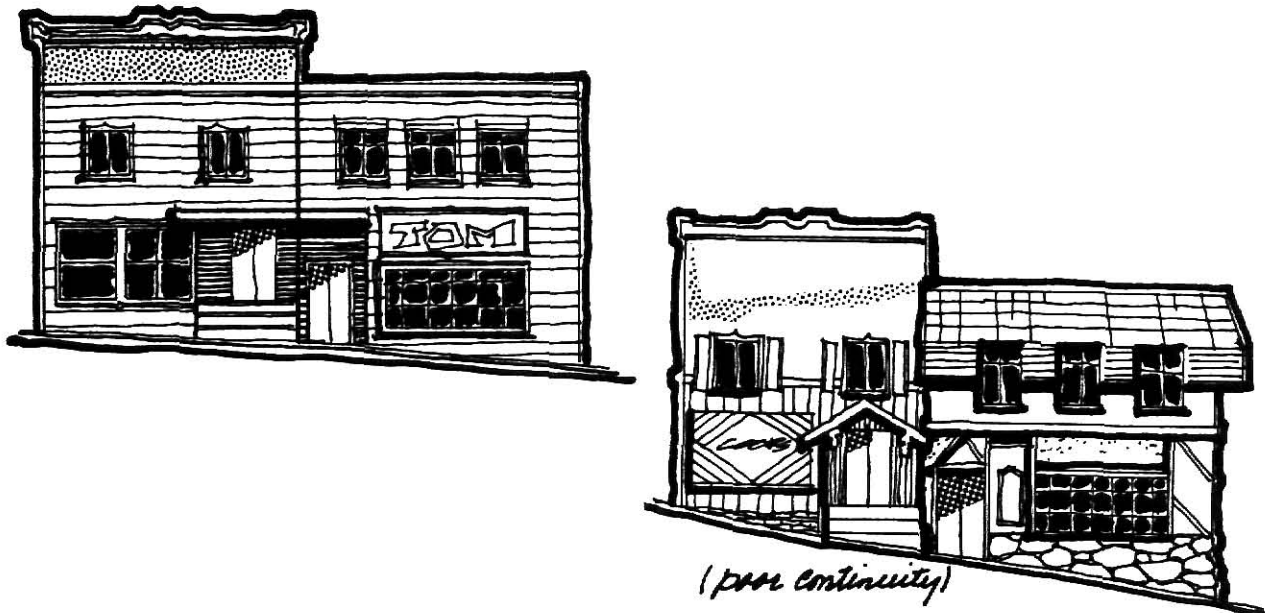


vertical trim

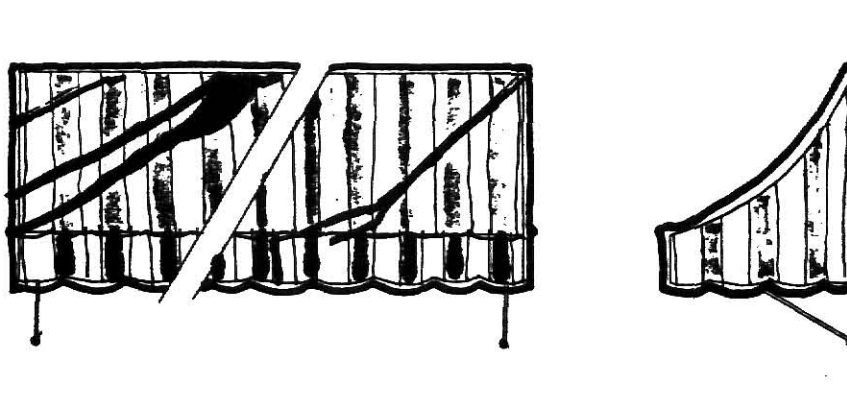
13. REPLACE OBSOLETE WINDOWS WITH CONCERN FOR BOTH THE INTERIOR AND EXTERIOR QUALITY OF THE BUILDING. USE PLYBOARD PAINTED BLACK TO ALLOW THE ORIGINAL WINDOWS TO APPEAR AS WINDOWS EVEN THOUGH THEY NO LONGER FUNCTION, OR MATCH WALL MATERIALS WHEN "CLOSING-IN" ORIGINAL WINDOWS.



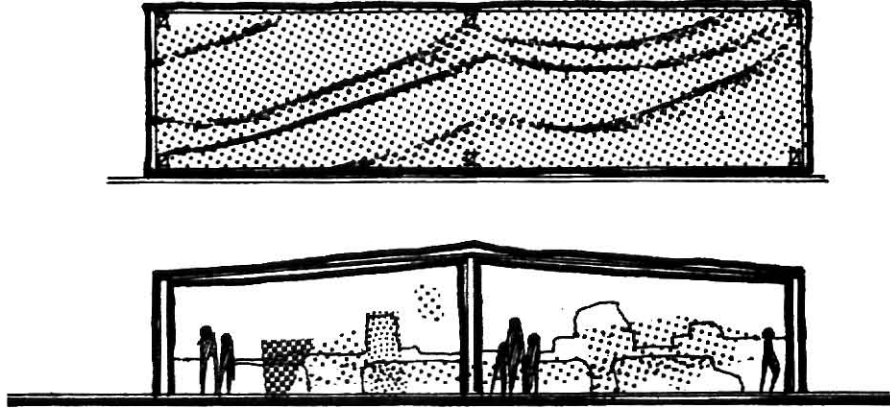
14. RELATE STRUCTURE TO ADJOINING STRUCTURE (THROUGH ROOF-LINE, BUILDING MATERIALS, AND FACADE DETAILS) FOR GREATER GROUP CONTINUITY.



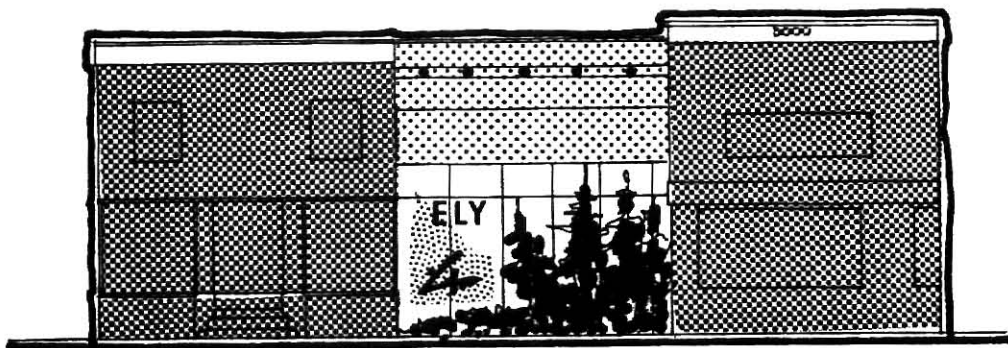
15. METAL OR PLASTIC AWNINGS ARE NOT APPROPRIATE. CANVAS AWNINGS (TREATED WITH PLASTIC FIBER) ARE VISUALLY ACCEPTABLE FOR COMMERCIAL FACADES.



16. CONSTRUCTION OF SIMPLE CANOPIES CAN GREATLY INCREASE FLEXIBILITY OF A BUSINESS, AND ADD VARIETY TO THE STREET-SCAPE. ARTS, CRAFTS AND ARTIFACTS WOULD BECOME A PART OF THE SUMMER BUILDING FACADE. THE CANVAS CAN BE TAKEN DOWN AND STORED DURING THE WINTER MONTHS.



17. UTILIZE VACANT C.B.D. STOREFRONT WINDOW DISPLAY SPACE. THE STOREFRONT IS IDEAL FOR PROMOTIONAL DISPLAYS OR COLLECTIONS OF ARTIFACTS THAT ARE OF INTEREST TO TOURISTS. A TEMPORARY SYSTEM OF PANELS MIGHT ALSO BE CONSTRUCTED TO COVER A BUILDING FACADE PRIOR TO DEMOLITION OR DURING RECONSTRUCTION. THESE PANELS ARE SUITABLE FOR INFORMATIVE STREET GRAPHICS.



C.B.D.° Vacant Lots

In addition to the facades of new or older buildings, townscape quality is influenced by the condition of vacant lots within the C.B.D. Communities of the Arrowhead Region have many lots that lie unused or that develop uses inappropriate to the best visual quality. Typical of minimally maintained property, they are collectors of "junk" and visual litter.

The process of establishing appropriate uses for these vacant C.B.D. lots is usually referred to as C.B.D. "infill". Such infill might include architectural additions, or the lot might simply take on a new physical appearance in order to encourage a different C.B.D. function. All design principles stated for "Building Facades" apply to architectural infilling within the C.B.D. Additional recommendations specific to the visual qualities of new building design for architectural infill are particularly relevant if the essential townscape character is to be maintained.

