

ALCONA COUNTY PARKS AND RECREATION COMMISSION

ALCONA COUNTY, MICHIGAN

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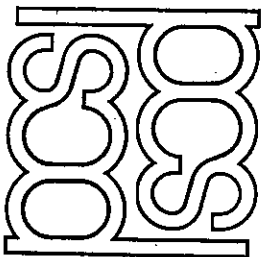
ALCONA COUNTY PARK

MASTER PLAN

FEASIBILITY STUDY

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APRIL, 1978



PLANNING CONSULTANT SERVICES INCORPORATED  
520 CHERRY STREET · LANSING, MICHIGAN 48933 · 517 371-1315

ALCONA COUNTY PARKS AND RECREATION COMMISSION

1977

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## INTRODUCTION

Planning: "to devise or project the realization  
of achievement of"

Recreation: "refreshment of strength and spirits after toil"

(Websters New Collegiate)

Every individual or group plans its future to some degree, some more extensively than others. Individuals plan their daily activities, educational goals, budgets, insurance programs and retirement. Families plan vacations and whether or not to add a room to the house. Municipalities must also plan their future. Planning is necessary to determine the wisest use of physical and human resources in order to reach established goals and objectives.

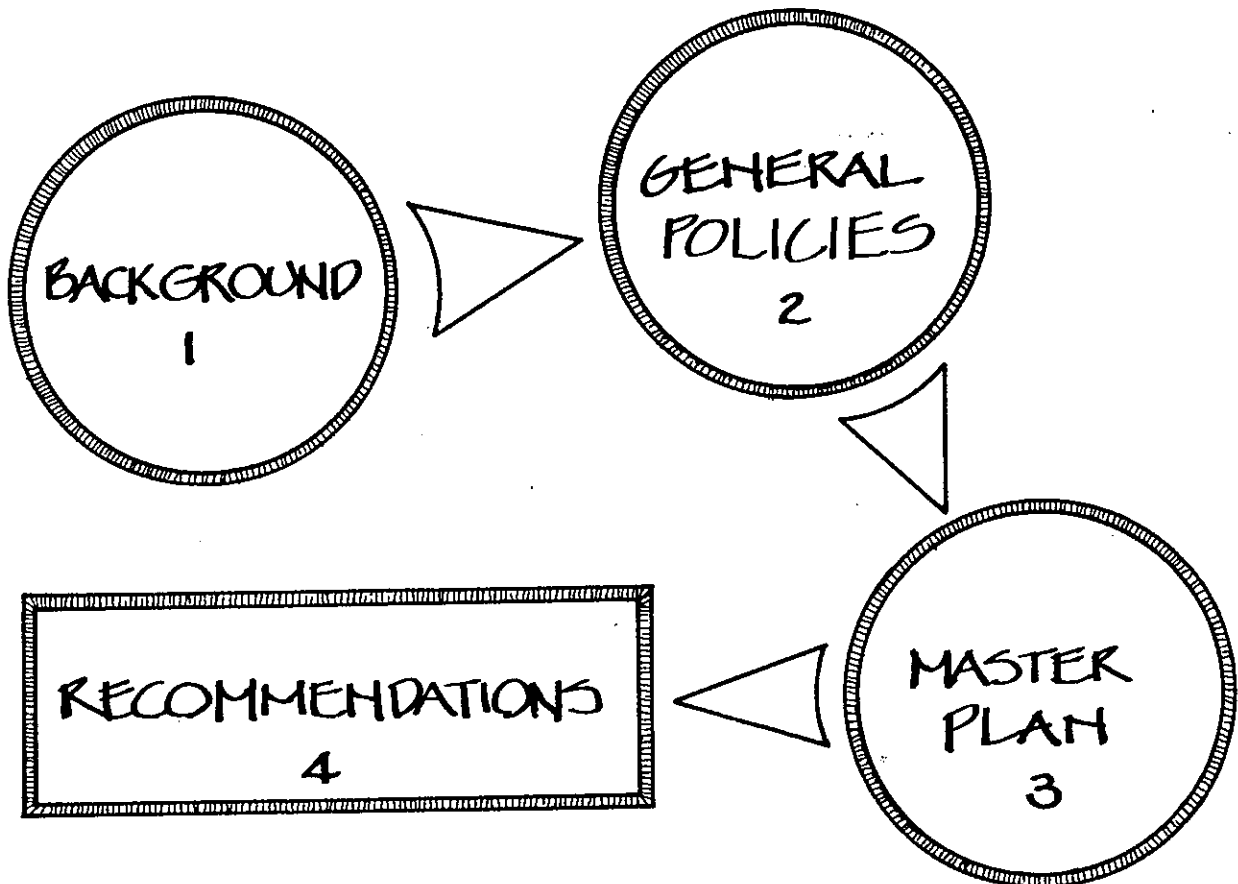
Although we may realize the importance of prudent planning in our daily activities, how does planning relate to recreation? Furthermore, why should a group such as the Alcona County Park and Recreation Commission be concerned about the future of, and planning for the outdoor recreation - camping facility at Alcona County Park? These questions bear close consideration and will be addressed in detail throughout the remainder of this text. An initial response concerns the major challenge facing Alcona County Park, and in fact many other campgrounds - what about expansion? Should we stay the same size, expand or upgrade our present services. Realizing the validity of these questions as well as the instability of the camping segment of the outdoor recreation market in Michigan, a cross roads was reached. At this point a decision was made by the Alcona County Park and

Recreation Commission that in order to adequately deal with the above questions, an exercise in pre-thinking needed to be undertaken. As such the "planning exercise" would need to provide them with the framework for dealing with the long-range use, design and financial management of Alcona County Park.

## THE PLANNING PROCESS

If the purpose of long-range planning is to provide answers to questions of economic feasibility, and efficient functional and aesthetically pleasing re-design of the existing Park facility, how does such a study function as a means to realize these end purposes?

Planning itself is a continuing process and as applied to Alcona County Park, it involved: (1) a survey and analysis of Background Information relevant to the park, its characteristics and operation; (2) a determination of problems, trends and potentials, as well as the formation of General Policies to take advantage of existing resources; (3) a Master Plan, which is both a written and graphic presentation of proposals; and (4) Recommendations for Implementation.





## REGIONAL PERSPECTIVE

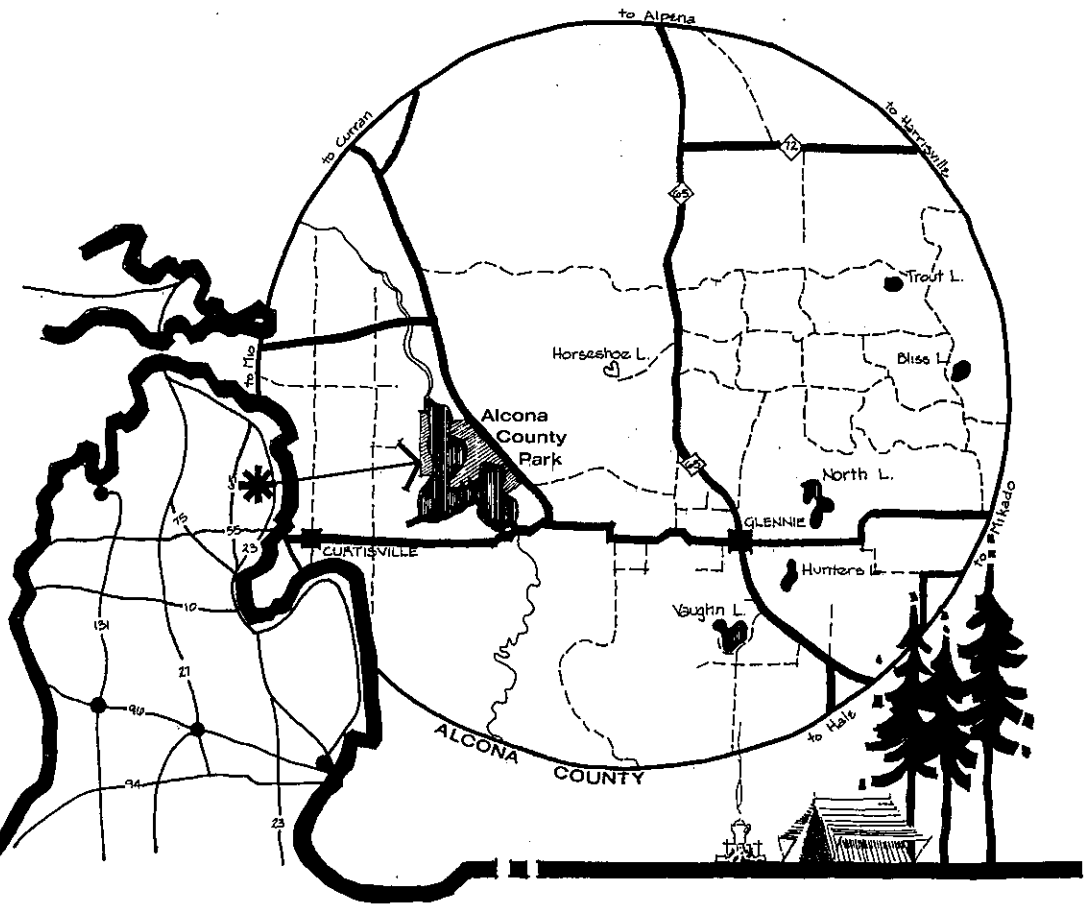
Alcona County, Michigan is situated in the northeastern quadrant of the Lower Peninsula, bordered by Lake Huron on the east and Alpena, Oscoda and Iosco Counties on the north, west and south, respectively.

The natural resource wealth contained on the roughly 680 square miles within Alcona County is too extensive to describe in a few brief paragraphs. It is estimated that over 75% of the County is in tree cover, much of which lies within the 120,000 acres of National and State Forest. There are also some 60 streams and rivers with an additional 22 lakes located in Alcona County.

In the southwestern corner of the County, situated on a portion of the resource wealth mentioned above, is the Alcona County Park. The Park is located on the east and west shores of the Alcona Dam Pond (also known as Bamfield Pond) which is an impoundment of the AuSable River. It is roughly 30 miles from the Park to Harrisville which is the county seat and located on Lake Huron, northeast of Alcona Dam Pond. The closest settlement to Alcona County Park is the unincorporated area of Glennie, in Curtis Township, some six miles to the east. In a regional context, the park is approximately 90 miles north of the Tri-Cities Area (Saginaw, Bay City, Midland) or roughly a two hour drive. The major population concentration in Michigan is obviously the Detroit metropolitan area - Alcona County Park is a four hour drive north of Detroit or roughly 180 miles.

As a brief introduction to Alcona County Park - the park site is slightly over 500 acres in extent and as mentioned previously is situated on the east and west banks of the Alcona Dam Pond. Primary orientation of the facility is towards camping (both

modern and primitive sites are available) and outdoor recreation involving the water resource, namely fishing, swimming, boating and simply visual enjoyment. At present there are some 369 designated campsites at the Park, arranged in four sub-areas - these are identified as the Lower Landing Modern Campground, Reed's Point, Upper Landing and the West Side Primitive Area. A detailed description of the Park and each sub-area follows in later sections of this report. The Park also contains a bathhouse facility in the Modern Campground complete with showers and restrooms, a park office, park manager's residence, dump station and several boat launch locations.



## BACKGROUND

### RECREATION INDUSTRY

One of the phenomenas of our present mobile, reasonably affluent and definitely recreation-oriented socity, is the increased demand on the commodities of tourism and outdoor recreation. In the United States as well as Michigan recreation has been among the fastest growing sectors of our total economy. The impact on the state is definitely noticeable and depending upon the criteria used or source consulted the recreation sector is one of the largest industries in Michigan.

Leisure is a direct function of several variables, namely income and length of work week. Outdoor recreation and particularly such elements as camping, fishing and boating which are dominant at Alcona County Park, again serve as a function of leisure time. To understand as an example, the camping sector of the recreation industry, it is necessary to have some understanding of those conditions which generate outdoor activities. As a brief background, these factors are discussed below.



## Leisure Time and Income

The work week in this country has obviously changed and with this change has come an impact on our leisure time and the demand for increased recreational opportunities. While the average work week in the 1870's was 68 hours in extent, by 1930 this had been reduced to 48 hours. In the post World War II years, the work week as a whole has continued to decrease in length. The 40 hour work week is what we perceive as the norm, however projections indicate a high probability for a less than 40 hour work week in future decades. Even more significant, is the fact that accompanying the decrease in time necessary for earning a living, is the increase in personal time available for leisure pursuits. Since the 1870's the average leisure time available per person per week has more than tripled.

While the length of the work week has declined, the amount of expendable income available for the average worker at the end of his work week has increased. The following series of tables establish the past trends in the United States, Michigan and the Alcona County region, relative to income levels. Irrespective of inflation - personal per capita income is projected as continuing to rise.

## Mobility

Historically we find that in 1900 the average traveler covered only about five hundred miles a year. Today, thanks to the automobile and air travel, this yearly average has risen to roughly 5,000 miles. As a whole, the camping segment of our population is particularly mobile, with the majority of campers traveling from between 1,000 to 8,000 miles per season.

TABLE 1  
TOTAL AND PER CAPITA PERSONAL INCOME  
1970-1975

<u>Year</u>	<u>Total Income</u> (Millions of Dollars)		<u>Per Capita Income</u> (Dollars)	
	<u>Michigan</u>	<u>United States</u>	<u>Michigan</u>	<u>United States</u>
1970	37,158	808,223	4,180	3,966
1971	40,318	864,989	4,499	4,195
1972	44,616	944,585	4,950	4,537
1973	49,886	1,054,081	5,506	5,023
1974	53,493	1,151,721	5,880	5,449
1975	57,142	1,243,313	6,240	5,834

Source: Survey of Current Business and  
U.S. Department of Commerce

TABLE 2  
TOTAL PERSONAL INCOME BY COUNTY  
1967-1974  
(MILLIONS OF DOLLARS)

<u>County</u>	<u>1967</u>	<u>1968</u>	<u>1969</u>	<u>1970</u>	<u>1971</u>	<u>1972</u>	<u>1973</u>	<u>1974</u>
Alcona	15.1	17.1	17.9	19.5	21.0	23.8	26.9	29.7
Alpena	69.9	77.4	87.6	95.5	104.1	116.3	127.6	143.4
Montmorency	10.2	11.6	12.6	14.4	16.2	18.9	21.0	23.3
Oscoda	7.3	8.3	9.4	10.7	12.3	14.0	15.5	18.1
Ogemaw	21.8	26.2	27.1	29.6	32.4	38.6	42.5	48.9
Iosco	60.0	68.0	74.8	85.8	94.4	105.6	115.2	125.6

Source: Bureau of Economic Analysis, Regional Economic Information System

TABLE 3  
TOTAL PERSONAL INCOME, POPULATION AND PER CAPITA INCOME  
1969, 1980, 1990

Location	Total Personal Income Millions of 1967 Dollars		Population Thousands		Per Capita Income 1967 Dollars	
	<u>1969</u>	<u>1980</u>	<u>1969</u>	<u>1980</u>	<u>1969</u>	<u>1980</u>
United States	689,626	1,115,898	201,877	234,208	3,419	4,769
Great Lakes Region	145,191	234,653	40,006	46,578	3,629	5,038
Michigan	32,431	53,086	8,803	10,366	3,684	5,121
						6,541
						6,466

Source: U.S. Department of Commerce, Bureau of Economic Analysis

### Participation

As reflected in Table 4, camping is one of the fastest growing form of outdoor recreation. Between 1965 and 1970 the actual number of camping participants, more than doubled. Increases are also shown in other areas of outdoor pursuits which have a direct impact on Alcona County Park - namely boating, swimming and fishing. We must realize however that various outdoor activities follow faddish patterns - witness the current craze about jogging or running. Also remember the heavy interest in power boating not too many years ago. The factors that have caused an increase in the popularity of camping are varied, depending upon the source one consults, however much of the increase is related to the introduction of new products. Motor homes, fifth wheel campers, tent trailers etc. have all increased dramatically in both sales and use, in the last decade.

TABLE 4  
 NUMBER OF PARTICIPANTS IN SELECTED OUTDOOR ACTIVITIES, 1960-1965-1970  
 U. S. TOTALS IN MILLIONS  
 PERSONS 12 AND OVER

Activity	1960		1965		1970		% Change		
	Number	% Of Pop.	Number	% Of Pop.	Number	% Of Pop.	1960-65	1965-70	
Picnicking	69.2	53	80.5	57	73.8	49	16	- 8	7
Swimming	58.7	45	67.8	48	67.7	44	15	Nil	15
Outdoor Games and Sports	39.2	30	53.7	38	51.5	33	37	- 4	31
Walking for Pleasure	43.1	33	67.8	48	46.4	30	57	-47	8
Fishing	37.8	39	42.4	30	44.1	28	12	Nil	17
Boating	28.7	22	33.9	24	37.6	24	18	11	31
Bicycling	11.7	9	22.6	16	28.8	19	92	27	146
Camping	10.4	8	14.1	10	30.9	20	35	119	197
Nature Walks	18.3	14	19.8	14	26.9	17	8	36	45

Source: 1965 Survey of Outdoor Recreation Activities, U.S. Department of the Interior, Bureau of Outdoor Recreation.

1970 Survey of Outdoor Recreation Activities, Preliminary Report, U.S. Department of the Interior, Bureau of Outdoor Recreation.



TABLE 5  
 MILLIONS OF OCCASIONS OF PARTICIPATION IN 16 MAJOR SUMMERTIME OUTDOOR RECREATION ACTIVITIES  
 (1965 BUREAU OF OUTDOOR RECREATION SURVEY AND PROJECTIONS)

Activity	Rank	1965		1980		1965-1980		Projections		1965-2000 % Change
		1965	1980	1965	1980	% Change	2000	% Change		
Walking for Pleasure	1	1,030	1,539	49%	2,581	151%				
Swimming	2	970	1,671	72	2,982	207				
Driving for Pleasure	3	940	1,423	51	2,146	128				
Playing Outdoor Games or Sports	4	929	1,594	72	2,940	216				
Bicycling	5	467	617	32	860	84				
Sightseeing	6	457	705	54	1,169	156				
Picknicking	7	451	668	48	1,022	127				
Fishing	8	322	422	31	574	78				
Attending Outdoor Sports Events	9	246	352	43	535	117				
Boating, other than Canoeing or Sailing	10	220	387	76	694	215				
Nature Walks	11	117	173	48	274	134				
Camping	12	97	173	78	328	238				
Horseback Riding	13	77	111	44	179	132				
Water Skiing	14	56	124	121	259	363				
Hiking	15	50	89	78	159	218				
Attending Outdoor Concerts, Plays	16	47	80	70	144	206				
Total		6,476	10,128	56	16,846	160				

Source: Outdoor Recreation Trends, Bureau of Outdoor Recreation, April 1967.

TABLE 6  
PARTICIPANTS IN CAMPING  
 (1970)

NUMBERS OF PARTICIPANTS AND DAYS OF PARTICIPATION

<u>Characteristic</u>	<u>No. of Par.</u>	<u>% of Population</u>	<u>Days/Person</u>	<u>Days/Party</u>
Total vs. 9 or over	35,199,000	21.0	2.4	11.3
Small cities & suburbs	13,088,000	21.1	2.5	11.8
Towns & rural areas	18,248,000	22.8	2.6	11.2
Total vs. 12 or over	30,885,000	19.9	2.3	11.5
Small cities & suburbs	11,454,000	19.9	2.4	12.0
Towns & rural areas	16,031,000	21.9	2.5	11.5

Source: 1970 Surveys of Outdoor Recreation Activities  
 Preliminary Report, Bureau of Outdoor Recreation, Feb. 1972

## The Economics of Outdoor Recreation

In the context of identifying who participates in what outdoor activity and in turn how much are they willing to spend, the following series of tables provides us with relevant data.

While it is projected that camping will increase by 78% (in numbers of occasions) from 1965-1980, it must be remembered that participants in outdoor recreation can be fickle. Therefore a successful campground operation must be cognizant of fluctuations in the camping market and employ economic analysis as a planning tool. As stated by Dice (Supply-Demand in Campgrounds, 1975).

"The current situation within the campground industry shows that this is a time in which the most forceful competitive weapons must be brought into action. The industry is confronted on the one hand with a serious uncertainty about available fuel supplies for its consumers, and an equally serious question about both growth potential and over-building of facilities.

In such a period, the reaction is to search for ways to become more competitive for the volume of users. Since the margin of profit is already small, campground owners cannot reduce rates as a means of appealing to customers because costs of operation can be expected to increase. The search for competitive marketing must be for ways of making operations more efficient and for expanding the income from the present investment in facilities, goods and services. Any additional investments will have to be examined for profit generating ability of their own as well as for ability to attract more customers. Actions will have to answer to the question of "what can and should be done in order to attract more customers and keep costs down"."

### Camper Characteristics and Expenditures

In that no detailed analysis of expenditures made by the typical camper at Alcona County Park is available, we will instead need to construct a reasonable model utilizing national norms.

A primary variable is that of income - from what economic background does the average camper come from, and in turn based upon

income - what type of accommodations will suit his needs and how much will he pay for them? The source for much of the data reflected in the following series of tables is a 1971 market survey of campers in the United States as compiled by Opinion Research Corporation. Information on expenditure for accommodations as well as a survey of State-wide campground fees for Michigan are also shown. These tables illustrate what is perhaps the obvious - that with lower costs for accommodations when camping, the average camper has more funds available for food, active recreational pursuits and can travel farther to "get away from it all". On a national basis and in 1971 dollars, the average camper was willing to spend slightly in excess of \$3.00 for a campsite. The rate structure for most Michigan campgrounds exceeds the 1971 figure.

TABLE 7  
HOUSEHOLD INCOME  
PERSONS 9 AND OVER WHO PARTICIPATE IN CAMPING  
U. S. 1970

<u>Income</u>	<u>Number of Participants (Thousands)</u>	<u>Per Cent of Camping Population</u>
Under \$1,000	246	4.2%
\$1,000 - 1,999	382	2.7
\$2,000 - 2,999	781	4.5
\$3,000 - 3,999	984	4.8
\$4,000 - 4,999	1,398	7.0
\$5,000 - 5,999	2,023	8.5
\$6,000 - 7,499	3,911	10.5
\$7,500 - 9,999	7,414	12.2
\$10,000 - 14,999	10,939	13.6
\$15,000 - 24,999	4,620	13.4
\$25,000 and over	944	10.0
Not Reported	1,556	8.6

Source: The 1970 Survey of Outdoor Recreation Activities, Preliminary Report,  
U.S. Department of the Interior, Bureau of Outdoor Recreation, February 1972.

TABLE 8  
ESTIMATED SIZE OF THE ACTIVE CAMPER MARKET BY TOTAL  
GROSS HOUSEHOLD INCOME CATEGORIES IN 1970

<u>1970 Gross Income</u>	<u>Per Cent of Weighted Income Classes Who Are Active Campers</u>
Under \$5,000	10.9%
\$5,000 to 6,999	19.7%
\$7,000 to 9,999	20.7%
\$10,000 to 14,999	23.5%
\$15,000 or more	27.8%
Total U.S.	19.4%

Source: 1971 Camper Market Survey, Market Data Kit,  
 Princeton, New Jersey

TABLE 9  
HOW CAMPERS SPEND THEIR MONEY

<u>Item</u>	<u>Value</u>	<u>Percent</u>
Campsites	\$ 42.63	10.0%
Food	87.79	21.0%
Car Expenses	124.77	29.0%
Recreation	53.11	13.0%
Clothing/Accessories	31.25	7.0%
Souvenirs	19.07	5.0%
Other	63.89	15.0%
	<u>\$422.51</u>	

Source: 1971 Camper Market Survey, Princeton, New Jersey:  
 Opinion Research Corporation, 1971.

TABLE 10  
TYPES OF TOURIST PARTY EXPENDITURES BY THE TYPES OF ACCOMMODATIONS  
 (SHOWN IN PERCENT)

<u>Accommodation Type</u>	<u>Food Expenditures</u>	<u>Accommodation Expenditures</u>	<u>Recreation Expend</u>	<u>Transportation Expend</u>	<u>Other</u>
Motel-Hotel	33.5	35.6	10.3	11.8	8.8
Resort-Hotel	19.7	58.9	7.9	4.2	9.3
Friends-Relatives	44.7	--	16.5	21.6	17.2
Private Cottages	63.2	--	14.1	9.5	13.2
Rented Cottages	33.0	43.0	10.1	7.8	6.1
Tent	48.0	14.0	14.1	17.2	5.5
Housetrailer- Vehicle Camper	48.7	17.0	12.3	17.1	4.9
Mult. Accommodation	39.3	32.2	10.1	12.2	6.2

Source: Michigan Tourism, Vol. 1  
 Center for Economic Expansion & Technical Assistance  
 Central Michigan University

TABLE 11  
WILLINGNESS TO SPEND FOR A CAMPSITE

<u>Dollar Amount/Night</u>	<u>Per Cent of Campers</u>
\$1.00	5%
\$2.00	22%
\$3.00	47%
\$4.00	20%
\$5.00	6%

Source: 1971 Camper Market Survey, Princeton, New Jersey;  
 Opinion Research Corporation.

TABLE 12  
BASIC CAMPING FEES CHARGED IN MICHIGAN  
PRIVATELY OWNED CAMPGROUNDS IN 1972

<u>No. of Sites</u>	<u>Modern Sites</u>			<u>Primitive Sites</u>	
	<u>No. of Campgrounds</u>	<u>Number Responding</u>	<u>Basic Fee</u>	<u>Number Responding</u>	<u>Basic Fee</u>
State	100	99	\$5.25	23	\$2.67
30 to 59	41	40	\$3.07	5	\$2.50
60 to 79	16	16	\$3.23	5	\$2.40
80 to 99	9	9	\$3.22	3	\$2.83
100 or more	34	34	\$3.48	10	\$2.85

Source: "A Study of Expenditures and Management in the Private Campground Industry", Cooperative Extension Service, Michigan State University.



## REGIONAL INVENTORY

In a county containing 22 lakes, over 60 trout streams, 25 miles of Lake Huron shoreline and some 117,000 acres of State and National forest, it is obvious that other sites for outdoor recreation and in particular camping would have been developed. A recent study by the Alcona Parks and Recreation Commission indicated that there are 41 facilities or points of interest (both public and private) throughout the County that provide some form of recreational activity. Many of these are privately owned and include golf courses, shooting ranges, recreational communities and even a stock car and snowmobile race track. Most municipalities in the county have developed community parks for picnicking and softball. One of the largest parks in Alcona County is the Alcona Recreation Area near the Village of Lincoln. The ARA presently contains a large snowmobile race track, with other facilities to be developed in the future.

With the substantial acreage devoted to state and national forest use, there are additional sites in Alcona for camping within such forest areas. Table 13 below contains in capsule form, information on State Park as well as National Forest campgrounds.

