

PROPOSED
VAN BUREN
LAKESHORE BEACH
MICHIGAN



VAN BUREN LAKE SHORE BEACH
VAN BUREN COUNTY
MICHIGAN

TABLE OF CONTENTS

1. Letter of Transmittal, Project Manager, Van Buren Project, Michigan.
2. Letter from Director, Michigan Conservation Department.
3. Report from E. C. W. Inspector.
4. Preliminary proposal and recommendations for Van Buren Lake Shore Beach Project.
5. Photographs of Proposed Area.
6. Exhibits:
 1. Circle Map.
 2. County Map.
 3. Special Interest Points.
 4. State Highway Map.
 5. U. S. Geological Survey Map.
 6. Aerial Map.
 7. Development Suggestions.
 8. Intensive Use Area Suggestions.
 9. Childrens Camp Area.
 10. U. S. Lake Survey Map.

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
STATE PARK DIVISION

Post Office Building
South Haven, Michigan

June 20, 1935.

Paul V. Brown, Regional Officer
Fifth Region
812 Illinois Building
Indianapolis, Indiana.

ATTENTION: Mr. Earl C. Grever
Regional Projects Manager

Dear Mr. Grever:

In compliance with your recent request, we have prepared the accompanying report on the proposed Van Buren Lake Shore Beach. We believe that this area offers opportunities to provide a unique and inviting recreation center. By reason of its proximity and accessibility to metropolitan centers, we believe it will help to meet a real recreational need. The peculiar natural beauties of the dunes should also be preserved.

This report is respectfully submitted for further investigation and consideration of this sand dune and beach area as a lake shore beach park.

Yours very truly

Daniel F. Bosma

Daniel F. Bosma
Junior Project Manager
Michigan, R-2.

DFB:JB

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June 11, 1935

Mr. Daniel F. Bosma
Junior Project Manager
Michigan, R-2
Post Office Building
South Haven, Michigan

Dear Mr. Bosma:

In your communication of May 31, and in line with our conversation of June 5, both of which pertain to the Van Buren Park submarginal land project, you refer to an inquiry by Mr. Grever as to "the agency which would be willing to administer and maintain the area, if requested to do so by the Federal Government."

This project is adjacent to the present Van Buren State Park - virtually a material enlargement of that unit - now under administration of this Department. The enlargement of this park was authorized by the Conservation Commission, the body responsible for administration of state parks. While specific action was not taken on the particular lands in question, I feel there is sufficient authority to advise you that this Department will accept the responsibility of administration and maintenance of the property if so requested by the Government.

Should it be necessary to have specific authority issue by action of the Commission to cover particular lands, I will submit the question with affirmative recommendation as to its acceptance at the next regular meeting scheduled for July 9. In this case kindly advise this office, with maps and reports for their consideration.

Very truly yours,

P. J. Hoffmaster
Director

PJH:ch

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
STATE PARK DIVISION

June 15, 1935

Fifth Regional Office
State Park E.C.W.
812 Illinois Building
Indianapolis, Indiana

Subject: Report on Desireability of
Utilizing lands at Van Buren
Project between U.S. #31 and
Lake Michigan for Park purposes.

Sirs:

In answer to Project Manager Bosma's request I submit the following comments on the desireability of purchasing lands between highway U.S. #31 and Lake Michigan for park purposes instead of buying land east of U.S. #31 as originally proposed under the old F.E.R.A. Land Program for this Van Buren Recreational Area.

A large scale public beach park in this locality is needed. The only bathing beaches for the great throngs of visitors and natives who would use the lake on the southern coast are at several small state parks and township parks all of which are inadequate in size and the majority lacking in development of proper facilities. This vicinity is particularly convenient to Chicago by boat as well as by road.

The area is well suited for the purpose and, provided it can be purchased, could be a fine park of its type. The beach is a fine sandy strip, clean and white, extending the entire length of the project. It should compare favorably with any existing first class beach.

Back of the beach is an interesting dune country typical of the eastern shore of Lake Michigan. Its scenery is rather unique and its flora of great biological interest.

The idea of a development between the highway and the lake appeals to me, because while it is accessible from adjacent main trunk line U.S. #31 it is not necessary to cross this road to get to the lake as was the case under the original plan contemplating purchase east of the road.

There is ample level land between highway and dunes for all manner of camp sites, auto parking areas, and other necessary development which will be adjacent to the road and convenient to the beach though screened from it by the dunes.

-2-

On the whole I consider the new scheme excellent. The old scheme was far from ideal and simply an attempt to make the best of a bad situation. I hope the land can be purchased and the excellent potentialities of the beach and country west of the road developed to serve the multitudes of citizens who will swarm to the park for relief and recreation.

Respectfully submitted,

Sterling Myrick
Inspector, Fifth Region

VAN BUREN LAKE SHORE BEACH

VAN BUREN COUNTY

MICHIGAN

1. State: Michigan
2. Suggested Name: Van Buren Lake Shore Beach
3. Location:

The area is located in Van Buren and Berrien Counties, Michigan. Its northern boundary is approximately two miles south of South Haven, Michigan. It extends in a southerly direction for about ten miles in a long narrow strip between U. S. Highway #31 and Lake Michigan. The area is in South Haven and Covert Townships of Van Buren County and extends one mile into Hagar Township, Berrien County. The length of the area is approximately ten miles and the width varies from 500 feet to nearly one mile. The Van Buren Recreation Project lies directly east of the area across U. S. Highway #31, and the length of both projects coincide.

4. Accessibility:

The following table indicates the distance of the proposed project from large population centers:

-2-

Table 1.

<u>Name of City</u>	<u>Population</u>	<u>Distance from Area</u>	
1. Benton Harbor)			
St. Joseph)	23,756	15 mi.	
2. Kalamazoo	54,707	40	
3. South Bend	104,066	52	
4. Grand Rapids	168,234	62	
5. Battle Creek	43,301	64	
6. Michigan City	26,785	65	
7. Fort Wayne	115,121	100	
8. Lansing	78,425	110	
9. Chicago	3,375,329	120	Road
		78	Boat
10. Chicago Metrop.	5,050,000	120	Road
		78	Boat
11. Detroit	1,573,985	180	
12. Milwaukee	572,557	220	Road
		92	Boat

The following table shows approximate population within distance radii*:

Table 2.

50 mile circle - population	550,000
100 mile circle - population	6,000,000
200 mile circle - population	14,000,000

The following table shows the daily tourist traffic load on U. S. Highway #31, and other connecting highways in Western Michigan, as computed by the U. S. Department of Agriculture:

Table 3.

U. S. #31	North & South bound	1,324	Tourist cars daily
U. S. #12	North & South bound	1,808	Tourist cars daily
U. S. #112	North & South bound	647	Tourist cars daily
U. S. #131	South bound	504	Tourist cars daily
U. S. #27	South bound	326	Tourist cars daily

Source: Public Roads, Feb. 1933, U. S. Dep't. Agriculture.

-3-

The area is especially accessible by road, as U. S. Highway #31 forms its entire eastern boundary. This highway was constructed in 1932 and serves as the main artery in Western Michigan for north and south bound traffic. It connects with U. S. Highway #12 at Benton Harbor, which is only 10 miles from the southern end of the area. U. S. Highways #12 and #20 are the principal east and west routes out of the Chicago metropolitan area and carry the heaviest traffic load across Indiana and Southern Michigan. The proposed area is easily accessible to all of the southern peninsula of Michigan. A large percentage of the extensive north and south bound tourist traffic into northern Michigan from neighboring States is over U. S. Highway #31, and this area, viewed either as a stopping over place or as a destination, is admirably situated to attract these tourists.

In addition to being conveniently located for over-land travelers, the area is only two miles distant from South Haven, which has a good lake port on the Black River. Until last year, South Haven had a daily passenger steamship service. This service has been temporarily discontinued, but the harbor is still adequately maintained for commercial shipping. Chicago is but 78 miles distant by this lake route, and Milwaukee 92 miles. This feature is of tremendous importance in that it provides the possibility of transportation from the largest centers of population to this area, which is both economically and pleasurably attractive.

-4-

Railroad service is conducted by the Pere Marquette and Michigan Central Railways. Although South Haven is not on a main line of either railroad, complete freight facilities are available over either of these lines, the Pere Marquette line coming within one mile of the eastern boundary of the area.

Bus service for the area is excellent, being furnished by the Indian Trails and Greyhound Systems, both running several busses daily to and from Chicago via U. S. Highway #31, and connecting with all other principal points in and out of the State.

5. Extent of the Area:

The area comprises about 2,737 acres or 4.25 square miles. The shoreline is 9.45 miles, or approximately 50,000 feet in length. The highway, U. S. #31, forming the eastern boundary is approximately 10 miles in length.

6. Physical Characteristics:

A. General:

The area includes a belt of the finest sand dunes along the shores of Lake Michigan. These dunes rise to a height of over 200 feet in Thunder Mountain. One of the highest, Marvin's Slide, is devoid of vegetation and is a typical moving dune, covering the forest as it advances and affording an impressive spectacle from the highway, nearly one mile distant. With this one exception all of these dunes are heavily wooded. They are famous throughout the Middle West for their rugged beauty and for the variety of vegetation which they support.

