

A TOPOGRAPHICAL SURVEY
OF THE LANSING BOY SCOUTS'
SUMMER CAMP

Thesis for the Degree of B. S.
MICHIGAN STATE COLLEGE

Robert R. Backus

1947

THESIS

C.1

**SUPPLEMENTARY
MATERIAL
IN BACK OF BOOK**

A TOPOGRAPHICAL SURVEY OF THE
LANSING BOY SCOUTS'
SUMMER CAMP

A Thesis Submitted to
The Faculty of
MICHIGAN STATE COLLEGE
of
AGRICULTURE AND APPLIED SCIENCE

by

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Candidate for the Degree of
Bachelor of Science
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The purpose of this study is to provide the Lansing Boy Scouts with a topographic map and scale model of their summer camp.

For twenty-five years the Chief Okemos Council of the Boy Scouts of America has owned and operated a summer camp. This camp is located on Clear Lake in Jackson County, Michigan, and is named Camp Ki-Ro-Li-Ex. The four service clubs of Lansing had an important part in establishing this camp - the Rotary Club donated twelve acres of land, the Lions Club, Kiwanis Club, and Exchange Club each constructed a building for the camp. The name Ki-Ro-Li-Ex was derived from the first two letters of each club name - the "Ki" from Kiwanis, the "Ro" from Rotary, the "Li" from Lions, and the "Ex" from Exchange.

Early in 1947 the Chief Okemos Council decided that it was necessary to enlarge the camp. Two parcels of land were considered, one consisting of approximately eighty acres and the other consisting of six acres. At the present time, July 1947, they have purchased the eighty acre tract and are negotiating for the six acres. Once again the service clubs of Lansing have had an important part in establishing a new and larger camp. The Rotary Club has given them \$1,500, the Lions Club \$1,000, the Kiwanis Club \$1,000, the Optimist Club \$1,000, and the Exchange Club \$100. The Exchange Club has promised to give more in the near future, as at present

they are financing a similar project for the Girl Scouts.

In planning for the future development of the camp it was suggested that an accurate topographic map and scale model would be extremely helpful. The map would enable the various committees and the executive staff of the council to readily plan and locate all of the necessary buildings, roads, wells, and etc. As these improvements will be financed largely by contributions from citizens in the Lansing area, interested in scout activities, it was thought that a scale model would provide a clearer picture of the contemplated improvements.

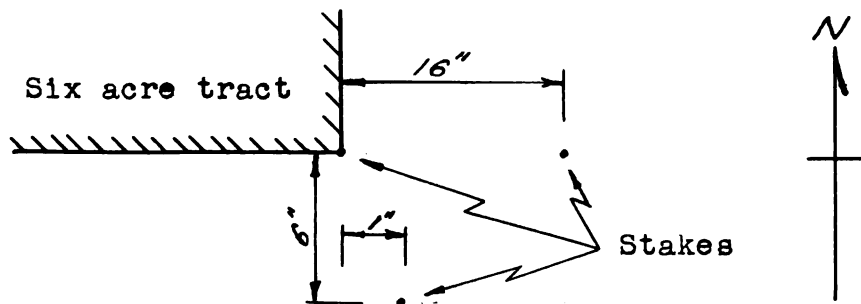
A topographic survey was made of the three tracts of land illustrated on page 6, and described as follows:

1. The present camp site - The East fifty (50) rods in width of the N.W. $\frac{1}{4}$ of the N.W. fractional $\frac{1}{4}$ of Section 1, Township (2) South of Range (2) East, Waterloo Township, Jackson County, Michigan, containing twelve (12) acres more or less.
2. The eighty acre tract recently purchased - The South $\frac{1}{2}$ of the S. W. $\frac{1}{4}$ of Section 36, Township (1) South of Range (2) East, Waterloo Township, Jackson County, Michigan, except that portion in the N.W. corner thereof lying North of the pavement and excepting also that portion of the West three hundred (300) feet thereof lying South and West of the gravel road which runs across the S.W. corner thereof. In addition a parcel of land lying between the North line of Section 1, Township (2) South of

Range (2) East and the North Shore of Clear Lake described as commencing in the North line of the said Section 1 at a point three hundred (300) feet East of the N.W. corner thereof, thence South to the shoreline of Clear Lake approximately forty-six (46) feet, thence Easterly along the shoreline of Clear Lake to a point directly South of the North line of said Section 1 four hundred and ninety-five (495) feet East of the N.W. corner of said Section 1, thence North approximately eighty (80) feet to the said North line of said Section 1, thence West one hundred and ninety five (195) feet to the point of beginning.

3. The six acre tract - Commencing at the N.W. corner of Section 1, Township (2) South of Range (2) East, thence South $87^{\circ}6''$ East thirteen hundred and twenty (1320) feet for a place of beginning. Thence South $1^{\circ}30''$ West six hundred sixty seven and seven tenths (667.7) feet, thence South $87^{\circ}6''$ East four hundred and thirty six (436) feet, thence North $1^{\circ}30''$ East six hundred sixty seven and seven tenths (667.7) feet to North line of said Section 1, thence North $87^{\circ}6''$ West four hundred and thirty six (436) feet to place of beginning. Being a part of the East $\frac{1}{2}$ of the N.W. $\frac{1}{4}$ of Section 1 and having an area of Six and sixty eight hundredths (6.68) acres.

In making the survey of the above described land no difficulty was experienced in locating the lines and corners. However, at the south east corner of the six acre tract there was evidence of three different surveys having been made, as three iron corner stakes were found. These stakes were not in agreement with each other either as to type or location and varied as shown in the following sketch:



The survey for this thesis agreed with the type of stake that bordered the six acre tract.