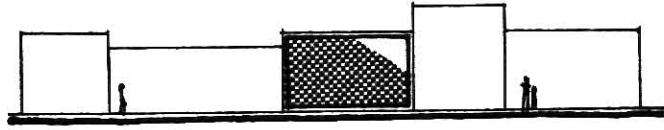


Figure 28:

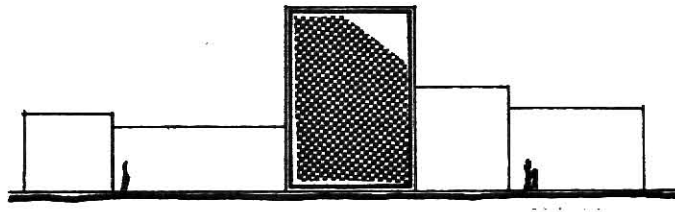
Typical Vacant
C.B.D. Lot

design principles:

1. RELATE A NEW BUILDING TO THE SCALE AND RHYTHM OF THE C.B.D. SKYLINE. A NEW STRUCTURE SHOULD PRESERVE THE ESSENTIAL PROPORTIONS OF THE EXISTING BUILDINGS.

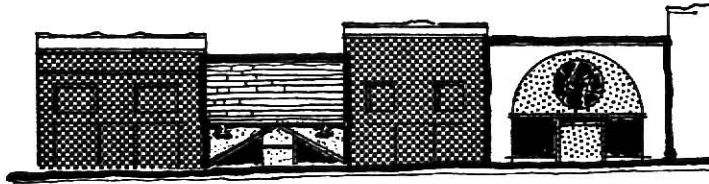


Appropriate Proportion for Architectural Infill

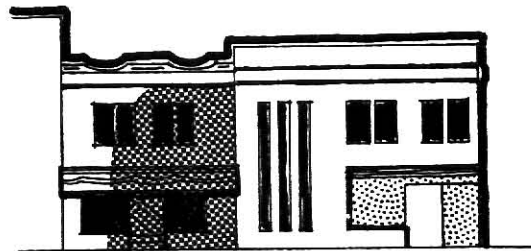


Inappropriate Proportion for Architectural Infill

2. RELATE SOME DESIGN ELEMENTS OF A NEW BUILDING TO THE EXISTING DESIGN ELEMENTS OF ADJACENT FACADES.

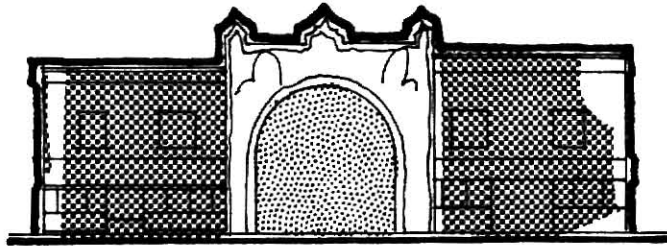


Poor Visual Relationship of Design Elements

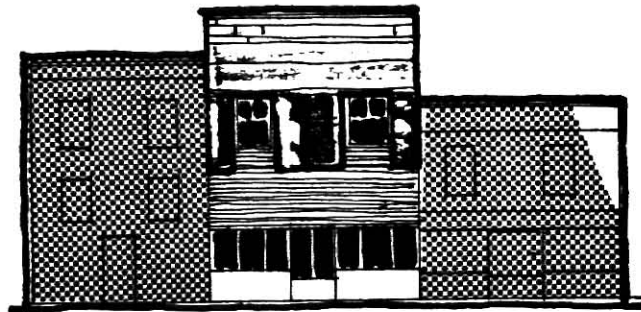


Design Elements Show Better Visual Relationship

3. RELATE TO THE REGIONAL HERITAGE. BUILDING STYLES PLACED OUT OF CONTEXT IN A C.B.D. RELATE POORLY TO THE EXISTING STRUCTURES.

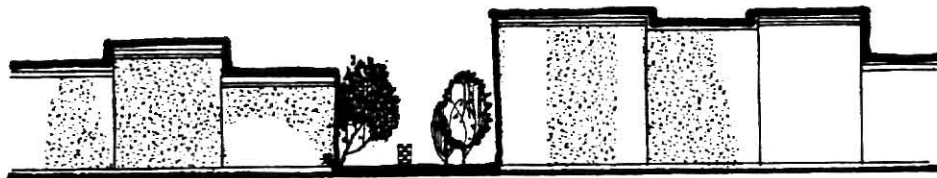


A Spanish Arch built of plastered adobe is foreign to the cultural heritage of Arrowhead communities.

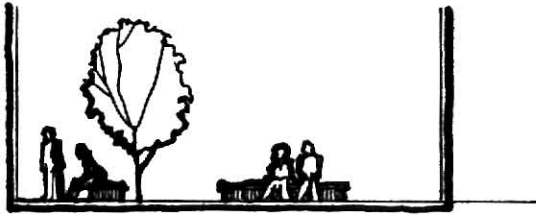


The Mansard roof was designed to allow three-story building construction in France. This design concept is appropriate for Arrowhead communities if it is used for a similar purpose. As a cosmetic addition it is rarely effective.

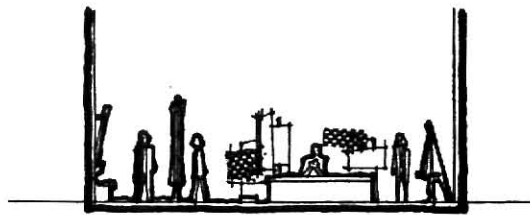
4. ADAPT THE VACANT LOT TO PROVIDE A NEW COMMUNITY SERVICE. THE UNUSED COMMERCIAL PROPERTY CAN BE REHABILITATED IN SEVERAL APPROPRIATE WAYS THAT ARE SUPPORTIVE OF THE BEST COMMUNITY IMAGE.



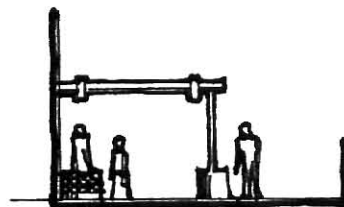
The vacant C.B.D. lot might become a small alcove of green space (a "mini-park"), providing visual relief from the mass of building forms and pavements.



The vacant lot might become a pedestrian rest area where people gather to converse and relax while shopping in the C.B.D.

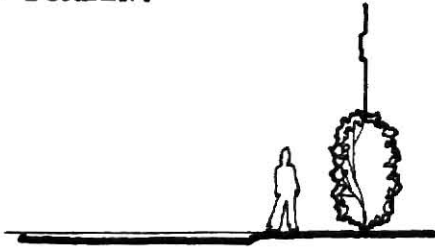


The vacant lot might become an out-of-doors art gallery or craft market.

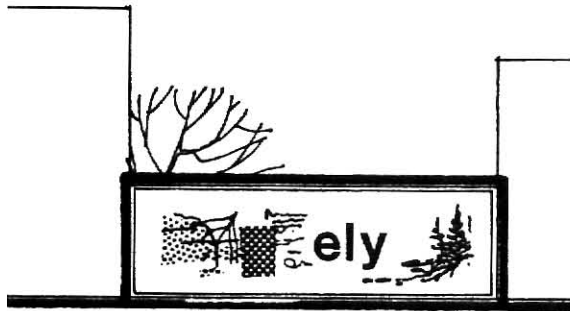


The vacant lot could even become an exterior extension of a C.B.D. business. With minor alterations the space could support a "garden restaurant", recreation area or tourist-oriented concession outlets.

5. WHEN THE VACANT LOT SUPPORTS SERVICES OR ACTIVITIES NOT CONDUCTIVE TO THE BEST TOWNSCAPE IMAGE, CONSTRUCT A STREET-SIDE VISUAL SCREEN. PROMOTE THE BEST TOWNSCAPE IMAGE BY THIS SCREEN.

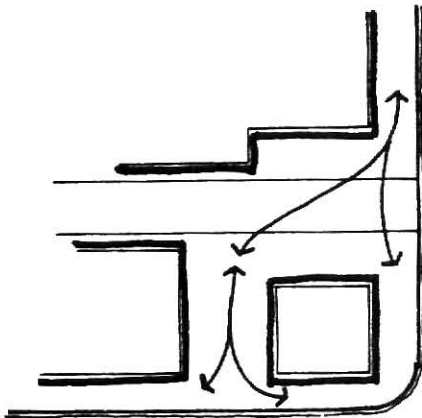


The screen might be vegetative.



The screen might be a structural element such as a fence or wall that promotes tourism and community activities.

6. PROMOTE THE NATURAL CIRCULATION PATTERNS WITHIN THE C.B.D. BY PROVIDING SIMPLE, WELL-MAINTAINED PEDESTRIAN PATHS THROUGH THE VACANT LOT.



Note: When the vacant lot is privately owned, a flexible lease may be arranged whereby exemption of liability is exchanged for property maintenance by the City.

C.B.D.: Business Signs

Business signs are an accepted part of the commercial townscape. Tourists rely upon signs to help them locate products and services in the unfamiliar towns. They quickly associate a sign image with a function, much like a face suggests a name.

We have all grown accustomed to the more common commercial signing images. "Kentucky Fried Chicken" wouldn't be as recognizable without the colonel and his bucket, nor would "Mac Donalds" be as identifiable without its fluorescent yellow arch.

The Arrowhead communities have some sign images that have developed peculiar but successful sign character. "Piggly Wiggly" food stores always show a smiling pig, outfitting companies tend to show a canoe being carried across a portage, and resort signs promote the lakes and fishing activity.

There is such a wide variety of signs within the Arrowhead communities that an entire study could be made of them. Old signs should be preserved as part of the visual character of the Arrowhead mining town. To legislate their removal and insist that all signs be of specific style and proportion would contradict the efforts to preserve a mining town image.