-5-

- Immediately back of the dunes are large and secluded wooded valleys, some with abrupt declines and others having gentle slopes. From the beach the dunes offer an impressive sight as they rise abruptly from the beach, usually from four to five hundred feet from the water's edge. In several places occur gaps between the dunes which afford easy means of access to the beach.

The area where used is devoted entirely to recreation. No farming is conducted within its borders. Thirty years ago, the lumber was removed from this land and a second growth of timber now covers it entirely. Adjacent to the proposed area is the famous fruit belt of Michigan, intensively used for all types of orchards and vineyards.

B. Scenic Values:

The scenic possibilities of the area are unparalleled. The wooded dunes are beautiful from the beach and also from the highway, which runs along side of them. The higher dunes offer an excellent view of the surrounding lower dunes and valleys, as well as long vistas over Lake Michigan. Being heavily wooded, they are especially beautiful in their spring garb of green, mixed with blossoms of dogwood and serviceberry, which is varied by the riot of color that comes with autumn.

-6-

There are two streams that traverse the area and flow into Lake Michigan. Brandywine Creek to the north, flows through a pleasant valley. Rogers Creek flows at the foot of Thunder Mountain, through a fine cool glen which is easily accessible from the Highway. These streams flow throughout the year.

The outlook over Lake Michigan is in a westerly direction. From the vantage points offered by the dunes, the sunsets over Lake Michigan offer a scenic attraction whose beauty often defies description. All these scenic features should be maintained and kept unspoiled from a too intensive development, such as the building of wide roads straight through the forests.

C. Character of the Beaches:

The width of the beaches varies from 200 to 500 feet. Where the dunes are most rugged, they rise in bluffs of sand from the beach. Where they are less rugged, a secondary elevation above the beach often occurs, making a low shelf about 200 feet wide before the dunes rise from the beach.

The soil is classified as Bridgman Sand, very fine, and almost white. It is annually washed clean during the winter storms, which often drive waves over the entire beach.

The beaches are level, with no pools standing on them, as there is sufficient slope to keep them well drained. They are devoid of vegetation except where beach grass grows at the foot of the dunes.

-7-

There is no undertow from tides and the slope of the lake bottom under the water is extremely gentle from the beach. No hazards exist, such as deep holes or sharp stones and rocks. The bathing is of the finest, with a sand bottom on the lake and gentle depths receding from the shore. The constant action of the water keeps it clean.

D. Present Development:

a. Subdivisions:

The following subdivisions all located together in Sec. 7 & 8, Covert Township, exist within the area:

Table 4.

<u>Name</u>	<u>Acres</u>	<u>Lots</u>	<u>Lots Sold</u>	<u>Lots Improved.</u>	<u>Lots Delinquent</u>
Beechwood Hills	9	53	34	4	17
Covert Rest.	77	88	25	15	11
Deans Add.	10	74	12	5	1
Hiawatha Hills	37	258	51	0	34
Palisades Park 1st Subd.	25	213	162	61	75%
Palisades Park 2nd Subd.	35	267	97	28	75%
Palisades Park 3rd Subd.	25	124	27	7	80%
Palisades Park Lakeside Subd.	<u>5</u>	<u>18</u>	<u>18</u>	<u>12</u>	<u>50%</u>
Totals	223	1095	426	132	

-8-

b. Private Clubs:

There are no private clubs in the area. Palisades Park offers the only hotel accommodations in the area and this use is restricted.

E. Public Beaches:

There are no public bathing beaches in the area, except at Covert Township Park and Van Buren State Park. The facilities at Covert Township Park are entirely inadequate with a bath house accommodating only about eight people at one time. Van Buren State Park, formerly a defunct subdivision, acquired in 1923 through delinquent tax action by the State, is without bath houses of any kind, and is poorly situated, as visitors must climb a bluff to reach the beach. To the north, there are no publicly supervised bathing beaches for 35 miles. South Haven has no municipal beach. Benton Harbor, 15 miles south of the area has a County Park, with good facilities, which is soon crowded because it is too small. Palisades Park, a private development, has restricted use of its beaches for tenants and their friends.

Within the area, there is one large concentration of private owners on subdivided property, in the vicinity of Palisades Park. There are 132 cottages at this point, which is in the middle of the area. There are three other groups of from six to fifteen cottages on larger tracts of lands in other parts of the area. Many of the cottages are in very poor condition. Not more than 15 cottages have been built within the past five years.

-9-

F. Forest and Wild Life Values:

The sand dunes are famous for the variety of fauna and flora which they support. They are covered with a rich variety of native trees. For the most part this is the second growth and is uniformly dense, thinning out in only one or two small areas. The deciduous varieties include all the usual soft and hard wood trees, especially oaks, hard maples, bass wood, aspens, poplars, beach, ironwood, black cherry, elms and ash. Types not usually found in Michigan forests include flowering dogwood, sassafras, june berry, tulip trees, sycamores, yellow birch and hazel trees.

The evergreens include the coniferous types of white pine, jackpine, hemlock, prostrate juniper, red cedar and ground hemlock. The shrub varieties include all the types native to southern Michigan. Wild flowers are found in profusion and exotic shrubs and flowers are often discovered. The combined picture is one of varied and luxuriant growth, with surprises the rule rather than the exception.

There is a great abundance of squirrels, rabbits, pheasants, partridge and quail found in the natural cover which supplies an abundant food supply. Gulls are to be seen overhead almost anywhere in the area. Wild fowl gather in large numbers on the lake during the flight season. The forest is also plentifully supplied with native birds.

-10-

7. Possible Cost:

The following table shows the acreage, and assessed valuation of all the property owners, exclusive of subdivisions in the area, having one acre of land or more:

Table 5.

<u>Name</u>	<u>Total Acreage</u>	<u>Assessed Valuation</u>	<u>Average per Acre.</u>	<u>Acres in Area</u>
Mrs. J. Guernsey	2.75	\$ 1100.00	\$ 40.00	2.75*
James H. Porter	49.25	1500.00	30.50	49.25*
Florence Rodgers	20.	600.00	30.00	20.
Marnchilk & Orlinsky	23.	400.00	17.40	6.
Dr. W. Baum	16.5	400.00	24.20	16.5
Van Buren St. Pk.	107.			107. *
J. T. King	10.	300.00	30.00	10.
A. H. Clarke	30.	800.00	26.60	23.
J. W. Hardt Est.	40.	900.00	22.50	2.
Ida Ewald	11.3	300.00	26.50	4.5
S. B. McGrew	11.3	500.00	44.20	2.5
H. Axtell	11.4	400.00	35.10	1.
Jesse Baldwin	20.	900.00	45.00	20. *
H. Kuebler Est.	20.	1000.00	50.00	18.5 *
W. Boetticher	40.	1600.00	40.00	31. *
A. A. Packard	10.	800.00	80.00	6.5 *
Roosevelt Hills	206.	4800.00	23.30	120. *
Mrs. G. Corbin	87.	2000.00	23.00	55. *
O. M. Carter	150.62	4500.00	29.90	120. *
M. B. Dean Est.	137.	4000.00	29.20	117.
R. G. Ballou	10.	500.00	50.00	4.
Palisades Park Assn.	79.	2200.00	27.90	79.
Monroe	40.	900.00	22.50	11.
M. B. Dean Est.	40.	1100.00	27.50	40.
M. B. Dean Est.	26.	400.00	15.40	21.
1st Nat. Bk.-Chgo.	158.	4800.00	30.40	124.
Covert Twp. Park	68.			68. *
Olive T. Glidden	320.	12000.00	37.50	202. *
Terry W. Edwards	16.65	2000.00	120.00	16.65*
Imo Donahoe	14.5	2000.00	138.00	14.4 *
Olive T. Glidden	98.7	6000.00	60.80	98.7 *
Andrew Brown	10.	1800.00	180.00	10. *
Olive T. Glidden	140.	6000.00	42.80	60. *

-11-

Table 5.- Cont'd.

