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Bulletin 898-G

# SPIRIT LEVELING IN MISSOURI 

## Part 7. CENTRAL MISSOURI

1896-1938
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Prepared in cooperation with the
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GEOLOGICAL SURVEY AND WATER RESOURCES
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PART 7. CENTRAL MISSOURI, 1896-1938

## J. G. Staack, Chief Topographic Engineer

## INTRODUCTION

Scope of report.-This bulletin, which for convenience is to be published in eight parts, contains tre results of all spirit leveling done in Missouri by the Geological Survey, United States Department of the Interior, incluaing those heretofore published. Each of the parts deals with one of eight sections into which the State has been divided for this purpose and which have been designated northeastern, northwestern, southeastern, southwestern, central, east-central, south-central, and westcentral. Missouri. In each part descriptions of the points for which figures of elevation have been determined are listed according to the quadrangles in which the points occur. Results of spirit leveling other than that done by the Geological Survey have not been included.

Cooperation.-The State has contributed financially to the work of leveling in Missouri since 1907, ordinarily cooperating with the United States Geological Survey on a dollar-for-dollar basis. The agencies concerned in this cooperation are the Missouri Geological Survey and Water Resources and, since 1929, the Missouri State Highway Commission. Since 1934, the Missouri Geological Survey and Water Resources, under allotments from the Federal Emergency Relief Administration and the Works Progress Administration, has also supplied the funds to pay the personnel working on extensive projects of leveling in the State. For these projects the United States Geological Survey has fumished equipment and supervision as its share of the cooperation.

Classification of leveling. -Spirit leveling is classified according to the degree of refinement in the instruments and methods used and according to the closure errors. First-order leveling consists of leveling done with the most improved instruments; all sections being leveled twice, in opposite directions, under varying conditions. Closures are not allowed to exceed the amount in feet represented by the formula 0.017 times the square root of the length of section in miles.

Second-order leveling, according to regulations of the United States Geological Survey, comprises lines leveled twice with reliable instruments, though not necessarily of the most improved type. Closures are not allowed to exceed $0.03 \ddot{5}$ times the square root of the length of section in miles.

Third-order leveling is made up of lines that are run, either with first-order equipment or with an engineer's wye level and rods of the New York type, in single-line circuits that are required to close within the 11 mits of 0.05 times the square root of the

[^0]length of circuit in miles. This is equivalent to 0.071 times the square root of the length of section in miles if the line is leveled twice.

All leveling done by the United States Geological Survey in Missouri is of thirdorder accuracy except as otherwise stated.

Adjustments.-A preliminary step to the adjustment of first, second, and third-order leveling is the application of all corrections for rod error, temperature, and unbalanced sights, as well as the orthometric corrections required because of the convergence toward the poles of level surfaces of different elevations. The adjustment of a net of leveling begins with the first-order lines. Most of these lines in both the United States and Canada have already been combined in a general net and adjusted to remove accidental closure errors by the mathematical method known as least squaras. The latest adjustment of this kind was made in 1929 by the United States Coast and Geodetic Survey and is known as the "1929 general adjustment of first-order leveling." This adjustment included the first-order lines in Missouri, and the elevations thus derived are the fundamental references for elevations determined by second- and thirdorder nets. The third-order leveling of the United States Geological Survey in Missourl has been adjusted by determining weighted mean elevations for new junction points and prorating the errors of each link. The weights are taken as the reciprocals of lengths of links. The third-order net has thus been brought into agreement with the best information available for the resulta of the fundamental first-order leveling, although the published figures of elevation may be changed slightly by future adjustments of the level net.

Benchmaris.-The benchmarks used by the United States Geological Survey (pl. 1) are of two general classes-principal and supplementary. Prinoipal benchmarks are placed at more or less regular intervals along: a level line and are established with the aim of making them as nearly permanent as practicable. They are usually bronze or aluminum tablets, iron posts, or copper bolts. Supplementary or auxiliary benchmarks are less formal in design and are placed between the principal benchmarks. Some of the supplementary benchmarks in conmon use are copper nails fitted with washers, spikes, and marks cut with a chisel on rock or masonry.

