

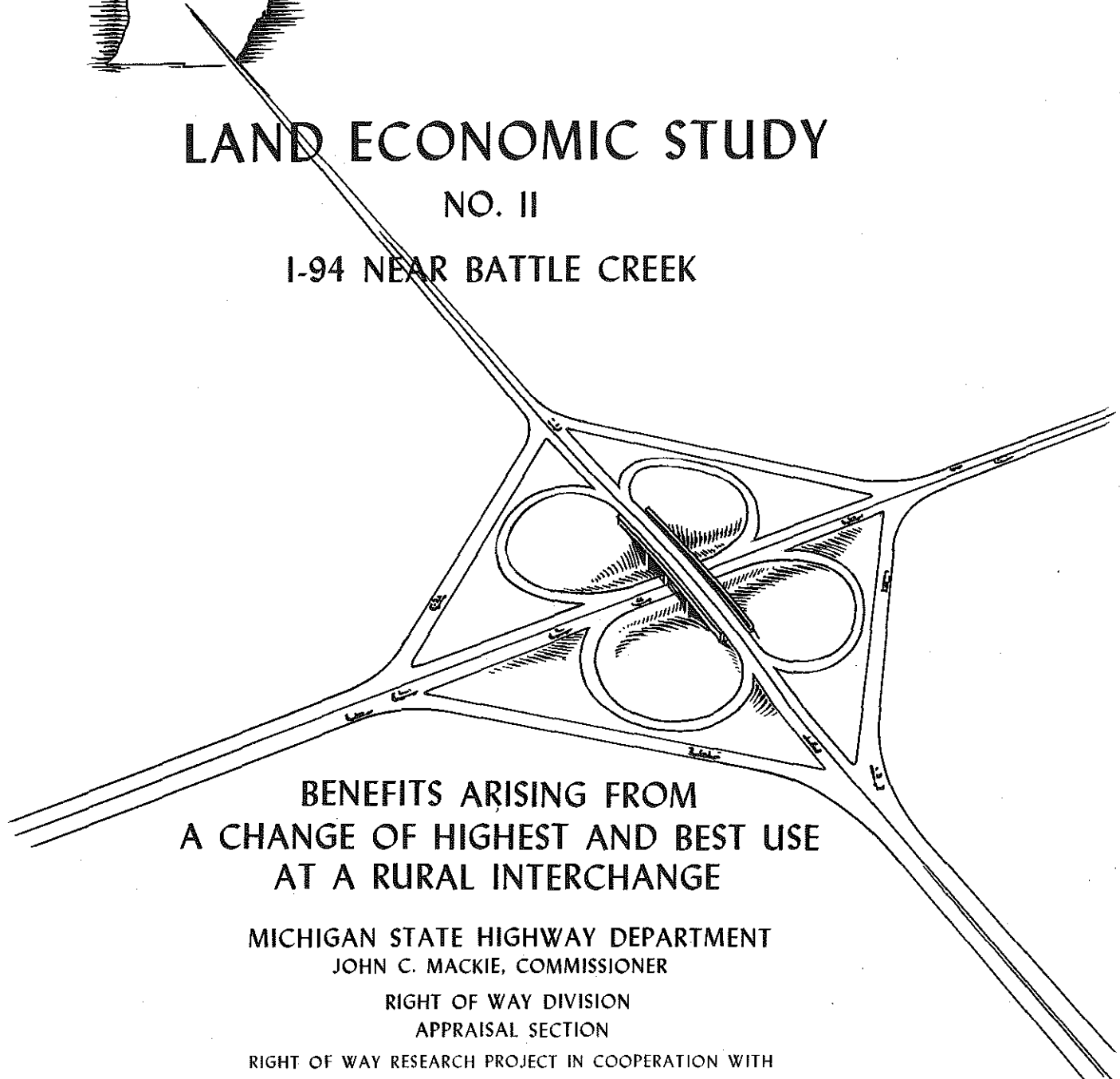


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LAND ECONOMIC STUDY

NO. II

I-94 NEAR BATTLE CREEK



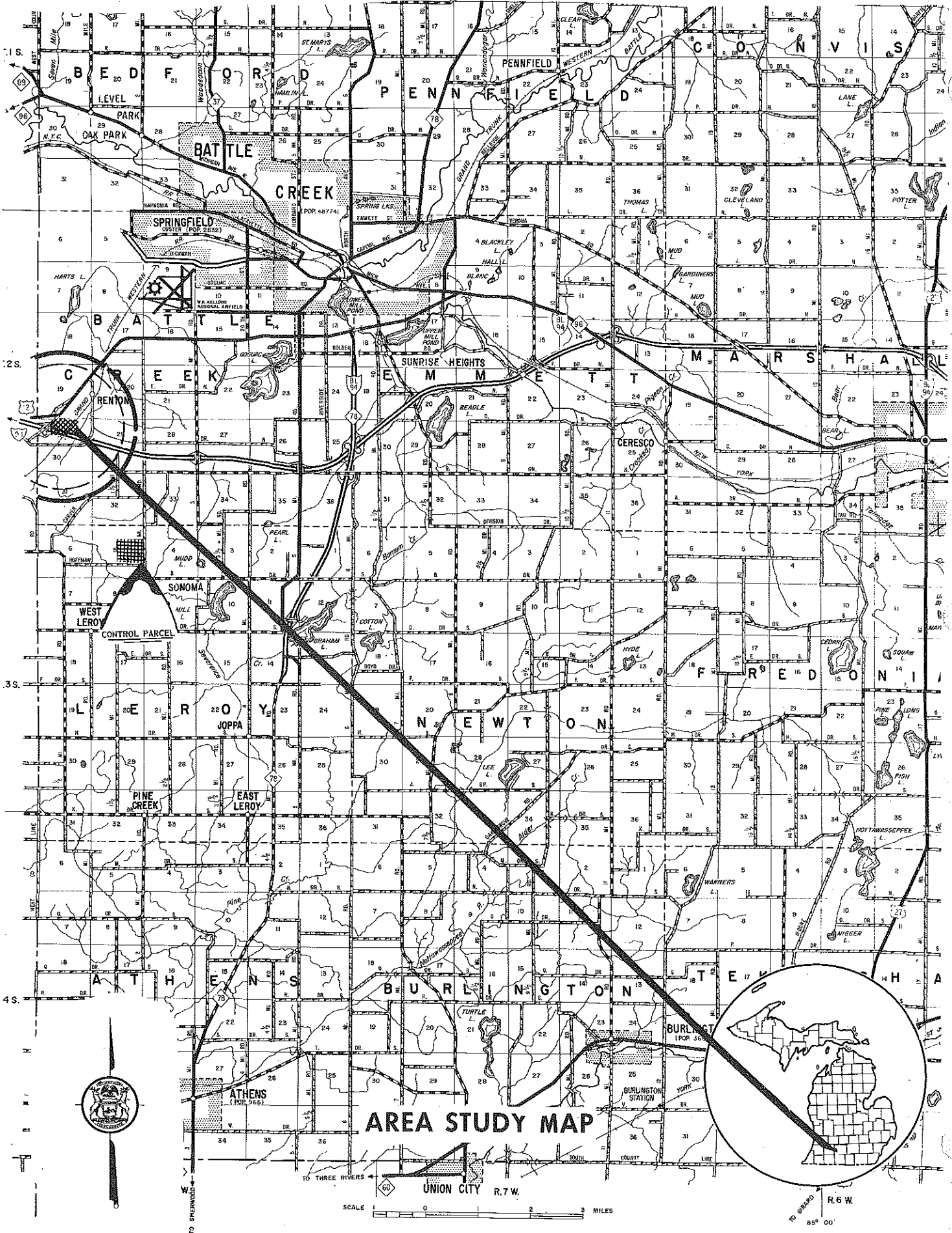
BENEFITS ARISING FROM A CHANGE OF HIGHEST AND BEST USE AT A RURAL INTERCHANGE

MICHIGAN STATE HIGHWAY DEPARTMENT
JOHN C. MACKIE, COMMISSIONER

RIGHT OF WAY DIVISION
APPRAISAL SECTION

RIGHT OF WAY RESEARCH PROJECT IN COOPERATION WITH
UNITED STATES DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

JULY 1962



AREA STUDY MAP

SCALE 0 1 2 3 MILES

UNION CITY R.7.W.