<u>Name</u>	<u>Total Acreage</u>	<u>Assessed Valuation</u>	<u>Average per Acre.</u>	<u>Acres in Area</u>
Marie L. Wilson	44.25	\$ 2600.00	\$ 58.80	44.25*
Ervin Baumel	10.06	1300.00	122.80	10.06*
H. C. Kling	32.5	3800.00	117.00	32.5 *
Peyton & Hieman	46.5	4000.00	86.00	46.5 *
L. P. Teuscher	24.	2400.00	100.00	24. *
Wm. Geisler	37.8	2950.00	78.10	37.8 *
Samuel Higgins	10.25	1250.00	122.00	10.25*
John Rebideaux	16.6	1650.00	99.40	16.6 *
Olive T. Glidden	230.	6000.00	26.10	12. *
Alice Giordano	15.1	1600.00	106.00	15.1 *
Mary K. Band	14.4	1200.00	83.40	14.4 *
H. N. Wieman	38.3	3200.00	83.60	38.3 *
Olive T. Glidden	270.	11600.00	43.00	240. *
Mrs. Bray	88.5	3300.00	37.30	88.5 *
Virgil Polmanteer	40.	1500.00	37.50	37.5
A. C. Dystrup	240.	4900.00	20.40	2. *
Bergman	67.	3200.00	47.80	67. *
F. Fisher	40.	1000.00	25.00	40.
Breining	10.	300.00	30.00	9.
Ida Montgomery	30.	1400.00	46.70	5.
H. Sinden & E. Denney	92.	4500.00	49.00	92. *
Mrs. Burgess	20.	900.00	45.00	20.
L. M. Lucker	20.	700.00	35.00	19.
A. M. Woodruff	40.	1200.00	30.00	27.
Comm. Nat. Bank St. Joe	40.	1200.00	30.00	12.
Gray & Bergman	165.42	5900.00	35.70	123. *
G. Ackerman	2.3	350.00	152.00	2.3 *
Howard	3.6	350.00	97.30	3.6
P. P. Ackerman	5.9	290.00	49.20	5.9 *
F. C. Ackerman	8.5	700.00	82.30	8.5 *
Geo. M. Ackerman	10.1	700.00	69.30	10. *
Friday Bros.	88.08	1300.00	14.80	3.5
Gertrude Applegate	7.5	1500.00	200.00	4.5 *
Bertha Collener	2.	600.00	300.00	2. *
Margaret Fewins	2.	500.00	250.00	2. *
J. Scribano & J. Pacina	3.	800.00	267.00	3. *
Bergman & Gray	37.4	2400.00	64.20	2. *
Sophia Wisé	1.8	200.00	111.10	1.8 *
I. B. Good	2.	700.00	350.00	2. *
Jacobs Est.	172.	15700.00	91.40	55. *
F. Van Amber	4.	500.00	125.00	4. *
Mrs. Rae Emerson	11.5	2200.00	191.00	11.5 *
Walter Miller	2.	500.00	250.00	2. *

* Indicates Lake Frontage.

-12-

The possible cost of the land is estimated as follows:

Table 6.

2500 Acres @ \$100 to \$200 per Acre, including improvements
276 Unimproved lots @ \$200 per lot.
150 Improved lots @ \$600. per lot.
569 Unsold subdivided lots @ \$25 per lot.

From this table, it is estimated that the land will cost approximately \$525,000. If, however, the concentrated subdivision area around Palisades Park is excluded, the cost would be approximately \$400,000. This would divide the project into two parts, north and south, but would in no way detract from its usefulness or its accessibility. The part not taken would be in the hands of owners who now have restrictions on their property and the remainder would be in public ownership, so that no nuisances are to be anticipated. This division would not interfere with maintenance or administration and would not create any traffic congestion or hazards.

The price used in determining values in this area is dependent entirely on supply and demand. Before the highway was built in 1932, this area was highly inaccessible and the price was low as reflected even today in the assessed valuations, which are no criterion of value as these estimates have not caught up with current asking and selling prices. With the building of the highway, an immediate boom sent the prices soaring. Today, these prices

-13-

no longer obtain, but they do still influence asking prices, especially those of a speculative nature. The changing of ownership in the area is not entirely at a standstill. There is some activity in sale and purchase of acreage, but practically none in lots. The owners of this property are well aware that they hold one of the last large areas of beach property that has not been entirely subdivided and they are content to hold their property for brighter days, when they hope it will again command exorbitant prices.

As a point of comparison, we have investigated the cost of the land in creating the Indiana Dunes State Park, which is an area very similar to the one covered by this report. For the Indiana property \$1,000,000 was paid for 2210.47 acres. This property gave them a beach mileage of 3.25 miles. The land was purchased in 1925.

8. Special Interests of the Area:

The following is a list of special interest features for this area:

- a. Ludwigs Pier, from which most of the lumber cut in the vicinity of the area was shipped in sailboats to Chicago.
- b. Marvin's Slice, a moving sand dune from the summit of which sand is constantly blowing in a fine spray.
- c. Thunder Mountain, elevation 242 ft. above Lake Michigan from which a view for many miles can be enjoyed, both landward over the project area, and also over Lake Michigan.

-14-

d. Bangor, Michigan, apple center of Michigan. Surrounded by very fine orchards.

e. Commercial Activity:

1. Black River, South Haven Terminus for ocean going boats, bringing principally pulp wood and China clay. In one year, from 90 to 110 boats call at this port, most of which are foreign, nearly one-third being Norwegian.

2. Fruit Belt. The area is adjacent to the Michigan fruit belt. In the vicinity are large peach, pear, apple, cherry and plum orchards, strawberry fields and vineyards. Each year in May, a Blossom Festival is held in Benton Harbor and St. Joseph, which attracts thousands to the neighboring cities. Also, in May, a Tulip Festival is held in Holland, attracting other thousands.

3. Fishing tugs leave South Haven every day.

f. Geological Interests:

The sand dunes are an interesting phenomenon from a geological point of view. The wind and lake together created these dunes, which are interesting alike to the geologist and naturalist.

9. Climate:

The normal tourist season extends from May 15th to October 1st. The great influx of tourists, however, comes with the school summer vacation period, about June 15th, and lasts until Labor Day, Sept. 1st. The normal population of South Haven is 5,000. During the height of the season, it is conservatively estimated to be 20,000.

-15-

The following table gives the air temperatures for the four summer months in South Haven, during the last four years:

Table 7.

<u>Yr. 1931</u>	<u>High</u>	<u>Av. High</u>	<u>Low</u>	<u>Av. Low</u>	<u>Clear Days</u>	<u>Part Cloudy & Cloudy</u>
June	91.	77.6	39.	60.4	9	21
July	95.	83.4	49.	63.9	23	8
Aug.	93.	79.9	45.	60.1	13	18
Sept.	88.	77.3	40.	59.7	14	16
<u>Yr. 1932</u>						
June	89.	78.1	43.	57.9	13	17
July	94.	80.9	50.	61.8	18	13
Aug.	89.	79.9	47.	60.7	15	16
Sept.	88.	74.1	36.	50.9	19	11
<u>Yr. 1933</u>						
June	95.	82.4	39.	60.2	19	11
July	91.	83.2	53.	62.3	18	13
Aug.	89.	78.4	44.	56.9	16	15
Sept.	94.	76.6	44.	56.4	12	18
<u>Yr. 1934</u>						
June	99.	83.2	48.	57.7	22	8
July	99.	85.7	47.	62.3	23	8
Aug.	99.	81.0	44.	59.3	22	9
Sept.	85.	74.0	42.	55.7	12	18
<u>1931-34</u>						
June	99.	80.3	39.	59.0	15.75	14.25
July	99.	83.3	47.	62.6	20.5	10.5
Aug.	99.	79.8	44.	59.3	16.5	14.5
Sept.	94.	75.5	36.	55.7	14.25	15.75

-16-

The following table gives the water temperatures taken at the South Haven water works intake, 1500 ft. from shore, southwest of the south pier. Temperatures at the water's edge range from 2 to 5 degrees higher in warm weather:

Table 8.

<u>Yr. 1929</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>Aug.</u>	<u>Sept.</u>	<u>Oct.</u>
High	61.	65.	75.	71.	70.	56.
Low	46.	46.	44.	49.	47.	46.
Average	50.9	54.9	60.8	60.8	59.	50.
<u>Yr. 1930</u>						
High	55.	70.	73.	74.	74.	68.
Low	44.	49.	47.	45.	50.	49.
Average	48.	53.	60.	58.8	65.	54.
<u>Yr. 1931</u>						
High	52.	75.	75.	76.	74.	65.
Low	44.	46.	46.	45.	55.	46.
Average	48.	50.	64.	61.	63.	57.
<u>Yr. 1932</u>						
High	63.	67.	78.	74.	74.	60.
Low	45.	45.	58.	47.	46.	52.
Average	53.	61.	71.	69.	57.	56.
<u>Yr. 1933</u>						
High	59.	69.	76.	75.	73.	66.
Low	43.	47.	46.	47.	45.	48.
Average	51.	62.	63.	70.	67.	56.
<u>Yr. 1934</u>						
High	56.	67.	72.	76.	66.	63.
Low	45.	45.	49.	49.	60.	50.
Average	51.	61.	62.	67.	62.	54.
<u>1929-34</u>						
High	63.	75.	78.	76.	74.	68.
Low	43.	45.	44.	45.	45.	46.
Average	50.3	57.	63.5	64.4	62.1	54.5

-17-

The following table gives the monthly and annual precipitation for the last four years, with normal comparison:

Table 9.