The tablets are circular in shape, measure 3-7/8 inches in diameter, and taper from a thickness of three-eighths of an inch at the center to about a quarter of an inch near the rounded edge During a short period in the earlier years of the Survey's leveling the tablets set were made of aluminum. The softness of this metal, however, made them susceptible to damage, so that aluminum as a material for tablets was soon discarded. The earliest tablets set and those now being placed are made of bronze, and bronze is the material now specified for standard tablets. Each tablet is cast with a 3-inch shank extending from the center of its reverse side, by means of which it is cementod in place, and each bears an inscription on its face. The inscriptions on the tablets already placed differ in many details, because of changes in design at various times. The face of every tablet, however, is cast with the words "U. S. Geological Sur vey", a cross at the center, which indicates the fiducial point for position or elevation, and the words "Elevation above sea." On some tablets the inscription indicates that they were setiin connection with a project in which a State or other organization cooperated; on some the inscription includes a triangle, which signifies a located point, enclosing the cross at the center. Tablets bearing a triangle enclosing a cross may be used not only as benchmarks but also as triangulation- or traverse-station marks.


GEOLOGICAL SURVEY BENCHMARKS.
$A$ and $B$, Standard tablets, principal benchmarks, used where masonry or rock is available to hold them. $A$ is used in cooperating States; the State name is inserted at $a . \quad C$, Under side of $A$ and $B$, showing shank used to hold tablet in place. $D$ and $E$, Two views of copper nail and copper washer, a supplementary benchmark, used for points lying between those marked by standard tablets. $F$, Standard iron post fitted with bronze cap similar in design to the standard tablet, formerly used where no rock or masonry was available; superseded by concrete post with tablet set in top.

The inscription on most of the tablets already set includes the warning " 250 dollars fine for disturbing this mark", but the latest design omits this phrase and adds the sentence "For information write the Director, Washington, D. C.n

If the tablet is to mark a transit-traverse station, the traverseman stamps it with letters indicating this use of it, such as "Prim. Trav. Sta.", "P.T.S.", or "T.T.", as well as his own identifying letter or letters, the serial number of the station, and the year, using steel dies. If the tablet is set as a benchmark, the levelman stamps it with his identifying letter or letters, the serial number, and the year. He may at the same time stamp upon it with steel dies the figures of elevation to the nearest foot, or these figures may be added later. Tablets that serve as benchmarks may have been set as such or they may have been set to mark traverse stations. Thus some of them serve a dual purpose, but each has stamped upon it the date and the identifying designation of only the engineer who established it.

The figures of elevation that appear on a tablet are usually those determined by field computation only. It is sometimes found, therefore, that they do not represent the latest information. This has happened either because they refer to some independent datum temporarily adopted before first-order trunk lines made standard datum available, or because a later adfustment made in the office has rendered necessary an appreciable change in the figures as determined in the field. In June 1938 a field party was organized and charged with the responsibility of stamping figures of elevation, to the nearest foot, on the permanent benchmarks established in the State by the Geological Survey. Thus, these figures may appear stamped on the tablets in addition to the identifying letters and numbers quoted in the printed descriptions. It is assumed that engineers and others who require accurate figures of elevation for the marks will use those printed in a bulletin such as this one, instead of accepting the stamped figures. If the appropriate bulletin is not conveniently accessible, a request for the desired information may be addressed to the Director, Geological Survey, United States Department of the Interior, Washington, D. C.

The tablets, of whatever style, are cemented into holes drilled in solid rocks or in the walls of public buildings, bridge abutments, or other masonry structures. Where masonry or rock is not available, the tablets are set in the tops of reinforced concrete posts, which may be either precast or mixed and molded at the selected site. The posts are about 8 inches square or 8 inches in diameter at the top and larger at the base. They vary in length from 36 to 48 inches and are generally set so as to project about 6 inches above ground.

Antedating the concrete posts which are now constructed to hold the tablets, in places where masonry or rock is not available, are wrought-1ron posts, to the tops of which are riveted bronze caps of similar design to the tablets. These iron posts measure 4 feet in length and $3 \frac{1}{2}$ inches in outer diameter and are set about 3 feet in the ground. The bottom of the post spreads out to a width of about 10 inches in order to give it a firm footing in the earth. No iron posts have been set in recent years. They have proved impracticable, as they are easily disturbed and are subfect to rust at the ground level, which eventually destroys them.