TO SHAW R.6.W.



15 S.
14 S.
13 S.
12 S.
11 S.
10 S.
9 S.
8 S.
7 S.
6 S.
5 S.
4 S.

TO SPENCER

TO THREE RIVERS

85° 00'

INTRODUCTION

As Michigan's freeway system becomes of age---advancing from infant sections of superhighway to a continuous network---businessmen have shown increased interest in buying property adjoining freeway interchanges.

In the beginning, only locations at main interchanges near large cities attracted buyers, but as these new businesses have demonstrated startling success, the commercial demand has extended to other interchanges more removed from populous areas.

This report shows how land values increased at a rural interchange on the Interstate 94 Freeway.

GENERAL AREA INFORMATION

The study parcel---known as the Carey property---is about eight miles southwest of Battle Creek and a half-mile off old US-12, the highway replaced by I-94.

Nearest heavy concentration of people is in Battle Creek. The city has a population of 45,000. About 40,000 additional people live in an area immediately surrounding the city.

Backbone of Battle Creek's economy is industry. Manufacture of cereal and grain milling are the major industries, but there are a variety of other enterprises.

Prior to construction of I-94, the Carey property was a 108-acre dairy farm. About 95 per cent of the land within two miles of the property was used for agricultural purposes.

Commercial development on old US-12, two miles east and west of the Carey property, was sparse---a small motel and a truck stop with a low production gasoline station and a service area for cars and trucks..

The only residential development nearby was a subdivision with about 20 low priced homes, primarily owner built and under \$10,000 valuation.

Although the area was serviced by a railroad, there were no signs of industrial development.

Except on old US-12, land in the area of the Carey property was zoned agricultural. The Battle Creek Township Zoning Board had shown an interest in reasonable zoning changes.

HISTORY AND ANALYSIS OF THE CAREY PROPERTY

When the Carey property was appraised in 1957, the dairy farm was flourishing. On the property were a good set of outbuildings and a fair home. About 80 per cent of the farm was tillable with the balance in pasture and woods.

The appraisal included:

<u>BEFORE Right of Way Taking</u>	<u>Appraised Value (Aug. 1957)</u>
107.74 acres.....	\$15,470.00
Improvements.....	<u>15,565.00</u>
TOTAL.....	\$31,035.00
<u>AFTER Right of Way Taking</u>	<u>Appraised Value</u>
90.14 acres.....	\$12,440.00
Improvements.....	<u>none</u>
TOTAL.....	\$12,440.00
Estimated Compensation.....	\$18,595.00

Allocation of the appraisal for property required for right of way and damage to remaining land included:

Allocation

Improvements.....	\$15,565.00
17.56 acres.....	3,030.00
Damages.....	<u>none</u>
TOTAL Compensation.....	\$18,595.00

After completing the appraisal, it was decided that about 200,000 cubic yards of borrow were needed for construction of the freeway. The State Highway Department then purchased the entire farm in November 1957 at the appraised value of \$31,035.

Borrow was removed from about 15 acres of rolling land in the interior of the property to a depth of 15 feet. (See map, page 6).

In 1960, with construction of the freeway completed, the Highway Department made most of the farm available for sale through public auction. Held in reserve were 8.2 acres (parcel C) for future interchange development and 16.5 acres (parcel D) for future borrow. The after value is now adjusted to reflect reserves.

Estimated AFTER Value After Adjustment for Reserves

Appraised value after right of way taking (90.14 acres)...	\$12,440
Reserved for future interchange (parcel C)	
Tillable land 4.8 acres @ \$150.....	\$750
Frontage <u>3.4</u> acres @ 200.....	<u>680</u>
8.2 acres	\$1,400
Reserved for future borrow (parcel D)	
Pasture and waste 16.5 acres @ \$40.....	\$660
TOTAL reserved.....	2,060
Adjusted Estimated AFTER Value (65.44 acres).....	\$10,380

SALE OF REMAINING LAND

At the time of this report, there have been four sales of remaining land, each showing increasing land values at the interchange.