<u>Month</u>	<u>Normal</u>	<u>1931</u>	<u>1932</u>	<u>1933</u>	<u>1934</u>
January	2.00 in.	1.21 in.	3.61 in.	.99 in.	.81 in.
February	1.67	.31	.89	1.65	.90
March	2.63	2.11	2.42	1.77	1.34
April	2.93	1.95	.89	2.36	1.65
May	3.44	2.98	3.76	5.50	1.05
June	3.87	2.65	1.18	4.14	1.22
July	2.64	2.21	2.86	2.98	.85
August	2.68	1.45	3.12	2.11	3.82
September	2.91	1.94	1.44	5.48	4.61
October	2.91	3.51	5.89	5.84	2.73
November	3.46	4.32	1.23	1.44	4.69
December	2.66	2.42	2.50	1.17	1.37
Annual	33.80	27.06	29.79	35.43	25.04

No nuisance conditions exist from insect pests, due to the lack of presence of stagnant water. The prevailing winds also drive away any mosquito nuisance which is so common around inland lakes. The beaches are free from insect pests.

-18-

10. Anticipated Use:

We believe that an area of this type is greatly needed. For a comparative basis, we offer the following table showing the size of other public beach developments on Lake Michigan, and their distance from Metropolitan Chicago:

Table 10.

<u>Name of Park</u>	<u>No. of Acres</u>	<u>Frontage on Lake Mich.</u>	<u>Distance from Chicago</u>
D. H. Day	32	708 ft.	318 mi.
Grand Haven	29	1800	168
Holland	44	1540	147
Chas. Mears	15	960	221
Muskegon	1197	15000	178
Oceana Cty.	1118	15000	221
Orchard Beach	26	1130	283
Van Buren	107	2160	110
Warren Dunes	252	5300	80
Ludington	3056	16360	259
North Port	31	1960	368
Indiana Dunes	2200	17160	60

Of these parks, the Indiana Dunes State Park is the only one adequately equipped to meet the existing need. Van Buren State Park is entirely inadequate, without bath houses and hemmed in by almost insurmountable bluffs. Warren Dunes is leased by the State of Michigan, but has never been developed nor does it have an attendant. The remaining parks are State Parks, north of the project area, and are all crowded because of limited facilities. Each provides only parking and bath house accommodations.

-19-

The following table gives the total number of visitors at State Parks on Lake Michigan for the last six years:

Table 11.

<u>Name of Park</u>	<u>Total No. of Visitors</u>		
	<u>1929</u>	<u>1930</u>	<u>1931</u>
D. H. Day	44,891	54,005	41,528
Grand Haven	1,184,441	1,156,250	1,355,075
Holland	631,712	698,150	711,855
Chas. Mears	65,244	72,335	179,305
Muskegon	132,359	284,370	284,175
Orchard Beach	70,665	65,149	63,035
Van Buren	17,812	43,719	63,565
	<u>1932</u>	<u>1933</u>	<u>1934</u>
D. H. Day	49,107	38,899	37,251
Grand Haven	1,431,200	1,620,900	1,642,600
Holland	515,500	750,305	503,850
Chas. Mears	186,550	202,275	254,605
Muskegon	362,545	325,535	315,625
Orchard Beach	67,869	50,595	113,883
Van Buren [*]	63,640	55,802	57,190

-20-

The following table gives the total number of campers and camps built at State Parks, on Lake Michigan for the last six years:

Table 12.

<u>Name of Park</u>	<u>1929</u>		<u>1930</u>	
	<u>No.</u> <u>Campers</u>	<u>No. Camps</u>	<u>No.</u> <u>Campers</u>	<u>No. Camps</u>
D. H. Day	1,467	428	1,549	474
Grand Haven	5,187	1,488	5,932	1,711
Holland	2,353	613	3,819	976
Chas. Mears	1,974	577	1,850	535
Muskegon	2,676	808	3,322	970
Orchard Beach	5,837	1,875	5,667	1,682
Van Buren	1,544	448	1,620	502
	<u>1931</u>		<u>1932</u>	
	<u>No.</u> <u>Campers</u>	<u>No. Camps</u>	<u>No.</u> <u>Campers</u>	<u>No. Camps</u>
D. H. Day	1,765	542	1,908	534
Grand Haven	7,929	2,299	9,549	2,784
Holland	5,272	1,331	7,422	1,618
Chas. Mears	1,986	558	1,714	456
Muskegon	3,456	1,028	3,922	1,023
Orchard Beach	4,832	1,545	4,289	1,312
Van Buren	2,303	607	2,695	813
	<u>1933</u>		<u>1934</u>	
	<u>No.</u> <u>Campers</u>	<u>No. Camps</u>	<u>No.</u> <u>Campers</u>	<u>No. Camps</u>
D. H. Day	1,333	368	1,370	383
Grand Haven	9,084	2,574	9,063	2,552
Holland	7,074	1,612	7,393	1,798
Chas. Mears	1,270	385	1,561	419
Muskegon	3,452	814	3,102	891
Orchard Beach	3,437	1,037	3,887	1,143
Van Buren	2,323	670	2,167	657

-21-

The following table is a summary for three representative years of the use made of State Parks in Michigan:

Table 13.

	<u>1925</u>	<u>1930</u>	<u>1934</u>
Attendance	2,539,672	8,891,880	8,561,016
Campers	77,534	154,425	149,482
Camps Built	24,267	44,257	40,773
Michigan Campers	59,061	128,906	127,649
Michigan Camps Built	17,701	36,310	34,145
Non-Resident Campers	18,473	25,519	21,833
Non-Resident Camps Built	6,566	7,947	6,628
Average number of persons per camp	3.2	3.48	3.67
Percentage campers (of total attendance)	3%	1.7%	1.75%
Number of States represented	46	47	40
Localities represented, other than States	Washington, D. C. & Canada	Peru, S.A., Wash., D.C.	Canada, Wash., D.C., India & Honolulu.

The following section gives suggested developments for the proposed area, which make a complete recreational unit, far superior to the parks listed in Tables 11 and 12.

-22-

11. Development Suggestions:

A. General:

1. Roads. The construction of roads should be adequate for actual needs, but kept down to a minimum. No scenic roads should be built, as they would detract from the natural unspoiled beauty of the area. The main artery for traffic has been built, U. S. Highway #31. Only service roads should be constructed. Adequate traffic circulation is provided by U. S. #31. The type of roads constructed should depend entirely on use, and should be made to fit topographical contours so as to be least conspicuous.

2. Utilities. Electric lines are now existant at the center of the proposed area. No serious problem presents itself in getting an adequate supply of light and power. Some lines will have to be built, perhaps ten to fifteen miles sufficing. An adequate supply of fine water can be had for the drilling. Drainage and soil types are excellent for the construction of the necessary sanitary facilities.

3. Reforestation. This will be a matter of maintenance and control rather than planting, as the whole area is heavily wooded.

4. Beach Improvement. Although the beach is kept clean by the water action, nevertheless, the beach will require some attention, especially so with increasing public use.

-23-

B. Particular Areas: (See Exhibit #7)

1. State Park Area:

As previously explained, this area has never been developed. Part of it is now used as a camp by the Boy Scouts. As it is not suited to general public use, we believe that its present use could be extended to include other organizations who camp. There is a road leading into the property at present. The only development required would be sanitary facilities, large open shelters and covered kitchens.

2. Area of Short Hiking Trails:

This area is heavily wooded and adapts itself admirably to hiking short distances. It is not as rugged as the territory farther south. There should be no construction of any kind except a shelter or two advantageously located. Trails could be defined through the forest without actually cutting and constructing them. This area could be used for general public hiking as the elevations are not very great and the forest growth is some of the finest in the area.

3. Intensive Public Use Area: (See Exhibit #8)

The main features of this area are:

- a. One or two large bath houses.
- b. Parking Space for 2500 cars.

-24-

- c. Adequate beach for thousands of people, accessible through a natural gap in the dunes. This is one of two places in the entire area where the lake can be seen from the highway. It is the logical place for intensive public use. A large open level area can be used for parking immediately adjacent to the highway.

4. Picnic Area:

This area is a continuation of area #3, and also designed for intensive public use. Here, in a large area, could be developed the picnic facilities for the whole proposed area. It is adjacent to the public bath houses. Trails leading to lookout shelters atop the dunes, and to secluded spots for picnic tables would permit of great public use of this particular area. Areas 2, 3 and 4 are all designed solely for daytime use and could be administered in that way. The only development required in the picnic area would be adequate picnic tables, outdoor stoves, sanitary facilities, lookouts, and some open shelters.

5. Boat Basin and Golf Course:

This area embraces the present subdivisions. It also includes an abandoned golf course, which could be restored if desirable. There is also a small artificial lake created at the mouth of Brandywine Creek. This could be enlarged and improved to constitute a boat basin and shelter for small craft.

-25-

6. Township Park:

This park is small and its use restricted by its size. It has 1050 feet of lake frontage, and includes about 48 acres of land. Its future use is problematical should the proposed project be carried out.

7. Childrens Camps: (See Exhibit #9)

Here, in rather rough terrain, is an ideal location for childrens camps. They are separated on the north from the township park by a very high ridge. There would be seclusion and protection for children of all ages, with adequate space on which to roam. The public would be easily excluded. Service roads only would be constructed. There is a good beach.