There are several reasons, in addition to preservation, why these old signs need to remain. They are visually compatible with the original structures. They are far more creative and honest than the newer, plastic versions, and the

signs add visual interest to the horizontal and vertical planes of the typically barren street space.



The neon sign's glowing or flashing color at night also creates visual excitement to an otherwise dead C.B.D. townscape. Only a few old signs remain in functioning condition, but the limited number of such signs add visual variety to the C.B.D. image.



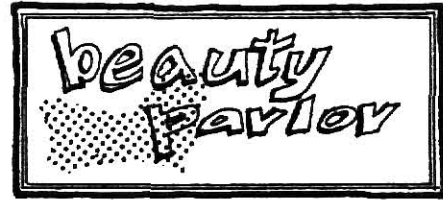
Figure 29: Preservation of Charming Old Signs

Most of these old signs have been, or are in the process of being, replaced by "contemporary" design versions. To assure that signs do in fact add to the C.B.D. townscape rather than detract, the following design principles are stated to encourage better signage in the small town business districts.

design principles:

Business Signs

1. LETTER SIZE AND STYLE OF SIGN NEED TO SUGGEST THE FUNCTION OF THE BUSINESS. IN MOST CASES ORNATE SCRIPT IS NOT APPROPRIATE BECAUSE OF ITS POOR LEGIBILITY.



Lettering style
must indicate the type of
service or trade being offered.

2. ALWAYS AVOID DESIGN FOR DESIGN'S SAKE. IT IS USUALLY WISE TO COMBINE SYMBOLIC GRAPHICS WITH WRITTEN INFORMATION.

b
BAR

b.a.
bar

Symbol might be clever, but

this sign will be
understood.

3. "Sans- Serif" LETTERING STYLE HAS THE GREATEST LEGIBILITY. "Serif" LETTERING STYLE IS ALSO APPROPRIATE FOR BUSINESS SIGNAGE.

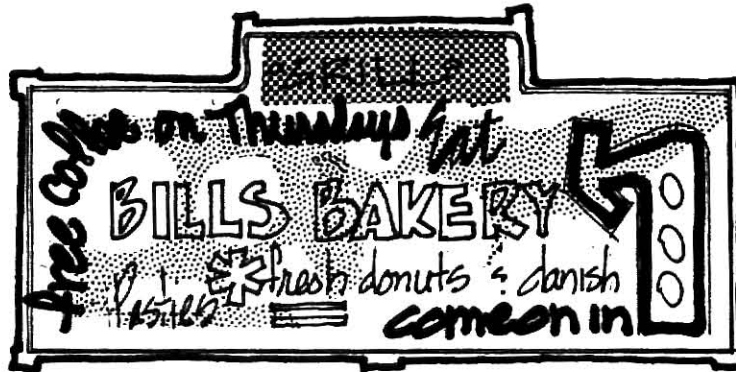
E

Sans-Serif

E

Serif

4. LIMIT THE AMOUNT OF INFORMATION. PROMOTE ONLY UNEXPECTED OR SPECIAL PRODUCTS AND SERVICES.



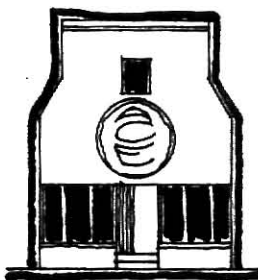
5. SIGN CONSTRUCTION CAN DETRACT FROM ITS PRIMARY MESSAGE. PLACE MULTIPLE MESSAGES ON A SINGLE SIGN BACKGROUND.



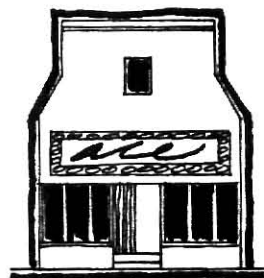
Word separation and board movement reduce legibility of sign message.



6. DESIGN THE BUSINESS SIGN APPROPRIATE TO THE SCALE AND STYLE OF THE FACADE.



Neither scale nor style of the sign relate to building facade.



Scale is better but the sign materials and style clash with facade.

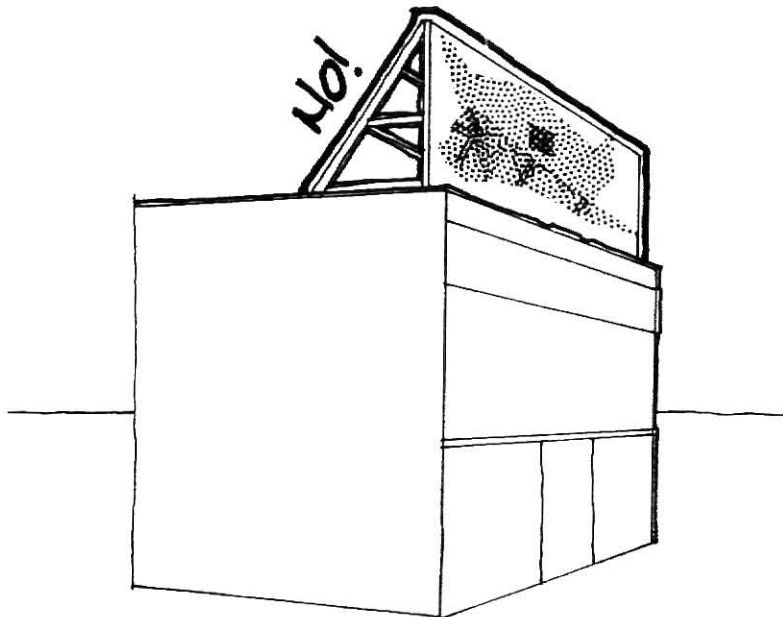


Sign simplistically lettered reflects the lines, scale and style of the building.

7. SELECT SIGN COLORS AND SIGN MATERIALS COMPATIBLE WITH THE BUILDING FACADE.
8. VISUAL CONFUSION EXISTS WHEN BUSINESSES COMPETE WITH EACH OTHER FOR CONSUMER ATTENTION. CONFUSION IS EVEN MORE APPARENT WHEN BUSINESSES COMPETE WITH THEMSELVES THROUGH GRAPHIC ADVERTISING.



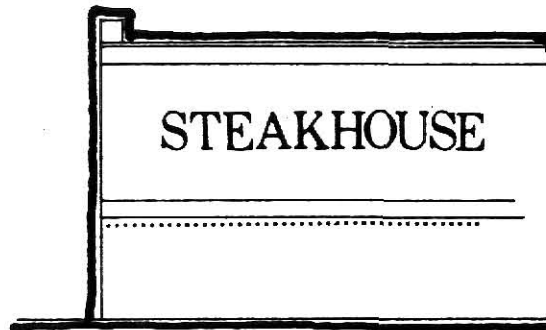
9. BILLBOARD BUSINESS ADVERTISING IS MORE ACCEPTABLE AS WALL MOUNTED GRAPHICS IN ORDER TO DIMINISH THE STRUCTURAL PROMINENCE OF THE UNIT.



10. LOCATE BUSINESS SIGN APPROXIMATING THE "EYE LEVEL" OF PEDESTRIAN VIEWERS.



11. LOCATE BUSINESS SIGN SLIGHTLY HIGHER IF MOST VIEWERS APPROACH THE BUILDING BY AUTOMOBILE.



C.B.D.: Streetside Public Space (Trees)

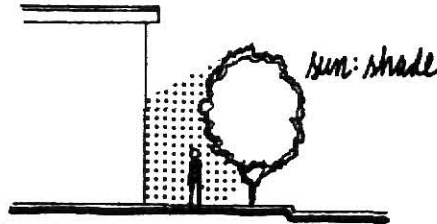
While the buildings and signs of a central business district initially attract the tourist, the streetside space encourages the tourist to remain in the area. If this space between the business structure and the street is pleasant, with activities and sights of interest, the tourist will be more likely to spend time and money in that district.

Making the C.B.D. streetside pleasant and inviting to the tourist need not be an expensive renewal project. The essential character of the small town commercial district is good, and it should not be destroyed by inappropriate urban scale design modifications. Characteristics of individual streetside public spaces will dictate what is appropriate and what is not appropriate for that particular C.B.D.

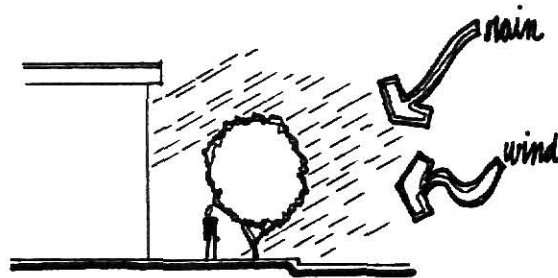
It is always appropriate to make the streetside space more comfortable for human use. At present all the Arrowhead C.B.D. townscapes are essentially barren and unprotected. One of the best ways to create a less barren, more inviting streetside space is through the use of street trees. The qualities of this street amenity are integral to successful commercial townscapes.

design principles: Streetside Space

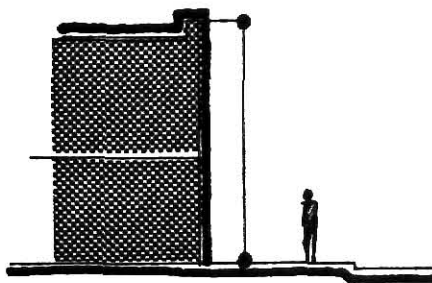
1. TREES PLANTED WITHIN THE STREETSIDE PUBLIC SPACE PROVIDE SHADE FOR PEDESTRIANS AND SHOPS ALIKE.