The third form of principal benchmark, set only in the early leveling, is a copper bolt, designed to be wedged into a drill hole in rock or masonry and perhaps further secured with lead or cement. This bolt measures 4 inches in length and 1 inch in diam-
eter and has a slot at one end into which fits a brass wedge. The wedge serves to expand the bottom end of the bolt, so that after the bolt has been driven to almost its full length into the hole, it cannot be easily removed. The exposed end of the bolt bears an appropriate inscription, stamped upon it with steel dies. This inscription is made up of the letters "U S G S", the letters indicating the datum used, the abbreviated word "Ft.", and the figures of elevation.

Supplementary benchmarks are of many kinds. One kind consists of a copper nail $1 \frac{1}{3}$ inches long supplied with a copper washer seven-eighths of an inch in diameter, through which the nail is driven into the root of a tree or some timber structure or cemented into rock after bending the point. The designation "U S G S B M" is stamped on each washer, and on some washers the abbreviation of the name of the cooperating State is added. Another kind of supplementary benchmark is a chiseled square, used on the horizontal surface of rocks or masonry structures, or a chiseled cross, used on a vertical surface. Nails, track spikes, and small, capped iron pipes also serve as supplementary benchmarks, and occasionally easily described and recognized points, such as doorsills and tops of hydrants, are so used.

Preservation and restoration of benchmarks. - Any person who finds that a principal benchmark has been damaged, disturbed, or destroyed or that it should be reset or redescribed on account of highway or other improvements will render a public service by commenicating the facts to the Director, Geological Survey, United States Department of the Interior, Washington, D. C., before taking any action affecting the location or elevation of the mark. A proper form, accompanied by a return-addressed, franked envelope, will be sent for use in reporting the action taken and in recording the revised description of the mark, if any, and the notes made in obtaining the revised elevation.

Datum.-All elevations determined by the United States Geological Survey and those determined by the United States Coast and Geodetic Survey for inland mapping are referred to mean sea level, which is the level that the sea mould assume if the influence of winds, tides, and currents were eliminated. This level is not the elevation determined from the mean of the highest and lowest tides, nor is it the half sum of the mean of all the high tides and the mean of all the low tides, which is called the half-tide level. Mean sea level is the average height of the water, all stages of the tide being considered. It is determined from observations made by means of tidal gages placed at stations where local conditions, such as those due to long, narrow bays, rivers, and like features, will not affect the height of the water. To obtain even approximately correct results these observations must extend over at least one lunar month, and if accuracy is desired they must extend over several years. At ocean stations the halftide level and the mean sea level usually differ but little. It is assumed that there is no difference between the mean sea levels determined from observations made in the Atlantic Ocean, the Gulf of Mexico, and the Pacific Ocean."

Location of the area.-Central Missouri, as the term is used in this bulletin and as the subject of part 7 of the bulletin, is that section of the State lying between latitudes $38^{\circ} 00^{\prime}$ and $39^{\circ} 30^{\prime}$ and between longitudes $92^{\circ} 00^{\prime}$ and $93^{\circ} 30^{\prime}$. (See fig. 23.)

[^1]Index map.-The accompanying index map of central Missouri (fig. 14) shows the relative position of the quadrangle areas which make up this section. A quadrangle is the unit of topographic survey adopted by the United States Geological Survey for dividing the area of the United States. All the quadrangles referred to in listing the results of leveling in central Missouri measure 15 minutes in latitude by 15 minutes in longitude. Possible topographic mapping on a larger scale in some of the quadrangle areas may make it necessary to use, for newer $7 \frac{1}{2}-m i n u t e q u a d r a n g l e s, ~ t h e ~ n a m e s ~$ shown on this index map for 15 -minute quadrangles. On the index map the name of each quadrangle is accompanied by the number of the page on which begins the list of descriptions of benchmarks in that quadrangle.


Pigure 13.-0utline map of Missouri showing the names and relative position of the elght sections covered by the parts of Bulletin 898 , on spirit leveling in the State. The shaded portion represents the section designated as central Missouri.

Maps of many of the quadrangles in central Missouri may be purchased at 10 cents each retail or 6 cents each in lots of 50 or more. Prepayment is required and may be made by money order, payable to the Director, Geological Survey, United States Department of the Interior, or in cash-the exact amount, at sender's risk. Postage stamps should not be sent.