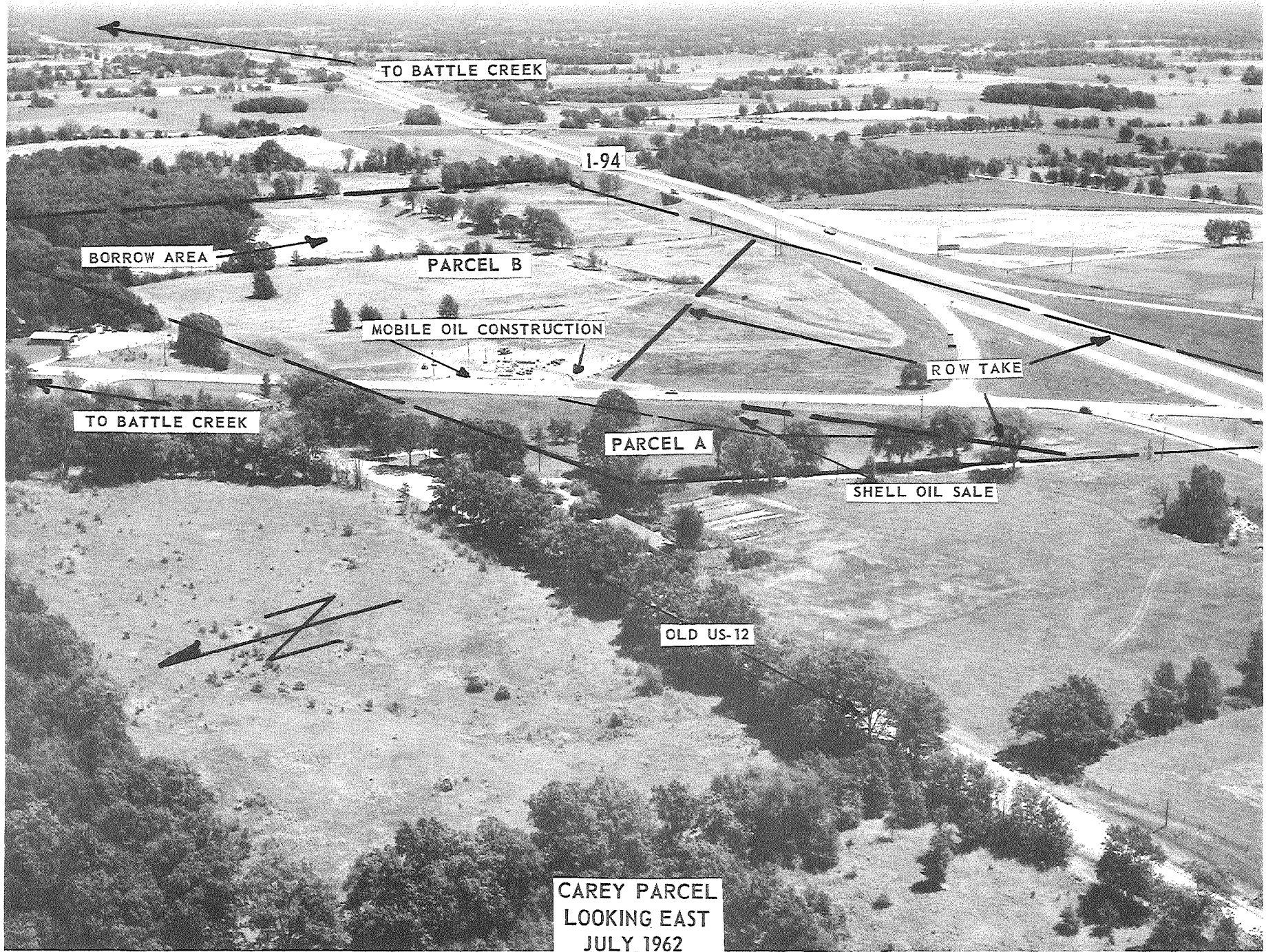
In May, 1961, the Highway Department sold parcel "A" at public auction for \$8,000. In February, 1962, one acre of this parcel was sold to Shell Oil Company for \$20,000. (L. 826, p. 83, Calhoun County).