TABLE 13  
STATE PARK, AND  
NATIONAL FOREST CAMPGROUNDS  
-ALCONA COUNTY-

Harrisville:

Harrisville State Park

Location: Harrisville on US-23  
Fee: \$4.00/night  
Facilities: Electricity, flush toilets, showers, swimming,  
boat launch, disposal station, picknicking,  
playground, hiking, fishing  
Sites: 229 sites on 94 acres

Barton City:

Jewel Lake - Huron National Forest

Location: East of Barton City  
Fee: \$2.00/night  
Facilities: Pit toilets, swimming, water skiing,  
fishing, boat rental, boat launch, pic-  
nicking  
Sites: Tent or RV - 32 sites

Glennie:

Horseshoe Lake - Huron National Forest

Location: 3 miles north of Glennie on M-65  
then 1 mile west  
Fee: \$2.00/night  
Facilities: Pit toilets, fishing, boat rental, water  
skiing, boat launch  
Sites: Tent or RV - 7 sites

Mikado:

Pine River - Huron National Forest

Location: 8 1/2 miles west of Mikado on County 116  
then 3 miles south  
Fee: \$2.00/night  
Facilities: Pit toilets, picnicking, fishing  
Sites: Tent or RV - 11 sites

In addition to camping facilities within Alcona County there are numerous sites in adjoining counties yet within roughly a 30 mile radius of the Park. Campgrounds in the general area are described below. In addition figures 1 and 2 which follow illustrate recreational facilities in Alcona County - which range from the Huron National Forest Hiking and Riding Trail to the various township parks - as well as the location of all campgrounds in the county.

TABLE 14  
REGIONAL CAMPGROUNDS - ALCONA COUNTY AREA

Curran:

Oscoda State Forest

Location: McCollum Lake  
Fee: State Forest Campground  
Facilities: Pit toilets, swimming, boating, fishing  
Sites: Tent or RV - 32 sites

Hillman:

Emerick Municipal Park

Location: State Street - Hillman  
Fee: \$2.50/night  
Facilities: Electric, water, disposal station, swimming,  
boating, fishing, water skiing, snowmobiling,  
nature program, recreation room, playground  
Sites: Tent or RV - 22 sites

Heine's Landing

Location: 4 mi. south of Hillman on Route 32 then 3  
mi. south on Farrier Road  
Fee: \$4.00/for 4 people - 50¢ per extra person  
Facilities: Electric, disposal station, flush and pit  
toilets, boat ramp, fishing, playground  
Sites: Tent or RV - 30 sites

Thunder Bay River State Forest - Ess Lake

Location: Ess Lake  
Fee: State Forest Campground  
Facilities: Pit toilets, swimming, boat ramp, fishing  
Sites: Tent or RV - 30 sites

Luzerne:

Oscoda State Forest - Parmalee Bridge

Location: 5 miles north of Luzerne on County 489  
Fee: State forest campground  
Facilities: Canoeing, fishing, pit toilets  
Sites: Tent or RV - 6 sites

Mio:

Island Lake National Forest

Location: 10 miles south of Mio on M-33  
Fee: \$2.00/night  
Facilities: Pit toilets, swimming, boating, fishing,  
14 day limit  
Sites: Tent or RV - 17 sites

Mack Lake National Forest

Location: 3 3/4 miles south of Mio on M-33 then 4 miles  
east  
Fee: \$2.00/night  
Facilities: Pit toilets, swimming, boating, fishing, 14  
day limit  
Sites: Tent or RV - 42 sites

Oscoda State Forest - Muskrat Lake

Location: 12 miles northwest of Mio on M-72, County  
Road 608 and Richeson Road  
Fee: State forest campground  
Facilities: Pit toilets, canoeing, fishing  
Sites: Tent or RV - 6 sites

Oscoda State Forest

Location: Mio Pond  
Fee: State Forest Campground  
Facilities: Swimming, canoeing, fishing  
Sites: Tent or RV - 24 sites

Pine Acres Travel Trailer Park and Campground

Location: 1/2 mile west of Mio on SF-72  
Fee: \$4.50/night  
Facilities: Electric, water, disposal station, laundry,  
propane, playground  
Sites: Tent or RV - 40 sites

Oscoda:

Acres and Trails KOA Kampground

Location: 1 mile south of Oscoda on US-23 then 3/4  
miles west and 1 mile south  
Fee: \$4.50 for 2, extra person - 75¢  
Facilities: Electric, disposal station, laundry, gro-  
ceries, propane, snowmobiling, nature trails,  
recreation room playground  
Sites: Tent or RV - 85 sites

Old Orchard Park - County Park

Location: 9 miles west of Oscoda on River Road  
Fee: \$3.00-\$4.00/monthly and seasonal rates available  
Facilities: Disposal station, flush and pit toilets, showers, groceries, propane, restaurant, swimming, boat ramp, fishing, snowmobile trails, nature trails, playgrounds - 21 day limit  
Sites: RV only - 525 sites

Oscoda State Forest - Van Etten Lake

Location: 4 1/2 miles northwest of Oscoda  
Fee: State forest campground  
Facilities: Pit toilets, swimming, boat ramp, fishing  
Sites: Tent or RV - 62 sites

Ossineke:

Alpena State Forest - Ossineke

Location: 2 miles northeast of Ossineke on Lake Huron  
Fee: State forest campground  
Facilities: Boating, sandy beach, swimming, fishing, hiking  
Sites: Tent or RV - 43 sites

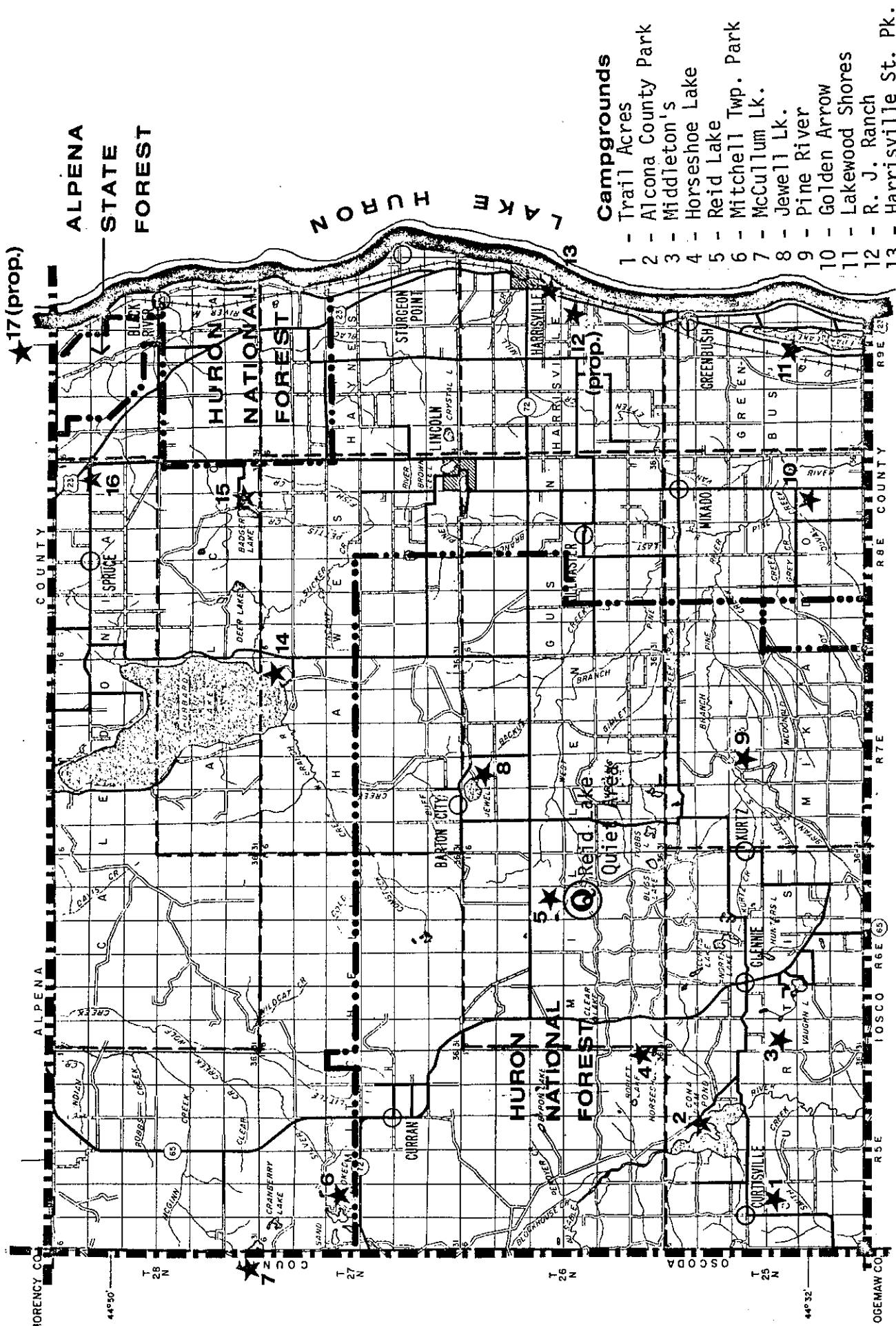
Rose City:

Ogemaw State Forest - Rifle River

Location: 5 1/2 miles south of Rose City on M-33 then 5 miles east  
Fee: State forest campground  
Facilities: Pit toilets, canoeing, fishing  
Sites: Tent or RV - 40 sites

Rifle River State Recreation Area

Location: Lupton  
Fee: \$3.00/night  
Facilities: Swimming, boating, fishing, snowmobiling  
Sites: Tent or RV - 139 sites



ALPENA  
STATE  
FOREST

LAKM  
HURON

**Campgrounds**

- 1 - Trail Acres
- 2 - Alcona County Park
- 3 - Middleton's
- 4 - Horseshoe Lake
- 5 - Reid Lake
- 6 - Mitchell Twp. Park
- 7 - McCullum Lk.
- 8 - Jewell Lk.
- 9 - Pine River
- 10 - Golden Arrow
- 11 - Lakewood Shores
- 12 - R. J. Ranch
- 13 - Harrisville St. Pk.
- 14 - South Bay Marina
- 15 - Lost Lake Woods
- 16 - Paul Bunyan KOA
- 17 - Newegon St. Pk.
- 18 - Rifle River

A.F.S.

FIGURE 1

★ 18

- Ball fields
- ▲ Public access site

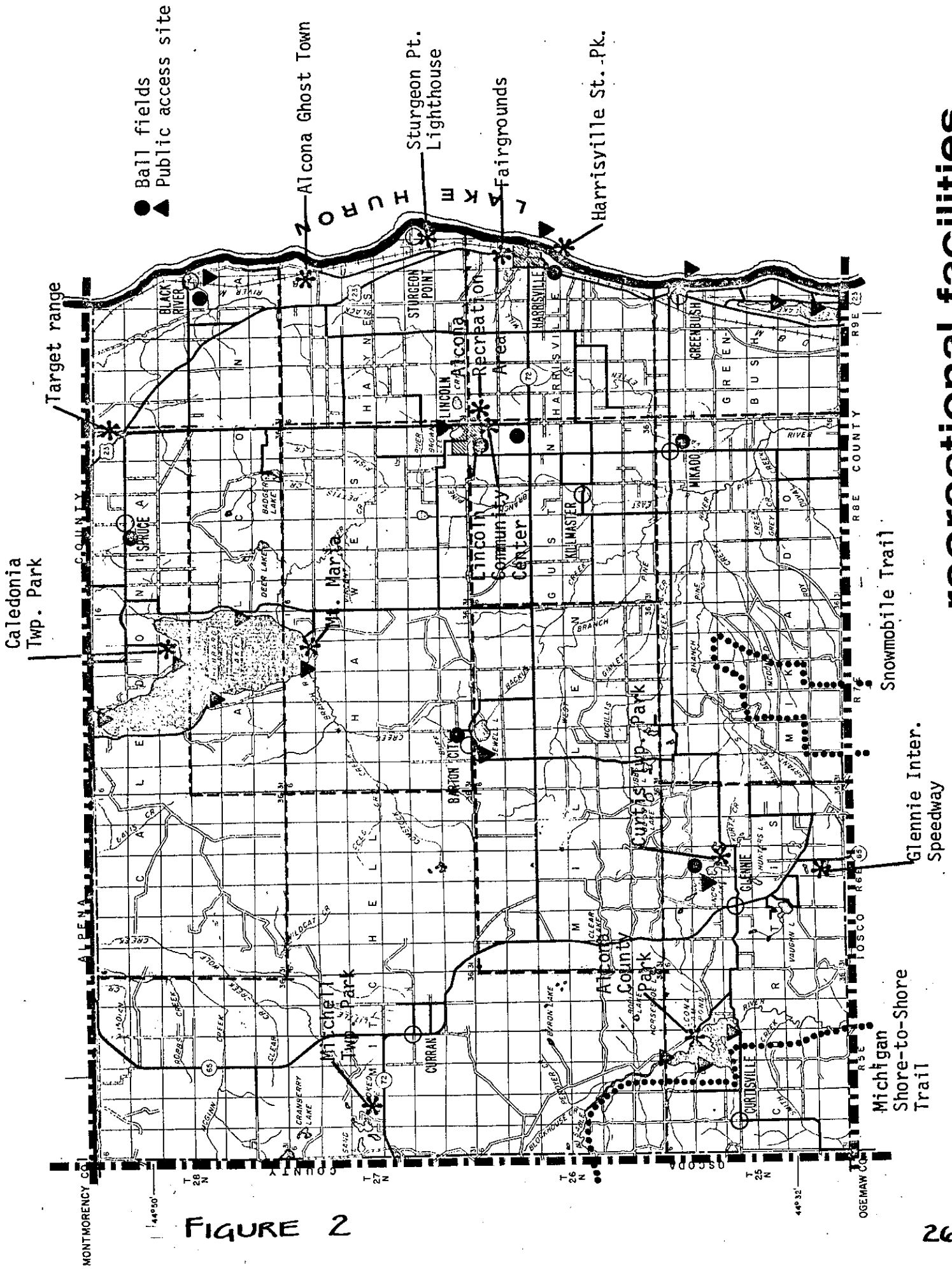


FIGURE 2

recreational facilities

## ALCONA COUNTY PARK

### History

The large acreage which comprises the present Alcona County Park is owned by Consumers Power Company based in Jackson, Michigan. The impoundment and acreage on the AuSable River is similar to other sites and situations controlled by Consumers Power in northern Michigan. Initially the property was leased to Curtis Township at which time it was known as the Bamfield Impoundment Campgrounds. In 1966 management of the campgrounds was transferred to Alcona County. At that point a consulting firm was hired by the County to prepare a series of studies intended to culminate in a Comprehensive Plan for Parks, Recreation and Open Space. The planning program was an essential element, enabling the County to apply and compete for Bureau of Outdoor Recreation monies for development of campground facilities. Efforts were initiated in 1968 to create a County Parks and Recreation Commission (ACPRC) as empowered under Act 261. Such a Commission was established in 1969 and recognized by the Alcona County Board of Commissioners in 1970. In the same year, Alcona County received \$40,000 in matching Land and Water Conservation Funds to develop a modern campground facility at the Park. The initial allocation was then enlarged to \$55,000 of 50% matching funds enabling the ACPRC to initiate a \$110,000 program at the Lower Landing Campground. As data yet to be presented will indicate, the 100 site Lower Landing Modern Campground has been an extremely popular and successful venture.

Although operated under the direction of the ACPRC, Alcona County Park has a full-time manager and seasonal employees. The total number of employees working at the Park has varied in recent years in that they primarily have been employed through various



funded programs such as CETA for an example. The expenses of the ACPRC are paid by Alcona County as an extension of county-government, however the daily costs incurred in operation of the Park are paid through user fees. In accordance with the agreement between the County and Consumers Power Company, all receipts paid for camping, and rentals actually comprise the annual park budget. All "profits" or receipts in excess of expenditures are "put back into" the park taking the form of various improvements.

#### Statement of Problem

In introductory comments to this text, the statement was made that in essence the Alcona County Parks and Recreation Commission was at a crossroads relative to decisions being made which would impact and direct the future of Alcona County Park. Expanded demand in recent years for camping and associated recreational activities at the Park has prompted the ACPRC to consider expansion to their existing facilities. It was realized however that prior to any actual sitework - before a new campsite was created or a road re-designed, two areas warranted close-examination. First, a basic master plan designating future use of all areas within the Park was needed. Such a plan should provide for economical and efficient site usage, as well as a document with the ACPRC could compete for park development grants. In conjunction with a master plan of the physical resources of the Park, a study of the fiscal operation was also critical. The ACPRC needed an analysis of the economic well-being of the Park operation - what had been happening in the recent past as far as income and expenditures and also what might the future and potential of the Park be? Finally the ACPRC having made preliminary policy decisions concerning the types of improvements needed at the Park the questions remained - could they be realistically accommodated on the site and would they prove economically feasible?

## Alcona County Park - Description

### Existing Use

At present the 500+ acre Park receives heavy usage by campers spending both weekends and long-term vacations. Water is an obvious attraction for people interested in spending time out-of-doors and the Alcona Dam Pond is extremely popular for fishing (containing good population of trout, pike, perch and bass), swimming, canoeing and simply as a visual resource. Such a valuable natural facility as a portion of the total recreation experience at Alcona County Park has certainly been a major determinant in the past success of the Park and enhances its future potential. The backwaters of the AuSable River separate the Park into two segments with roughly 2/3 of the total area being on the east shore and the remainder sited on the west bank. Historically the Park has been divided in four sub-areas which are known by individual names or designations. The western third of the Park is referenced as the West Side Primitive Area and contains 153 (informal) campsites. The West Side is serviced by a gravel access road, and contains limited development with all toilet facilities being pit privies. There is also a small storage structure and two informal boat launching areas. The eastern area of the Park has traditionally been known by various titles. The Lower Landing Modern Campground containing 106 full-service modern campsites is located in the southeast corner of the Park. This area contains a shower-washroom building, has electrical service to the individual campsites and a boat launch. To the immediate north of the Lower Landing Modern Campground is the Park entrance - it is here that the most intensive development has occurred, including the Park office, Park manager's residence, storage area, dump station and firewood supply. Moving to the northwest from the Park entrance the next area of development is a maintenance

building and equipment storage area roughly 1/2 mile from the entrance. Beyond this area the shoreline and Park boundary line form an elongated peninsula which runs in a north-south direction. The northern half of this peninsula is known as the Upper Landing and the southern half as Reed's Point. Both areas are used as primitive campgrounds containing a total of 204 sites. As with the West Side, all facilities are limited to hand pumps for water and pit toilets. There is a swimming area at Reed's Point and a boat launch at the mid-point between the two areas. A more detailed analysis of the total Park is contained in a future section.

#### Topography

The topography of Alcona County Park can be classified for the most part as gently rolling with abrupt changes in elevation occurring along the shoreline of the Alcona Dam Pond.

The elevations at the northern edge of the property begin at approximately 860' (U.S.G.S. datum) and gradually slope to the south to meet the Pond elevation of 829.67'. Along portions of the western and eastern shorelines the elevations fall off drastically, creating steep banks up to 30'+ in height.

#### Drainage

For the most part the entire site, which is composed of a narrow peninsula and band of land along the shore, has few well-defined drainage channels, as run-off from these areas is rather diffused, draining to the pond. However, several deeply cut swales serving as drainage systems for land behind the Park boundaries run across park land. These swales are found on the north and south ends of the West Side Primitive Area and just north of the present managers office.

Drainage is poor in several locations, primarily because the ground elevation in these areas slopes down to the surface of the water table. These areas are at the south end of the east tip of Reed's Point and at the south and east sides of the Modern Campground.

### Soils

The site is composed of four major soil classifications as shown on Figure 3. Over 2/3 of the West Side Primitive Area is composed of East Lake Loamy Sand which are well to moderately well drained with only moderate restrictions on development for recreational purposes. The soils do tend to erode in the absence of good management practices.

The lower third of this area is composed of Augres Sand which lies along the low area at the shoreline and generally follows the swale draining the lower portion of the West Side Primitive Area. Augres Sand is a somewhat poorly drained soil with a seasonal high water table and moderate limitations for recreational developments.

The major portion of Reed's Point, Upper Landing and the shoreline area of the Lower Landing are composed of Rubicon Sand which are well to moderately well drained with only moderate restrictions on development for recreational purposes. The soil is of a sandy nature and is subject to wind erosion and drouthiness in the absence of good management.

The tip of Reed's Point, the remainder of the Lower Landing and the strip of land joining Upper and Lower Landings are composed of both Augres Sand (see description above) and Roscommon Sand which is very poorly drained due to a high water table. This soil has severe limitations for recreational purposes of any sort.

# ALCONA COUNTY PARK

Alcona County Parks & Recreation Commission  
Harrisville, Michigan 48740

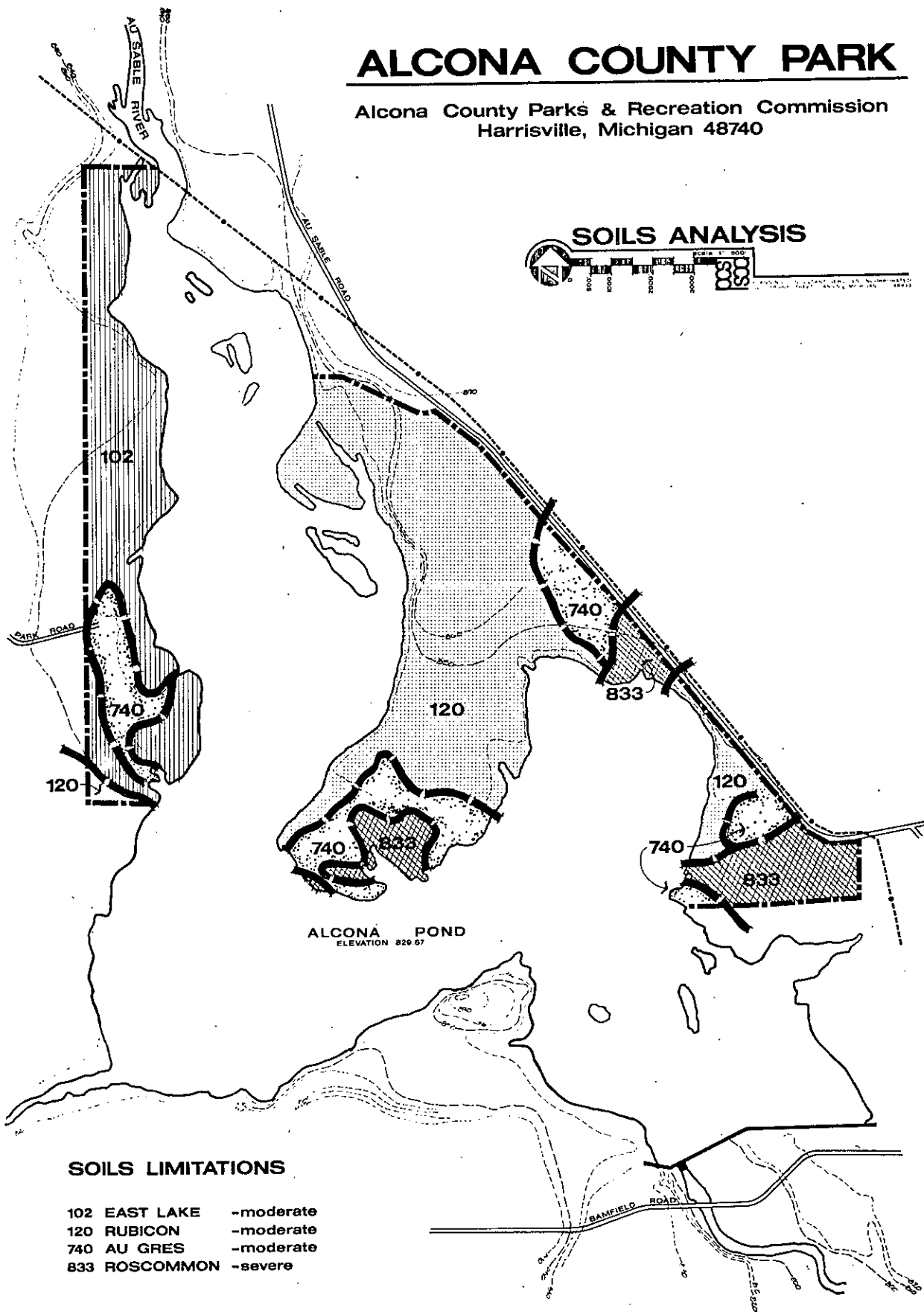


FIGURE 3

### Vegetation

The forested areas of the surrounding Huron National Forest extend throughout the Alcona County Park. While the exact composition of tree stands varies within the Park depending on local soil and drainage conditions, the Park is, for the most part, heavily wooded with hardwood stands of Birch and Oak intermixed with Pine, Poplar and some Cedar. A limited area of the Park has been reforested with pine plantations by Consumers Power Company.

Where park development has occurred, forested areas have been selectively cleared of trees and brush to accommodate campsites. The current practice of poplar removal has also thinned the number of trees at campsites. Consumers Power Co. has erected transmission lines paralleling the eastern park boundary and a wide corridor (60'-80') has been cleared of all trees and brush. Lumbering operations in the northern most portion of Upper Landing have removed a few acres of trees thru clear cutting practices.

### Existing Utilities

The Park is provided power by Consumers Power Co. to service the entrance facility on the east side of the Pond and the Modern Campground at Lower Landing. The rest of the Park, which is in a primitive or undeveloped state is not serviced with power. The primitive areas do however have minimal sorts of services providing water and pit toilets.

## ANALYSIS

Having established a general introduction to Alcona Park, highlighting its past history, usage and physical features there remain numerous elements requiring detailed examination. To briefly list several - what are the peak times of campground usage during the year; how large is the typical camping group and for how long do they usually stay; what about developing various areas in the Park, for new campsites? These and other pertinent matters are addressed during the analysis phase. The written text and support diagrams which follow are intended to provide answers.