8. Longer Hiking Trails:

Here, in an area which is the most rough of all the land in the proposed area, is the ideal hiking country. This area would appeal especially to the confirmed and experienced hiker. It should be left just as it is without roads and developments. Trails could be posted for guidance only and a few shelters built. A posted nature trail would appeal to the naturalist. Beautiful^{*} views are possible from several of the higher elevations. The general public would not be invited in this area, its use being restricted to hiking.

-26-

9. Overnight Camps:

This area includes several large sweeping valleys which could be used for overnight camps to the vest advantage. Here the tent and trailer owner could find a peaceful overnight camping grounds. Sanitary facilities and outdoor stoves should be provided, parking areas in secluded spots designated, and otherwise no construction. Roads would be required, but only for ingress and egress to parking areas.

10. Family Vacation Areas:

Here at the southern end of the project would be the best location for family vacation camps. The buildings for these camps, together with the childrens camps and the bath houses on the intensive public use area, would be the major construction work for the entire project. Areas 9 and 10 could well be administered as parts of one large similar unit.

C. Winter Sports:

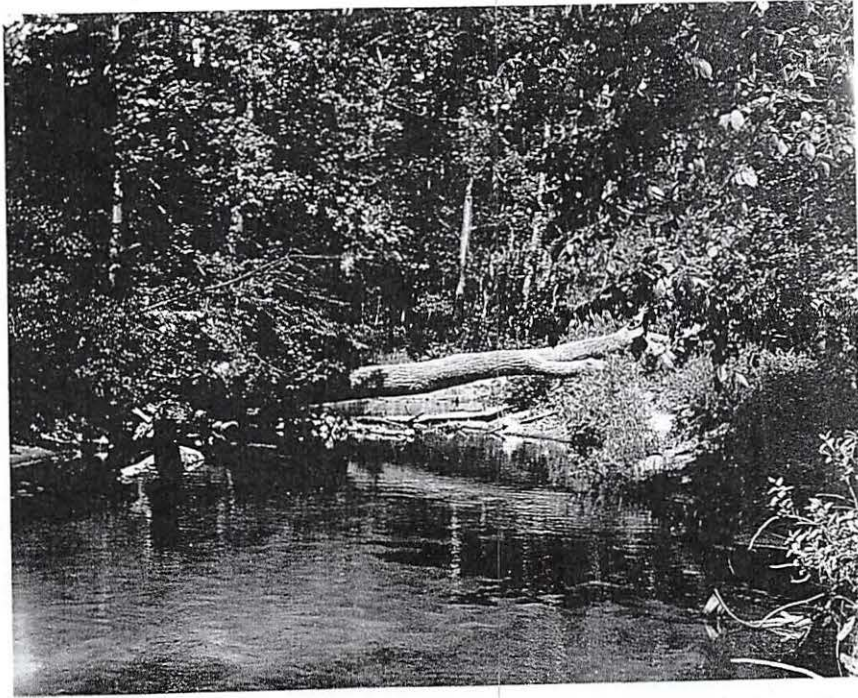
The steep slopes of the dunes are ideal for tobogganing and skiing. Skating could be provided on the boat basin. Winter hiking could also be encouraged. There is adequate snowfall for winter sports, but not too much to discourage the hiker.

-27-

Summary:

Justification for Van Buren Sea Shore Beach Project.

1. Anticipated public use during future greater leisure.
2. Proximity to large metropolitan centers.
3. Accessibility by road, boat and bus.
4. Cost of land less now than at any anticipated future time.
5. Beauty of the dunes should be preserved.
6. There are no similar areas in the Middle West today, providing such a varied program as outlined.
7. Work projects could be carried out in developing the area.
8. Health, especially of children, fostered.
9. Investment for good citizenship, resulting in pride and enjoyment in Government owned recreation centers.
10. Low cost of maintenance and administration, in proportion to vast public use.
11. Saving in cost to individual in use of public non-profit, rather than private, facilities.
12. No private enterprise to undertake so vast a program.
13. Public need for this type of project. The supply of this type area is not equal to demand.
14. The area is directly adjacent to the Van Buren Recreation Project on which work is under way. The combining of these projects would be feasible and advisable, using the same personnel.