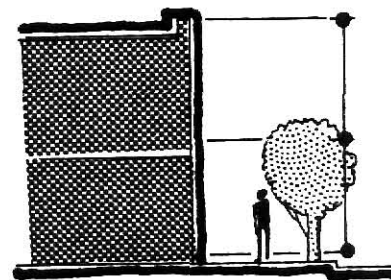
2. TREES WITHIN THE C.B.D. REDUCE WIND PROBLEMS AND GIVE ADDITIONAL PROTECTION FROM ADVERSE WEATHER CONDITIONS.



3. TREES HELP TO REDUCE THE BARREN QUALITIES OF MOST C.B.D. STREETSIDES. BY CONTRAST WITH MAN-MADE MATERIALS, THEIR DYNAMIC, CONSTANTLY CHANGING FORMS ADD "LIFE" TO THE OTHERWISE STATIC QUALITIES OF THE COMMERCIAL DISTRICTS.
4. TREES WITHIN THE C.B.D. STREETSIDE REINFORCE A SENSE OF HUMAN SCALE.

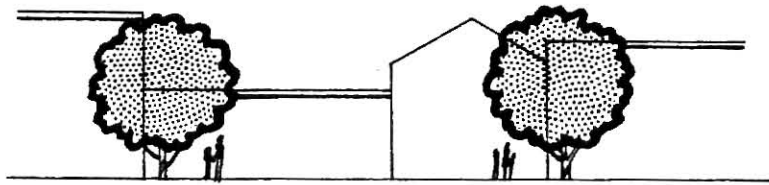


A thirty foot building and a six foot person show little relationship of scale.

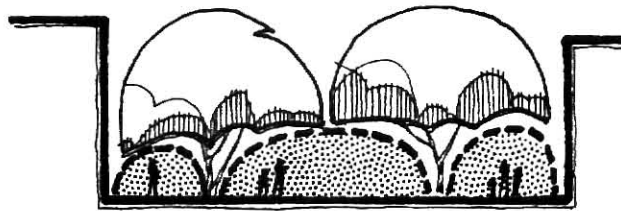


A tree can "bridge the gap", bringing building and person closer in scale.

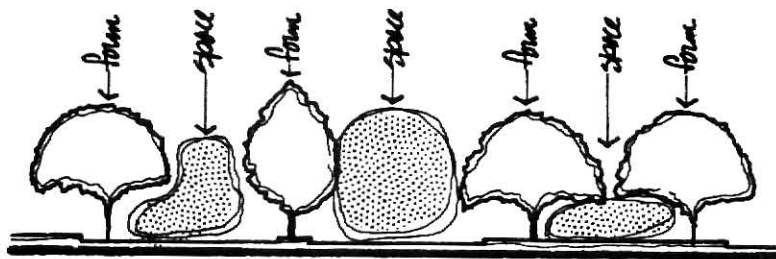
5. TREES OFTEN REDUCE VISUAL INCONSISTENCIES WITHIN THE C.B.D. TOWNSCAPE.



6. TREES PROVIDE VERTICAL AS WELL AS HORIZONTAL DIMENSION, ENCLOSING SOME SPACES AND OPENING OTHERS UP TO THE SKY.



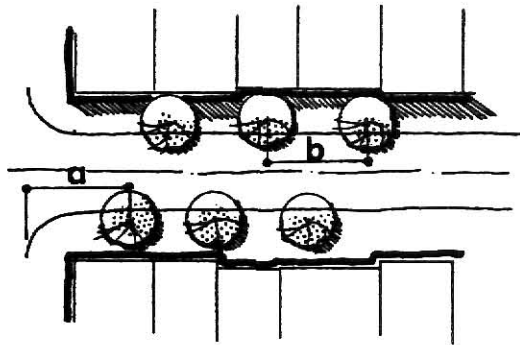
A large tree canopy strengthens vertical and horizontal spaces.



Jagged edges of the streetscape begin to relate as trees give visual space identity.

recommendations:

Streetscapes of C.B.D.s with a distance of less than ten feet between the street curb and building should plant small ornamental trees twenty to thirty feet apart. Street trees of one side should not be planted directly opposite from the street trees of the other side in order to maximize the visual effect. Small trees are also recommended when the C.B.D. buildings are single-story, when a tree canopy is not desired, or when large trees would interfere with overhead utility wires.



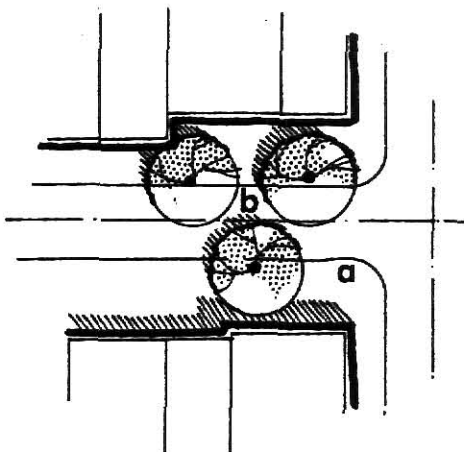
Distance **a** = approximately forty feet from the edge of the corner curb in order to keep "sight lines" open

Distance **b** = twenty to thirty feet between trees

COMMON & BOTANICAL NAME	SPACING	CHARACTERISTICS
VANGUARD CRAB <i>Malus 'Vanguard'</i>	20-30'	hardy, globe-shape, orange-red fruit is retained during the winter months
STRATHMORE CRAB <i>M. Strathore'</i>	20-30'	upright form that does not bear fruit
AMUR MAPLE <i>Acer ginnala</i>	20-30'	brilliant red fall color, adapts well to streetscape if lower branches are pruned
PINCHERRY <i>Prunus pennsylvanica</i>	20-30'	red-barked tree that produces small cherry-like berries

recommendations:

C.B.D. streetscapes that have a large distance between the curb and the building (over ten feet) can accommodate larger trees. When a street canopy is desired, medium trees from the following list should be planted thirty to fifty feet apart as the spatial limitations dictate.



Distance **a** = approximately forty feet from the corner curb

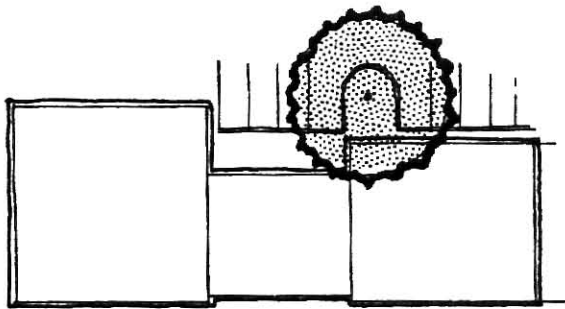
Distance **b** = thirty to fifty feet between trees

COMMON & BOTANICAL NAME	SPACING	CHARACTERISTICS
MOUNTAIN ASH <i>Sorbus aucuparia</i>	30-50'	globe shaped, slow growing, hardy
MARSHALL ASH <i>Fraxinus pennsylvanica</i> 'Marshall'	30-50'	upright, seedless
IMPERIAL HONEYLOCUST <i>Gleditsia triacanthos</i> 'Imperial'	30-50'	small, compact, lace-like foliage
GREENSPIRE LINDEN <i>Tilia cordata</i> 'Greenspire'	30-50'	small pyramid shape

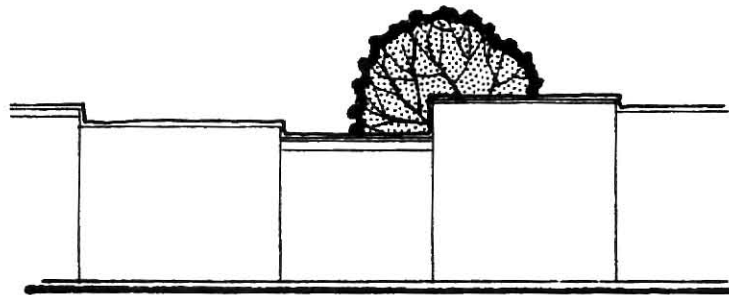
recommendations:

With the present C.B.D. street system large trees (such as Silver Maple and American Elm) should not be planted as street trees within any C.B.D. of the Arrowhead Region. However, since the scale and form of these tree species are sometimes desirable, a few possibilities for appropriate C.B.D. uses are briefly outlined.

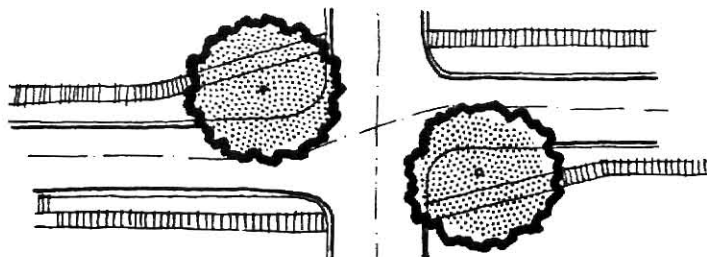
1. TO PROVIDE SHADE WITHIN OFF-STREET PARKING OR COMMERCIAL AREA.