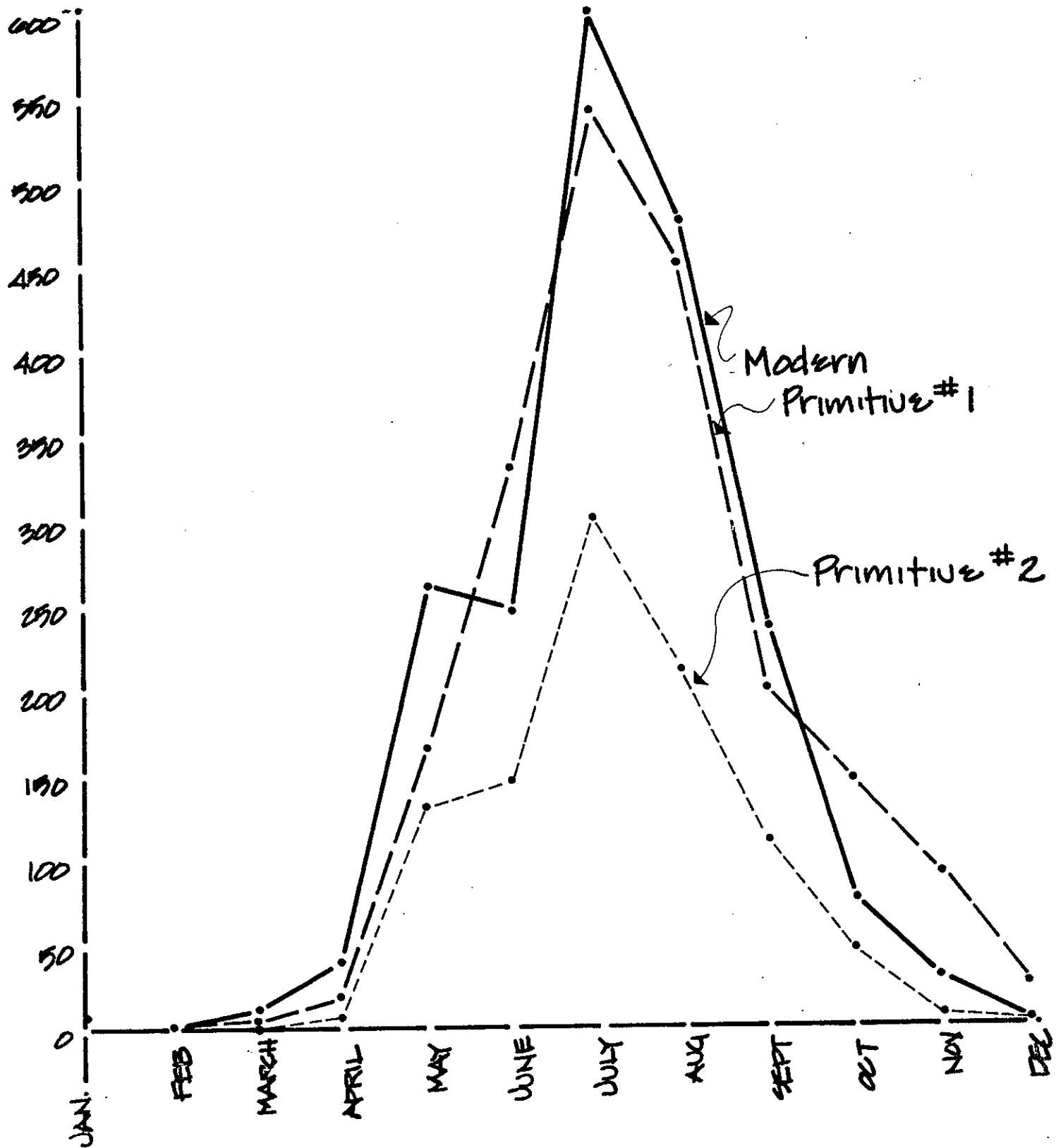
### CAMPGROUND USAGE

The number of permits issued monthly by campground were monitored for the five years preceeding the 1977 camping season. Raw data is listed in Tables A-1 through A-5 in the Appendix. Annual trends are not very revealing due to the fact that a new modern campground facility was introduced during 1974. In general however the data does show a steady rate of usage for both the Primitive #1 (Reed's Point and Upper Landing) and Primitive #2 (West Side Primitive) campgrounds. Average usage for the two sites is 1,300 and 1,000 camper groups per year respectively. Permits issued for the Modern Campground have grown at an annual rate of 12% per year since its opening in 1974.

In our Michigan climate certainly the most pleasurable time for camping and all-around outdoor recreation is during the summer months. It should certainly surprise no one that Alcona County Park receives its peak camper usage during the months of June thru August. As Figure 4 indicates July is definitely the peak camper usage month. Records for the

past five years show that an average of 900 permits were issued for the primitive campgrounds during July, with another 540 camping groups using the 100 modern campsites. Figure 5 reflects usage by week for the Lower Landing Modern Campground during the summer of 1977. As the chart indicates, for each week in July, well over 100 permits were issued to campers staying at the modern facilities.





AVERAGE MONTHLY USAGE  
 BY PERMITS ISSUED  
 FIGURE 4

# USAGE BY WEEK in MODERN CAMPGROUND Alcona County Park (Summer 1977)

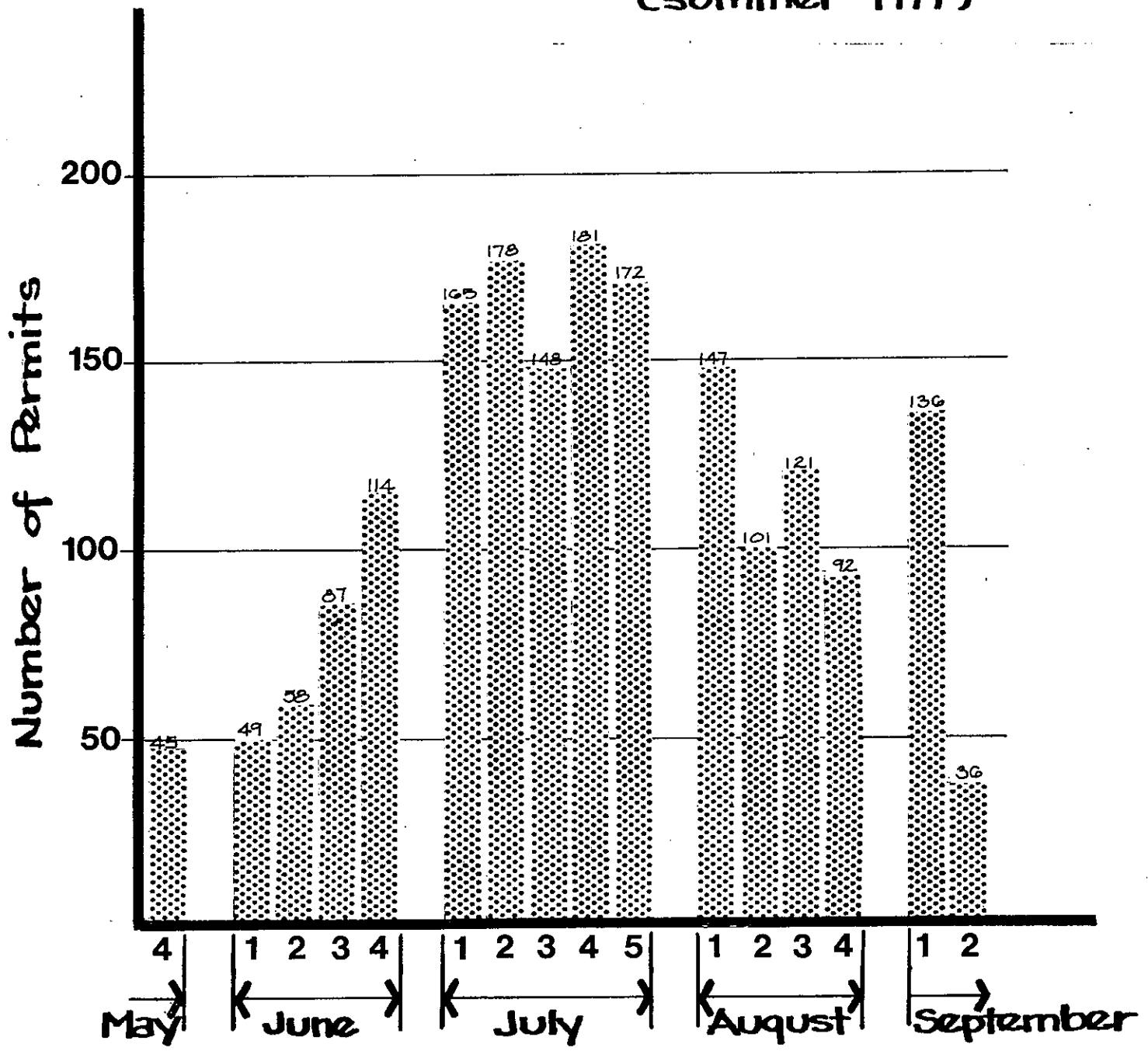


FIGURE 5

The following series of tables, establish additional usage characteristics of Alcona County Park. Tables 15 and 16 again analyze weekly and peak day (Saturday) use for the modern campground during the summer of 1977. Tables 17 and 18 show us that the average camping group consisted of four persons (3.90 modern camp, 3.76 primitive camp) and that the average camping party spent slightly more than 3 days in the Modern Campground during the peak month of July.

Interstate 75 in the eastern section of the State running from the Detroit metropolitan area north to the Straits of Mackinac is an important thoroughfare for mobility of Michigan's urban residents to the recreation resources of the northern lower and upper peninsula. This is definitely evidenced in the following figures which illustrate county of origin for campers using Alcona County Park. The counties of Arenac, Bay, Saginaw, Genesee, Oakland and Wayne are the dominant generation points for Alcona County Park's campers.

TABLE 15  
 ALCONA COUNTY PARK  
 MODERN CAMPGROUND  
 WEEKLY USE  
 (SUMMER, 1977)

<u>Month</u>		
May		
	1. Memorial Day Weekend (partial data)	
	5/27 to 5/31 - - - - -	45 camps
June		
	1. 1st. week and weekend	
	6/1 to 6/7 - - - - -	49 camps
	2. 2nd. week and weekend	
	6/8 to 6/14 - - - - -	58 camps
	3. 3rd. week and weekend	
	6/15 to 6/21 - - - - -	87 camps
	4. 4th. week and weekend	
	6/22 to 6/28 - - - - -	114 camps
July		
	1. 1st. week and weekend (July 4th.)	
	6/29 to 7/5 - - - - -	165 camps
	(July 1st.-4th. only) - - - - -	144 camps
	2. 2nd. week and weekend	
	7/6 to 7/12 - - - - -	178 camps
	3. 3rd. week and weekend	
	7/13/ to 7/19 - - - - -	148 camps
	4. 4th. week and weekend	
	7/20 to 7/26 - - - - -	181 camps
	5. 5th. week and weekend	
	7/27 to 8/2 - - - - -	172 camps

August

1. 1st. week and weekend  
8/3 to 8/9 - - - - - 147 camps
2. 2nd. week and weekend  
8/10 to 8/16 - - - - - 101 camps
3. 3rd. week and weekend  
8/17 to 8/23 - - - - - 121 camps
4. 4th. week and weekend  
8/24 to 8/30 - - - - - 92 camps

September

1. 1st. week and weekend (Labor Day)  
8/31 to 9/6 - - - - - 136 camps  
(Sept. 2nd.-5th. only)- - - - - 131 camps
2. 2nd. week and weekend  
9/7 to 9/13 - - - - - 36 camps

TABLE 16  
 ALCONA COUNTY PARK  
 MODERN CAMPGROUND  
 SATURDAY USE  
 (SUMMER, 1977)

Modern Campground

<u>Month</u>	<u>Average Party Size</u>
May	4.40 persons
June	3.64 persons
July	4.39 persons
August	3.81 persons
<hr style="border-top: 3px double #000;"/>	
Summer Average	3.90 persons

Primitive Campground

<u>Month</u>	<u>Average Party Size</u>
June	3.87 persons
July	3.84 persons
August	3.57 persons
<hr style="border-top: 3px double #000;"/>	
Summer Average	3.76 persons

TABLE 17  
 ALCONA COUNTY PARK  
 AVERAGE PARTY SIZE  
 (SUMMER 1977)

June - 1977

- 1. 1st Saturday - 32 camps  
June 4th
- 2. 2nd Saturday - 35 camps  
June 11th
- 3. 3rd Saturday - 53 camps  
June 18th
- 4. 4th Saturday - 81 camps  
June 25th

July - 1977

- 1. 1st Saturday - 120 camps  
July 2nd
- 2. 2nd Saturday - 103 camps  
July 9th
- 3. 3rd Saturday - 79 camps  
July 16th
- 4. 4th Saturday - 97 camps  
July 23rd
- 5. 5th Saturday - 90 camps  
July 30th

August - 1977

- 1. 1st Saturday - 91 camps  
August 6th
- 2. 2nd Saturday - 55 camps  
August 13th
- 3. 3rd Saturday - 75 camps  
August 20th
- 4. 4th Saturday - 56 camps  
August 27th

September - 1977

- 1. 1st Saturday - 107 camps  
September 3rd

TABLE 18  
 ALCONA COUNTY PARK  
 MODERN CAMPGROUND  
 AVERAGE LENGTH OF STAY  
 (MAY - SEPTEMBER 1977)

Month

May

4th Week - 2.42 Days  
 (Memorial Day)

June

1st Week - 2.78 Days  
 2nd Week - 2.17 Days  
 3rd Week - 2.76 Days  
 4th Week - 3.30 Days  
2.75 Days - Average for the Month

July

1st Week - 3.82 Days  
 2nd Week - 2.81 Days  
 3rd Week - 3.22 Days  
 4th Week - 2.83 Days  
 5th Week - 2.70 Days  
3.08 Days - Average for the Month

August

1st Week - 2.39 Days  
 2nd Week - 3.60 Days  
 3rd Week - 2.26 Days  
 4th Week - 3.00 Days  
2.81 Days - Average for the Month

September

1st Week - 2.72 Days  
 (Labor Day)

=====

2.76 Days - Average for the Year



# COUNTY OF ORIGIN MODERN CAMPGROUND USERS

## Alcona County Park (Summer 1977)

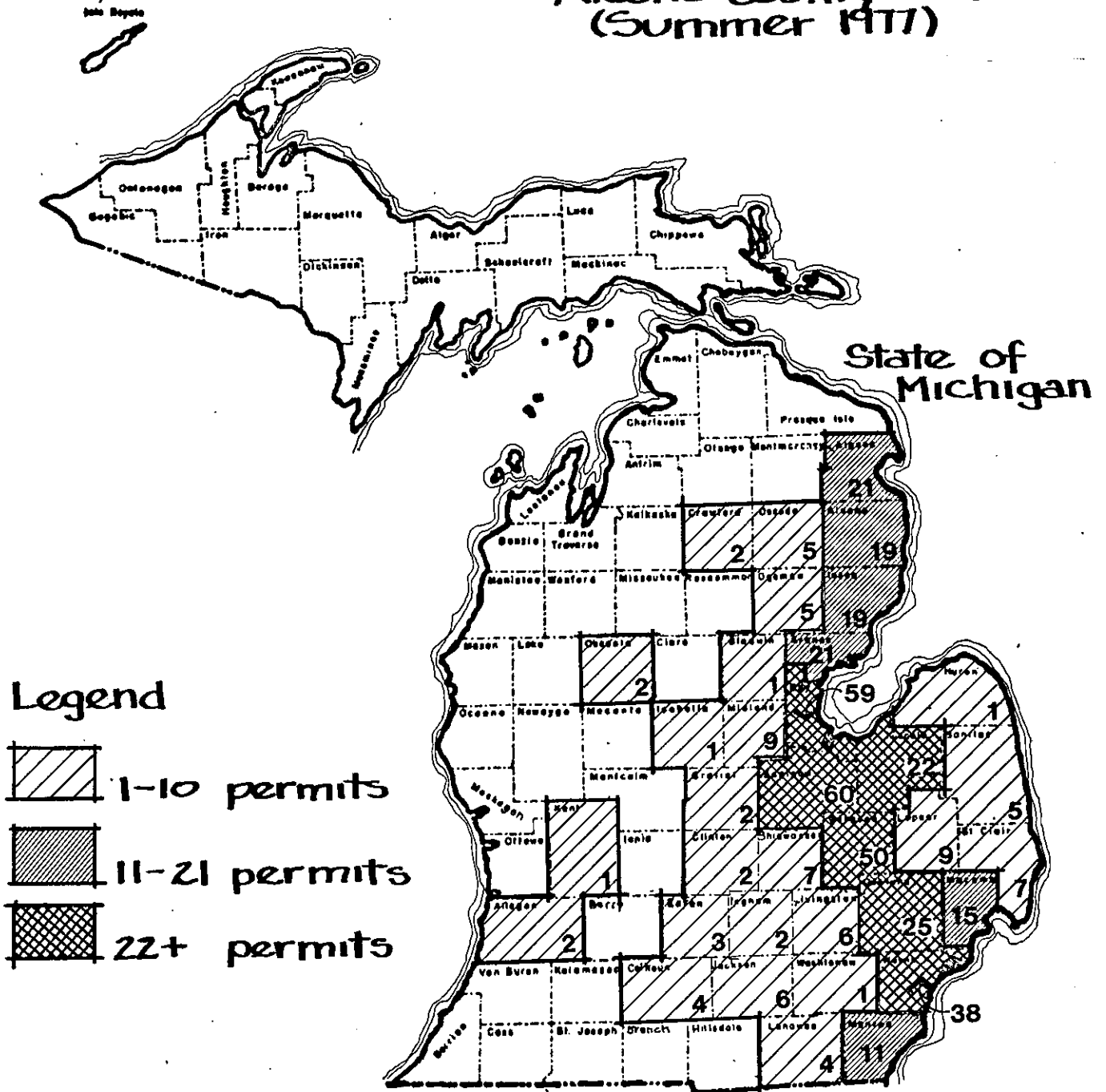


FIGURE 6

\* sample size - 486 permits



## PARK EXPENDITURES

An analysis of potential or projected profitability for the future years of operation, of Alcona County Park, first requires examination of past expenditures. The year-end statements compiled by the Alcona County Parks and Recreation Commission for the years 1973-1976 (and the projections for 1977) have been consistent with regard to line-item classifications, permitting analysis and projections of some items. The budget sheet prepared for 1977 however, contains more detail relative to dispersements, than those statements for earilier years. The total expenditures throughout the past five years, have varied widely - the reasons for which will be discussed in the following sections.

### Expenditures and Line-item Groups

As previously indicated, the expenditure totals for operation of the Alcona County Park through the Alcona County Parks and Recreation Commission Fund, have fluctuated from 1973 to 1977. The following table (Table 19) summarizes expenditures for the 1973 through 1977 period, based upon item groups rather than individual line items. The major cost groups include:

Wages	=	Wages paid to park staff
Insurance	=	General liability insurance and Blue Cross Insurance
Development and Maintenance	=	Construction/Equipment/Repair Costs
General Supplies	=	Hardware/Material & Supplies Expenditures
Promotion	=	Advertising
Office Costs	=	Telephone/Printing/Office Supplies
Other	=	Sanitary Pick-up/Miscellaneous/Retail Sales Purchases

Assuming a straight-line trend it could be stated that total expenditures have in fact declined by 33% (\$80,330.63 to \$53,475.22) in the past five years. This however is not the complete picture. There are actually two sets of years that show similar experiences relative to disbursements - these being 1973 and 1974 (5% increase in expenditures) and 1975 and 1977 (18% increase in expenditures). However in the years 1973-1974 sizeable costs were realized for construction and engineering, as well as the repayment of a loan to the County. Although both 1975 and 1977 are similar in expenditures they are both substantially smaller relative to total disbursement than any of the other years. The year 1976 stands alone - its year-end statements show total expenses of \$113,282.47. This total however includes "taxes" (\$16,800) which was not included on prior balance sheets, as well as a substantial "miscellaneous" expenditure of \$40,400. A more realistic figure for park-related expenses for 1976 is roughly \$94,000 - or a 100% increase from 1975.

TABLE 19

ALCONA COUNTY PARK  
EXPENDITURES

<u>Item</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>	<u>1976</u>	<u>1977**</u>
Wages	\$13,821.07	\$13,042.90	\$15,846.32	\$22,988.59	\$21,027.32
Insurance	1,169.50	1,342.10	1,891.39	3,078.94	3,679.77
Energy	4,575.56	5,802.26	8,677.76	10,785.45	10,199.33
Development and Maintenance	44,142.11	21,212.15	8,556.87	9,448.42	13,134.61
General Supplies	1,957.69	1,212.59	3,484.72	4,334.19	1,552.59
Promotion	417.24	1,482.00	13.06	393.76	-0-
Office Costs	552.28	672.80	1,419.78	1,219.55	1,358.78
Other	13,695.18	39,331.92	5,442.74	41,829.99	2,522.87
	<u>\$80,330.63</u>	<u>\$84,098.72</u>	<u>\$45,332.49</u>	<u>\$94,088.89*</u>	<u>\$53,475.22</u>

\*Does not include all line items - e.g. taxes, meetings, merchandise purchases

\*\*Based upon estimated year-end budget prepared by Park staff

A closer look at trends for both fixed and controllable cost groups, is as follows:

Wages: (Controllable)

- \* increase in wage costs 1973-1977 equals 52%
- \* wages remained fairly stable (slight declines) in the 1973-74 and 1976-77 periods
- \* most significant increase was in 1976 (+45%) due to staff expansion
- \* average annual increase has equaled 13%

Insurance: (Fixed)

- \* insurance costs increased substantially for 1973-1977 (+215%)
- \* steady annual rate of increase - 35% per year
- \* most elements of insurance costs are fixed with the exception of the type and extent of Blue Cross coverage for employees

Energy: (Fixed)

- \* as experienced by businesses and individuals alike, electricity and fuel costs have climbed substantially in recent years
- \* the total 1973-1977 increase was almost a \$6,000 per year cost or +123%
- \* the average annual increase since 1973 was 23%
- \* the estimated year end budget for 1977, indicated a decline in energy costs of 5% - discounting this year, the average annual increase from 1973-1976 was 32%
- \* the consumer price index for fuel and utility expenses in the United States rose by 44% in the years 1973-1976

General Supplies: (Controllable)

- \* expenditures for general supplies, fluctuated widely in the last five years

- \* the trends from 1973-1976 was an increase in disbursements for hardware and supplies of 121%
- \* the projected 1977 total is however a 64% decline from that spent in 1976 (- \$2,800)
- \* past trends - particularly the projections for 1977 - may be realistic for future years, however there will no doubt be a continued need for a base level expense for hardware and supplies which will increase annually due to inflation and general price increases

Promotion: (Controllable)

- \* as anticipated, in the operation of a recreation-related business, the amount spent on general promotion will vary depending upon policy decisions of the Commission, available money and anticipated need
- \* the Alcona County Park questionnaire indicated that only 6% of all visitors found out about the Park through promotional means - the majority (60%) visited the Park based upon a recommendation from another party
- \* the years of 1973 and 1976 reflect the most realistic past experience relative to advertising

Office Costs: (Controllable)

- \* general trend in office costs, including telephone and office supplies, is upward (+146% for 1973-1977)
- \* unknown factors contributed to the marked increase in disbursements from the years 1973-74 to 1975-77
- \* as the management of the Park becomes more formalized as far as record-keeping, etc., it is realistic to anticipate increased costs for office and support materials - the telephone bills in particular will remain high

Development and Maintenance: (Controllable)

- \* as previously mentioned, in that this cost group contains expenditures for construction and development, it could be highly variable from year to year dependent upon such things as the availability of matching grants and decisions by the Commission pertaining to improvements or expansion
- \* one of the products of this report will be a capital improvements program, detailing at minimum a five-phase program for construction which can then be plugged in as a element of the budget for a given year
- \* the remaining two line items - equipment and repairs - should be acknowledged and projected within a proposed budget

Repairs:

- \* the obvious trend in expenditures for repairs is the sizeable increase of over \$3,500 per year from \$445 (1973) to \$4,700 (1977)
- \* the irregular nature of repair expenses make any analysis of annual trends somewhat meaningless - the more important factor being the designation of a dollar amount as a contingency for repair expenses - this need not be spent every year

Equipment:

- \* equipment expenses increased from 1973-1974 (41%) and from 1976-1977 (150%) but declined in other years
- \* anticipated equipment needs should be programmed into a five-year phase, similar to potential development costs



Other:

- \* the catch-all category for "other" expenditures does contain a separate line item for sanitary pick-up costs which should be projected within a proposed budget
- \* any additional expenditures within this category can be considered as contingency funds

Sanitary pick-up:

- \* the average annual increase to provide sanitary pick-up has been 16%
- \* should further development occur - including additional modern campsites, expanded restroom facilities, up-graded primitive area toilets etc. - changes for sanitary pick-up could increase substantially

PARK INCOME

Trends in Revenues

As the following Table indicates, the year-end revenues derived from camping receipts, storage fees and concession sales, have been quite variable during the study frame of 1973-1977.

TABLE 20  
Alcona County Park

<u>Total Revenues</u>	<u>Total Permits</u>
1977 - \$ 73,883.00*	(N.A.) **
1976 - \$113,310.94	(4,755)
1975 - \$ 45,715.86	(4,287)
1974 - \$ 63,330.71	(3,905)
1973 - \$107,215.25	(3,969)

\*based upon estimates prepared at end of November - 1977

\*\*numbers in parenthesis are total permits issued by year, with the exception of 1977

The fluctuation in total revenues per year does not appear to be a direct function of the number of camping permits issued, as might be expected.

## PARK USERS ATTITUDE SURVEY

The Alcona County Parks and Recreation Commission in conjunction with the Cooperative Extension Service, developed a brief questionnaire which was then utilized to monitor the attitudes of those individuals utilizing the Park during this past summer. Copies of the questionnaire were given to all camping groups when they registered and they were asked to complete it and return it to the Park office upon breaking camp. The questionnaires were coded by campground sub-area for comparison purposes. All responses received between June 17 and August 18, 1977 were tabulated and are contained on the following pages. As such a users survey is an excellent means of getting feedback about the quality of facilities or operation at the Park. The information gleaned from the survey has proven to be most valuable to the Park management and the ACPRC.

In brief a few of the highlights of the data obtained by the questionnaire are:

1. Advertising for Alcona County Park was primarily by word-of-mouth.
2. The overwhelming majority (74%) of those campers surveyed were regulars at the Park.
3. The good fishing and "wilderness" setting are the two main attributes of Alcona County Park as perceived by its users.
4. In general the Park management received good marks for general maintenance - such items as restrooms, roads, keeping the beaches clean and so forth.
5. The fee schedule change was considered to be reasonable - input on which provided support to the ACPRC to raise their general fees for the 1978 season.
6. Most people (82%) camping at Alcona County Park, are utilizing it as their vacation spot and not just an over-night stopover.

7. Strongest criticism of the overall operation of the Park, centered on the need for cleaner restrooms and upgraded toilets in the primitive camps.