In January, 1961, the Highway Department sold Parcel "B" at public auction for \$18,000. In November, 1961, the entire parcel---61.5 acres---was sold to Socony Mobil Oil Company for \$38,000 (I.R.S.). (L. 823, p. 81).

The following table compares sale prices with adjusted after values.

	Parcel "A"	Parcel "B"
Appraised Value. ("A" 4.0 acres) ..	\$800	.. ("B" 61.5 acres) \$9,580*
Appraised value per acre.....	\$200 \$156
Auction sale price.....	\$8,000 \$18,000
Auction sale price per acre... ..	\$2,000 \$293.
Increase over appraised value... ..	900% 88%
Second sale. ("A" 1.0 acre).... ..	\$20,000	.. ("B" 61.5 acres) \$38,000
Second sale price per acre... ..	\$20,000 \$618
Increase over appraised value. ..	9,900% 297%

*The appraised value of parcel "B" was not adjusted because of borrow removal (15 acres). The borrow removal appears to be detrimental because of adverse grades which would not lend themselves to development of the property.



TO BATTLE CREEK

I-94

BORROW AREA

PARCEL B

MOBILE OIL CONSTRUCTION

ROW TAKE

TO BATTLE CREEK

PARCEL A

SHELL OIL SALE

OLD US-12

CAREY PARCEL
LOOKING EAST
JULY 1962

TREND OF REAL ESTATE VALUES

Several studies were made to obtain an accurate comparison of land values between 1957 and 1962.

The Department of Agriculture reported a 17 per cent increase in farm real estate during the five-year period.

The value of an improved 160-acre farm about two miles south of the Carey property increased 10 per cent between 1958 and 1961. (See control parcel - p. 12).

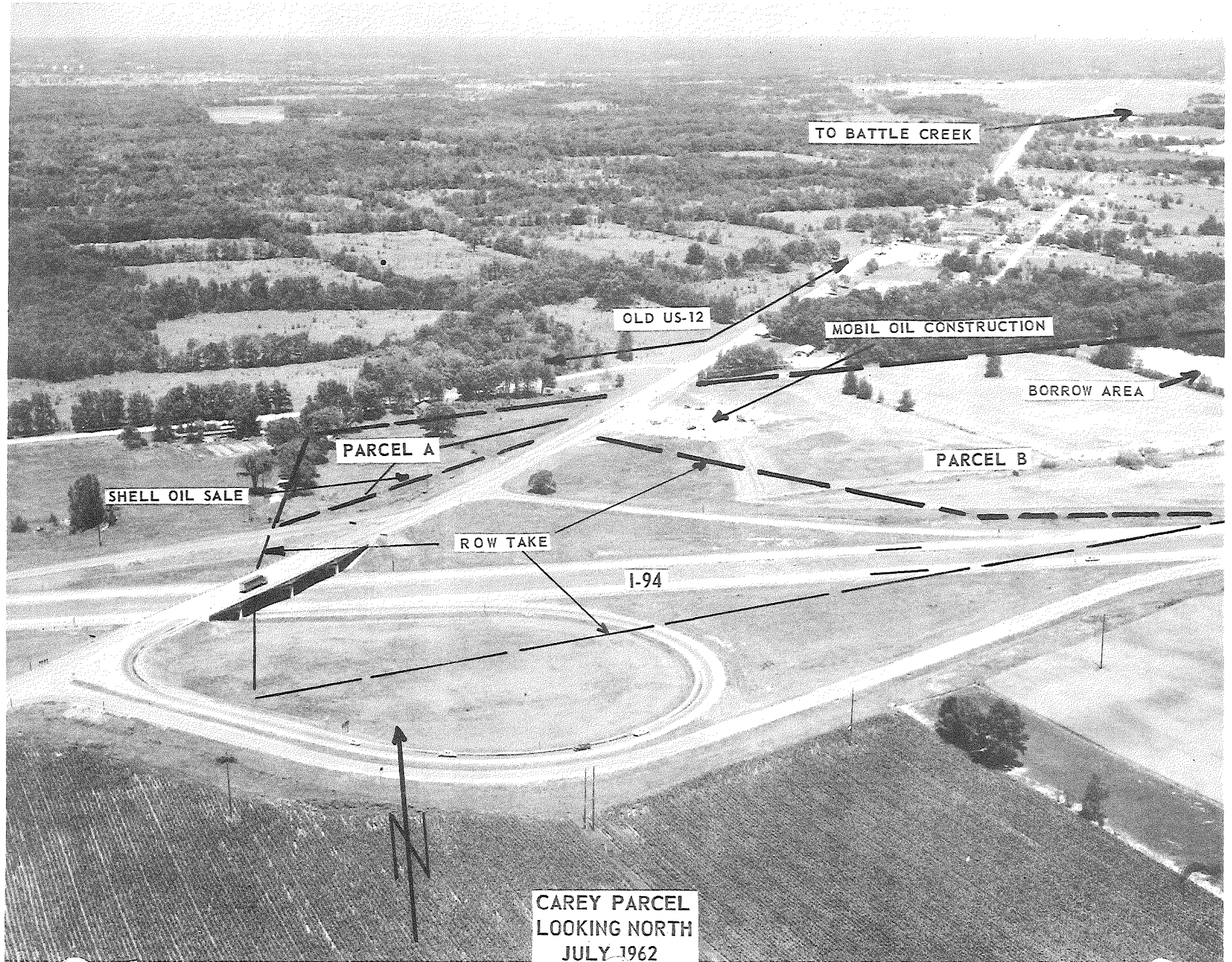
There was an increase of nearly 20 per cent in the value of land with subdivision potential just outside the residential area around Battle Creek (See Economic Study No. 8).