Large trees improve the visual quality of the C.B.D. skyline and enhance functional utilization of off-street space.



2. TO PROVIDE AN ACCENT FOR PECULIAR ROAD ALIGNMENT.



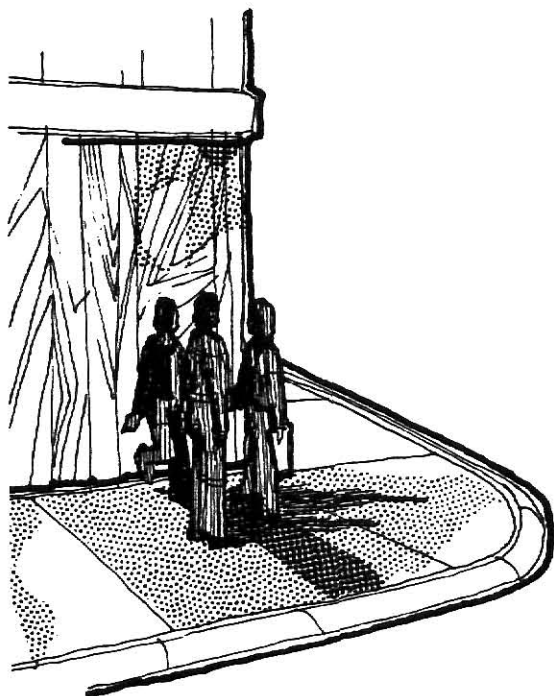
C.B.D.: Streetside Public Space (Street Furniture)

Making the streetside inviting for human activity can be accomplished by street amenities including trees. Another important element that encourages human activity is the public bench. This amenity serves a variety of visual and practical functions. At present there are few places for tourists to sit and rest while in the commercial districts. Providing such exterior rest points will increase the amount of time and money that tourists spend within the C.B.D. It is awkward to be forced to stand in the streetscape, but it can be enjoyable to sit and relax at these same locations. Because people are attracted to activity, the C.B.D. is the most natural area to enjoy waiting, conversing and "people watching".

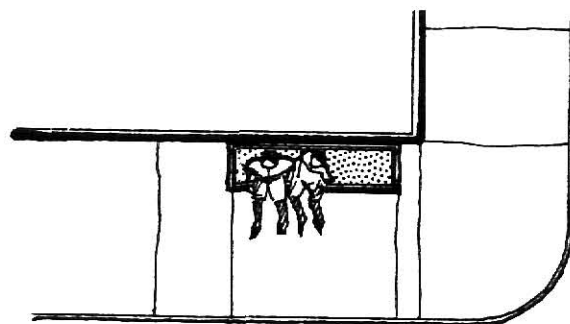
Other physical amenities can improve utilization of the public streetside space. Correct locations and design of trash receptacles, drinking fountains and similar convenience furnishings encourage pedestrian participation within the C.B.D.

design principles: Street Furniture

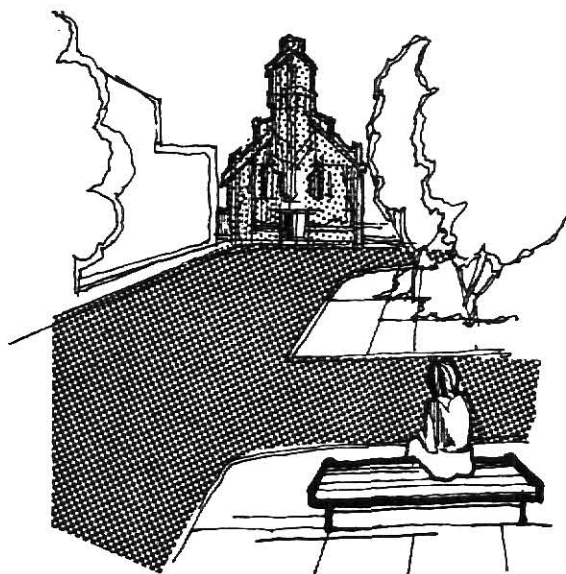
1. LOCATE PUBLIC BENCH TO AUGMENT NATURAL GROUPING TENDENCIES. THE BEST LOCATIONS FOR A BENCH ARE INDICATED BY THE NATURAL SOCIAL PATTERNS OF PEOPLE WITHIN THE C.B.D.



If it is observed that people gather on a particular street corner, provide a bench or group of benches to physically support that social activity.



2. ORIENT THE PUBLIC BENCH TO OVERSEE INTERESTING VIEWS OR ACTIVITIES WITHIN THE C.B.D.



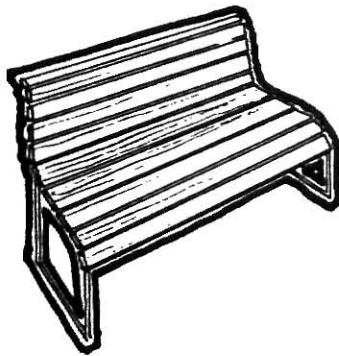
Benches can be aligned to view a structural landmark

Benches viewing a park or fountain are as appropriate as the benches found within the facility.

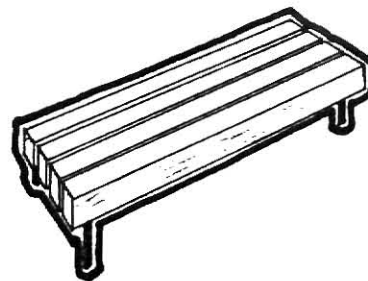


Even street traffic can be an activity enjoyable to watch if comfortably seated.

3. THE DESIGN STYLE OF THE PUBLIC BENCH CAN VARY. WHILE A CURVED BACK SUPPORT IS MORE COMFORTABLE FOR LONG PERIODS OF TIME, A PLATFORM BENCH IS LESS EXPENSIVE AND EASIER TO CONSTRUCT.

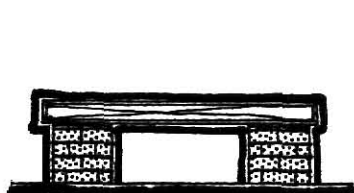


Contoured Bench Design

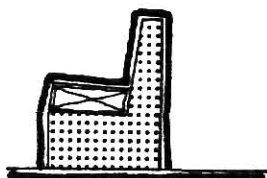


Platform Bench Design

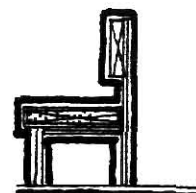
4. THE DESIGN STYLE AND MATERIALS OF THE BENCH SHOULD REFLECT A RELATIONSHIP WITH THE C.B.D. SURROUNDINGS. VISUAL AS WELL AS FUNCTIONAL QUALITIES NEED TO BE CONSIDERED WHEN DESIGNING A PUBLIC BENCH. FOR EXAMPLE, A FORMAL SETTING SUCH AS THE STREETScape ALONG THE CITY HALL OF TOWN SQUARE SUGGESTS A FORMAL MARBLE OR CONCRETE BENCH DESIGN. A CASUAL PARK SETTING SUGGESTS A LESS FORMAL WOODEN BENCH DESIGN.



BRICK AND WOOD

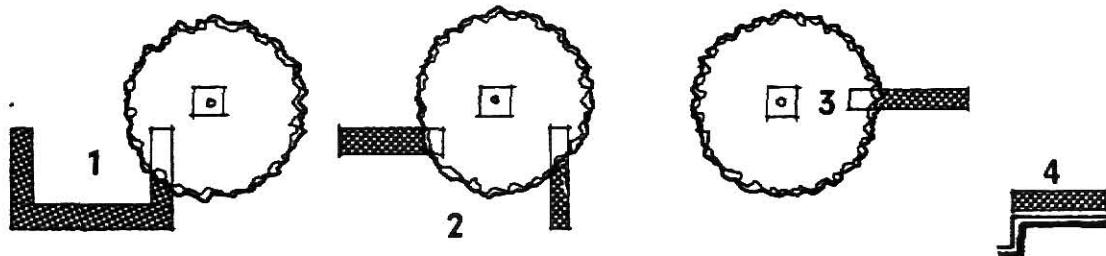


PRE-CAST CONCRETE



WOOD AND STEEL

5. THE EXACT LOCATION OF A SINGLE BENCH OR A GROUP OF BENCHES IS SPECIFIC TO EACH STREETSIDE SITUATION. SIDEWALK DIMENSION AND BUILDING ALIGNMENT WILL GENERALLY INDICATE THE MOST APPROPRIATE BENCH LOCATION. STREETSIDE POSSIBILITIES INCLUDE THE FOLLOWING BENCH ARRANGEMENTS.



Design Module Scattered Groups Free-Standing Wall-Mounted

note: FOR SAFETY REASONS IT IS ESSENTIAL THAT A BENCH OR BENCH GROUP DOES NOT PROTRUDE INTO PEDESTRIAN WALKING PATHS.