TABLE 21  
 TABULATED RESPONSES  
 ALCONA COUNTY PARK QUESTIONNAIRE  
 JUNE 17 - AUGUST 18, 1977

1. Why did you come to this park?

News Ad	<u>.4%</u>
Brochure	<u>5.3%</u>
Recommended	<u>57.6%</u>
Chance	<u>10.3%</u>
Other:	<u>26.3%</u>
Regular campers	<u>73.9%</u>
Good fishing	<u>10.1%</u>
Near relatives	<u>4.4%</u>
Close to home	<u>4.4%</u>
Found on map	<u>1.5%</u>
Close to canoe rental	<u>1.5%</u>
Waterskiing	<u>1.5%</u>
On river (canoe) route	<u>2.9%</u>

Total - 262 responses

2. Why do you go camping:

New area	<u>8.9%</u>
New routine	<u>16.3%</u>
New people	<u>9.4%</u>
Wilderness	<u>39.1%</u>
Other:	<u>26.3%</u>
Fishing	<u>26.1%</u>
Relaxation	<u>15.2%</u>
Get away from it all	<u>22.8%</u>
Enjoyment	<u>27.2%</u>
Cheap vacation	<u>2.2%</u>
Family companionship	<u>2.2%</u>
Swimming	<u>1.1%</u>
Hiking	<u>1.1%</u>
Roughing it	<u>1.1%</u>
To be by ourselves	<u>1.1%</u>

Total - 350 responses

3. Did you enjoy this park environment?

Yes	<u>94.0%</u>
No	<u>6.0%</u>

Total - 266 responses

Yes: Why?

Quiet	<u>36.5%</u>
Friendly people	<u>11.8%</u>
River	<u>9.4%</u>
Clean camp	<u>8.2%</u>
Woods	<u>8.2%</u>
Large sites	<u>5.9%</u>
View	<u>5.9%</u>
Well maintained	<u>5.9%</u>
Not crowded	<u>3.5%</u>
Many activities	<u>1.2%</u>
Likes primitive area	<u>1.2%</u>
Inexpensive	<u>1.2%</u>
Swimming	<u>1.2%</u>

No: Why?

Noisy people/area	<u>23.5%</u>
Restrooms/showers not clean	<u>17.7%</u>
Need new outhouses	<u>11.8%</u>
Toilets need new seats	<u>11.8%</u>
Too dusty	<u>5.9%</u>
No picnic tables	<u>5.9%</u>
No toilet paper	<u>5.9%</u>
Too many motorcycles	<u>5.9%</u>
Not clean enough	<u>5.9%</u>
Poorly stocked river	<u>5.9%</u>

4. Was our maintenance satisfactory for . . . ?

a. Restrooms:

Yes	<u>72.2%</u>	
No	<u>27.8%</u>	*mostly responses from primitive area

b. Trash:

Yes	<u>90.8%</u>
No	<u>9.2%</u>

c. Roads:

Yes	<u>91.6%</u>
No	<u>8.4%</u>

d. Beach:

Yes	<u>82.6%</u>
No	<u>17.4%</u>

Total - 230 responses

4. & 5. (Comments combined and contained in separate section)

6. Is our fee schedule . . . ?

Too high	<u>14.8%</u>
Just right	<u>84.5%</u>
Too low	<u>.7%</u>

Total - 271 responses

7. How much more would you be willing to pay?

\$0	<u>60.6%</u>
\$1	<u>21.1%</u>
\$2	<u>9.2%</u>
\$3	<u>9.2%</u>

Total - 218 responses

8. Did you feel our security was adequate for your safety?

Yes	<u>92.1%</u>
No	<u>7.9%</u>

Total - 214 responses

9. Would you recommend this park to a friend?

Yes	<u>96.5%</u>
No	<u>3.5%</u>

Total - 260 responses

10. Is this your vacation spot . . .

	<u>82.2%</u>
--	--------------

or a stop on route, . . .

	<u>16.3%</u>
--	--------------

or are you here for a weekend?

	<u>1.5%</u>
--	-------------

Total - 270 responses

Alcona County Park Questionnaire  
Questions #4 and #5

4. Was our maintenance satisfactory? Other comments please \_\_\_\_\_?  
\_\_\_\_\_?
5. Recommend any improvements or ideas for a better park \_\_\_\_\_?  
\_\_\_\_\_?

In compiling the extensive lists of comments, suggestions, and in some instances complaints, that were offered by those campers completing the questionnaire, a method was needed to arrange them in a format that would reflect their relationship. Five groupings were established - each pertaining to a separate and identifiable portion of the physical attributes of the park, the quality of the camping "experience", or the parks management and operation. These groupings are:

- restrooms and showers (facilities)
- trash (removal)
- water (related activities - beach area, swimming, fishing, boating)
- improvements (to program, facilities or added conveniences)
- policy (rules and regulations and their enforcement)

Although the titles of the various groupings appear to be lengthy, they cover a specific area of discussion and all responses could be applied to one of the five groups.

The following, indicates the ranking of the five categories as far as number of responses per group:

- I. Improvements (35%)
- II. Restrooms and showers (27%)
- III. Water (18%)
- IV. Policy (13%)
- V. Trash (8%)

The categories of "improvements" and "restrooms and showers" totaled 62% of all comments received. This indicating the concern and sometimes dissatisfaction with these aspects of the total park program. As following sections will indicate, the suggestions offered by campers for the most part did not involve extensive development but rather were often subtle and sometimes insignificant changes that could improve the over-all quality of their visit to the park.

The listings which follow indicate in an abbreviated format, those comments which were received within each of the five groups. The comments are arranged in decreasing order of similar or identical comments received.



## I. Improvements

1. Need more picnic tables
2. Need playground for children
3. Need an ice machine at office
4. Need more hand pumps (wells)
5. Need permanently defined fire pits
6. Remove stumps on the camp lots
7. Furnish cut firewood (for a fee)
8. Need park store/party store
9. Need emergency phone (primitive west)
10. Grills for each lot
11. Bigger lots for tents
12. Erosion control along shoreline
13. Mark lots better
14. Need bigger parking spaces (modern)
15. Furnish boat rental
16. Furnish more electrical outlets
17. Bottle gas refilling station
18. Cement slabs for trailers
19. Shelter for tent campers in case of severe storm
20. Spray dusty roads
21. Provide steps for access to river
22. Provide special campground for backpackers

## II. Restrooms and Showers

1. Restrooms were not clean
2. Showers were not clean
3. More restrooms are needed (restrooms too far apart)
4. More showers are needed
5. Lack of toilet paper in restrooms
6. Need more hooks in showers
7. Toilets (primitive) need new seats
8. Repair locks on showers
9. (Pit) Toilets need deeper holes and lime
10. Repair locks on bathrooms
11. Separate male-female bathrooms
12. Need mirrors in restrooms

## III. Water

1. Improve boat dock
2. Plant fish in river
3. Need beach for swimmers only or don't allow boats on beach or keep boats away from swimmers
4. Need more beach area
5. Need a diving board
6. Need warning signs for water depth (water deepens too fast)
7. Beach needs to be cleaned regularly
8. Too many stones on beach

#### IV. Policy

1. Restrict dogs, or don't allow dogs on beach
2. Regulate motorcycles and trailbikes
3. Regulate chain saws
4. Enforce rules that exist
5. Keep nightly patrols for security
6. Keep bikes away from bath house
7. Too noisy
8. Enforce 10:00 p.m. closing
9. Enforce speeds on roads
10. Restrict in-out movement
11. Better security is needed
12. Better maintenance at park entrance
13. Establish senior citizen rate
14. Fee too high for wilderness camping
15. Permit year-round camping

#### V. Trash

1. Need more trash containers, also need more trash containers on beach
2. Give trash bags to each camper

## SITE USE ANALYSIS

The park analysis was compiled from the consultant's observations at the site, discussions with Park staff and Park commission members, past observations provided by members of the National Forest Service, the Regional Planning Commission, Cooperative Extension Service and Soil Conservation Service and data compiled from questionnaires distributed to 1977 summer campers (pages 54-61). The analysis was based on the desires of the Park and Recreation Commission to maintain the park as a viable camping facility and as a recreation resource serving the needs of Alcona County residents.

A visual survey of the park disclosed existing resources, potential resources and problem areas and are indicated on the Site Analysis map or have been discussed under Site Inventory.

Further clarification of problem areas follows:

It is helpful to list the concerns revealed by the site analysis. This listing begins to bring into focus the basic design criteria which will be discussed in the following section and also serves as an indication that certain problem areas cannot be answered thru the physical design, but are created/solved thru park policy and park maintenance standards.

Briefly stated -

### Environmental Standards

- present campsite layout and camping capacities have caused serious erosion problems on river banks, and adversely impacted the natural resource.
- present usage of the river's edge for camping limits access to the river resource.

- small campsite size and lack of development, (permanent fire pit, parking pad) have caused deterioration of the natural resource because of overuse.

#### Health Standards

- water supply in primitive areas is below current minimum health standards.
- leaching pit toilets in certain areas are below current minimum health standards because of soil types and proximity to water table. Consider vault-type outhouses.

#### Maintenance and Policy

- control of summer leases as to location and use of site is minimal and should become more stringent.
- service building in modern areas needs upgrading.
- maintenance of service facilities, trash collection and beach areas need to be increased as it is a major complaint of campers.

#### Facilities

- swimming areas and boat launch areas are not segregated and are poorly developed.
- few recreational opportunities exist for campers or county residents.
- need better development of individual campsites - picnic tables, fire pit, parking pad, conveniently located water supply and outhouses, campsite markers.

#### Design Standards

- park entrance on AuSable Road is in a constricted location and does not adequately handle park traffic.
- approaches to park entrances do not capitalize on the scenic or wilderness qualities of the Park.
- campsites are strung along main access roads and provide neither a safe nor a pleasant environment for campers to relax in.

# ALCONA COUNTY PARK

Alcona County Parks & Recreation Commission  
Harrisville, Michigan 48740

## SITE ANALYSIS

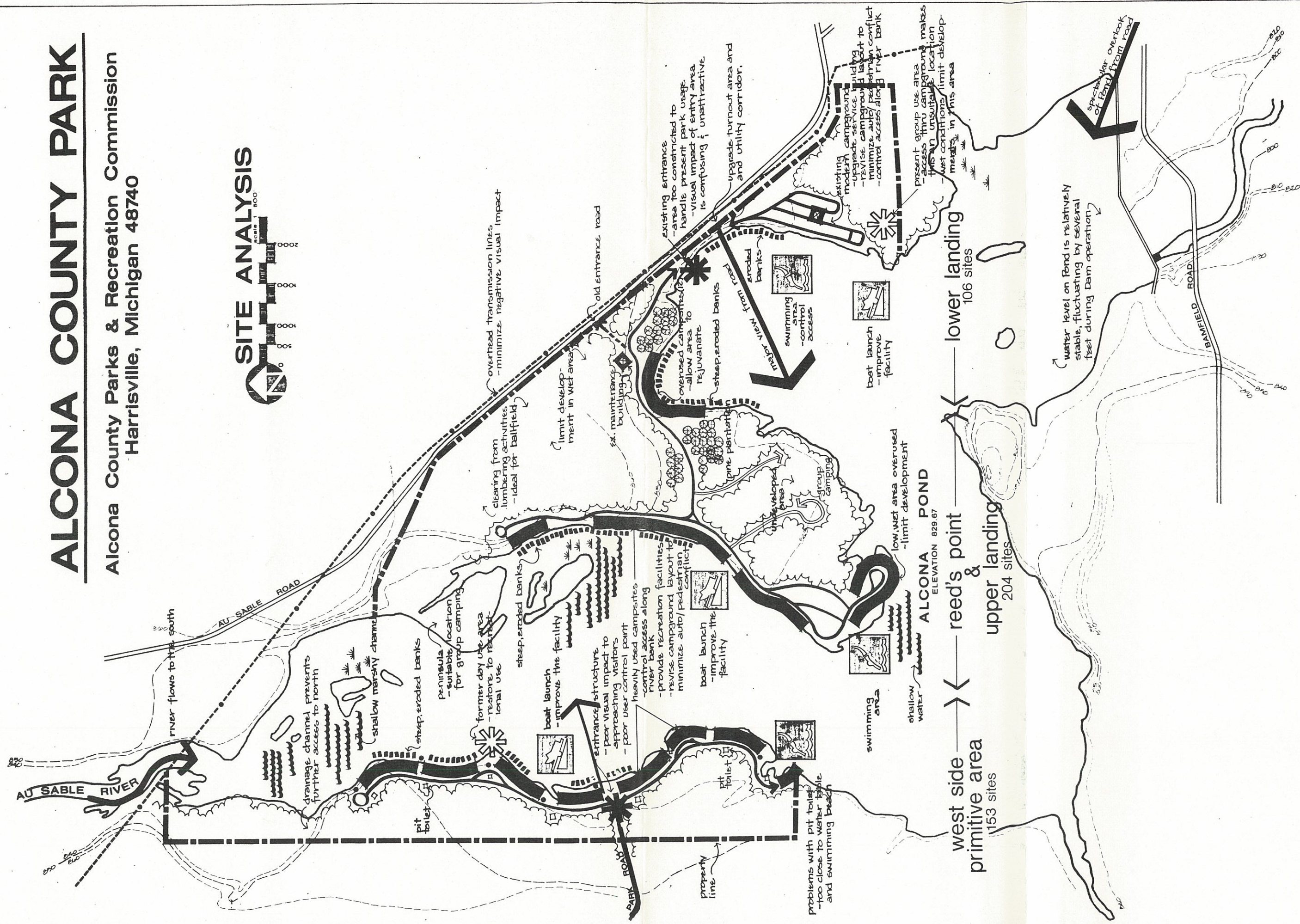


FIGURE 8

- directional and informational signage needs to be upgraded.

#### SITE DESIGN CONCEPTS

The concerns reiterated in the site analysis bring into focus the design concepts necessary to achieve a viable and attractive camping facility and a recreational resource for county residents.

The elements of major concern are the relationships between the river's edge, the campsites and access roads. The design concept is threefold (1) to return the river's edge to common usage by removal of all campsites from water's edge and development of shoreline areas; (2) to place campsites on cul-de-sac roads served by a main access road to reduce the conflict between pedestrians and vehicles, and (3) to more effectively utilize the park land back of the shoreline.

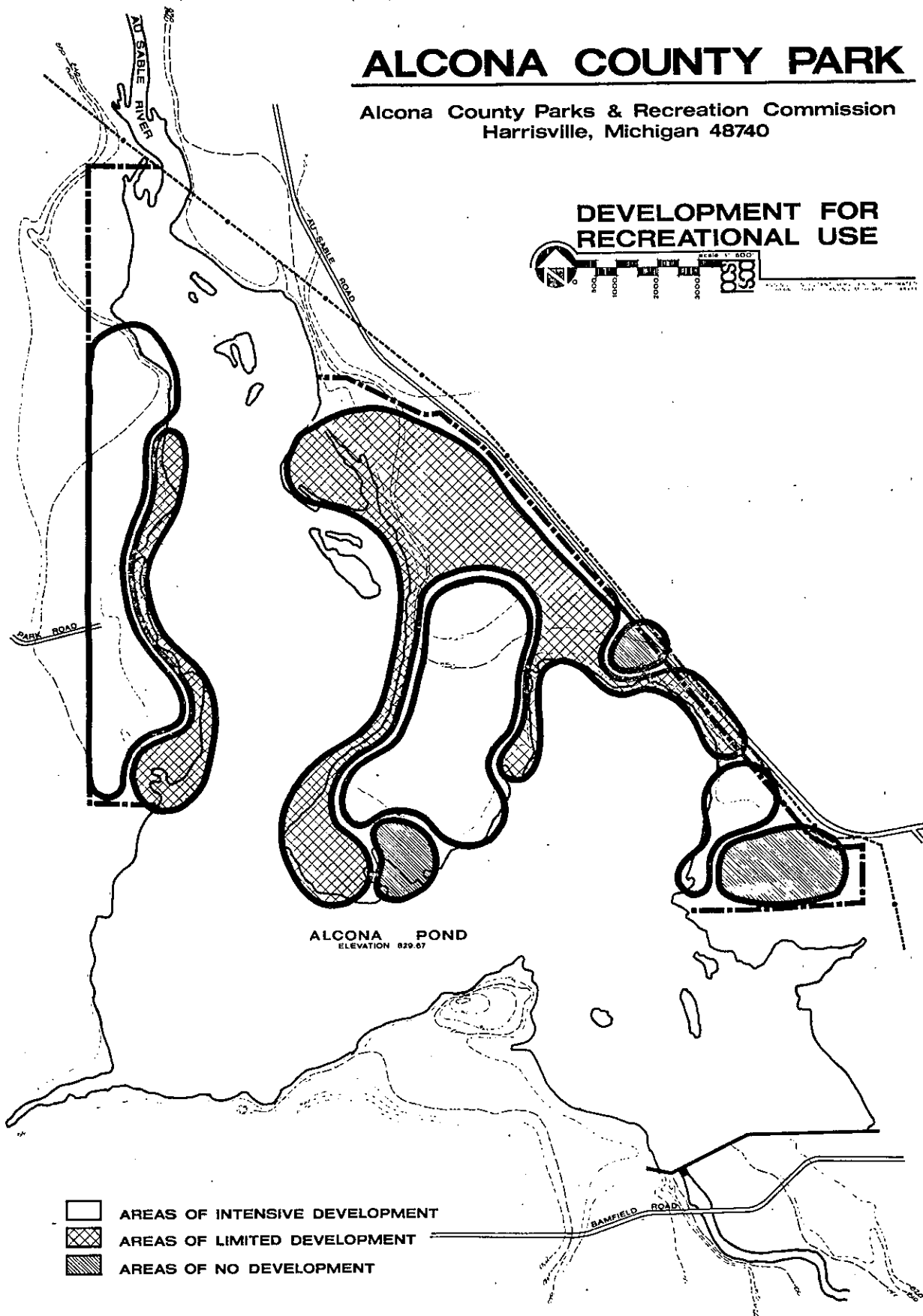
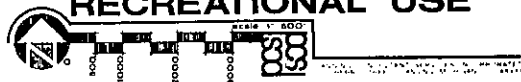
The location of the various use areas was arrived at thru a combination of several factors which culminated in the Recreational Use Map (Figure 9). Those areas with only moderate soil restrictions, few problems with the water table and no slope restrictions were designated as having only slight limitations for development and became the general location for intensive development. Those areas with steep slopes or seasonal water table or poorer soils have only moderate development as "public space" or for recreational use. Those areas with severe restrictions were left undeveloped, as natural areas.

The park's excellent natural resources in the form of soils, forests, low areas and shoreline are major factors in the creation of a workable site plan. Each facility location or use area should be compatible with these resources from the point of view of the user and practical maintenance.

# ALCONA COUNTY PARK

Alcona County Parks & Recreation Commission  
Harrisville, Michigan 48740

## DEVELOPMENT FOR RECREATIONAL USE



-  AREAS OF INTENSIVE DEVELOPMENT
-  AREAS OF LIMITED DEVELOPMENT
-  AREAS OF NO DEVELOPMENT

FIGURE 7

The site analysis map Figure 8 identified existing site elements that directly influence the site design process.

The conceptual site plan Figure 10 indicates how the general framework of the proposed plan is structured together, the relationships between individual facilities and use areas. These relationships are discussed in the following text by area - West Side Primitive Area, Reed's Point and Upper Landing and Lower Landing Modern Campground.



# ALCONA COUNTY PARK

Alcona County Parks & Recreation Commission  
Harrisville, Michigan 48740

## CONCEPTUAL PLAN

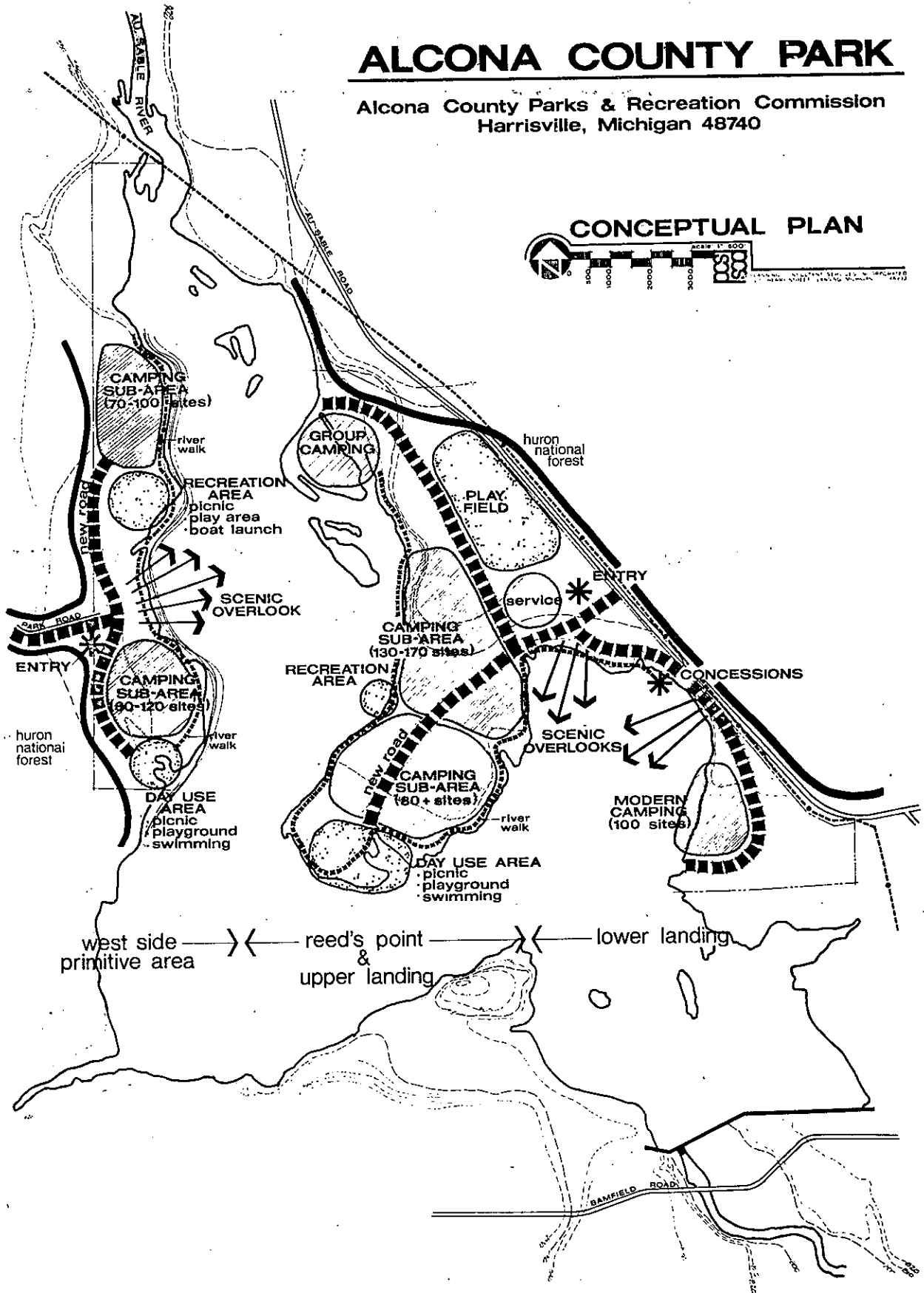


FIGURE 10

# ALCONA COUNTY PARK

Alcona County Parks & Recreation Commission  
Harrisville, Michigan 48740

## CONCEPTUAL PLAN

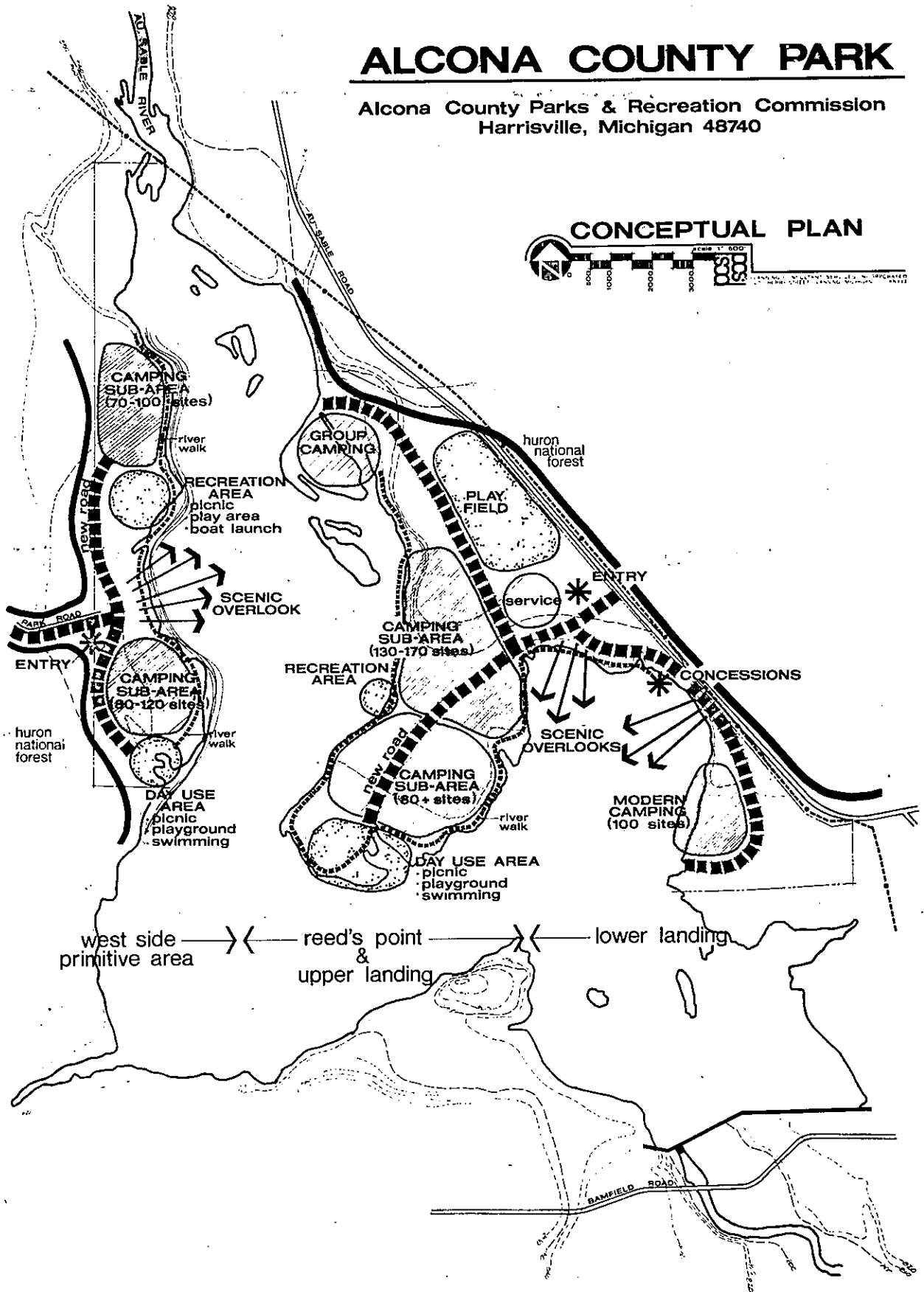


FIGURE 10

# MASTER PLAN AND RECOMMENDATIONS

## MAJOR PARK ENTRANCE AND APPROACH

Although the park is divided into two distinct areas, the formal entrance to Alcona County Park is located at its northeastern edge on Au-Sable Road. The present location of the registration and office building, dump station and service area is unsuitable. The entrance has proven too constricted to smoothly handle the volumes of traffic moving in and out of the park. Further vehicular conflict arises in that staff vehicles, staff housing and servicing area are not separated from the entrance area. The entrance gives a poor visual impact not only due to traffic congestion but also to its location under the Consumer Power Company's overhead power line.