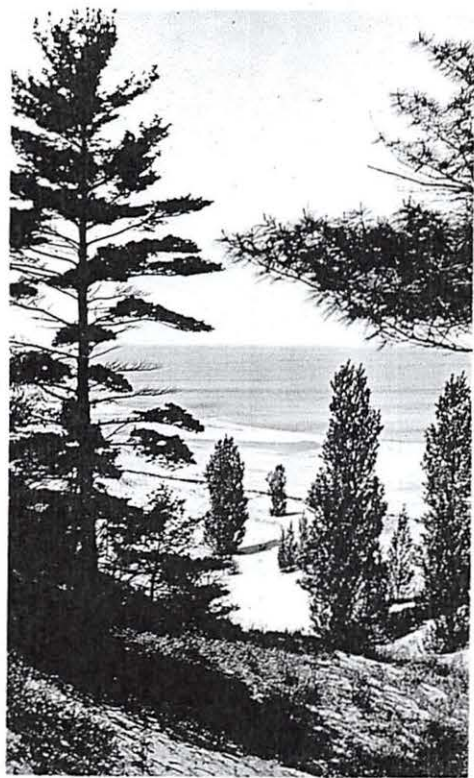
ROGER'S CREEK



U.S. 31



PINES
ON THE
DUNES





HANSEL SLIDE

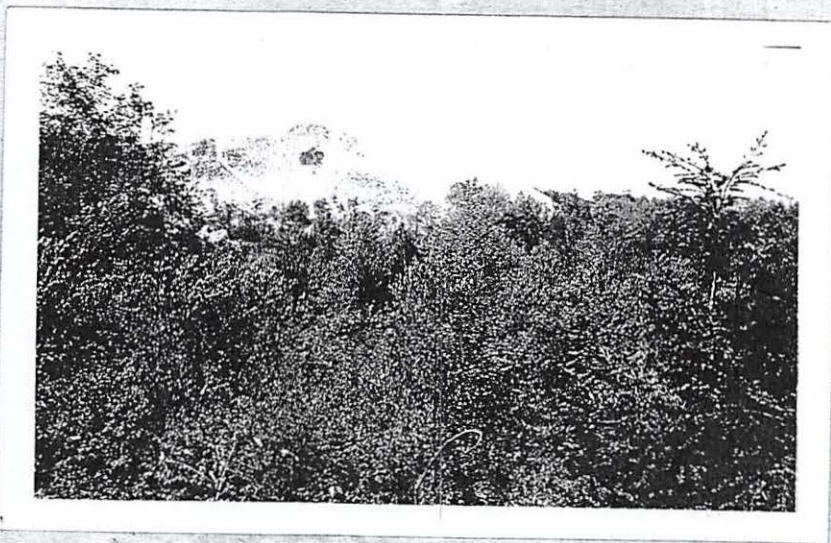


BEACH & WOODED SHORELINE



**USUAL BEACH SCENE
AT SOUTH HAVEN**
No bath house facilities provided





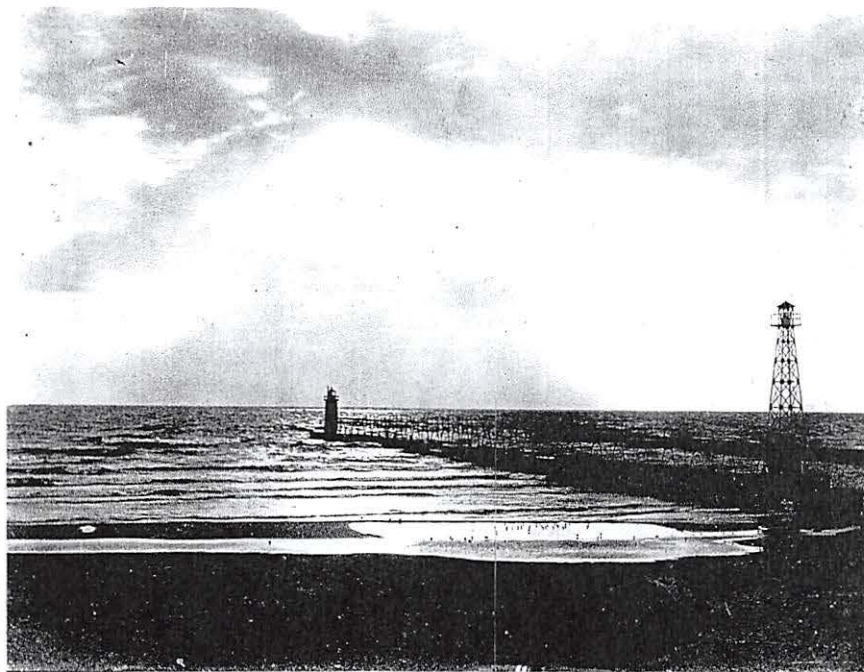
TOP OF DUNE



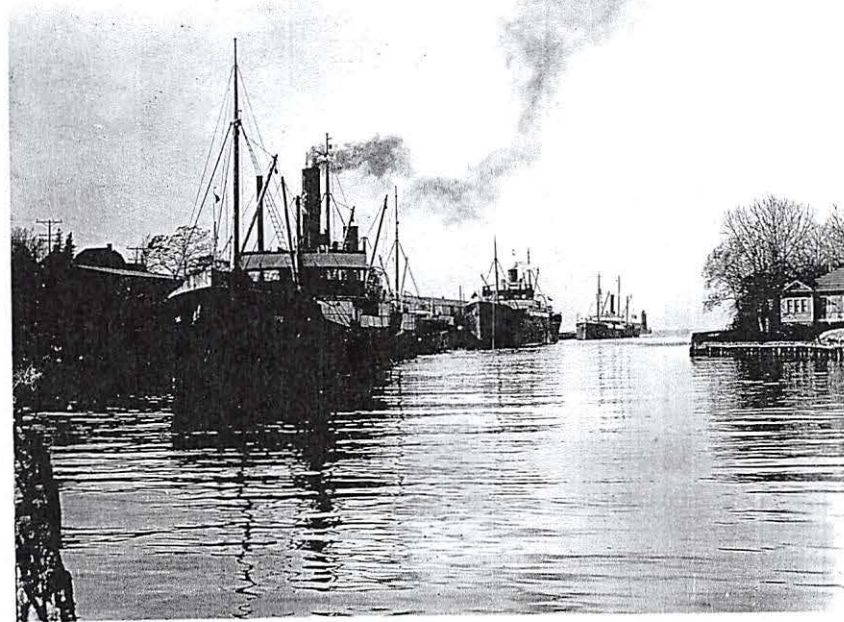
MARVIN SLIDE



GAP IN DUNES

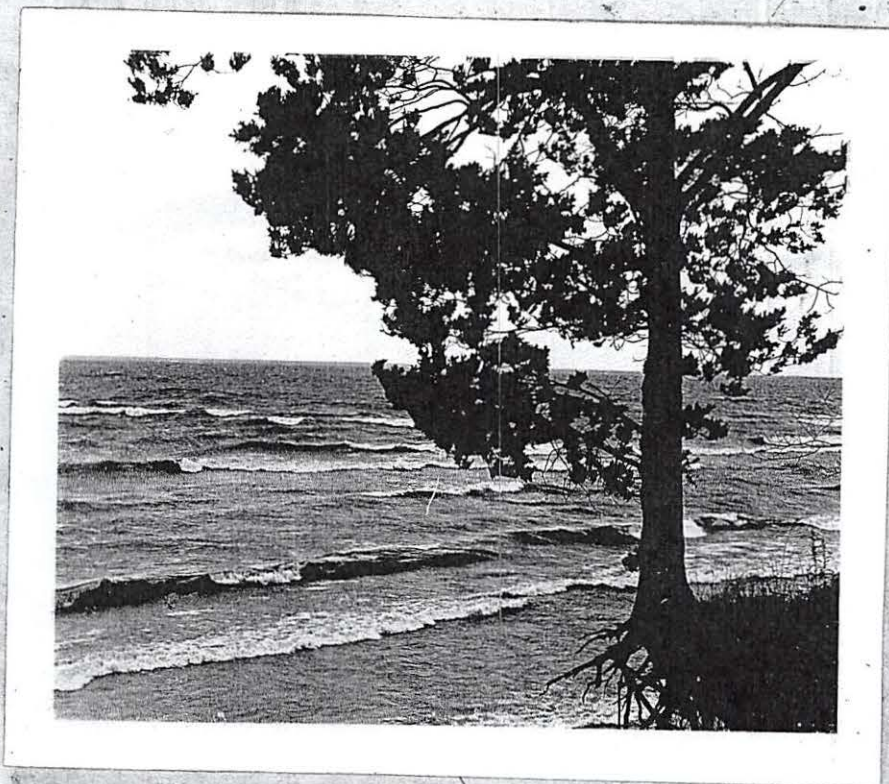


SOUTH HAVEN HARBOR





SUNSET

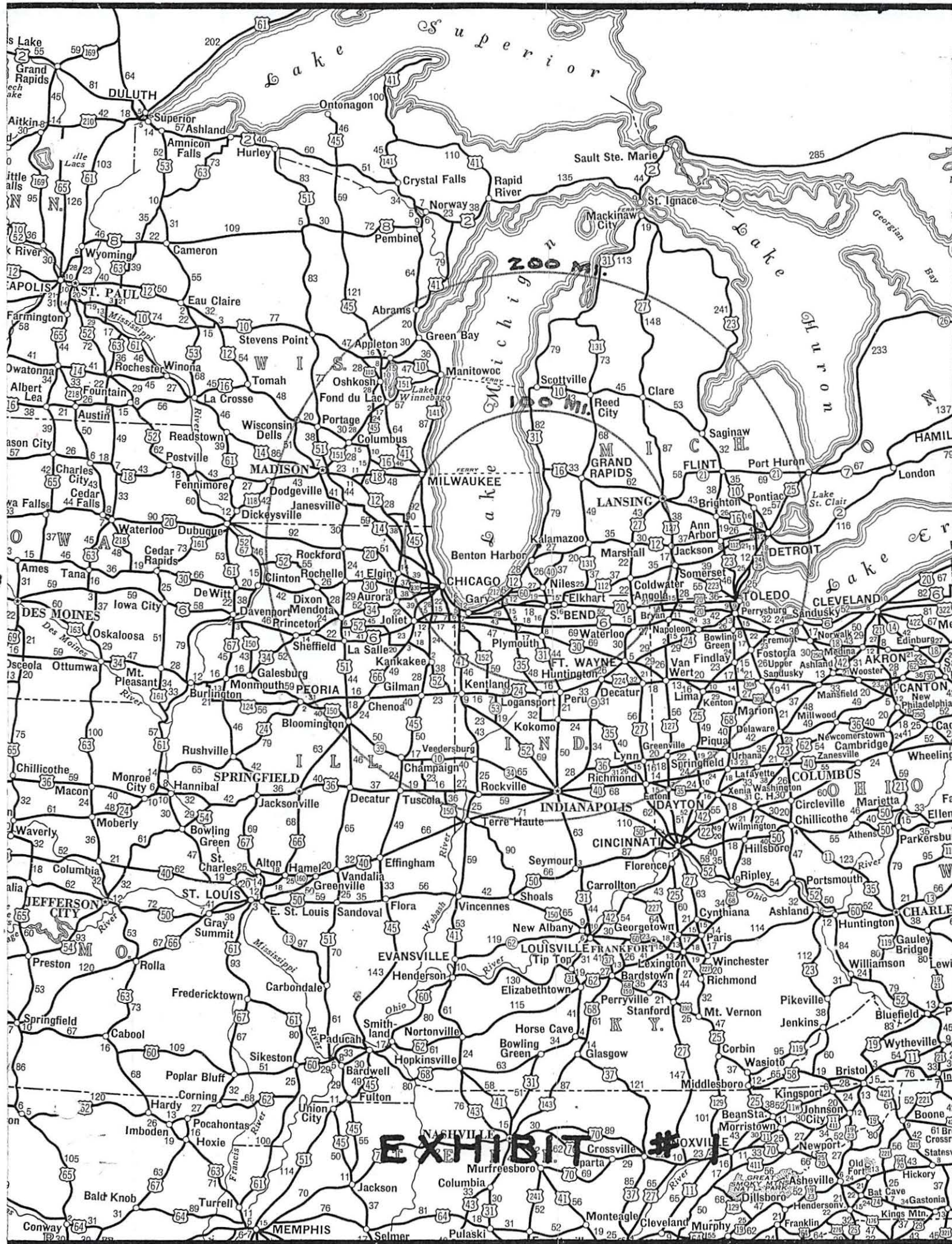