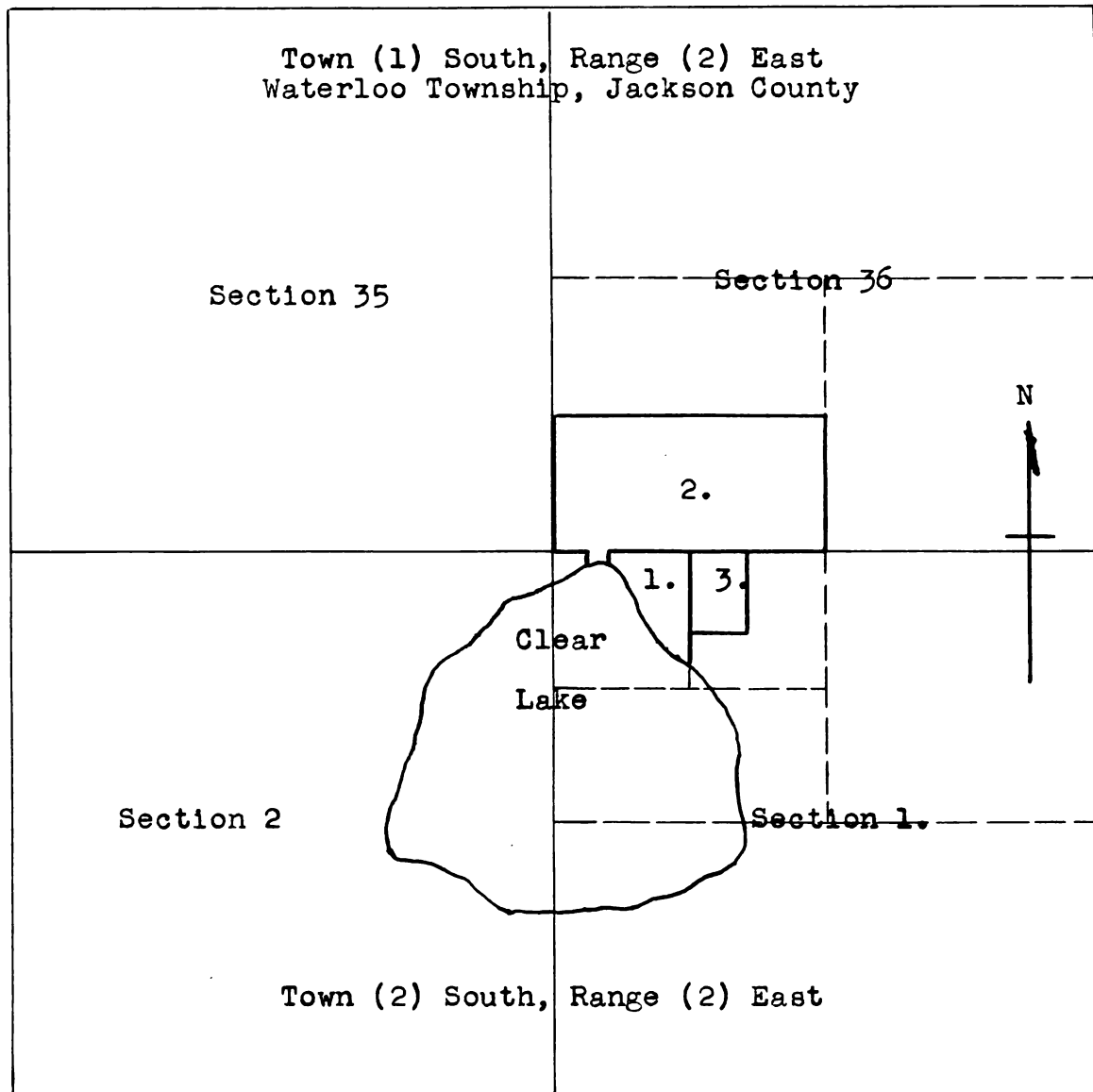
Elevations of the three areas were taken by the cross section method using fifty foot squares. All work was done with the transit and tape. The field work was done with the aid of several Boy Scouts from the camp who were interested in mapping and surveying.

In the construction of the model a sheet of glass was used as the base. Blue paint was applied to the back of the glass in the portion representing the lake. For the swampy area the same blue paint was applied to the top side of the glass after being mixed with fine sawdust. The land was constructed by cutting the area representing each contour

from sheets of one-eighth inch balsa wood. These flat sections were then glued together and the edges shaved and sanded down until an exact replica of the land was obtained. This was then all painted green as none of the areas contained plowed or cultivated land. All land which is not a part of the previously described land was painted black. Roads were then located and painted brown as they are actually sandy in nature. The trees were represented by cutting dark green rubber sponges into small pieces and gluing them in turn to the land. As in the map, they represent only the general outline of the wooded areas and no attempt was made to differentiate between the different kinds of trees. The buildings were also constructed of balsa wood, painted yellow, and glued in their respective places. A drawing containing the legend was mounted under the glass in the lower right hand corner. A stained and varnished frame was made to which the assembled model was firmly secured. The cost of the materials in the completed model was less than \$10.00.

After the model had been photographed it was presented to the Chief Okemos Council along with several copies of the finished map.

*Map Showing Location of
the Three Camp Sites



*Above is not drawn to scale.

Key

1. Present Boy Scout Camp
2. Eighty Acres purchased June 1947
3. Six acres to be purchased

Pocket his: 1 map &

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Map

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