Relocation of the entrance road 500'+ to the north at the former entrance road location and construction of a small registration building with screened service facilities nearby will improve traffic circulation at the park entrance. See Figure 12 for entry detail.

Office structure shall contain:

Registration area	-	144	square feet
Clerk's office	-	144	square feet
Toilet	-	36	square feet
		<u>324</u>	square feet

Equally important as the entrance area, is the value of the approach road landscape to enhance the scenic and wilderness qualities.

The highly visible, forbidding overhead power lines parallel the road adjacent to the park entrance. Judicious placement of low shrubs or scattered trees along side the utility right-of-way will minimize the visual intrusion of the power line in this primitive area and will also help control off-the-road vehicles.

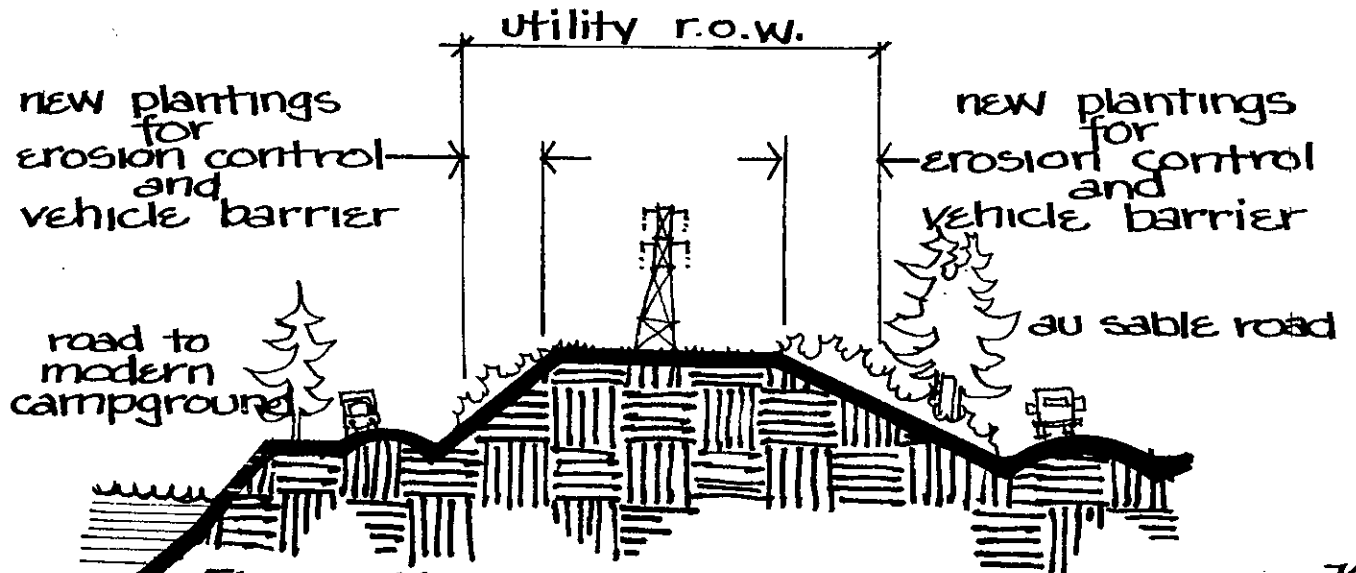
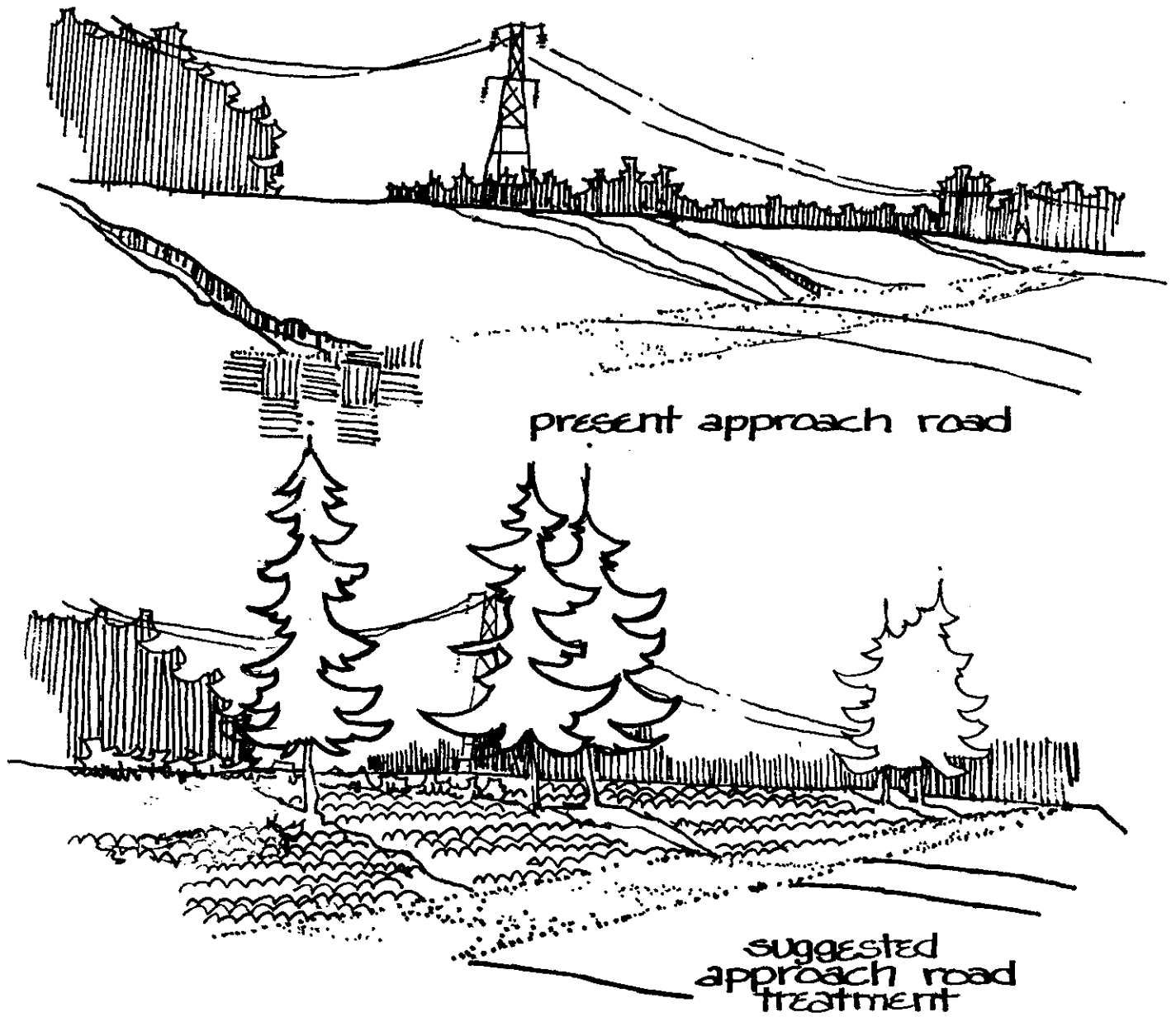


Figure 11

# NEW ENTRANCE DETAIL

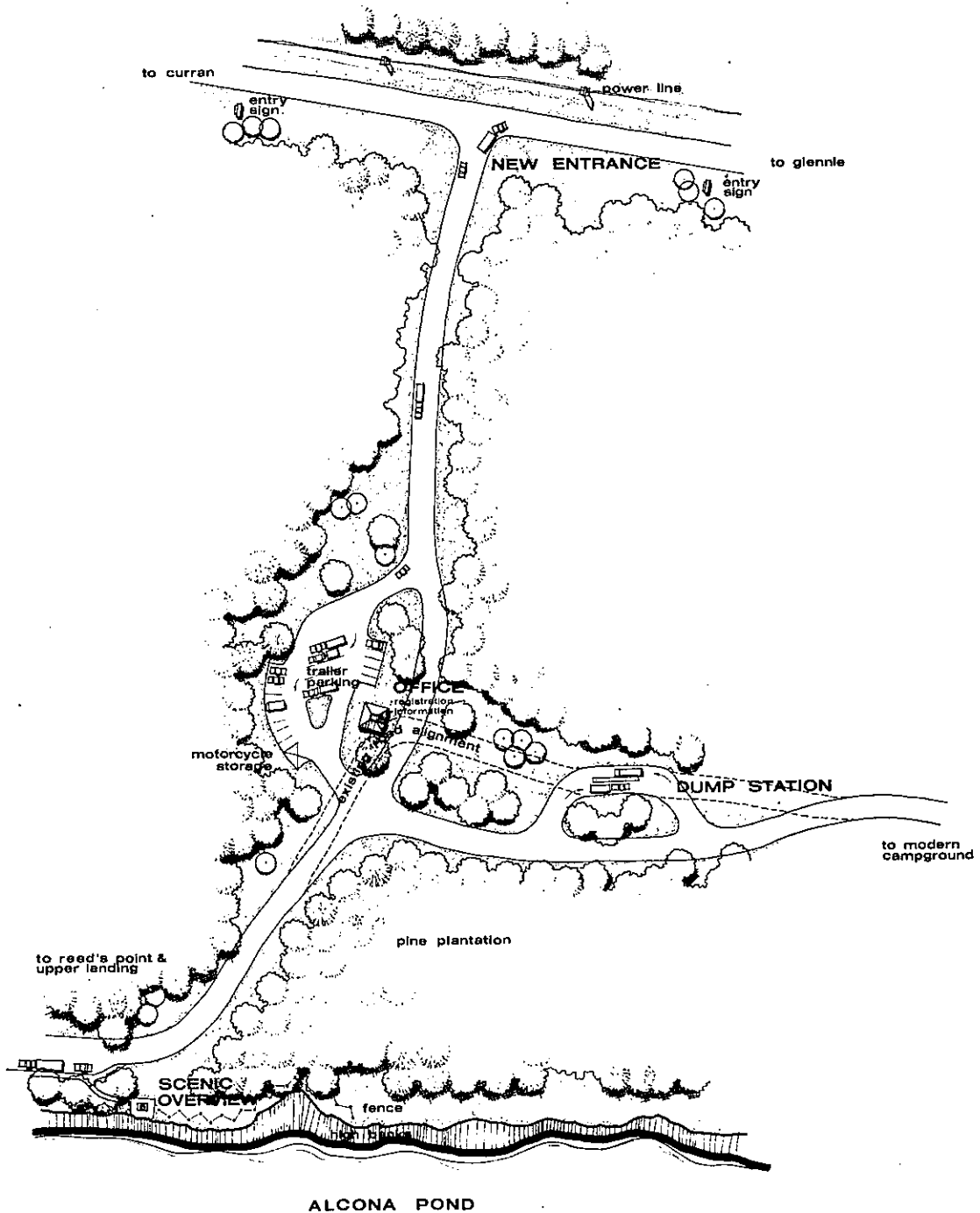
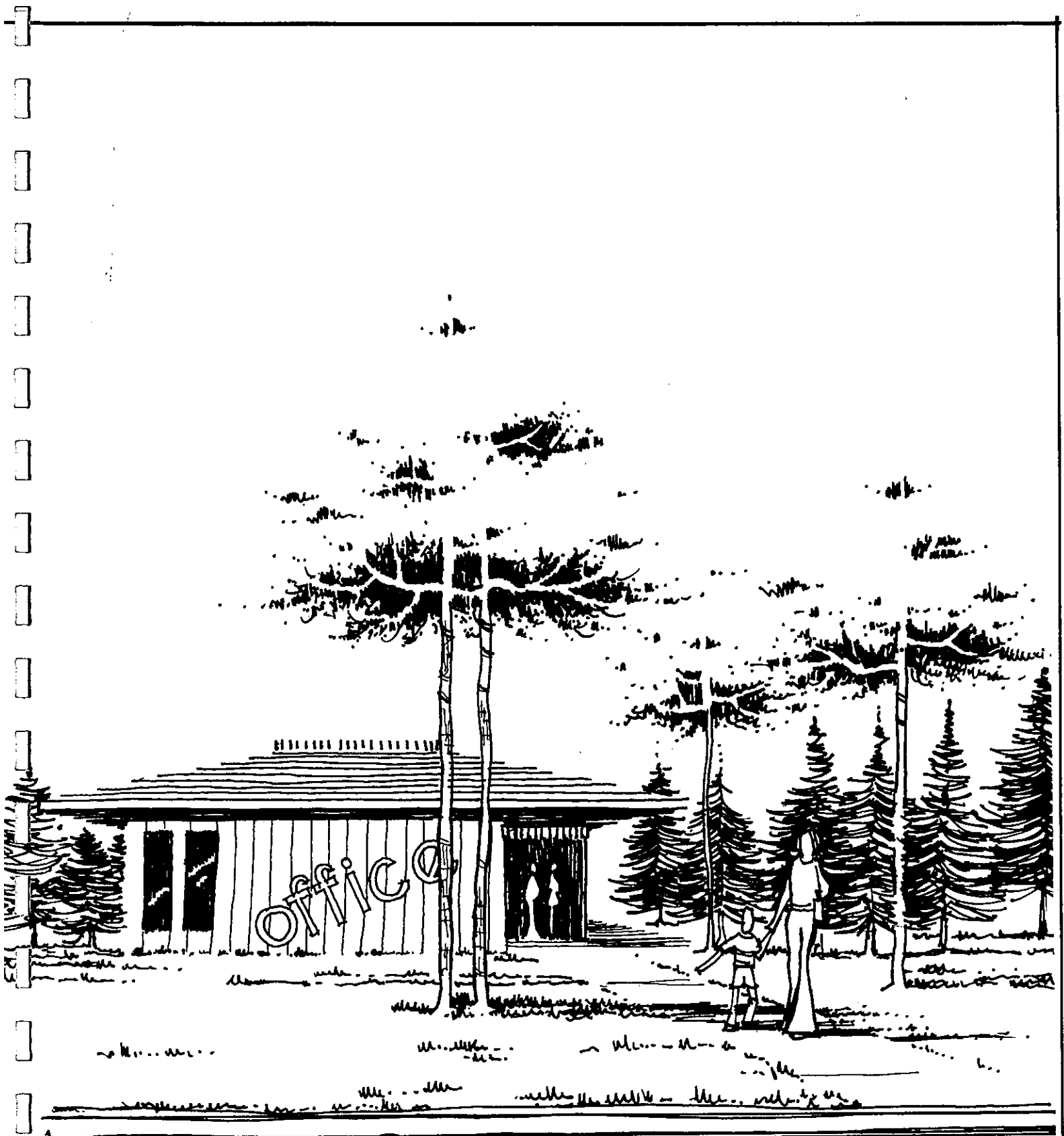


FIGURE 12



registration office sketch

FIGURE 13

## WEST SIDE ENTRANCE

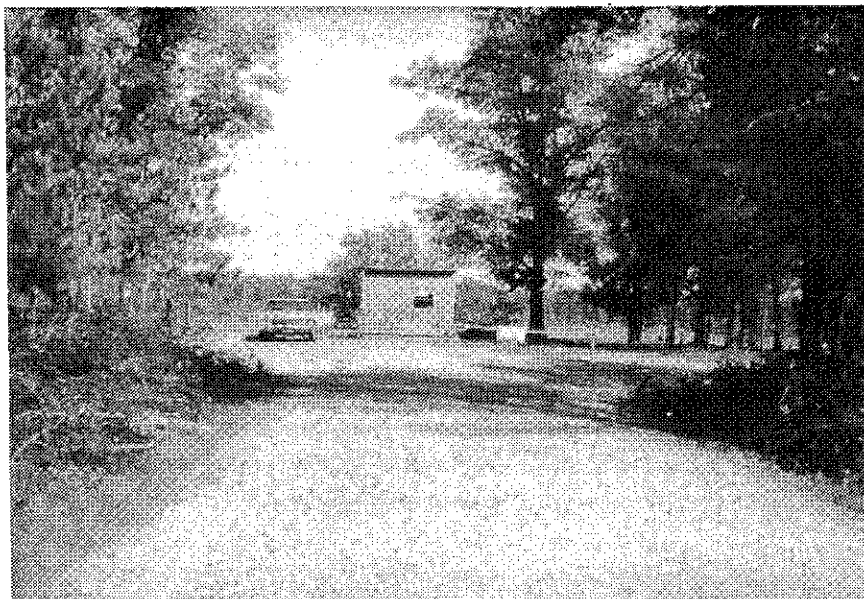
The West Side Primitive Area has its own entrance which should serve to direct park users to facilities with a minimum of confusion and should serve a control function when demand on the West Side is heavy. At the present time registration is handled by the AuSable Road Park Office or more informally by patrolling park staff. It is assumed that this practice will continue until user demands are such that an additional staff member can be placed at the entrance.

The West Side Primitive Area is serviced by Park Road - a gravel County road crossing Huron National Forest. It ends at the shoreline of Alcona Pond where it intersects the north-south park access road. The present entry does not allow for complete control of all the park area. In addition the first sight campers receive of the park at the present entrance is a dilapidated shed (see below) rather than a vista of Alcona Pond.

The proposed entrance to the West Side is placed near the property line along Park Road. Installation of a gatehouse here will give the staff better control of park users. (campers, motorcyclists, day users, etc.) It provides a more aesthetically pleasing "front door" to the park with a long vista down the present road right-of-way to the Pond.

Here, too, simple service and maintenance facilities can be located along with directional and informational board for park users.

present  
entrance



MAIN PARK ROADS AND CAMPSITE ACCESS  
WEST SIDE PRIMITIVE AREA  
REED'S POINT  
UPPER LANDING

For the most part the existing roadways parallel the shoreline within 50'-100' and service the campsites which are between the road and shoreline. The limitations for use of interior park land are obvious. It is recommended that existing road ways be removed and replaced with a 24' wide gravel road located a minimum of 200' back of the shoreline. The relocation of the existing roads make more effective use of all the land back of the shoreline. The main road then serves as the spine for campsite access or cluster roads which run at right angles from it to the shoreline.

In order to minimize pedestrian vehicle conflicts, and reduce the number of camping vehicles moving past individual campsites, the campsites were placed on dead end roads (200' apart minimum) serving a maximum of 28 sites as on the West Side and Upper Landing. Or campsites were placed in clusters of ten or less on turnarounds off of the main road. This layout serves several additional functions:

1. Campsites are not 'back to back', but separated by a natural buffer of varying width, so emphasizing the wilderness quality of the park.
2. The buffer provides pedestrian access to the shoreline and to service facilities (water/toilets) which are located in the buffer. Pedestrian circulation to all park facilities is arranged to provide the minimum number of conflicts with vehicles.
3. The shoreline is accessible to all campers as a common walkway and Pond access. Removal of campsites from the waters edge allows the fragile shoreline area to recover from the constant demands put on it by the present layout.



## PRIMITIVE CAMPSITE FACILITIES

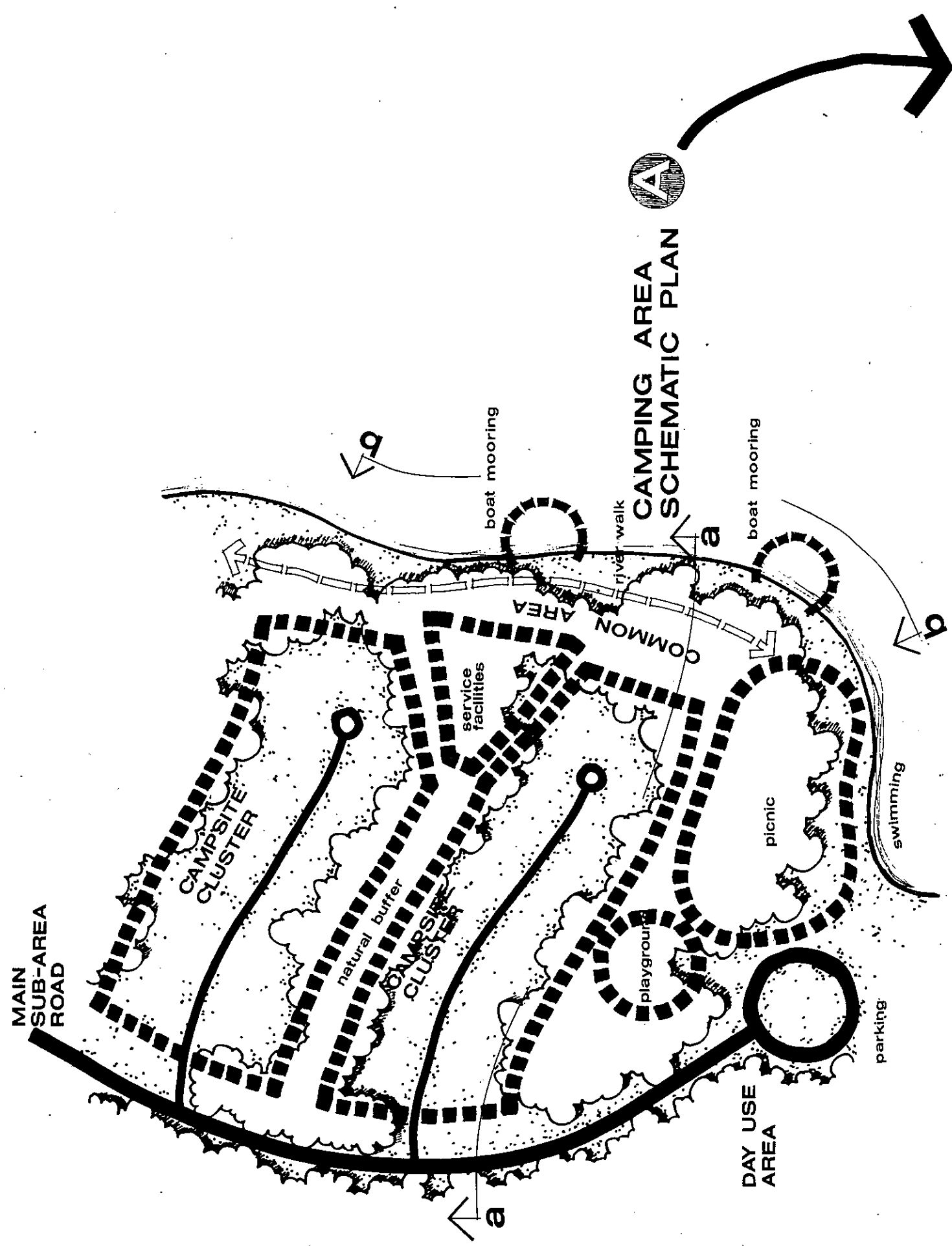
A major concern in the layout of individual primitive campsites is not only emphasis on the primitive quality of the campground, but also preservation of the natural resource which provides this quality. Several measures are recommended to both emphasize and preserve:

1. Natural buffer of undisturbed forest area between campsite clusters.
2. Larger campsites (60' x 75') to allow for planting 'screen' between adjacent lots, and to reduce concentrations of the campers activities per square foot of campsite area.
3. Clear definition of lot boundaries and use areas - i.e. permanent fire pits, gravel parking pad with bumper stops - to reduce random parking of vehicles and building of camp fires with resultant destruction of vegetation.
4. Limitation of camping capacities to no greater than 200 sites on the West Side and 184 at Reed's Point/Upper Landing with an overflow capacity of 79.

The questionnaires distributed to 1977 campers revealed that a significant number of campers wanted to see more campsite "furniture" and service facilities.

It is recommended that each site be provided with a picnic table, a fire pit ring and that every 15-20 sites be serviced by an outhouse (1 per sex) with a water tight vault and a water well. Type and location of toilets and wells shall conform with Michigan Public Health Standards (see Appendix.)