SURF

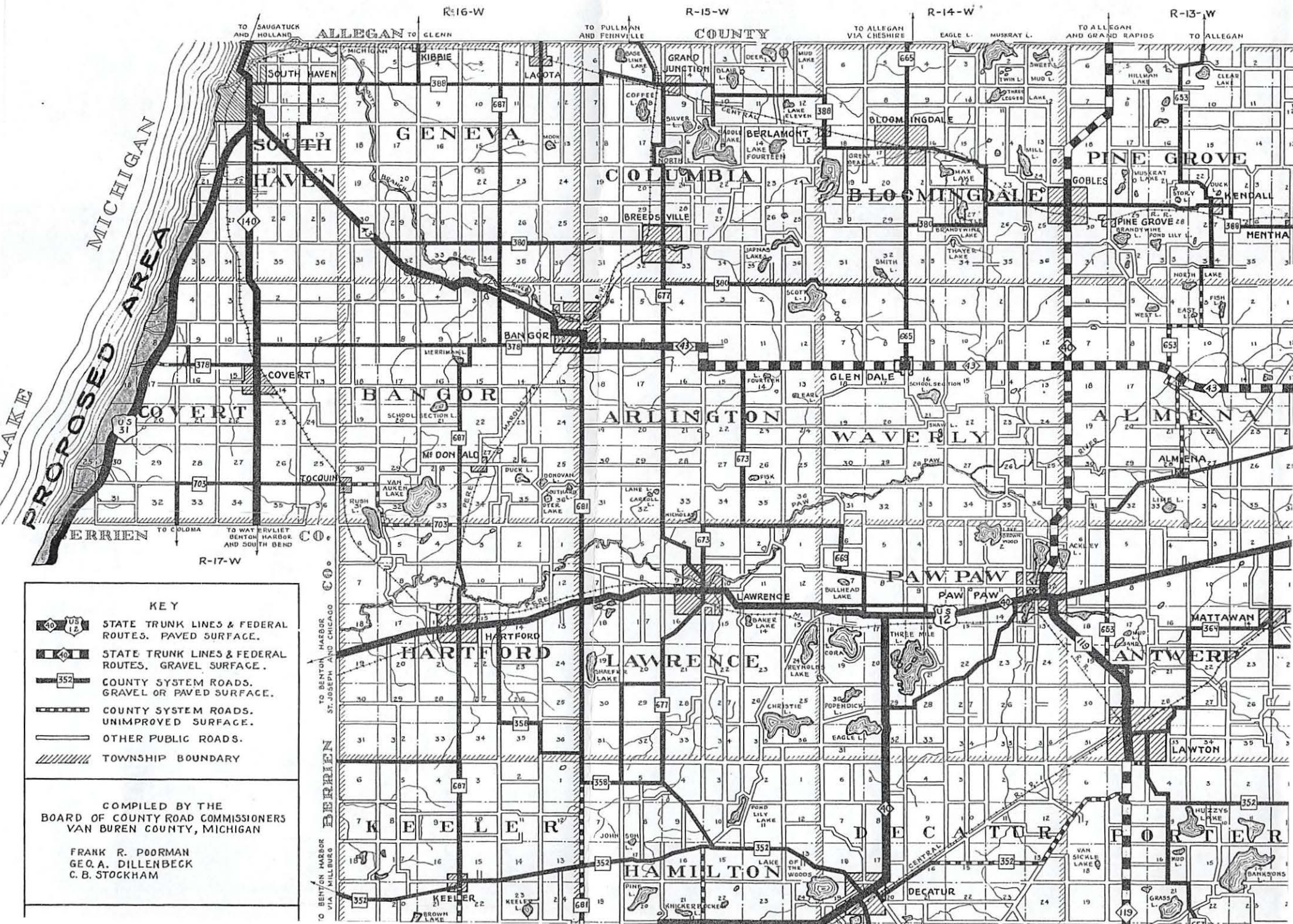


WINTER SCENES











ROAD MAP OF VAN BUREN COUNTY MICHIGAN



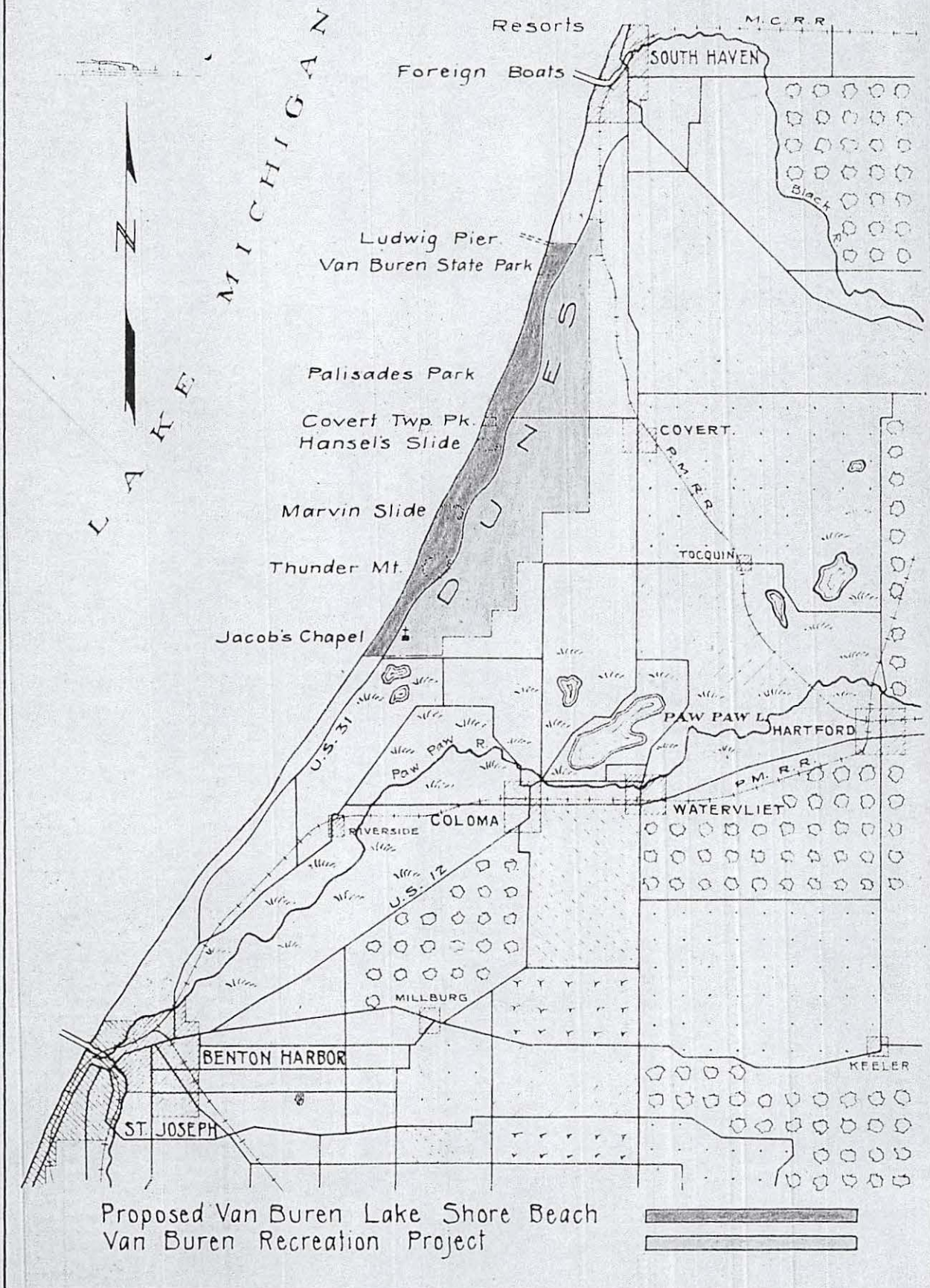
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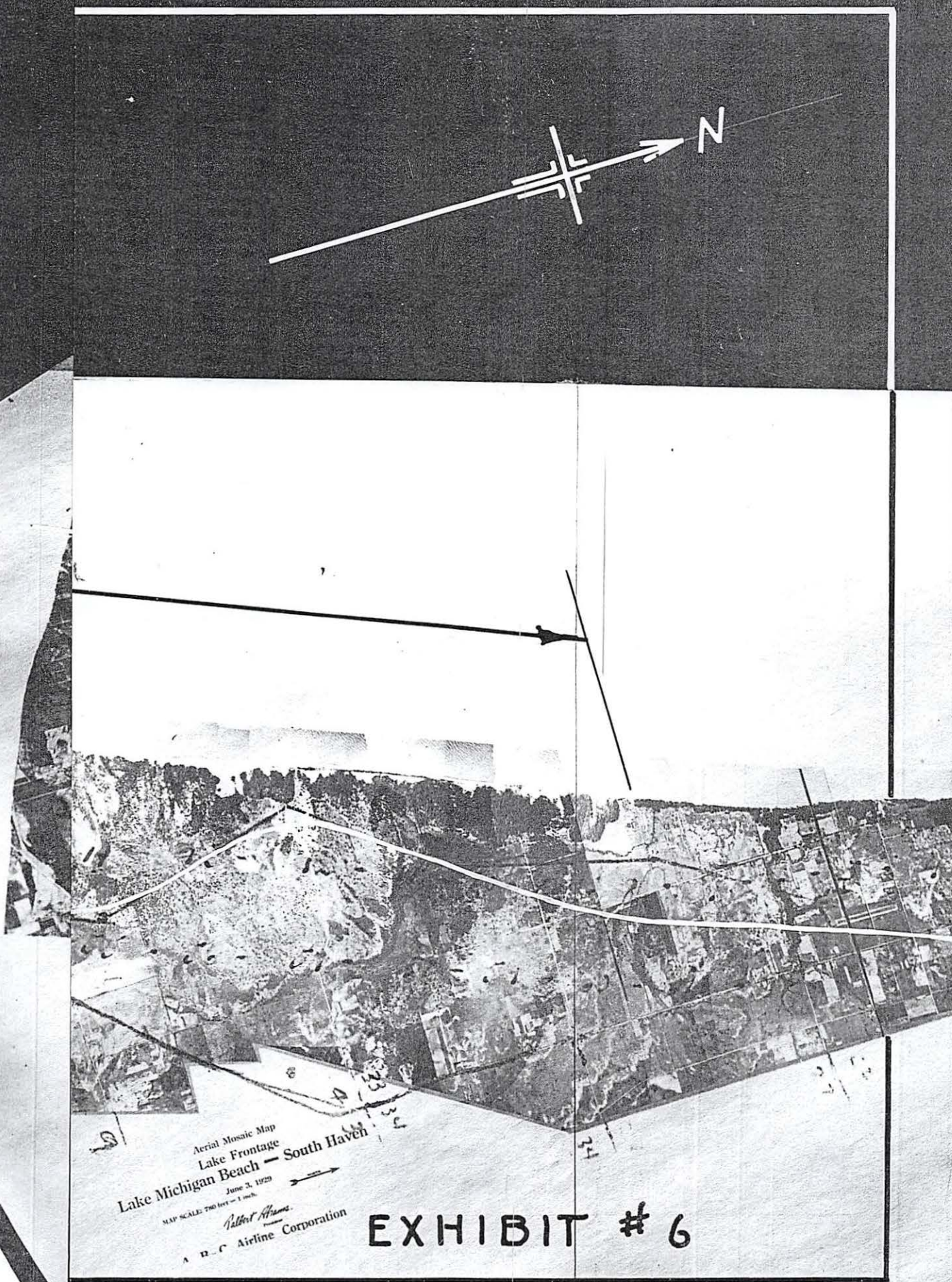
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-  STATE TRUNK LINES & FEDERAL ROUTES. GRAVEL SURFACE.
-  COUNTY SYSTEM ROADS. GRAVEL OR PAVED SURFACE.
-  COUNTY SYSTEM ROADS. UNIMPROVED SURFACE.
-  OTHER PUBLIC ROADS.
-  TOWNSHIP BOUNDARY