Diagrams of quadrangles showing routes of leveling.-Wt the beginning of the list of benchmark descriptions for each quadrangle is a diagram showing the routes followed by the lines of leveling in and imediately adjacent to that quadrangle. To aid in identifying these routes, the boundaries of the townships and ranges in the quadrangle are indicated by light dashed lines, and the designations of these land subdivisions are given on the margin. The principal settlements are also shown. The solid lines represent the routes of the third-order leveling of the United States Geological Sur-


Pigure 14.-Index map of central wissouri showing the quadrangles into which this section of the State has been divided.
vey. To each of these is assigned a number, and the same number is assigned to the list of descriptions of benchmarks along that route. The heavy dashed lines represent the first-order leveling of the United States Coast and Geodetic Survey.

Personnel.-The leveling of the United States Geological Survey in central Missouri was done under the supervision of the several chief geographers or chief topographic engineers who were in administrative charge of the topographic branch during the years when the lines were run. Included in the heading that precedes the descriptions of benchmarks established along any line of leveling are the name of the level$\operatorname{man}$ who ran that line and the date when it was run, or, if this information has been omitted, it may be assumed that the levelman and date are the same as those indicated for the line immediately preceding. The adjustment of the third-order level net was done in the Washington office by V. S. Benfell, computer, assisted by P. W. Goin, junior engineer. The revision, correlation, and compilation of the descriptions of benchmarks was done in the field office at Rolla, Mo., by employees of the Works Progess Administration of Missouri, who also assembled the lists and made new typewritten copies of them suitable for reproduction by photography. The work at Rolla was sponsored by the Missouri Geological Survey and Water Resources and was in charge of W. R. Broaddus, of the United States Geological Survey. The work in the Washington office was under the supervision of R. M. Wilson, chief of the section of computing, under the general direction of J. G. Staack, chief topographic engineer.

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MADISON QUADRANGLE
(Lat1tude $39^{\circ} 15^{\prime}-39^{\circ} 30^{\prime} ;$ longitude $92^{\circ} 00^{\prime}-92^{\circ} 15^{\prime}$ )
Audrain and Monroe Counties

> 1. FROM MOBERLY QUADRANGLE AT SEC. 22, T. 52 N., R. 12 W., NORTT INTO MOBERLY QUADRANGLE AT SEC. $16, \mathrm{~T} .54 \mathrm{~N} ., \mathrm{R} .12$ W. (by O. D. Williams and J. H. Vinyard in 1934)
> (Continued from Moberly quadrangle; see line 3.)
T. 52 N., R. 12 W., in NW $1 / 4$ sec. 22, at T-rd. E., in front yard of farmhouse, in $30-1 n$. ash tree; copper nail and washer