6. ONE SINGLE DESIGN FOR TRASH RECEPTACLES IS PREFERABLE. THIS ALLOWS PEDESTRIANS TO EASILY IDENTIFY AND USE THE CONTAINER. RECEPTACLES SHOULD ALSO BE PROTECTED FROM THE WEATHER, EITHER AS A PART OF THE UNIT OR LOCATED UNDER A COVER.
7. DRINKING FOUNTAINS SHOULD BE LOCATED IN AREAS OF HIGH PEDESTRIAN USE. AND THEY SHOULD ALWAYS ANTICIPATE THE PROBLEMS OF WATER SPILL AND SPRAY. SIMPLE DESIGN FORMS ARE BEST TO ALLOW VISUAL COMPATIBILITY WITH THE OTHER SURROUNDINGS OF THE C.B.D.
8. LOCATE ALL TRASH RECEPTACLES, WATER FOUNTAINS AND OTHER CONVENIENCE FURNISHINGS NEAR MAIN CIRCULATION PATTERNS WITHOUT BLOCKING PEDESTRIAN FLOW.
9. AVOID SMALL FLOWER CONTAINERS. THEY ARE ELEMENTS THAT REQUIRE HIGH MAINTENANCE. THE CONCEPT OF USING FLOWERING PLANTS TO ACCENT THE STREETScape IS GOOD, BUT IF IT IS TO BE SUCCESSFUL THE PLANT CONTAINERS NEED TO BE LARGE.
10. SPECIAL AREAS WITHIN THE C.B.D. CAN BE ACCENTED BY CHANGING THE STREETSIDE PAVING MATERIAL. BRICK OR EXPOSED AGGREGATE ARE SUITABLE PAVING MATERIALS FOR SUCH AREAS.

recommendations:

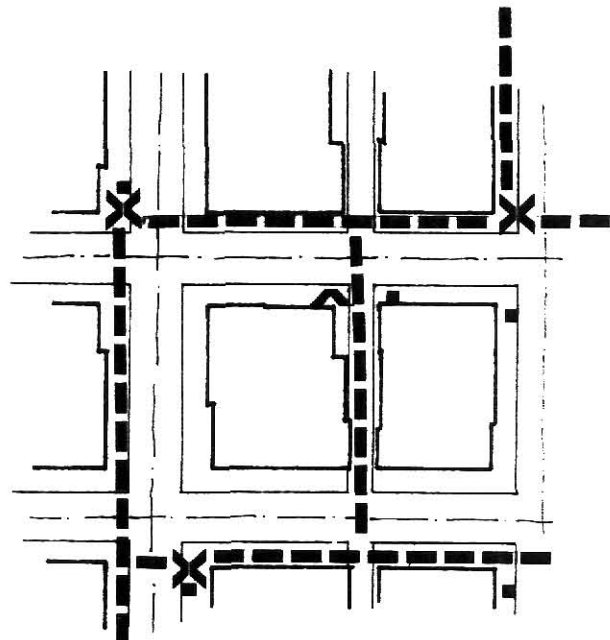
1. BENCHES SHOULD BE LOCATED WHERE THERE IS SUFFICIENT HUMAN ACTIVITY TO WARRANT THEIR USE.
2. PLACE BENCHES TO ENCOURAGE HUMAN ACTIVITY AND PARTICIPATION IN THE C.B.D. STREETSCAPE.
3. SELECT BENCH MATERIALS AND DESIGN STYLES THAT ARE CHARACTERISTIC OF THE C.B.D. ENVIRONMENT.
4. PLACE BENCHES ALONG HEAVILY TRAVELED PEDESTRIAN ROUTES: LOCATE ONE BENCH PER CITY BLOCK. (MINIMUM)
5. LOCATE AT LEAST ONE TRASH RECEPTACLE PER CITY BLOCK AT EACH STREET CORNER.
6. THERE IS LITTLE NEED FOR AN OVER-ABUNDANCE OF DRINKING FOUNTAINS. ONE OR TWO PUBLIC FOUNTAINS PER C.B.D. SHOULD BE ADEQUATE IF LOCATED NEAR AREAS OF HIGH PEDESTRIAN ACTIVITY.

LEGEND

✕ bench

■ trash receptacle

^ fountain



Section 6 - Selected C.B.D. Examples

ely, mn.

By using the C.B.D. design principles and the resource lists, the visual and functional problems of Ely's C.B.D. are economically solved, appropriate to the small town regional character.

Plans and perspectives have been drawn only to illustrate the potential of the solutions; the real statement must be made on the C.B.D. site.

prototype

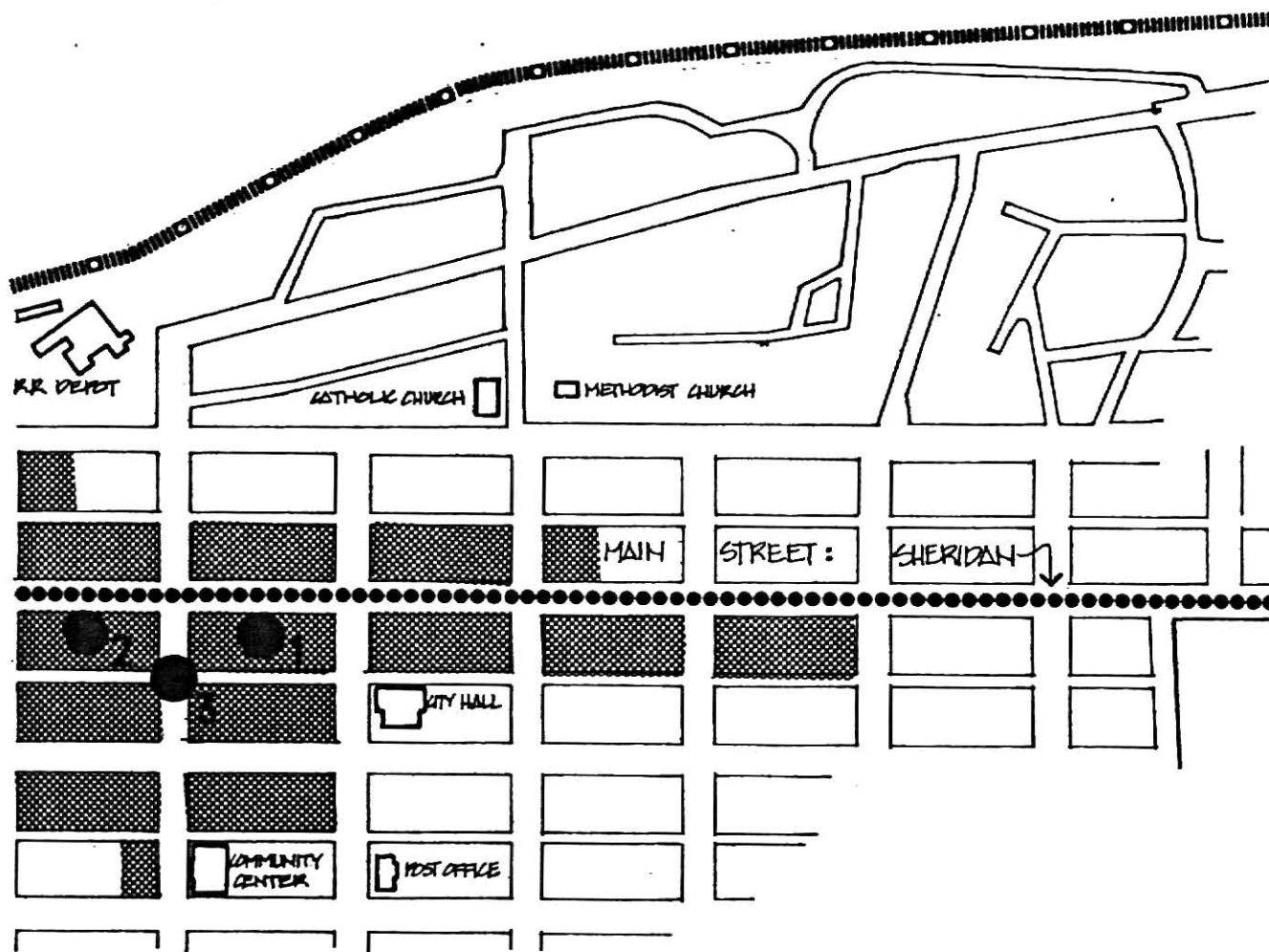


PLATE XXV

C.B.D. VICINITY MAP

LEGEND

c b d

₂ study prototype

ely, mn.