COMPILED BY THE
BOARD OF COUNTY ROAD COMMISSIONERS
VAN BUREN COUNTY, MICHIGAN

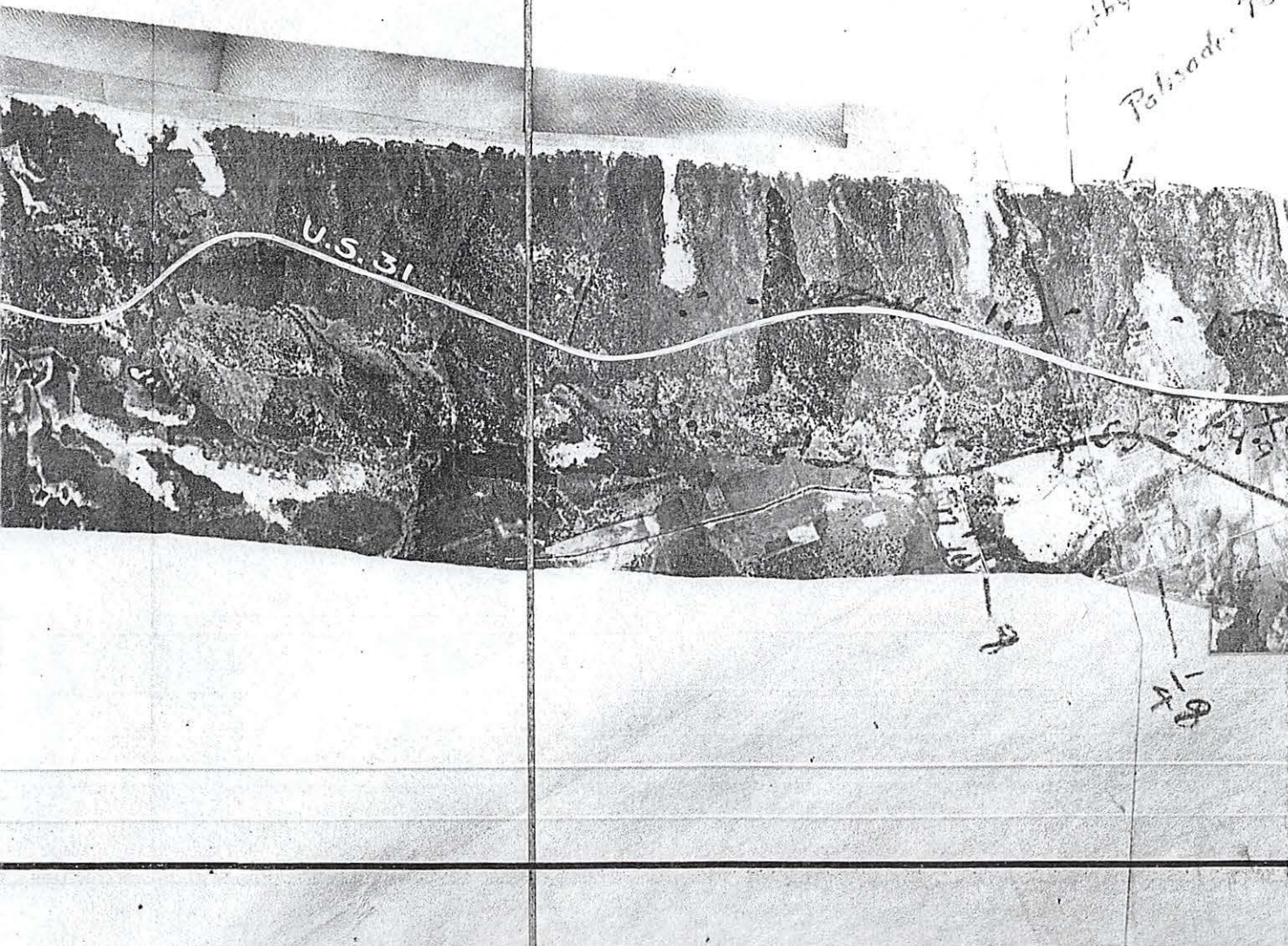
FRANK R. POORMAN
GEO. A. DILLENBECK
C. B. STOCKHAM

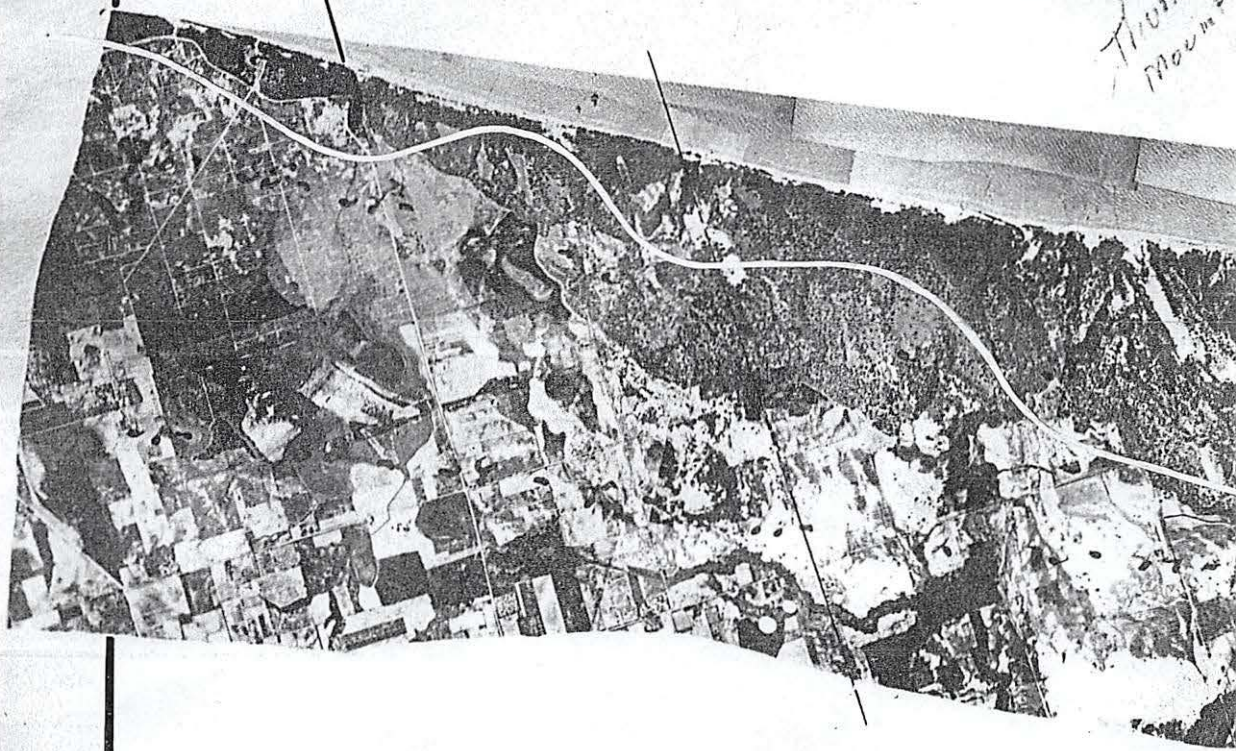
EXHIBIT # 3





PROPOSED AREA





Thomson
Mount