On site observations also indicated the need for additional parking spaces for the numerous 2-vehicle campers and for their visitors. Additional space was provided by large park-

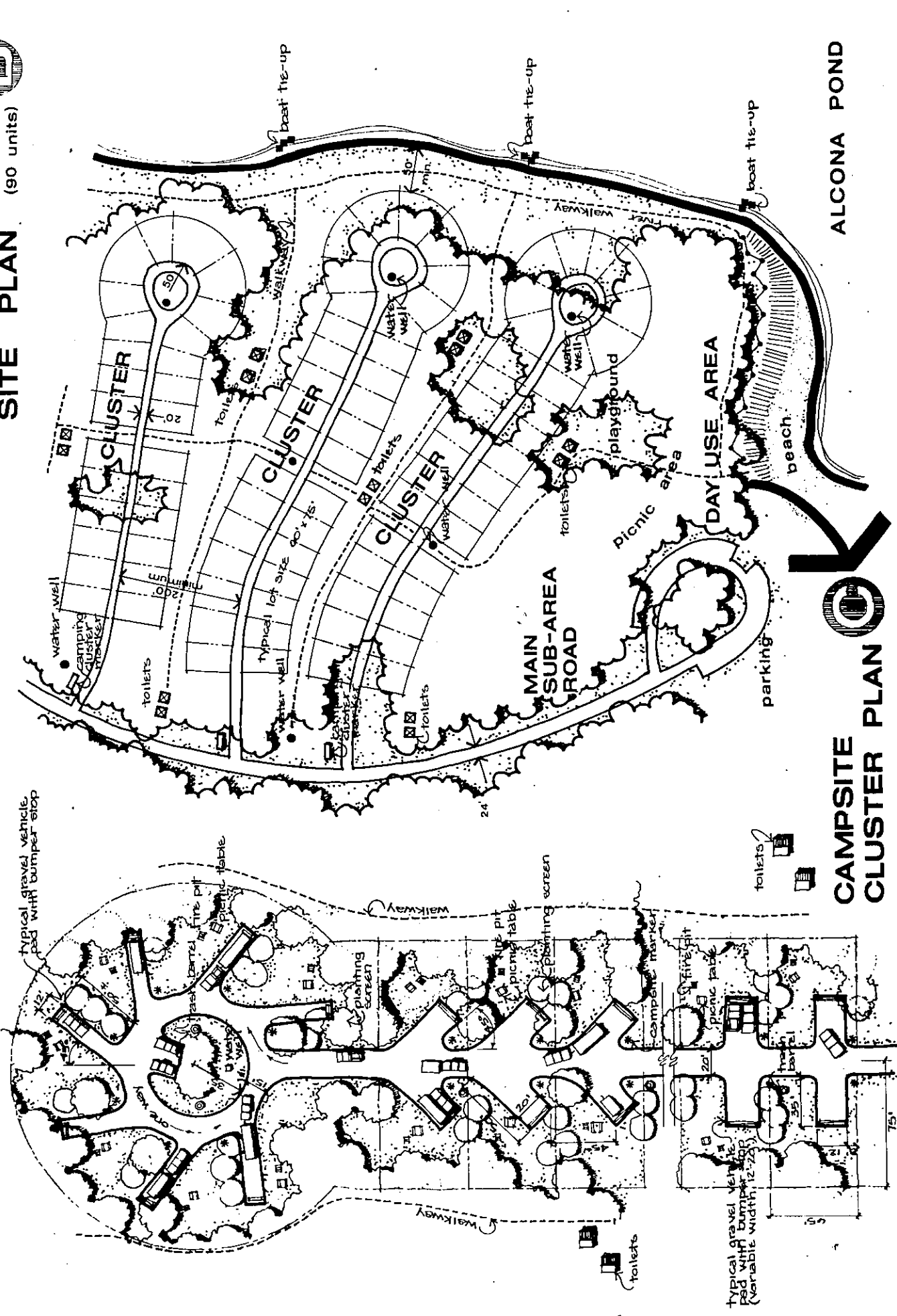


**A**

**CAMPING AREA SCHEMATIC PLAN**

**B**

**CAMPING AREA SITE PLAN (90 units)**

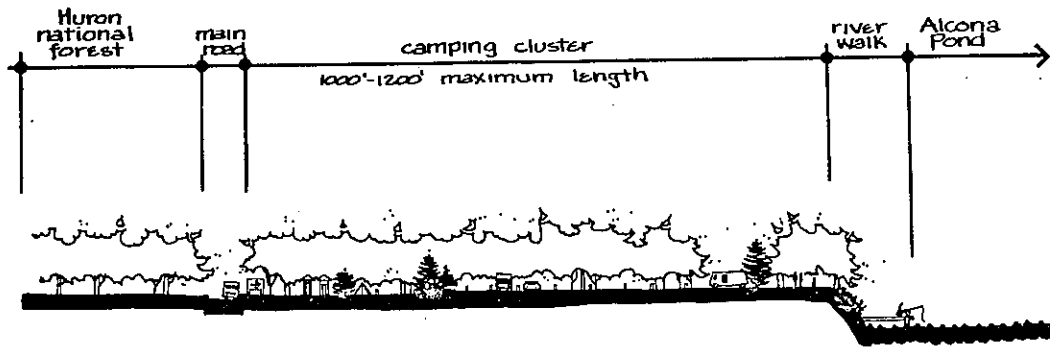


**C**

**CAMPSITE CLUSTER PLAN**

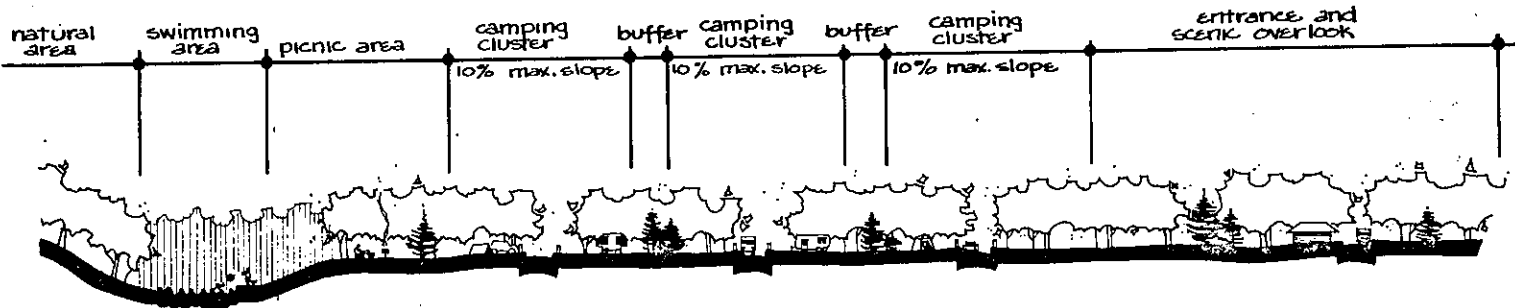
**FIGURE 14**

**ALCONA POND**



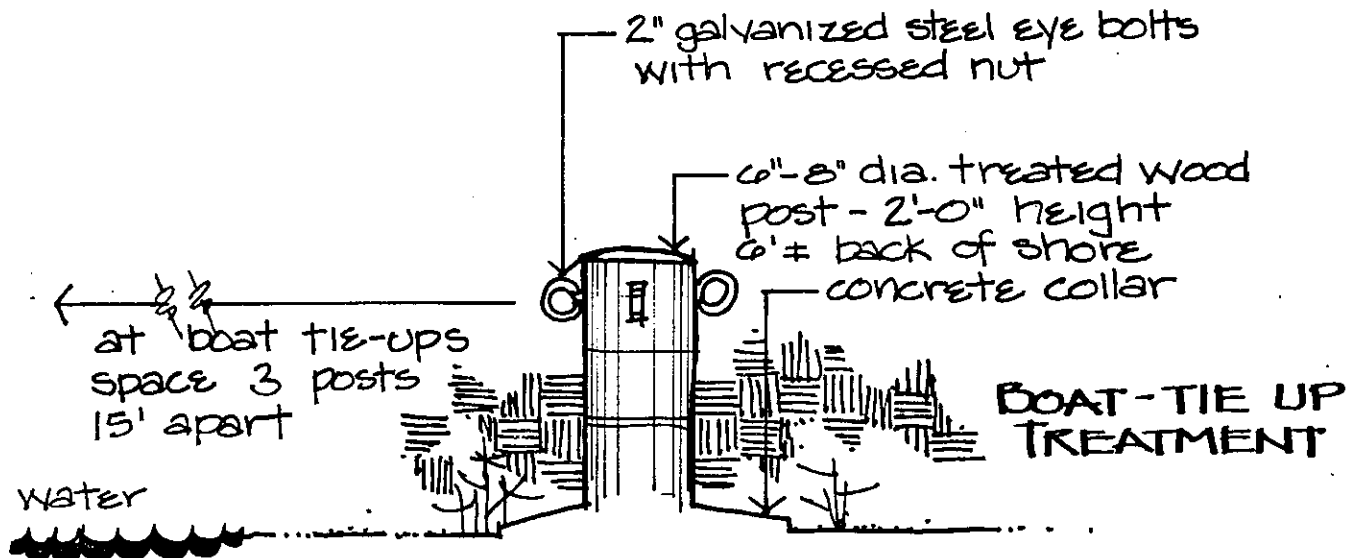
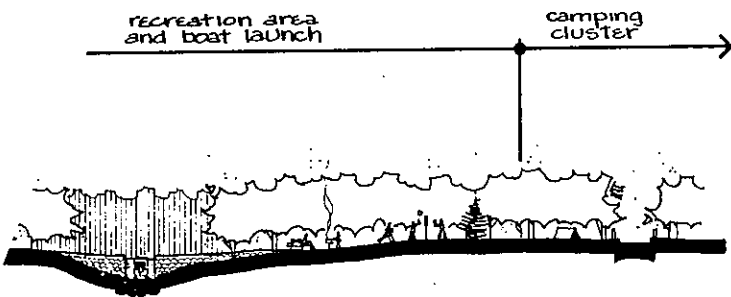
**section a-a**

no scale



**section b-b**

no scale



ing pad on each lot by parking spaces at the end of the cluster road.

Providing trash containers for every 4 sites would make the current practice of constant surveillance of each site for trash pickup services unnecessary, as park staff could institute a daily or once every two day routine to empty containers.

#### TREATMENT OF WATER'S EDGE

The current practice of camping directly along the water's edge has created serious problems along the banks. The uncontrolled access of campers down the banks to fish, to beach their boats, to build docks, to swim, etc. has severely eroded the shoreline.

The removal of campsites from the water's edge gives the shoreline a chance to rejuvenate and gives ample opportunity for all park users to enjoy the shoreline. Provision of fencing, wood chip pathway, and steps down the banks will direct pedestrian traffic to those areas of the shoreline which can best accommodate intense use. Further, primitive boat tie-up timbers and removable docks will further concentrate boating activities at those areas specifically designed for constant use.

#### RECREATIONAL FACILITIES

Recreational facilities related to both the camping population and day-users are poorly developed or non-existent. Park staff and the user questionnaires indicate the desire for both passive and active recreational facilities.

#### West Side Primitive

At the present time a small inlet at the south of the park serves as a day use swimming area. However a marked parking area is non-existent and no support facilities have been dev-

eloped. Nearby pit toilets are most probably polluting the water, creating unsanitary swimming conditions.

A day use area exists to the north of the present entry adjacent to a rough boat launch. The area is poorly marked and has been used by campers as an extension of their campsites.

At no location in the West Side Primitive Area is there a cleared area suitable for large ball fields. Because of the wooded character of the Park, it is not recommended that areas larger than a volleyball court be cleared; and even then location of game courts should be in existing clearings to minimize tree removal.

Proposed recreational facilities are placed adjacent to each of the camping sub-areas - accessible to both campers and day-users.

The lower camping sub-area is adjacent to a day-use facility which utilizes the existing beach, provides parking, picnic tables and grills, play ground equipment and service facilities. (outhouses, water, boat dock). This area is accessible by vehicle on the main road or by foot along the shoreline. The beach requires clearer delineation to prevent activity in areas unsuitable for intense use, bank erosion control measures and removal of pit toilets.

The upper camping sub-area capitalizes on the already designated day use area and provides picnic tables and grills, parking, play ground equipment, several clearings for volleyball nets, a boat launch and trailer parking, and service facilities (outhouses, water). This area too, is accessible by vehicle or by foot.

# ALCONA COUNTY PARK

Alcona County Parks & Recreation Commission  
Harrisville, Michigan 48740

## WEST SIDE PRIMITIVE AREA

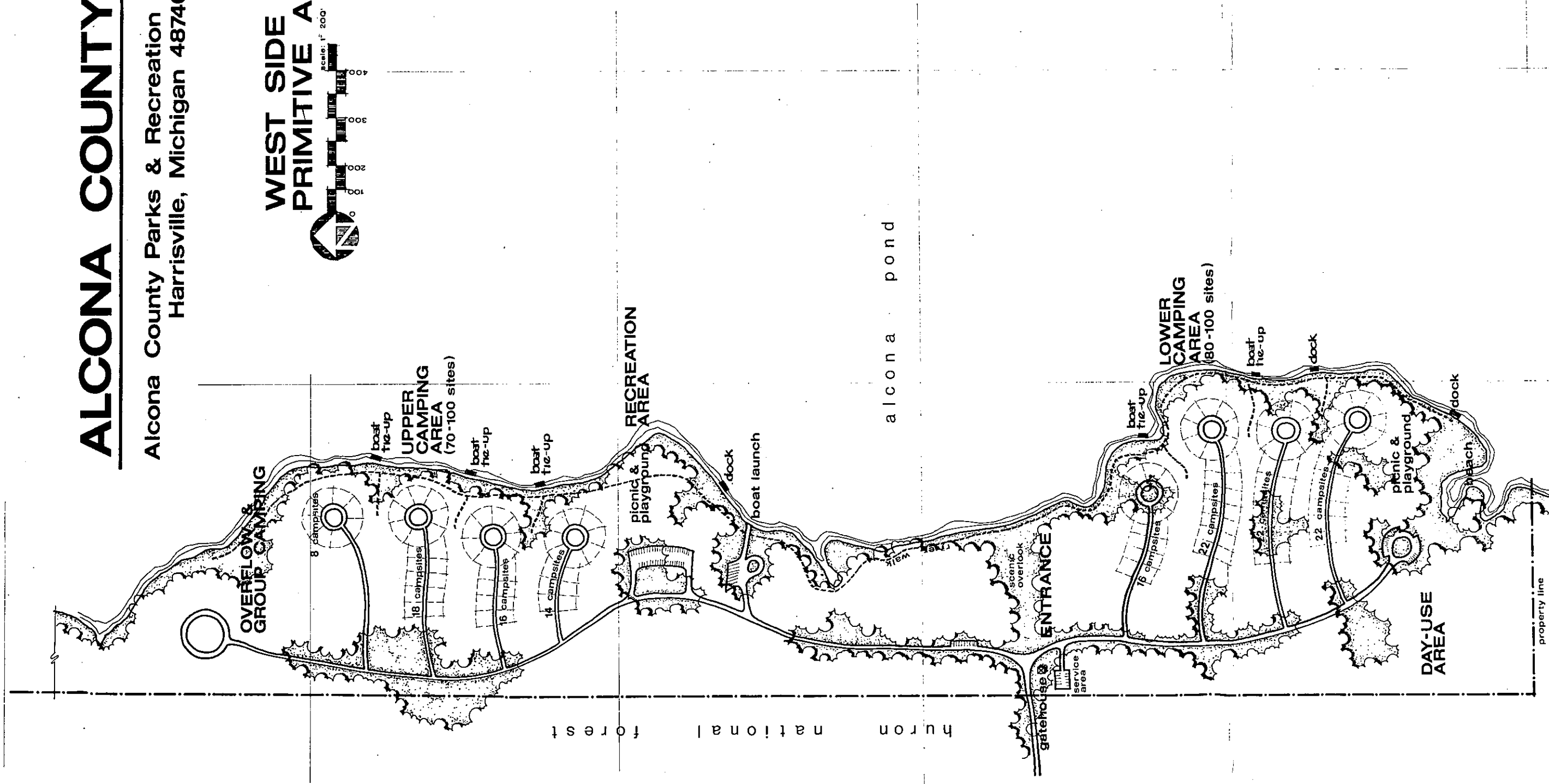


FIGURE 15

### Reed's Point and Upper Landing

Recreational facilities on this park peninsula are limited to a boat launch and a swimming area, both of which are poorly designated and underdeveloped. A number of regular park users have installed boat docks for their own private use. The practice is against park policy and the terms of lease agreement. While this individual practice should cease, it does point out the need for park authorities to make provisions for boat users.

The major recreational area provided for all park users on the peninsula is a day use area located on the southern edge of Reed's Point. At present the area contains campsites and a swimming area. The high water table even in the driest months indicates that use of the area should be less intensive in order to prevent damage to the resources.

The proposed day use area is of a fairly passive nature, with swimming, play ground, picnic tables, grills, picnic shelter, and parking along with service facilities of water, toilet and boat dock.

A second recreation area is located between the Reed's Point Campground and Upper Landing at what is now a boat launch. It is recommended that the boat launch be upgraded to Department of Natural Resource standards, as it is the peninsula's only boat launch. Also provided in this area are picnic tables, grills, play ground and parking.

As was mentioned earlier, the desire to preserve wooded character of the park limits the amount of ball fields that can be provided for active recreation. However, to the north in the Upper Landing an area has been clear cut during lumbering operations. It is suggested that a rough softball field be placed here to utilize the opening.



camping  
along  
Upper Landing  
banks

camping at  
Reed's Point

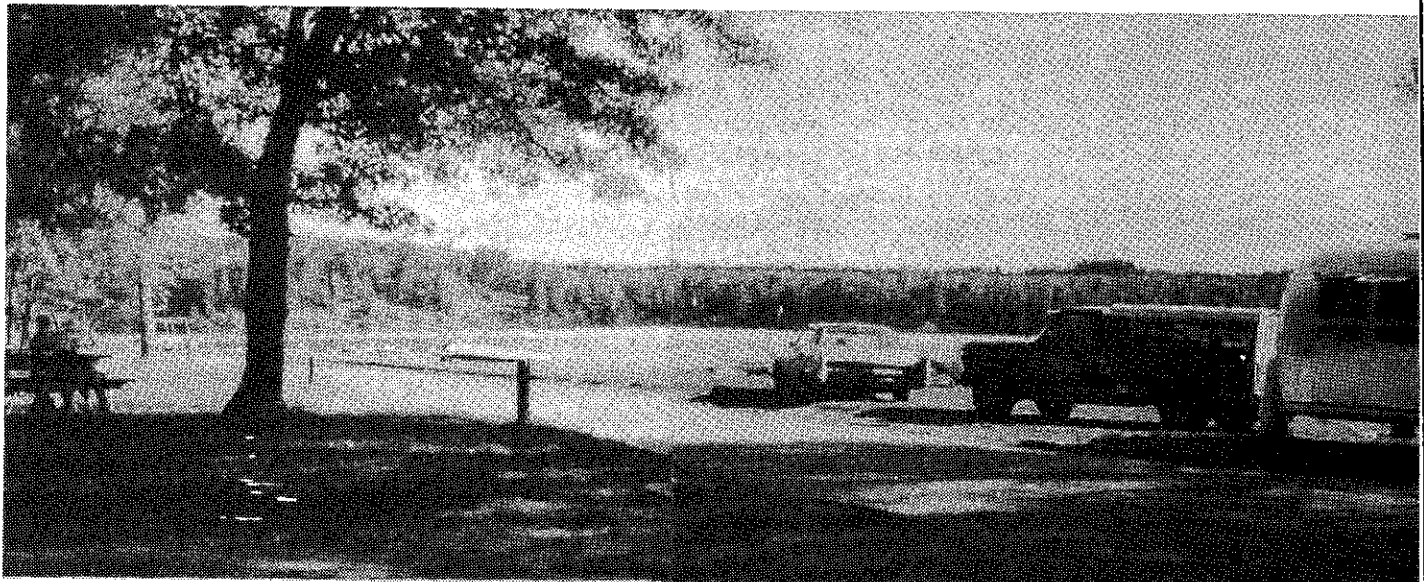


FIGURE 16



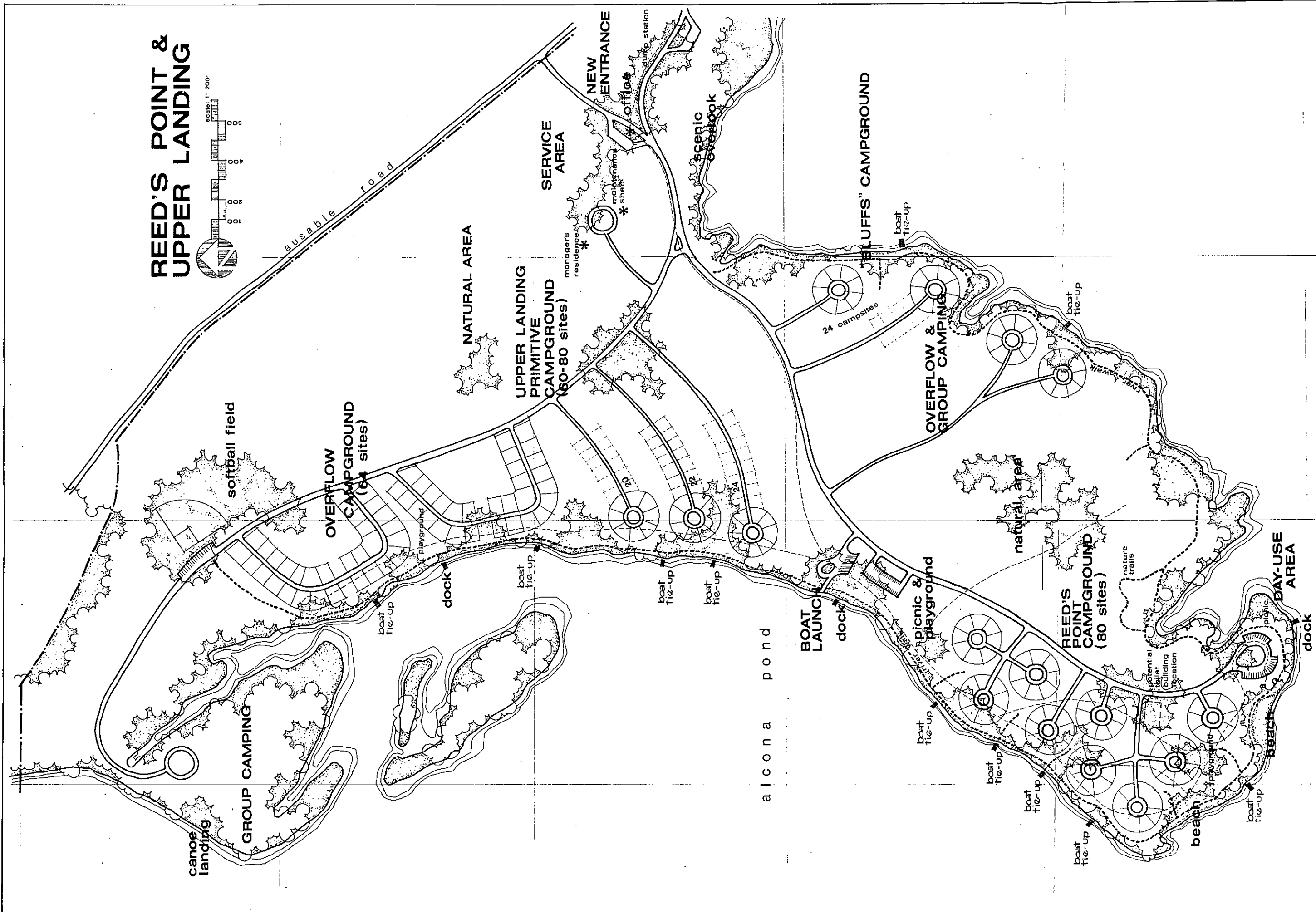


FIGURE 17

## FUTURE EXPANSION

The expansion potential in terms of numbers of campsites should be limited to no more than 200 total sites on the West Side and 184 sites at Reed's Point/Upper Landing plus overflow of 79. These limits are drawn to preserve the environmental, and aesthetic qualities of the Park.

Expansion can still occur in terms of upgrading the quality of the sites. It is recommended that the West Side remain in a primitive state. However Reed's Point is designed as a primitive campground that can efficiently and economically move to a modern facility should the demand occur. This expansion would include installation of electrical hookups, restrooms and showers, similar to the present Modern Campground.

## MODERN CAMPGROUND

The Modern Campground has become a positive feature of the park economically. In order to preserve that position and provide the most pleasant camping experience possible a number of changes or modifications are recommended based on concerns voiced by the user survey, park staff and on-site observations.

1. Modify existing road layout to reduce vehicular-pedestrian conflict. This can be accomplished by putting the main access road to the campsite loops and boat launch outside of the campground instead of paralleling the shoreline as it now does; by modifying intersection of one-way loops with main access road; and by directional signage.

2. Shoreline area has erosion problems due to the lack of provisions for access to the water. The Soil Conservation Service has recommended fencing retaining walls and steps to control access. That work is scheduled for completion in 1978.
3. Recreational opportunities are limited to swimming and boating. Both areas are underdeveloped, although the swimming area will be upgraded under S.C.S. this year. It is recommended that the boat launch be upgraded to Dept. of Natural Resources standards and that the present road connections be severed to accommodate the proposed main access road.

Opportunity exists to remove several campsites and install a playground to accommodate the numerous family campers needs. The playground should be a centrally located facility near the present service building tile field. Play equipment should be of timber or lumber construction to blend in with the rustic park character.

Pedestrian accessibility to the service area playground, and the Pond via a walkway from the back lots to the Pond is necessary to prevent indiscriminant travel by campers across other campers lots.

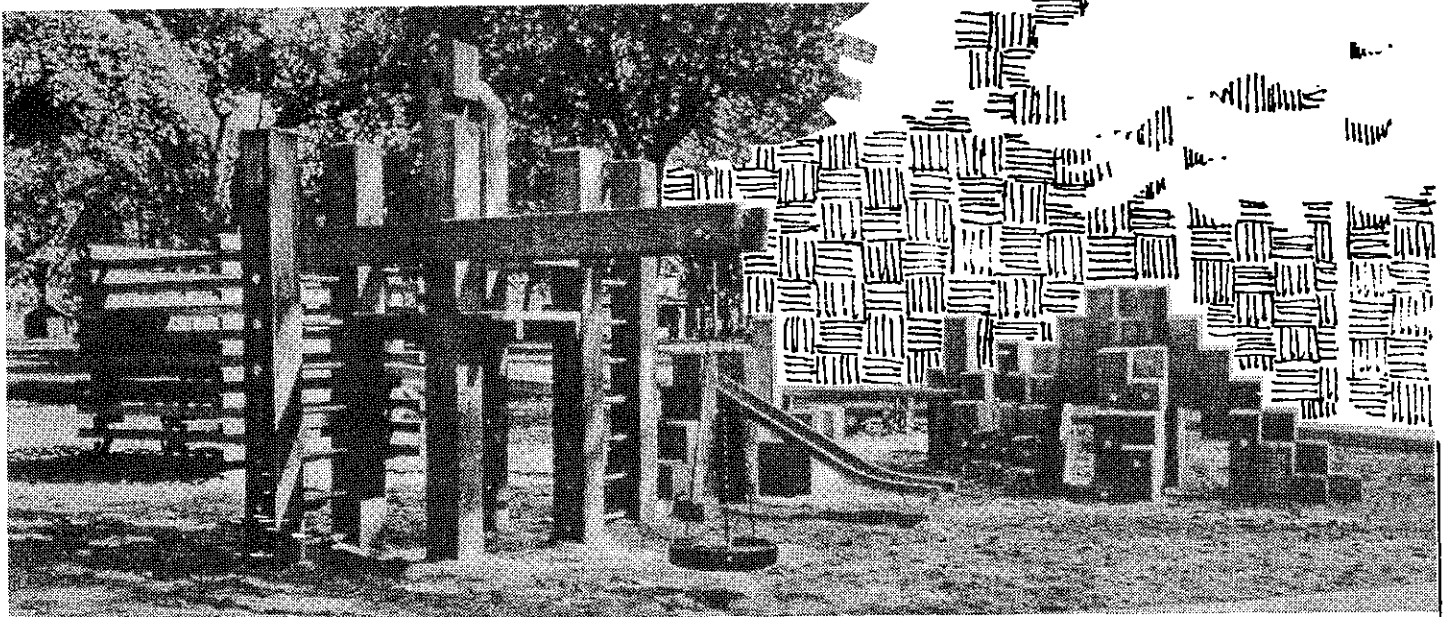
4. Existing campsites need clearer definition of lot boundaries and use areas along with individual picnic tables and grills. Permanent fire pits and gravel parking pads will reduce the destruction of vegetation promoted by random parking and fire pit building.

In addition to preserving existing vegetation, it is recommended that new vegetation of indigenous varieties be planted between campsites to replenish vegetation that has been lost and to provide a buffer between campsites.

5. The single, most important facility that effects a camper's perception of the quality of many campgrounds is the rest-room-shower building. It is here that park staff has an opportunity to show their committment to providing the most pleasant camping experience possible.