Feet
842.11
842.73
843.52
(Continued in Moberly quadrangle; see line 3.)
2. FRON FLORIDA QUADRANGLE AT SEC. 14 , T. 53 N., R. 10 W., WEST ALONG COUNTY ROUTE M TO SEC. $15, \mathrm{~T} .53 \mathrm{~N} ., \mathrm{R}$. 11 W. , THENCE WEST ALONG ROADS INTO MOBERLY QUADRANGLE AT SEC. 21, T. 53 N., R. 12 W. (by B. A. Barnes in 1935)
T. $53 \mathrm{~N} ., \mathrm{R} .10 \mathrm{~W}$., cor secs, $14,15,22$, and $23,26 \mathrm{ft}$. S. and 45 ft . E. from junction of State Highway 15 and rd. E., in concrete post; standard tablet stamped "T T Sta No $17 \mathrm{M} 1926^{\prime \prime}$
Reference mark, 70 ft . W. of tablet, on center of S . head wall of concrete culvert; chiseled square
787.978
787.16
T. $53 \mathrm{~N} ., \mathrm{R} .10 \mathrm{~W} .$, on line between secs. 15 and $22,60 \mathrm{ft}$. N. of highway, in root of twin maple trees crossed nalls
T. 53 N., R. 10 W., cor. secs. $15,16,21$, and $22,20 \mathrm{ft} . \mathrm{S}$. and 15 ft . W. from crossroad, on center of W. head wall of concrete culvert; chiseled square
T. 53 N., R. 10 W.., on Ine between secs. 16 and 21 , in front of dwelling, in root of $12-1 n$. locust tree; crossed nails
T. 53 N., R. $10 \mathrm{~W} .$, cor. secs. $16,17,20$, and $21,40 \mathrm{ft}$. S. and 100 ft . E. from crossroad, in root of 14-1n. cedar tree; copper nail and washer Top of hill, at corner fence posty surface of ground
T. $53 \mathrm{~N} ., \mathrm{R}$. $10 \mathrm{~W} .$, cor. secs. $17,18,19$, and $20,38 \mathrm{ft}$. S. of h1ghmay, 2 ft . N. of cormer fence post, in concrete post; standard tablet stamped "1927 E R A 1935"
T. 53 N., R. 10 W., near quarter cor. between secs. 18 and $19,60 \mathrm{ft}$. S. and 20 ft . W, from crossroad, in root on NW. side of $16-1 \mathrm{n}$. cottonwood trees crossed nails
T. $53 \mathrm{~N} ., \mathrm{Rs} .10$ and 11 W. , cor. secs. $13,18,19$, and $24,30 \mathrm{ft}$. S . and 300 ft . E. from crossroad, in root of $30-1 \mathrm{in}$. cottonwood trees copper nail and washer
T. 53 N., R. 11 W., near W. sixteenth cor. between secs. 13 and 24 , opposite junction of rd. N., in root of ly-in. ash treej crossed nails
T. $53 \mathrm{~N} ., \mathrm{R}$. $11 \mathrm{~W} .$, in $\mathrm{SE} 1 / 4 \mathrm{sec} .14$, 30 ft . N. and 15 ft . W. from function of lane $N$. to bapnyard of cicero Murphy, in root on SW. side of 20-in. locust tree; copper nail and washer
T. 53 N., R. 11 W., cor. secs. 14 , 15,22 , and 23 , $38 \mathrm{ft}$. . and 90 ft . E. from junction of County Route $0,58 \mathrm{ft}$. N. and 12 ft . W. from lone 24-in. elm tree, in concrete post; standard tablet stamped "I928 B R A 1935"
T. 53 N., R. 11 W., cor secs. $15,16,21$, and 22, on SE. corner of front concrete step of dwelling of Clyde Marshall; chiseled square
T. $53 \mathrm{~N} ., \mathrm{R}$. $11 \mathrm{~W} .$, cor. secs. $16,17,20$, and $21,100 \mathrm{ft} . \mathrm{N}$. and 30 ft . E. from crossroads, in root on SW. side of $16-\mathrm{in}$. cherry tree; copper. nall and washer
T. 53 N. , R. 11 W. , quarter cor. between secs. 17 and $20,60 \mathrm{ft}$. N. and 40 ft . W. from T-rd. E., in root of $26-\mathrm{in}$. mulberry tree; copper nail and washer
T. 53 N, , R. $11 \mathrm{~W}_{\text {, }}$ S. sixteenth cor. sec. $18,28 \mathrm{ft} . \mathrm{N}$. and 38 ft . E . from T-rd. $N_{*}$, in concrete post; standard tablet stamped "1929 ERA 1935年
T. $53 \mathrm{~N} ., \mathrm{Rs} .11$ and 12 W. , near S. sixteenth cor. between secs. 13 and 18, opposite T-rd. E., in root on W. side of 18-in. walnut tree; crossed nails
T. 53 N. , Rs, 11 and $12 \mathrm{~W} .$, cor. secs. $13,18,19$, and 24 , opposite T-rd. W., in base of corner fence post; spike