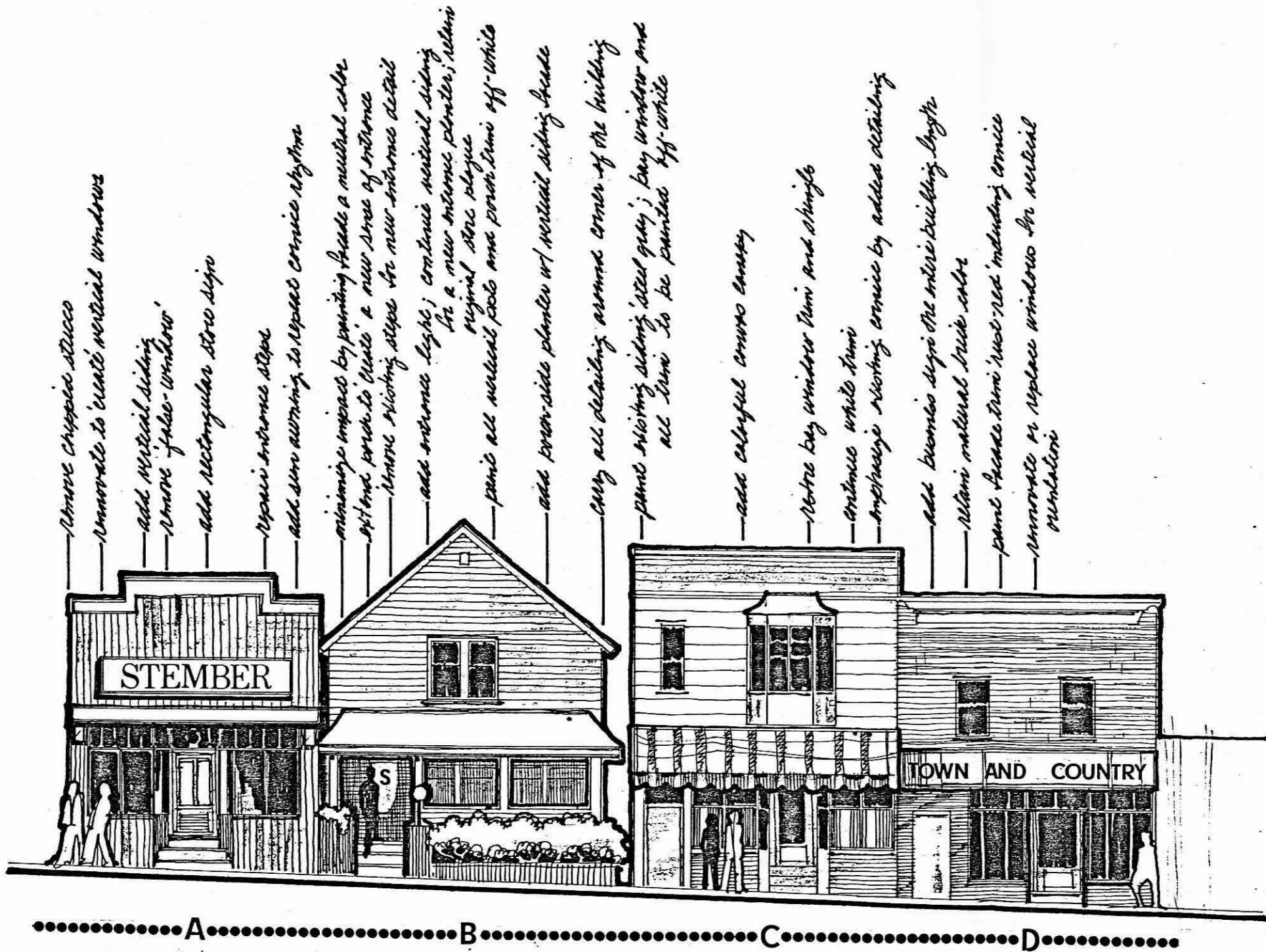
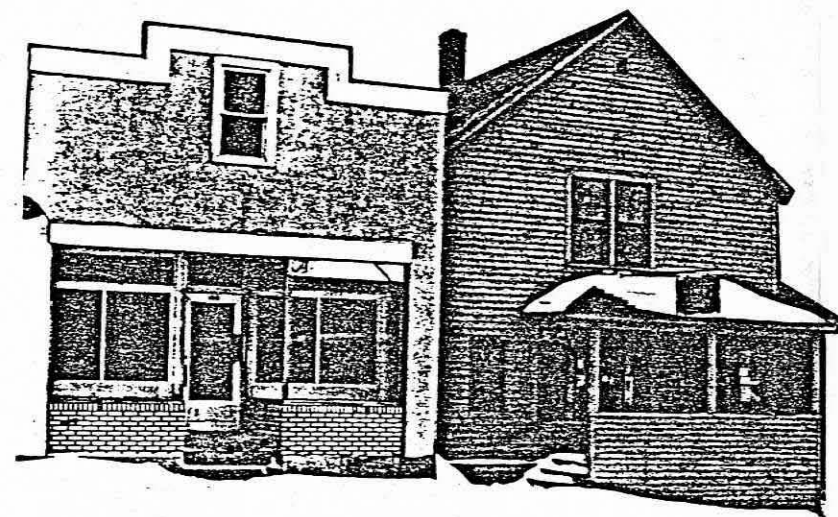


PLATE XXVI
 PROTOTYPE BUILDING

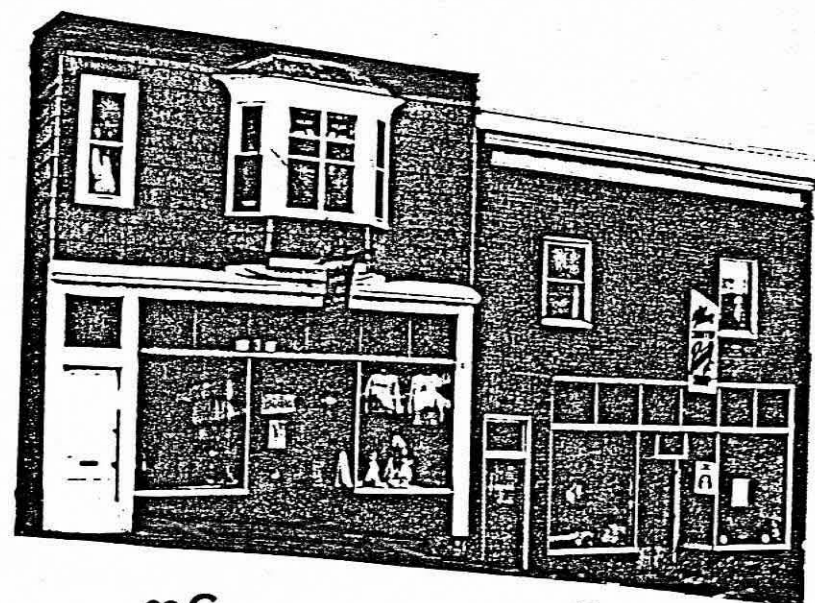
recommendations:

ely, mn.



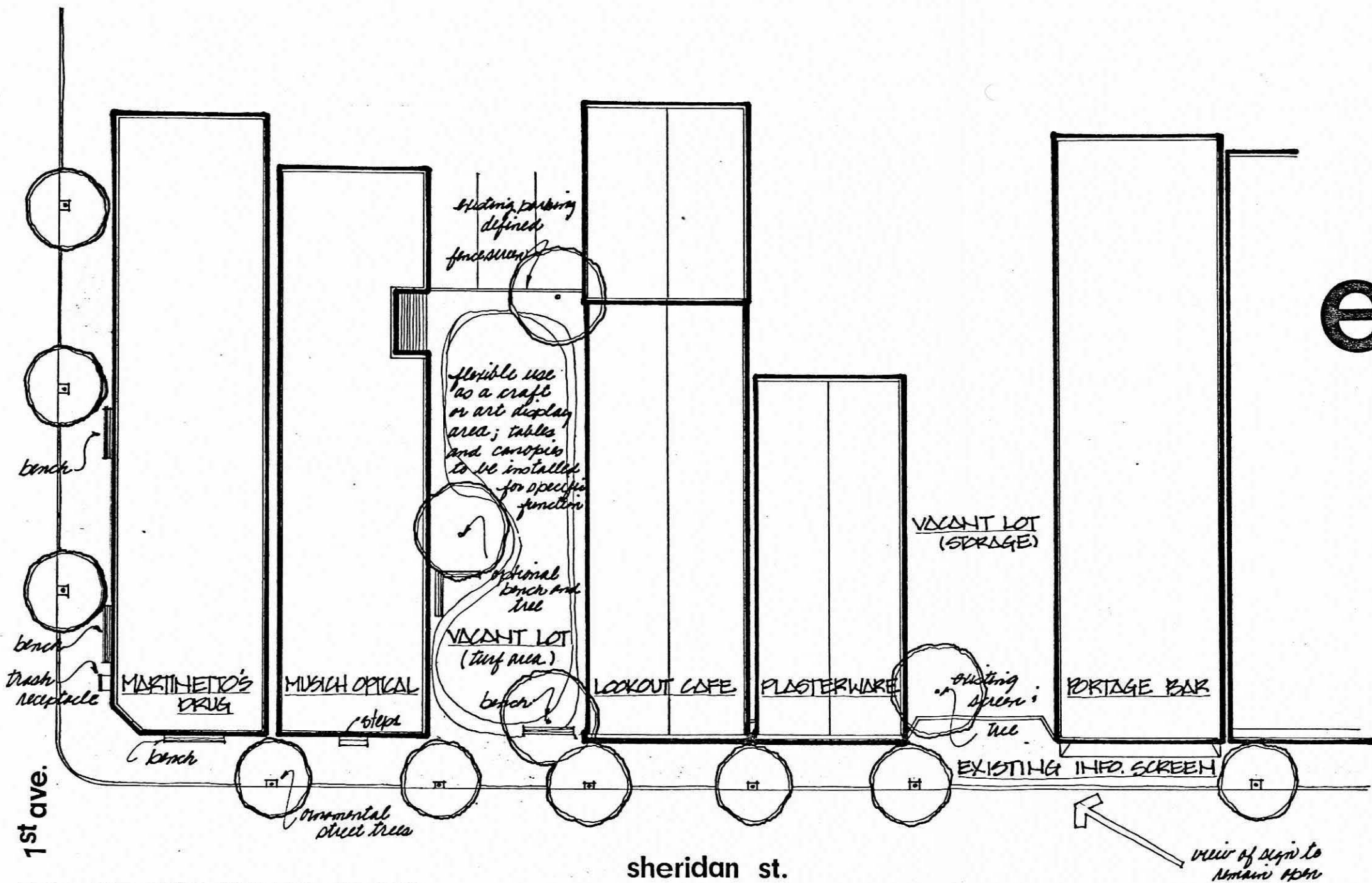
••A

••B



••C

••D



ely, mn.