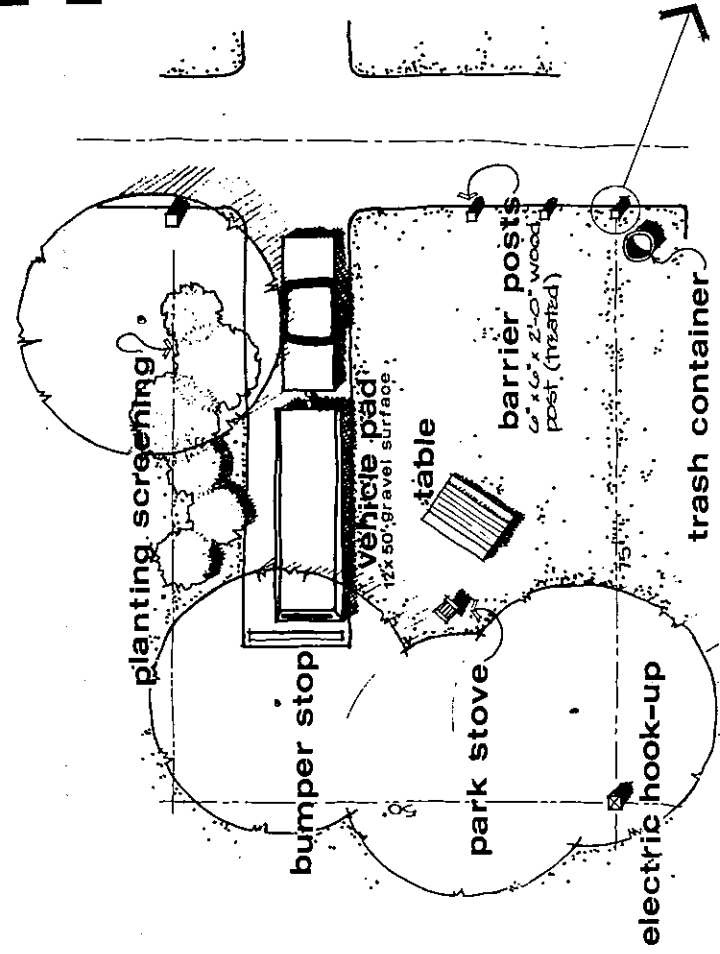
The Alcona County Park staff has undertaken an improvements program at their service building to upgrade the shower and restroom area. Continuing maintenance on the present structure to replace worn-out, obsolete or vandalized items will not only increase the useful life of the structure but will decrease the tendencies to vandalism that dilapidated structures seem to elicit.

The exterior of the service area needs to be more clearly defined. It is recommended that the entire service area - building, tile field, playground, well, parking - be marked with timber bollards to control vehicular and pedestrian traffic and to restrain campsites users from encroaching on this "public space". Of particular need is the provision of 2-3 parking spaces on either side of the building to accommodate those campers that approach by vehicle.

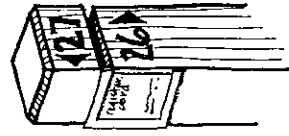


playground treatment

# LOWER LANDING MODERN CAMPGROUND

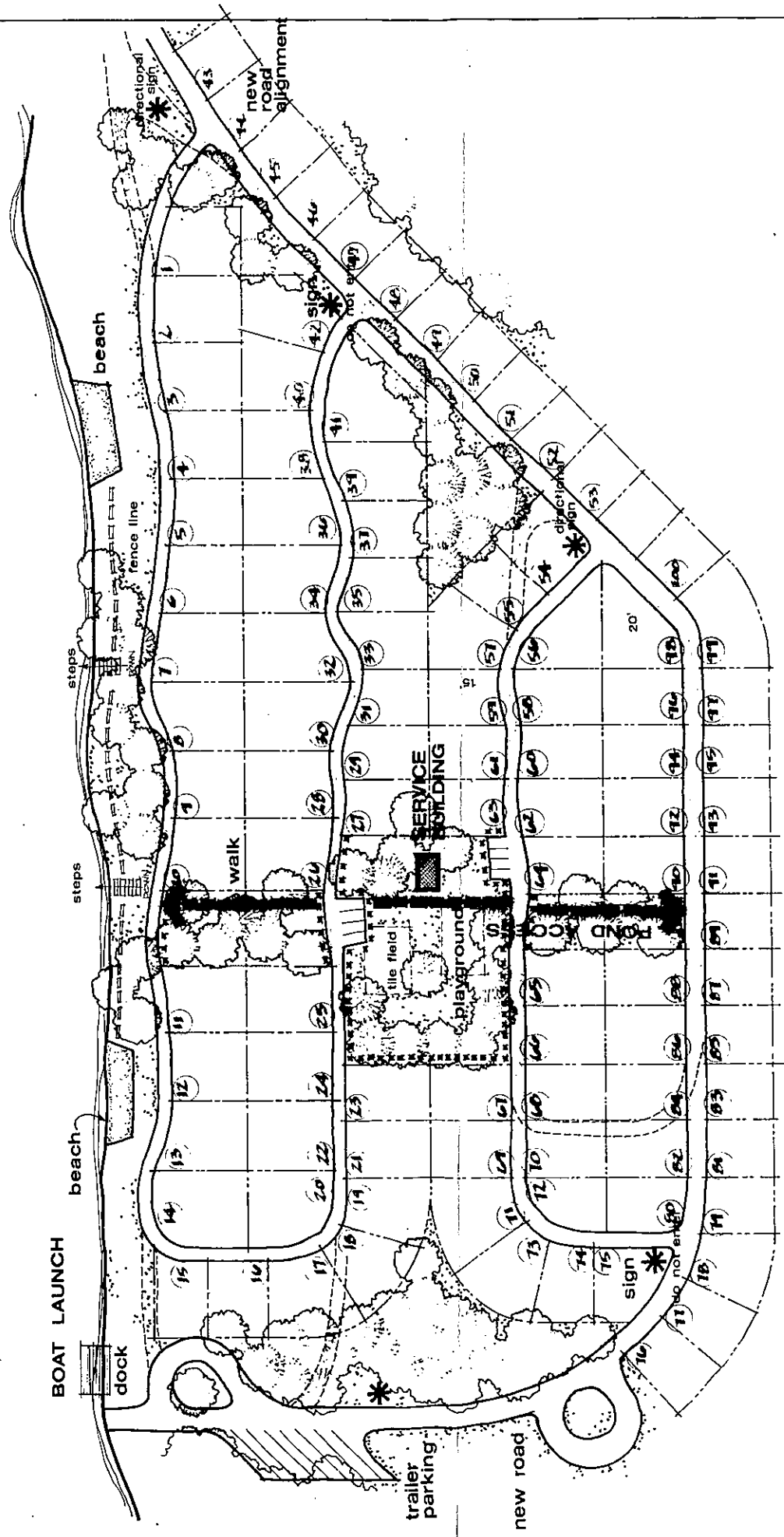


**TYPICAL MODERN  
CAMPSITE**



**CAMPSITE  
MARKER**

- 6" x 6" x 2'-0" treated wood post
- campsite numbers
- registration card holder



**MODIFIED CAMPGROUND LAYOUT**

**FIGURE 18**

Further directional devices outside the building in the form of an informational board with park map, park rules, notices of events, etc. would be helpful to campers.

The value of "dressing up" the service building with plant material to screen service areas or utilities and exemplify the primitive quality of the area should not be overlooked. Indigenous plant material judiciously placed around the building will do much to enhance the appearance of the service area and its surroundings.

#### CONCESSIONS-OFFICE BUILDING

The major function of the present entrance structure that of camper registration - will be housed at the new entrance development, as will service and staff functions currently based at the present structure.

The present structure has a number of years before it becomes obsolete. It is recommended that the Park Commission consider several alternate uses for the building rather than abandonment.

1. Concession Building. The user questionnaire indicated the desire for a conveniently located grocery, ice, bait, and firewood shop. With some renovation this structure could accommodate such a use.
2. Boat Concession. At the present time the boat rental business has no central storage or distribution point at the Park. Should Park officials desire to continue this service for park patrons, the present building is ideally located, and could be conducted in conjunction with the grocery concession.
3. Park Offices. There is a need for office space for Park business. The Alcona County Park and Recreation Commission has no official business location. Renovation of the present structure into office space for the Park and Recreation Commission and park staff would provide a suitable meeting and business space.

## FISCAL FEASIBILITY

The headlines for a recent newspaper article in the outdoors section of a local paper read 70,000 Campsites Becken to Campers! Reading further the question was posed - if you are thinking about taking up camping you are not alone, as millions of people have found camping for either recreation or an inexpensive substitute for the cabin in the northwoods. At present Michigan has between 65,000 to 70,000 sites - from the most primitive to the most plush campgrounds. A wide variety of services or activities are available at Michigan campgrounds, however water remains as a major attractor and the resource that campers are looking for.

In an earlier portion of this study, the comment was made that some measure of pre-thinking was needed to answer questions vital to the future of Alcona County Park. Necessary data on the present and past usage and character of the Park has been established. What remains is to develop predictions for future usage, costs of operation and potential revenues based on past practice.

### Projecting Campground Usage

Based upon the total number of campsites available at Alcona County Park and relying on past trends evident from the registration data monitored for the last five years a series of projections have been made. These projections, which are contained on the following pages, illustrate anticipated monthly use for the modern and primitive campsites.

TABLE 22  
MODERN CAMPGROUND  
ANTICIPATED USE BY MONTH

<u>Month</u>	<u>Days</u>	<u>Low</u>	<u>Medium</u>	<u>High</u>	<u>Peak</u>
April	30	30	0	0	0
May	31	26	5	0	0
June	30	0	16	7	7
July	31	0	0	0	31
August	31	0	0	7	24
September	30	12	12	0	6
October	31	23	8	0	0
November	30	24	6	0	0
	244	115	47	14	68

Based upon the projections established in the above Table, attendance and thus potential revenues can be derived. The following data explains the general parameters for the terms "low", "medium" etc. usage.

244 total camping days - April thru November

100 campsites - Modern campground

---

115 Low usage days (0-20 sites occupied)	=	0 - 2,300 camps
47 Medium use days (20-60 sites occupied)	=	940 - 2,820 camps
14 High use days (60-90 sites occupied)	=	840 - 1,260 camps
68 Peak use days (90-100 sites occupied)	=	<u>6,120 - 6,800 camps</u>
		7,900 -13,180 camps



TABLE 23  
PRIMITIVE CAMPGROUNDS  
ANTICIPATED USE BY MONTH

<u>Month</u>	<u>Days</u>	<u>Low</u>	<u>Medium</u>	<u>High</u>	<u>Peak</u>
April	30	30	0	0	0
May	31	22	6	3	0
June	30	10	8	4	8
July	31	0	0	7	24
August	31	2	4	7	18
September	30	14	8	4	4
October	31	25	6	0	0
November	30	30	0	0	0
	244	133	32	25	54

Consistent with the projections performed for the modern camp area, the following data reflects the income potential of the three primitive camps based upon the above Table.

244 total camping days - April thru November

357 total primitive campsites - 153 sites (West campground)  
 204 sites (Reeds Point and Upper Landing)

---

133 Low use days (0-50 sites occupied)	=	0 - 6,650 camps
32 Medium use days (50-100 sites occupied)	=	1,600 - 3,200 camps
25 High use days (100-250 sites occupied)	=	2,500 - 6,250 camps
54 Peak use days (250-350 sites occupied)	=	<u>13,500 - 18,900 camps</u>
		17,600 - 35,000 camps

### Projecting Revenue:

At the present time, there are three relatively fixed variables that impact upon the total potential revenues possible within a given year - essentially, these are the present fee schedule, the time of operation of the Park from April 1 to November 30, the number of developed sites available for campers. It is the intent of this section to examine the maximum income potential of the Park, as well as more realistic potential revenues based upon past attendance. The potential income for both camping sectors of the Park is dependent upon the following:

1. In the months of April through November, there are a total of 244 days that the Park would be open for camping.
2. There are a total of 457 designated sites in the present Park layout.
3. Due to the seasonal aspect of the activity, 100% occupancy or anything even approaching it, would be highly unrealistic, therefore (based upon past usage) a potential range for camp-site occupancy must be established.
4. Applying the recently approved fee structure (\$3.25/night - primitive and \$4.50/night - modern) we are able to derive a range of potential revenues as follows:

### Modern:

The potential totals for occupied camp sites in the Modern section throughout the total camping season, ranges from 7,900 to 13,180 sites (see previous table). Applying the present fee of \$4.50 per night for "modern" camping facilities, the potential revenue derived from the 100 sites could range from \$35,550 to \$59,310 per year.

### Primitive:

As indicated previously, the potential range for occupied camp sites in the three primitive sections, during the April-November

Camping Season, varies from 20,600 to 38,200 overnight stays. On the basis of the present \$3.25 fee per camp/per day the potential revenue derived during a year ranges for \$57,200 to \$113,750.

#### Projecting Expenditures

Again, utilizing historical trends in park operation expenditures since 1973 we are able to diagnose what is occurring relative to major costs, and then formulate reasonable projections. The cost item groups, such as wages, insurance, etc. refer back to the previous discussion of Park expenses. Table 24 projects potential Park expenditures through 1982 utilizing the following rationale:

1. Wages - Considering expanded park usage, plus spin-off costs associated with any funded "work programs" such as CETA, the proposed budget indicates a straight line increase in wage costs of 20% (\$4,205) per year.
2. Insurance - Propose a straight-line increase in insurance costs of 25% (\$920) per year from a 1977 base.
3. Energy - As the most difficult cost to pin-down or make reasonable predictions about, the projected expenditures sheet reflects two alternatives - (1) a 25% geometric or compounded annually rate of increase and (2) a straight-line projection of roughly \$3,735 per year.
4. General Supplies - The projected budget lines for supplies indicate a 12% annual increase, utilizing 1975 as the base year.
5. Promotion - The proposal is one of a 5% annual increase in promotional expenditures from the 1976 level.
6. Office Costs- The proposed budget indicates a conservative increase of 10% per year from 1977 on.

TABLE 24

## ALCONA COUNTY PARK

PROJECTED EXPENDITURES

<u>Item</u>	<u>1977(Est.)</u>	<u>1978*</u>	<u>1978**</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>
Wages	\$ 21,027.32	\$ 31,650	\$ 25,230	\$ 29,440	\$ 33,640	\$ 37,850	\$ 42,050
Insurance	3,679.77	4,100	4,600	5,520	6,440	7,360	8,280
Energy (1)	10,199.33	10,750	13,480	16,850	21,070	26,330	32,910
(2)			14,020	17,260	20,500	23,730	26,960
Development and Maintenance	13,134.61	15,350	15,350	17,550	19,750	21,950	24,150
General Supplies	1,552.59	1,500	3,900	4,370	4,900	5,480	6,140
Promotion	-0-	-0-	410	430	460	480	500
Office Costs	1,358.78	1,500	1,500	1,640	1,800	1,990	2,190
Other	2,522.87	2,600	2,700	2,800	2,900	3,000	3,100
	\$ 53,475.22	\$ 67,450	\$ 67,170	\$ 77,600	\$ 90,960	\$ 104,440	\$ 119,320
			\$ 67,710	\$ 79,010	\$ 90,390	\$ 101,840	\$ 113,370

\*Estimate prepared by ACPRC.

\*\*Estimate prepared by Consultant.

(1) 25% geometric increase

(2) \$3,235 annual increase

## DETERMINATIONS

"Demand is influenced by the size of the population, income, education, amount of leisure time, relative position in life, accessibility to a facility and intensity of management at the facility".

(Knetsch - Assessing the Demands for Outdoor Recreation)

The initial supporting reason for a master plan and economic study of Alcona County Park, was the perceived need by Alcona County Park and Recreation Commission members for development of a new "modern" campground section at the Park. Development of a complete modern campground, with electrical service, attractive and functional sites, and a shower - rest room structure would obviously be quite costly. Rather than rushing ahead with such plans the Commission determined that specific site design and economic questions needed to be answered. It is the intent of this analysis section to summarize all pertinent aspects of that information presented in prior sections. It is also the intent, to answer with qualifications, the question of "should we expand modern camping facilities" and "can we afford it?"

Some authorities (Dice, State Journal April 9, 1978) are not overly optimistic for the viability of the camping industry in Michigan. Dice states "We've overbuilt camping sites and have only about 40 percent average rental...The industry has peaked, because at costs of up to \$2,500 per site and 100 days of camping per year, it takes a long while to amortize an investment".

Based upon the study and analysis of Alcona County Park - its use and potential, the following series of statements are known to be valid, and accurate to the greatest extent possible.

1. Annual use of the modern campground has increased substantially in recent years (34% increase in permits issued from 1974 to 1976).
2. Analysis of past annual usage indicates that camper usage of the modern area peaks in the month of July. In descending order the remaining months of high usage are - August, June, September and May.
3. Based upon the weekly usage of the modern campground during the summer of 1977 it is possible to determine with reasonable accuracy the amount of camper usage during a given camping season. The data is as follows:
  - During the camping season of April thru November there are a total of 244 days that the modern campground is available for use.
  - Projections indicate that with the 244 day total the following will occur -
    - 115 Low Usage days (0-20 sites occupied)
    - 47 Medium usage days (20-60 sites occupied)
    - 14 High usage days (60-90 sites occupied)
    - 68 Peak usage days (90-100 sites occupied)
  - Tabulation of the above figures indicate that within the 244 day period the total number of camps (one camper and one overnight stay) could range from 8,000 to 13,000
  - Using the above range of "use-days" and the present fee structure of \$4.50 per site/per day; the range in potential annual income is from \$35,000 to \$60,000
4. The total year-end revenues derived from all aspects of the Alcona County Park operation, have fluctuated in recent years, however the trend for the 1976-1977 seasons is one of total revenues averaging \$94,000 per year.
5. Using reliable methods of projecting costs of operation for major expenditures (wages, energy, supplies, office costs, etc.) in future years, it is anticipated that expenses will

total some \$90,000 by 1980. A summary listing of projected expenditures are as follows:

1979 - \$ 78,600  
1980 - \$ 90,400  
1981 - \$101,800  
1982 - \$113,400

6. Greatest economies of scale for development of a modern campground are realized when the total campground size is 100 units.
7. Development of the present Reed's Point Camp into a fully-modern 80 unit campground complete with electrical service, shower-restroom facilities sanitary sewage system and day-use area (playground) would cost roughly \$260,000 dollars. This cost figure reflects the program for development as contained in the cost estimate section of this Study and implies 1978 prices as well as full labor and construction costs or in other words the cost estimates do not (and actually can not) take into consideration the amount of "sweat equity" which could be performed by Park Staff and County employees working at the Park through various grant programs.
8. The vast majority of campers staying in the modern area at Alcona County Park, come from a county within the I-75 corridor - including the counties of Bay, Saginaw, Tuscola, Genesee, Oakland and Wayne.

As with any problem solving or analytical procedure, there are certain variables which are extremely difficult to qualify (such as the attitudes, desires, etc. of a group of individuals - in this case, campers) or are equally difficult to accurately predict (such as the impact of increasing energy costs). What follows is a listing of assumed variables as they apply to Alcona County Park and future usage of the Park.

1. Based upon the natural amenities of the site, the good fishing available in Alcona Dam Pond, close proximity of Alcona County Park to major urban centers, and the courteous, friendly service and management of the Park, it is assumed that the demand for campsites and Park usage will certainly hold its present level and most likely expand.
2. At present, it is not anticipated that rising gasoline prices will have any substantial negative impact on campground usage. In that the counties of origin for most of the Park users are within a four-hour drive, it is unlikely that their visitation and use of the Park would drop off drastically. It is however very possible that as fuel costs increase the attractiveness of Alcona County Park - as a recreation opportunity for metropolitan Flint and Detroit residents will be enhanced and Park usage will increase.
3. Although the recreational vehicle industry has fluctuated widely in recent years, all trends appear to indicate a strong future demand for the type of amenities associated with some form of self-contained camping vehicle. The obvious end-product of this is a continued demand for campsites supplying electricity, dumping stations, propane supply, bathhouses and the like.
4. Just the recent up-grading of the now "modern area" to a full-service campground complete with amenities such as electric hook-ups and rest rooms has seen an increase in usage and a present strong demand, it is therefore assumed that if the program for improvements contained within this study is implemented, then the Park will see an increase in usage in all aspects and areas - particularly the so-called primitive campgrounds.



## RECOMMENDATIONS

### Fiscal Recommendations

It is the intent of this section to provide answers to the issues raised in the original problem statement - "should additional modern camping facilities be developed"?

1. It is the recommendation of this Study that the Alcona County Park and Recreation Commission not develop another modern campground at this time. This is not to imply that additional modern campsites should never be developed, but rather that other items be considered as higher priorities. The rationale for this recommendation is contained below:
  - a. Adequate funds are not available at the present time to initiate such a costly and extensive development program.
  - b. There is no clear cut indication that the demand for modern campsites is (and will be) sufficient to fiscally support a new modern campground development of 80-100 units. (This is in consideration of the regional supply of modern sites, particularly Old Orchard Park).
  - c. There are other improvements to Alcona County Park, that will require both financial and labor resources and which are of much higher priority and will have more significant impact on total park usage than that of a new modern campground.
  - d. Without any further increases in the fee schedule, and no significant shifts in Park usage, it is possible that profits will shrink in future years if costs of operation continue to rise drastically.
2. It is recommended that the Alcona County Parks and Recreation Commission actively pursue available sources of potential grants and funding. This implies all future sources of federal funds including construction and development grants, as well as the

CETA program equivalents, furthermore the ACPRC should, lobby through their local governmental representatives, the County Extension Director, County Coordinator and Consumers Power Company, for a change in the Land and Water Conservation Fund (LAWCON) requirements allowing Alcona County Park to compete for LAWCON funds.

3. It is recommended that the ACPRC, in their 1979 budget, create a separate Development Fund to which monies can be allocated for specific development purposes. This account should be funded on the following basis (a) the costs of a particular development phase as specified in the development program, and (b) depending upon the "profits" or revenues in excess of costs realized in the preceeding year.
4. The recommended phasing schedule does consider and provide for the development of another full-modern campground of 80 units, to be located at Reed's Point. You will note however that this is a low priority and is to be completed only after the Reed's Point area is upgraded as a primitive campground. As mentioned in the initial recommendation, the development of a second modern campground is still a possibility. It is difficult to ascertain at what point this phase will occur, as it is dependent on two variables, (a) if the phasing schedule is followed as proposed, and funded strictly through Park revenues and labor it is conceivable that the modern area phase will not be reached before 1990; (b) an obvious unknown that could speed up the phasing considerably is that of outside funding assistance, particularly 100% development grants - based upon the expected costs of such a phase (including sanitary sewage system, bath-house etc.) outside financial help will certainly be necessary (especially grants, or perhaps bonds issued on the full faith and credit of Alcona County).
5. An obvious end-product of this total Study is one of a scheme or plan to up-grade the camping experience at Alcona County Park -

usage and in turn increasing revenues. Equally obvious has been the focus or attention directed towards up-grading the primitive campgrounds. It is felt that this segment of the total Park is crucial as far as any profitable future. With the recent increase in primitive camping fees, the optimum or peak cost that the camping public is willing to pay for a primitive camp at Alcona County Park may have been reached. It is our belief, that if all primitive areas are up-graded - not only aesthetically but functionally - when such items as new vault toilets and boat tie-ups are added, that usage of the primitive camps will increase. If usage of the primitive camps can be maximized this will also have a bearing on when a new modern camp can or should be developed.

6. It is recommended that the questionnaire process initiated last season be continued as an on-going thing. Furthermore it is recommended that a question be added along the lines of "Do you prefer to camp in a modern or primitive campground" or "If you are camped in a primitive area are you doing so because you want to, or because the modern campground was full"? The response to such questions may have a bearing on future decisions regarding modern campground development.

## Design Recommendations

The proposed upgrading of park facilities at Alcona County Park for the purpose of (a) improving the quality of recreational and camping experiences at the Park, and (b) increasing usage and therefore revenues, can be accomplished by the following:

1. It is recommended that entrance approaches to the park be revised by relocation of present entrance facilities and by a planting program to upgrade the visual impact of the utility corridors.
2. It is recommended that proposed campsite layout and related recreational and service facilities be implemented to better express the primitive camping experience.
3. Preservation of the natural resource is the basis for a quality camping experience. Erosion control measures, rejuvenation of eroded or trampled areas and a program of rotating use of campsites are advisable in order to conserve this existing environment.
4. It is recommended that facilities receiving extensive public use (modern service building, pit toilets, swimming areas, dump station) be continually monitored to provide ample maintenance in order to meet high health, comfort and visual standards.
5. It is recommended that the Park and Recreation Commission make a commitment to a comprehensive signage program. While a program is necessary for the expanding county park system, an equally important need exists at Alcona County Park where signs have proliferated beyond the point of being helpful. The purpose of a signage system is threefold; to direct, to inform, and to control. A well designed system is easily understood, visible and attractive, as well as easily maintained. A poor system lets people get lost; they are uninformed about the park and the region; and they are uncontrolled in the use of park facilities.

## PHASING AND GENERAL COST ESTIMATES

The following schedule for phase development and cost breakdown constitutes a recommendation for a logical sequence of construction toward total project completion. The final sequence was based on the Alcona County Park and Recreation Commission's expressed priorities and logical developmental sequence of park facilities.

It should be remembered that the projected estimates are based on the assumption that all labor and materials costs for construction would be provided and/or performed by private contractors.

The totals reflect this assumption, but can be substantially reduced by utilizing park staff and county employees and locally available materials. For instance, the cost of picnic tables provided by a park equipment manufacturer is 4 or 5 times greater than the equivalent tables constructed by the park staff. Playground or picnic shelter costs can be reduced by 1/3 thru utilization of park staff labor to install the prefabricated equipment.