These studies show an increase of 10 to 20 per cent in the general real estate market, yet the Carey parcels under study had value increases of 88 to 900 per cent at public auction and 297 to 9,900 per cent at negotiated market sales.

An examination of the Highway Department's Traffic Movement Estimate Diagram for 1975 indicates why values of the Carey property have increased.

The diagram shows that 8,800 vehicles per day will pass the Carey property going to and from the Battle Creek area. An additional 22,000 vehicles a day will use the freeway passing the study parcel.

An interesting development in conjunction with market reaction is a change in zoning. In February, 1958, after plans for the freeway were set, the Battle Creek Township Zoning Board approved an interim zoning ordinance which set aside land in the interchange area for light industrial development. In November, 1960, the interim zoning was confirmed in a detailed ordinance. The zoning permits both commercial and industrial uses.



TO BATTLE CREEK

OLD US-12

MOBIL OIL CONSTRUCTION

BORROW AREA

PARCEL A

PARCEL B

SHELL OIL SALE

ROW TAKE

I-94

CAREY PARCEL
LOOKING NORTH
JULY 1962

CONCLUSIONS

The value of the study parcel---within easy reach of more than 6,500 vehicles making a turning movement a day---increased four to 100 times, even though the property is located more than four miles from any intensive development.

At the same time, the value of control parcels in the same general area only increased 10 to 20 per cent.

The Highway Department's purchase of the entire Carey property proved to be an advantage, through reduced borrow and right of way costs. There was no cost for borrow, and the Highway Department saved 75 per cent of anticipated right of way expenditures.

In this case, public auction did not fully measure changes in market value. Only when potential buyers had sufficient time to study the area, did land values increase considerably.

Prepared by

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CONTROL PARCEL

The nearest sale of land was a 160-acre farm about two miles south of the Carey property. (T3S, R8W, Section 5, S $\frac{1}{2}$ of NE $\frac{1}{4}$ and N $\frac{1}{2}$ of SW $\frac{1}{4}$).

This land was sold May 1, 1958, for \$36,250---\$1,500 down and terms of \$300 per month at six per cent. The purchaser was a former tenant. After buying the land, the buyer occupied the house and shingled the roof.

In February, 1961, the farm was resold for \$39,500 (L. 810, p. 494, Calhoun County). The farm was purchased by an adjoining owner---cash and mortgage terms.

Exact comparison is complicated because the first sale was on a land contract, the house was improved by the initial buyer and because the final buyer wanted a farm adjoining his land.

Soil on the control parcel was superior to that of the study parcel. Improvements were similar.

The indicated increase in market value is about 10 per cent.