prototype



SCALE 1" 20.0'

PLATE XXVII

PROTOTYPE VACANT LOT RECOMMENDATIONS

recommendations:

PROCEDURE FOR LAYMEN: REVITALIZATION OF THE CBD

1. Study the examples and design principles for the CBD and Commercial Strip studies (Chapters 5 and 6).
2. Observe the qualities of the CBD and analyze those elements which are considered to be either good or bad townscape features. Record those impressions on a sketch pad or a city map. Remember to observe behavioral patterns of tourists and residents, for they are excellent indicators of actual spatial use within the CBD.
3. Determine which elements are public problems and which are private. Encourage both the public and private sectors to participate in a revitalization program.
4. Refer to the design principles and imagine how the CBD might be improved.
5. Address a problem area that would affect the greatest numbers of people, public and private. For example, both tourists and residents would benefit from the installation of streetside benches and/or boulevard trees. Such simple projects can often result in greater community awareness and enthusiasm for additional projects.
6. After determining which portion of the CBD is of the highest priority, sketch design possibilities.
7. Discuss these possibilities with other concerned citizens and CBD merchants. If necessary, find specialized help within the community to provide technical support for design concepts.
8. A note of caution: Since the revitalization of the CBD involves merchants and their livelihoods, be sure that any proposed changes in a community CBD are discussed with them. Here, more than in any other area, a spirit of cooperation is necessary for a unified CBD image.
9. After discussing design proposals with representatives of all concerned groups, make a commitment to undertake a single project within the CBD.
10. Select project leaders to oversee sub-groups of townspeople responsible for specific portions of the revitalization project. Efforts to gain funding need to be as carefully organized as the actual implementation of the project.
11. Determine the exact quantities of material that will be

required to implement this single project. Solicit community-wide donations, merchant contributions, or community funding. Perhaps the Boy Scouts or other social service groups might contribute time and energy.

12. Gather materials and transport them to the site of the project just prior to beginning actual implementation.
13. With plans in hand, begin the project. Have fun improving the chosen portion of the CBD. Complete.
14. Address another CBD problem.

GENERAL GUIDELINES:

To revitalize the CBD, it is critical to have a general design for the entire area approved by property owners and merchants and, then, to work cooperatively toward achieving small segments of that goal.

CHAPTER 7 - CONCLUSION: Points Upon Which To Build

CONCLUSION: Points Upon Which To Build

By recognizing small town character and financial limitations, this study has established a comparative framework of feasible design concepts for town revitalization. Townscape problems of greatest impact for tourists have been solved simply and economically, acknowledging the basic long-term needs of the Arrowhead Region.

Success of these design principles for small towns depends upon (1) the degree to which they are followed, and (2) the restraint imposed upon inappropriate design proposals within the towns. It is assumed that effective city-wide zoning laws will continue to stabilize land uses and growth patterns in support of townscape design. Without implementation, townscape design principles are of little value. They have value only if they are applied to common townscape problems, and realized in physical, visual terms within the towns. Every town within the Arrowhead Region possesses potential for excellent townscape design.

Initiating town improvement requires only one interested person. That individual "doing something" is a more effective stimulant for community progress than any other means, including the comprehensive town plan. Although a town plan may be an impressive reference, it contains complicated, costly information beyond the understanding of most citizens. The town plan is also subject to continual professional updating. With limited budgets, it is better that a community spend its money for townscape improvements, rather than for more plans.

By using this study and adapting the design principles to the specific problems associated with Arrowhead entrances, commercial strips and C.B.D.s, the townspeople can revitalize their own environments. Community interest should establish the order in which problem areas are rehabilitated. Successfully improving the areas of greatest community concern will usually generate sufficient community interest to revitalize still other areas.

Phasing of work projects is suggested. The design methodology of this study will provide the continuity to blend phased improvement programs. From the design alternatives of the prototype, townspeople may select any number of design concepts according to the scope of a project. For example, it is not really important that all street trees along the main C.B.D. link be of the same species or planted at the same time; it is critical that they be selected from the appropriate plant list of this study to assure that future qualities of the C.B.D. are enhanced by "appropriate" tree species. It is also important to keep a record of "methodology" so that various groups undertaking the improvement programs may maintain continuity.

For these small towns it is likewise not feasible to begin a comprehensive C.B.D. "face-lifting", although it would be advantageous to define a general approach so that individual projects blend together when completed. The real quality of these townscapes rests with the visual variety of vernacular architecture. It would be disastrous if all buildings developed the same cosmetic facade,

and if all streets, signs and corners received the same design treatment.

Examples have been illustrated to suggest creative design options. Individual communities still make design decisions; however, it is hoped that after this study those decisions can be based upon a greater understanding of the design methodology that affects the visual quality of the town. If a merchant, for example, studied this report and implemented just one C.B.D. facade according to suggested design principles, it would result in a meaningful addition to the downtown area, and serve as an example for other merchants to follow. Unit by unit the entire block, C.B.D., and eventually the city could be appropriately transformed.

The city government must take an active part in encouraging the application of the design methodology. City governments' primary service to townscape quality is satisfactory maintenance of public lands and encouragement of ongoing projects. It is also the responsibility of the city government to see that appropriate street trees are planted, and that the public entrances provide favorable images to the tourist.

Although the town government is not solely responsible for bringing about town improvements, a climate conducive to improvement programs can be endorsed by the governing body. Actual assistance can be provided by supplying equipment and labor where appropriate. Several other groups of townspeople also must take an active responsibility.

For example, every town has some version of a "community pride committee", whether it be a garden club or J.C. group. In the past these groups have attempted to "beautify" Arrowhead towns by placing pots of geraniums near C.B.D. street corners. Few of the efforts were appreciated, and most pots were destroyed by the end of the summer. A real contribution, appropriate to the scale of the townscape environment, could be made if these groups were to undertake an "entrance improvement program" or "tree planting drive". Two hundred dollars for geraniums would instead purchase sufficient trees to landscape C.B.D. streets. This type of effort, permanent rather than temporary, would be utilized and enjoyed for several years by both tourists and townspeople alike.

Vacant public property, street boulevards, and barren entrances make ideal projects for Scouts, church groups, and social organizations. Suitable trees are available at minimal expense through Forest Service agencies. Trees and shrubs could also be collected from the forest lands surrounding each town and transplanted to new locations according to the design recommendations of this study.

Clearly, there are many ways that the visual assets of communities may be magnified and visual blights reduced. Any improvement, whether instigated by a planner/consultant or generated through consortium programs, is worthwhile. The recommendations of this study provide an alternative approach to solving townscape problems, when other methods prove ineffective.

The focus of this study is that grandiose, expensive design proposals offered by professional planning consultants are often neither necessary nor appropriate for the Arrowhead towns. Implementing the improvements is equally inefficient and impractical, and often too costly for small towns.

This study offers immediate design assistance amply illustrated and simply stated; it is a guide structured for the "do-it-yourself-community", which has more time and energy than capital for professional diagrams.

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DEVELOPING TOWNSCAPES: A METHODOLOGY
FOR IMPROVED VISUAL QUALITY

by

BRIAN L. ROTHMAN

B.S. in Landscape Architecture
University of Arizona, 1971

AN ABSTRACT OF A MASTER'S THESIS

submitted in partial fulfillment of the

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Manhattan, Kansas

1977

A B S T R A C T

An examination of the small towns within the Arrowhead Region of Northeastern Minnesota reveals that professionally prepared guide plans effect little townscape change. Clearly, a method by which such communities can evaluate and design their own townscape environments is a needed planning alternative.

Improving the visual qualities of townscapes requires the teaching of design principles to non-designer townspeople. By stating and illustrating the design principles in ways that are understandable to laymen, the principles may be learned and applied directly to town improvement programs. With the help of this thesis, small towns can formulate their own community projects without constant reliance upon outside planning agencies and consultants.

While some of the design principles and examples of this study may be suitable for most small towns, recommendations apply specifically to the small towns of the Arrowhead Region. These towns share historical, cultural and environmental aspects that require design recommendations which are probably not suitable for other environments. Ely, Minnesota will serve as the prototype of the townscape study.

The study analyzes the visual qualities of basic land use patterns along major vehicular routes in small Arrowhead towns. These land patterns are scanned primarily for their visual image and legibility to unaccustomed viewers, as if seen through the eyes of a tourist.

Solutions to the most obvious problems are sought first, through methodology appropriate and within the means of the small towns. Functional and visual problems within the prototype are then solved with regard to economy as well as visual revitalization.

Through greater understanding and awareness of town-scape design principles, concerned citizens will be better equipped to identify, evaluate and implement improvement within their own community.