<u>ITEM*</u> **	<u>QUANTITY</u>	<u>UNIT COST</u>	<u>TOTAL COST</u>	<u>PHASE COST</u>
PHASE 1 - NEW PARK ENTRANCE				
New Main Entrance				
- new approach road and parking (gravel)	2,355 sy	\$ 2.25	\$ 5,300	
- new office building and septic	324 sf	35.00	11,340	
- electrical service	L.S.		3,700	
- entry and directional signs	4	200.00	800	
- new dump station (re-use existing tank)	L.S.		3,000	
- soil borings	2	250.00	500	\$ 24,640
New Service Area				
- service area	1,065 sy	2.25	2,400	
- manager's residence (prefabricated)	900 sf	30.00	27,000	
- maintenance shed/garage and fuel pump	L.S.		11,500	40,900
Renovate Existing Entrance				
- approach and entry screening/barriers	L.S.		7,500	
- revise turnout area	L.S.		500	
- close existing office structure	Not applicable			
- dump station removal	L.S.		400	8,400
Upper Landing Campground (lots 107-119 and group area)				
- campsite cul-de-sac roadway (Bluffs Campground)	2,800 sy	2.25	6,300	
- campsite development	24 sites	880.00	21,120	
- overflow group camping access	3,700 sy	2.25	8,300	
- overflow group camping development	15 sites	800.00	12,000	
- picnic tables	39	150.00	5,850	
Grand Total			<u>53,570</u>	<u>\$127,510</u>

<u>ITEM</u>	<u>QUANTITY</u>	<u>UNIT COST</u>	<u>TOTAL COST</u>	<u>PHASE COST</u>
<b>PHASE 2 - MODERN CAMPGROUND MODIFICATIONS</b>				
Revised Campground Layout and Boat Launch Access				
- gravel road extension	20,000 sf	\$ 2.25	\$ 4,500	
- new campsites (103 existing)	7 sites	325.00	2,275	
- upgrade existing sites	93 sites	200.00	18,600	
- directional signage	5		800	\$ 26,175
Boating Facility (D.N.R. Standards)			10,000	
- new launching area				
- new mooring structure				10,000
Service and Recreation Facilities				
- upgrade service building area exterior	L.S.		1,300	
- define parking areas	75 posts	10.00	750	
- pedestrian walkway	3,000 sf	.50	1,500	
- playground	L.S.		6,000	
- new trash collection area	L.S.		500	9,750
Erosion Control (S.C.S. Estimate)			15,000	
- fence				
- stairways and retaining walls				
Grand Total			<u>15,000</u>	<u>\$ 61,225</u>
<b>PHASE 3 - WEST SIDE PRIMITIVE AREA</b>				
Entrance and Access Development				
- survey and marking of park boundaries	L.S.		2,000	
- new gatehouse and service area	L.S.		4,500	
- removal of existing campsites	153	30.00	4,590	
- development of new main road (gravel)	3,700 sy	2.25	8,300	
- entrance and directional signage	L.S.		800	\$ 20,190
Campsite Development (Lower Area)				
- development of campsites (primitive)	80 sites	880.00	70,400	
- picnic tables	80	150.00	12,000	82,400

<u>ITEM</u>	<u>QUANTITY</u>	<u>UNIT COST</u>	<u>TOTAL COST</u>	<u>PHASE COST</u>
Day-Use Area				
- gravel parking area	1,000 sy	\$ 2.25	\$ 2,250	
- clear picnic area	L.S.		500	
- miscellaneous (trash containers, b.b.q.pits)	L.S.		750	
- playground equipment	L.S.		6,000	
- picnic tables	5	150.00	750	
- service facilities (toilets, water)	L.S.		3,300	
- beach area development	L.S.		2,000	\$ 15,550
Campsite Development (Upper)				
- main access road	6,600 sy	2.25	14,850	
- campsites	70	880.00	61,600	
- picnic tables	70	150.00	10,500	86,950
Recreation Area				
- gravel parking area	1,000 sy	2.25	2,250	
- miscellaneous (trash containers, b.b.p.pits)	L.S.		750	
- service facilities (toilets/water)	L.S.		2,500	
- upgrade boat launch area and parking	L.S.		10,000	
- playground	L.S.		5,000	
- clear area for games	L.S.		300	
- picnic tables	5	150.00	750	21,550
River Edge Treatment				
- fencing and pathway	2,500 lf	1.50	3,750	
- stairways to water	15	350.00	5,250	
- boat facilities (7)	7	120.00	840	
- timber retaining walls	L.S.		3,000	
Grand Total				<u>12,840</u> \$239,480



<u>ITEM</u>	<u>QUANTITY</u>	<u>UNIT COST</u>	<u>TOTAL COST</u>	<u>PHASE COST</u>
<b>PHASE 4 - REED'S POINT DEVELOPMENT</b>				
Reed's Point Campground Modifications				
- remove existing roadway and campsites (120 sites existing)	120	\$ 30.00	\$ 3,600	
- development of access roads (gravel)	8,600 sy	2.25	19,350	
- development of campsites (primitive)	80	700.00	56,000	
- picnic tables	80	150.00	12,000	\$ 90,950
River Edge Treatment				
- fencing and pathway	1,000 lf	1.50	1,500	
- stairways to water	2	350.00	700	
- boat mooring facilities (5)	5	120.00	600	2,800
Reed's Point Campground Modernization				
- electrical service	L.S.		5,000	
- electrical hookup to campsites	80	100.00	8,000	
- service building	L.S.		50,000	
- water well, lighting	L.S.		5,000	
- sanitary system, lagoon	L.S.		62,000	130,000
Day-Use Area				
- gravel parking area	1,000 sy	2.25	2,250	
- miscellaneous (trash containers, b.b.p.pits)	L.S.		750	
- playground equipment	L.S.		6,000	
- service facilities (toilets/water)	L.S.		3,300	
- picnic tables	5	150.00	750	
- picnic shelter	L.S.		6,000	13,050
Boat Launch Area Development (D.N.R. Standards)				
- boat launch access and parking	L.S.		15,000	
- boat mooring facility (1)	L.S.		3,000	
- picnic facilities (tables, etc.)	5	150.00	750	
- service facilities (toilets/water)	L.S.		3,300	
- playground equipment	L.S.		3,000	
				25,050
<b>Grand Total</b>				<b>\$267,850</b>

<u>ITEM</u>	<u>QUANTITY</u>	<u>UNIT COST</u>	<u>TOTAL COST</u>	<u>PHASE COST</u>
PHASE 5 - UPPER LANDING DEVELOPMENT				
Reed's Point Campground Modifications				
- remove existing roadway and campsites (70 existing sites)	70	\$ 30.00	\$ 2,100	
- development of main access roads (gravel)	2,500 sy	2.25	5,600	
- development of campsite access roads				
- development of campsites (primitive)	60	880.00	52,800	
- campsite service facilities (toilets/water)				\$ 60,500
River Edge Treatment				
- fencing and pathway	2,000	1.50	3,000	
- stairways to water	10	350.00	3,500	
- boat mooring facilities (7)	7	120.00	840	7,340
Overflow and Group Camping Development				
- development of overflow campsite access roads	7,300 sy	2.25	16,425	
- development of primitive campsites and road	64 sites	880.00	56,320	
- campsite service facilities (toilets/water)	L.S.		500	
- develop canoe landing at group camping area	L.S.		6,000	
- develop softball field parking	66	150.00	10,200	
- picnic tables				89,445
Grand Total				\$157,285
Total For All Phases				\$853,350

In the development of the Alcona County Park, the conversion of the present office structure to a Concession Building and the installation of a boat concession/mooring facility is variable as far as the time it should take place. This phase will depend on the possibility of arranging lease agreements with interested concessionaires.

\*Does not include cost of engineering or architectural services (10%) or contingencies (10%).

\*\*For every additional year construction is delayed, increase the above cost estimates by an inflation factor of 10%.

APPENDICES

TABLE A-1  
PERMITS ISSUED BY CAMPGROUND  
ALCONA COUNTY PARK  
1972

<u>Month</u>	<u>Primitive #1</u>	<u>Primitive #2</u>
January	--	--
February	--	--
March	--	--
April	61	2
May	350	189
June	181	115
July	950	323
August	564	177
September	361	122
October	180	25
November	45	2
December	--	--
	<u>2,692</u>	<u>955</u>

TABLE A-2  
PERMITS ISSUED BY CAMPGROUND  
ALCONA COUNTY PARK  
1973

<u>Month</u>	<u>Primitive #1</u>	<u>Primitive #2</u>
January	14	--
February	--	--
March	26	--
April	88	17
May	383	125
June	329	91
July	804	237
August	1,020	156
September	332	104
October	129	38
November	64	--
December	5	7
	<u>3,194</u>	<u>775</u>

TABLE A-3  
PERMITS ISSUED BY CAMPGROUND  
ALCONA COUNTY PARK  
1974

<u>Month</u>	<u>Primitive #1</u>	<u>Primitive #2</u>	<u>Modern</u>
January	7	--	--
February	7	--	--
March	4	--	--
April	16	--	14
May	223	143	183
June	130	99	205
July	432	309	566
August	268	236	363
September	169	134	177
October	21	59	85
November	2	11	42
December	--	--	--
	<u>1,279</u>	<u>991</u>	<u>1,635</u>

TABLE A-4  
PERMITS ISSUED BY CAMPGROUND  
ALCONA COUNTY PARK  
1975

<u>Month</u>	<u>Primitive #1</u>	<u>Primitive #2</u>	<u>Modern</u>
January	--	--	2
February	--	--	--
March	3	--	12
April	38	10	15
May	257	167	203
June	275	106	337
July	375	263	482
August	267	187	475
September	131	52	210
October	20	50	145
November	11	15	103
December	1	--	75
	<u>1,378</u>	<u>850</u>	<u>2,059</u>

TABLE A-5  
PERMITS ISSUED BY CAMPGROUND  
ALCONA COUNTY PARK  
1976

<u>Month</u>	<u>Primitive #1</u>	<u>Primitive #2</u>	<u>Modern</u>
January	--	--	--
February	--	--	--
March	--	--	--
April	7	--	34
May	95	35	104
June	312	307	442
July	440	387	570
August	267	294	511
September	174	137	209
October	34	55	198
November	18	--	123
December	2	--	--
	<u>1,349</u>	<u>1,215</u>	<u>2,191</u>



TABLE A-6  
AVERAGE NUMBER OF  
PERMITS ISSUED  
PER MONTH  
PER CAMPGROUND

<u>Month</u>	<u>Primitive #1</u>	<u>Primitive #2</u>	<u>Modern</u>
April	42	6	21
May	262	132	163
June	245	144	328
July	600	304	539
August	473	210	450
September	233	110	199
October	77	45	143
November	28	6	89
December	<u>2</u>	<u>1</u>	<u>25</u>
Annual Average	1,962	958	1,957

**DEPARTMENT OF PUBLIC HEALTH**  
**DIVISION OF ENGINEERING**  
**CAMPGROUNDS**

*Filed with Secretary of State, July 2, 1971*

(By authority conferred on the Director of Public Health by section 7 of Act No. 171 of the Public Acts of 1970, being section 325.657 of the Compiled Laws of 1948.)

**R 325.1551. Definitions.**

**Rule 1.**

(1) The terms defined in Act No. 171 of the Public Acts of 1970, being sections 325.651 to 325.665 of the Compiled Laws of 1948, have the same meaning when used in these rules.

(2) "Modern campground" means a tract of land where recreational units are accommodated and water flush toilets and water under pressure are available at a service building or a water outlet and sewer connection are available at each site.

(3) "Primitive campground" means a tract of land where recreational units are accommodated and water is furnished from a hand pump well and sewage is disposed of by means of a sanitary privy.

(4) "Sanitary station" means a facility where recreational units equipped with fresh water storage tanks and sewage holding tanks can be serviced.

(5) "Service building" means a structure or portion thereof used to house sanitary facilities, such as water closets, lavatories and showers.

(6) "Site" means the camp space or land area designated for each recreational unit in a campground.

(7) "Temporary or rally type campground" means a tract of land where recreational units are accommodated on a temporary or short term basis.

**R 325.1552. Location.**

**Rule 2.** A campground shall not be located where it will be detrimental to public health. A campground shall not be located on top of an abandoned landfill which had been used within the past 5 years for disposal of garbage or refuse.

**R 325.1553. Applications for construction permits.**

**Rule 3.**

(1) An application for a construction permit for a new campground or an extensive addition to an existing campground shall include information regarding the proposed physical facilities. A sketch drawn to scale and properly dimensioned showing the plot plan and general layout of the facilities shall be submitted with the application. Where it is proposed to extend sewers or water lines to sites or where the sewage disposal system includes a treatment process other than a septic tank with a soil absorption system, the plans for the sanitary facilities shall be prepared by an engineer registered in Michigan.

(2) An application shall indicate the proposed method of garbage and refuse storage and disposal.

**R 325.1554. Construction permits.**

Rule 4. A construction permit is non-transferable except with written consent of the director. A permit expires 3 years after its date of issuance except the director may grant an extension. Delays in construction incurred by reason of litigation incident to the planning or construction of a campground shall not be included in calculating the date of expiration of a permit. If a petition for extending a permit is granted, the director may require such alterations in the plans of the campground as would be necessary for approval if the plans for the campground were being submitted at that date. Conditions or stipulations in connection with approval of the application shall be listed on the construction permit.

**R 325.1555. Temporary campgrounds.**

Rule 5. An application for a construction permit for a temporary or rally type campground is not required. However an application, on a form supplied by the director, for an annual license for such a campground shall be submitted at least 30 days before the opening date for receiving recreational units. A temporary or rally type campground shall be operated for no more than a 2-week period unless approval for an extension is obtained from the health officer. An application for an extension shall be submitted to the health officer at least 3 days before the expiration date of the first 2-week period. A temporary or rally type campground shall not operate for more than a 4-week period. At least 30 days shall elapse between the end of 1 licensing period for a temporary or rally type campground and the beginning of another for the same campground location.

**R 325.1556. Site use and arrangements.**

**Rule 6.**

(1) A site in a campground constructed after the effective date of these rules, unless designated on an approved plan as a walk-in-site, shall abut on a roadway and shall be of such size and so arranged as to provide space for a recreational unit and shall have at least 15 feet of road frontage width and 1200 square feet of area.

(2) A site in a primitive campground shall be so arranged that each 25 sites are served with a privy for each sex and a well, except that a primitive campground area with not more than 10 sites may be served with a single privy and a well. A site in a primitive campground shall be at least 50 feet from a privy.

(3) A site in a campground shall be so marked or arranged that a camper can readily identify and locate each site and site boundary on the ground.

(4) A site shall be well drained.

(5) A site shall be occupied by not more than 1 family or 1 camping unit comprised of not more than 8 persons. The licensed design capacity of the campground shall not be exceeded.

**R 325.1557. Caretakers.**

Rule 7. The owner of a campground shall designate a caretaker or person to be in charge of the campground. A notice indicating where the caretaker can be contacted shall be posted at all times the caretaker is not on duty.

**R 325.1558. Roads and vehicles.**

Rule 8.

(1) A road right-of-way shall be provided having a minimum width of 20 feet. This right-of-way shall be relatively free of obstructions, and an obstruction shall not prevent free and easy access to abutting sites. The traveled portion of the right-of-way shall be maintained in a passable and relatively dust free condition when the campground is in operation.

(2) A vehicle shall not park in the strip of land set aside for a road. Space for vehicle parking equal to a minimum of 1½ the number of sites in a campground shall be provided either on the sites or in a separate parking area.

**R 325.1559. Water supplies.**

Rule 9.

(1) Connection shall be made to a local government water system when available and accessible.

(2) A new or existing well, pump and water system installation intended to serve a campground shall be in compliance with department of public health rules, entitled, "Minimum Standards for the Location and Construction of Certain Water Supplies" being sections R 325.1451 to R 325.1461 of the Michigan Administrative Code.

(3) Any well installation to serve a campground shall be constructed by a well drilling contractor and any pump connected to such well shall be installed by a pump installer both of which shall be registered under authority of Act No. 294, Public Acts of 1965, being sections 325.221 to 325.240 of the Compiled Laws of 1948.

(4) A water distribution system for a campground constructed after January 1, 1971 designed for winter use shall be capable of being operated during the winter months without freezing.

(5) Where water under pressure is provided to individual sites, the well and pump capacity shall be adequate to provide ½ gallon per minute to all such sites, in addition to any other water needs in the campground.

(6) Below ground stop and waste valves with weep holes for use on the water lines shall not be used.

**R 325.1561. Sewage disposal in modern campgrounds.**

Rule 11.

(1) In a modern campground connection shall be made to a local government sewer system when available and accessible.

(2) Where a local government sewer system is not available a modern campground shall provide a soil absorption system, a lagoon system, a treatment plant or combination thereof.

(3) The design capacity of a facility described in subrule (2) shall be

based on the following estimated daily liquid flows:

- (a) Sites with water and sewer outlets available to each site – 100 gallons per site.
- (b) Sites served by service building – 75 gallons per site.

(4) A sewer outlet located at a site on a sewer system designed for winter use shall be trapped below the frost line. The trap and riser shall be constructed of cast iron or rigid plastic pipe as approved by the state board of plumbing for buried drain, waste and vent. The top of the riser shall extend at least 2 inches above the surrounding ground surface. A riser shall be capped when not in use.

**R 325.1562. Soil absorption systems, location.**

Rule 12. A soil absorption system shall be isolated as much as possible from camping sites and shall be protected from vehicular traffic or other possible damage. An absorption field shall not be placed in the following locations:

- (a) Beneath a building.
- (b) Where the soil is unstable or unsettled. Muck or peat soils are unsuitable.
- (c) Under a roadway or parking lot or paved area.
- (d) Within 100 feet of a lake or stream as a minimum.
- (e) In the path of a catchment area of surface runoff.
- (f) Where a high groundwater table is closer than 4 feet to the ground surface.
- (g) Within the minimum isolation distance of 75 feet from the well.
- (h) Where surface flooding may occur.
- (i) Where percolation rates above 30 minutes for water to fall 1 inch are encountered.
- (j) Where adequate protection cannot be provided for the water bearing formation.
- (k) Where the area is insufficient on which to locate a second absorption field of at least the size of the original field.

**R 325.1563. Soil absorption systems, standards.**

Rule 13. The standards set forth in the manual of "Septic Tank Practice," U.S. Public Health Service Publication No. 526, 1967 revision, incorporated herein by reference, shall be followed in determining the soil percolation rate and used as a guide for the design of septic tanks, dosing tanks and soil absorption systems. The manual may be purchased from the department of public health, 3500 North Logan Street, Lansing 48914 or from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20201 at a cost of 35¢.

**R 325.1564. Lagoon systems and treatment plants.**

Rule 14. When a lagoon system or sewage treatment plant is proposed and the treated effluent is to be discharged into a watercourse including a lake, stream, county drain or drainage ditch, data concerning the specific case shall be submitted to the department of public health on a form furnished by the department.

**R 325.1566. Sewage disposal in primitive campgrounds.**

Rule 16. A privy, outhouse or chemical closet used as a means of sewage disposal for a primitive campground shall comply with Act No. 273 of the Public Acts of 1939, as amended, being sections 325.271 to 325.274 of the Compiled Laws of 1948, and with R 325.421 to R 325.274 of the Michigan Administrative Code promulgated thereunder. The bottom of the pit of an earth privy shall be not less than 2 feet above the known high ground water table. In a location where this is not feasible a water tight vault shall be installed.

**R 325.1568. Seepage pits.**

Rule 18. In a campground where water outlets at the sites are not provided, seepage pits on the sites may be used for the disposal of sink wastes and shower water where a direct connection is made between the sink drain and the seepage pit. The connection shall not exceed 1½ inches in diameter. No other liquid wastes shall be discharged into such a seepage pit. Approval of such seepage pits will be restricted to those areas where the soil affords acceptable seepage, the ground water table is sufficiently low, and where well water would not be endangered thereby. Sufficient data shall be submitted to the health department having jurisdiction to permit evaluating these conditions before approval may be given. Recreational units on sites served by a seepage pit shall not be directly connected to the campground water system unless approved in writing by the health officer having jurisdiction.

**R 325.1571. Service buildings, plans and facilities.**

Rule 21.

(1) When a service building is proposed for a campground the sketch or plan required by Rule 3 shall include the following:

- (a) Location of window and door openings and whether the windows will open to provide ventilation.
- (b) Type of floor material and connection of a floor to the walls by a coved joint.
- (c) Location of facilities, including enclosures and dressing rooms.
- (d) Location of building lights.
- (e) Type and details of ventilation system.
- (f) Type of heating facility.

(2) A service building at a modern campground shall be provided with toilet, urinal and lavatory facilities in accordance with the following schedule:

Minimum Number of Fixtures

Sites	Toilets		Urinals	Lavatories		Showers*
	Men	Women	Men	Men	Women	
1-15	1	1	1	1	1	1
16-30	1	2	1	2	2	2
31-45	2	2	1	3	3	2
46-60	2	3	2	3	3	3
61-80	3	4	2	4	4	4
81-100**	3	4	2	4	4	5

\*Providing showers in a service building is at the option of the campground owner but when they are provided the schedule will apply.

\*\*A campground having more than 100 sites shall provide 1 additional toilet and lavatory for each sex for each additional 30 sites, 1 additional shower for each 25 sites, and 1 additional men's urinal for each additional 100 sites.

(3) In a modern campground where all or a portion of the sites are provided with water service and sewer outlets, and occupancy for those sites served with such outlets is limited to recreational units connected to the water and sewer systems a minimum of 1 water flush toilet and 1 lavatory shall be provided in a service building for each sex to serve these sites in addition to those required in the schedule of this rule.

(4) A minimum of 1 water flush receptacle shall be provided in a service building for depositing dishwater and other liquid waste, at a location available to both sexes. The receptacle shall be in addition to fixtures required in subrule (2).

**R 325.1574. Sanitary facilities in campgrounds adjacent to other establishments.**

**Rule 24.**

(1) Where a primitive campground is operated adjacent to or in conjunction with a modern campground served by a service building, an additional toilet and lavatory shall be provided for each sex for each 50 sites or major fraction thereof in the primitive campground.

(2) Where a campground is operated in connection with a resort or other business establishment, the number of sanitary facilities required in excess of those required by the schedule for sites alone will be based on the total number of persons who will use the facilities.

(3) The table on "Quantities of Sewage Flows" contained in the manual of "Septic Tank Practice" U.S. Public Health Service Publication No. 526, 1967 revision, shall be followed in determining the additional design capacity of the sewage facility required because of the application of this rule.

**R 325.1576. Sanitary stations.**

Rule 26. At least 1 sanitary station of approved design shall be provided for a modern campground except for those campgrounds catering solely to recreational vehicles that connect to the campgrounds' water and sewer

systems. The sanitary station shall be designed and maintained to prevent contamination from being introduced into the fresh water storage tanks or campground water supply system.

**R 325.1578. Plumbing.**

Rule 28. Plumbing in a campground shall comply with applicable codes or ordinances. In the absence of such codes or ordinances, plumbing shall meet the requirements of the standards of the state plumbing board with respect to layout, materials and workmanship.

**R 325.1581. Garbage and refuse disposal and insect control.**

Rule 31.

(1) Disposal of garbage and refuse shall be in accordance with state and local law, ordinances and rules. A sufficient number of containers shall be provided for the storage of garbage and other refuse. Garbage and refuse shall be collected and disposed of as often as necessary to prevent overflow, nuisance or odor, but not less than once each week. Containers shall be maintained in a clean and sanitary condition.

(2) Measures shall be taken to reduce populations of mosquitoes and other insects of public health importance in a campground.

**R 325.1583. Electrical installations.**

Rule 33. An electrical installation in a campground shall comply with applicable codes and ordinances, including but not limited, to the state electrical code.

**R 325.1585. Swimming pools and beaches.**

Rule 35.

(1) An artificial swimming pool at a campground shall comply with Act No. 230 of the Public Acts of 1966, being sections 325.60 1 to 325.620 of the Compiled Laws of 1948, and rules of the department of public health entitled, "Public Swimming Pools," being R 325.2111 to R 325.2199 of the Michigan Administrative Code.

(2) A bathing beach to be included as part of a campground project shall be evaluated by the health department having jurisdiction in accordance with department of public health rules entitled, "Public Bathing Beaches," being R 325.2101 to R 325.2103 to the Michigan Administrative Code.

**R 325.1587. Non-conforming uses.**

Rule 37. When conditions in a campground established before January 1, 1971 are found to be in non-compliance with these rules the non-conforming campground may be continued in use for a reasonable period of time, but not after January 1, 1974, if a diligent and progressive effort is made by the campground owner to bring about compliance with those items for which the health officer has requested correction by written notice to the campground owner. When a condition is found creating a health or safety hazard, the director or health officer shall act to bring about compliance with the act and these rules.



systems. The sanitary station shall be designed and maintained to prevent contamination from being introduced into the fresh water storage tanks or campground water supply system.

**R 325.1578. Plumbing.**

Rule 28. Plumbing in a campground shall comply with applicable codes or ordinances. In the absence of such codes or ordinances, plumbing shall meet the requirements of the standards of the state plumbing board with respect to layout, materials and workmanship.

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**R 325.1583. Electrical installations.**

Rule 33. An electrical installation in a campground shall comply with applicable codes and ordinances, including but not limited, to the state electrical code.

**R 325.1585. Swimming pools and beaches.**

Rule 35.

(1) An artificial swimming pool at a campground shall comply with Act No. 230 of the Public Acts of 1966, being sections 325.60 1 to 325.620 of the Compiled Laws of 1948, and rules of the department of public health entitled, "Public Swimming Pools," being R 325.2111 to R 325.2199 of the Michigan Administrative Code.

(2) A bathing beach to be included as part of a campground project shall be evaluated by the health department having jurisdiction in accordance with department of public health rules entitled, "Public Bathing Beaches," being R 325.2101 to R 325.2103 to the Michigan Administrative Code.

**R 325.1587. Non-conforming uses.**

Rule 37. When conditions in a campground established before January 1, 1971 are found to be in non-compliance with these rules the non-conforming campground may be continued in use for a reasonable period of time, but not after January 1, 1974, if a diligent and progressive effort is made by the campground owner to bring about compliance with those items for which the health officer has requested correction by written notice to the campground owner. When a condition is found creating a health or safety hazard, the director or health officer shall act to bring about compliance with the act and these rules.

**R 325.1599. Rescissions.**

Rule 49. The following rules of the department of public health or director of public health are rescinded:

(a) Rules entitled "Camps" being R 325.381 to R 325.383 of the Michigan Administrative Code and appearing on pages 2253 and 2254 of the 1954 volume of the Code.

(b) Rules and regulations governing "Trailer Coach Parks" being R 325.500 to R 325.538 of the Michigan Administrative Code and appearing on pages 2265 to 2278 of the 1954 volume of the Code.

(c) Rule entitled "Trailer Parks Operated Only During the Period Between May 1 and December 1" being R 325.540 of the Michigan Administrative Code and appearing on pages 2860 to 2862 of the 1963 Annual Supplement to the Code.

(d) Rules entitled "Sanitation Standards for Garbage and Refuse Disposal at Camps and Summer Resorts" being R 325.601 to R 325.604 of the Michigan Administrative Code and appearing on page 2286 of the 1954 volume of the Code.

(e) Rules entitled "Sanitation Standards for Summer Recreation Camps" being R 325.621 to R 325.635 of the Michigan Administrative Code and appearing on pages 2286 to 2290 of the 1954 volume of the Code.

(f) Rules entitled "Sanitation Standards for Cabin Camps" being R 325.641 to R 325.655 of the Michigan Administrative Code and appearing on pages 2290 to 2293 of the 1954 volume of the Code.

(g) Rules entitled "Sanitation Standards for Water Carried Sewage Disposal Systems at Camps and Summer Resorts" being R 325.671 to R 325.676 of the Michigan Administrative Code and appearing on pages 2293 and 2294 of the 1954 volume of the Code.