Feet 788.51
790.28 783.49 787.37 799.2
794.522
788.28
785.14
805.86
806.68
811.568
812.50
809.36
814.54
794.571
783.32
808.36
T. 53 N., Rs, 11 and 12 W., on line between secs. 19 and 24, on NE. concrete wing wall of small bridge over branch; chiseled square
T. $53 \mathrm{N}$. , Re, 11 and 12 W. , cor. seos. 19 , 24 , 25 , and $30,70 \mathrm{ft}$. S. and 20 ft . W. from rd. corner N.-W., in root of 16 -in. locust tree copper nat1 and washer
783.59
T. 53 N. , R. 12 W. , quarter cor. between secs. 24 and $25,130 \mathrm{ft}$. W. of T-rd. S., on SW. concrete wing wall of small bridge; chiseled square
T. 53 N., R. 12 W., cor. secs. $23,24,25$, and $26,10 \mathrm{ft}$. N. and 30 ft . E. from NE. coiner of Affliok School, 40 ft . s . and 60 ft . W. from T-rd. N., on concrete base of flagpole; chiseled square
822.56
795.09
830.35
836.88 of slope, at driveray to barn, in root on $\$ \mathrm{WW}$. side of $14-\mathrm{in}$, mulberid treep nail and washor
T. 53 N., R. 12 W , cor. secs. $22,23,26$, and $27,36 \mathrm{ft}$. S. and 165 ft . W. from rd. at fence $\mathrm{S} . \mathrm{i} 3 \mathrm{Pt}$. E . of fence, in concrete post; standard tablet stamped "1930 E \& A 1935"
Valley, 100 ft . S. of ra., in root on NE. side of $28-\mathrm{in}$. oak tree; crossed natis
T. 53 N., R. 12 W., near cor. secs. $21,22,27$, and $28,30 \mathrm{ft}$. S. of sW . corner of dreliling of James allen, $20 \mathrm{ft} . \mathrm{N}$. and 35 ft . W. from T-rd. S., in root of 24 -in. maple tree; copper nail and washer
822.999
786.28
T. 53 N., R. 12 W., near quarter cor. between secs. 21 and 22, opposite T-rd. W., in root of $15-\mathrm{in}$. oak tree; crossed nalls
782.36
778.09
(Continued in Moberly quadrangle; see line 4*)

## 3. FROM SEC, 11, T. 53 N., R. 10 W., NORTH ALONG STATE HIGHWAY 15 TO PARIS, INCLUDING THAT PART OF THE LINB IN FLORIDA QUADRANGLTE (by B. A. Barnes in 1935)*

T. 53 N., R. $10 \mathrm{~W} .$, in $\mathrm{SE} 1 / 4$ sec. $3,70 \mathrm{ft}$. S. of private lane W. to farmhouse of R. N. Davis; on center of W. head wall of concrete culvert; chiseled square
Junction of rd. E.; surface of highway
T. $54 \mathrm{~N} ., \mathrm{R} .10 \mathrm{~W}$, near guarter cor, between secs. 34 and 35 , near junction of rd. E., on S. head wall of concrete culvert; chiseled square
Paris, 4 mi . S. of, in NE $1 / 4$ sec. 34, T. $54 \mathrm{~N} .$, R. $10 \mathrm{~W} ., 25 \mathrm{ft}$. N. and 28 ft . E . from crossroad, in concrete post; standard tablet stamped "T T Sta No 18 i $1926^{\prime \prime}$
Crossroad, on SE. head wall of concrete culvert chiseled square
699.95
699.95
738.9
747.75
757.787

Paris, about 2.5 mi . S. of, in top of upstream end of S . pier of S. truss of bridge over Elk Fork of Salt River; standard tablet (set by waterresources branch of J.S.Geol. Survey)
Parls, 1.5 mf . S. of, center of E. head wall of concrete culvert; chiseled square

Paris, 0.5 mi . S. of S. limits of, at junction of State Highway 26, on
SW. head wall of concrete culvert under Highway 26; chiseled square U.S.C. \& G.S. standard disk stamped "J 133 1935" U.S.C. \& G.S. standard disk stamped "K 133 1935"

Paris, 10 ft . S . and 78 ft . W. from W. entrance to courthouse, in concrete sidewalk; standard tablet stamped "T T Sta No 19 M 1926 " U.S.C. \& G.S. standard disk stamped "C $1241935^{\prime \prime}$

Feet
339.90
$695 \cdot 740$
681.311
660.855
4. FROM SEC. 11, T. 53 N., R. 10 W., SOUTH ALONG STATE HIGHWAY 15
TO SEC. 1, T. 52 N., R. 10 W., THENCE SOUTH ALONG ROADS TO
SKINNER, INCLUDING THAT PART OF THE LINE IN FLORIDA QUADRANGLE
(by B. A. Barnes in 1935)*
T. 53 N., R. 10 W., cor. secs. $22,23,26$, and $27,30 \mathrm{ft}$. N. and 25 ft .苗. from crossroad, on center of $N$. head wall of concrete culvert; chiseled square
Top of hill, 80 ft . S. of filling sta., in root of $20-\mathrm{in}$. walnut tree; crossed nails
T. 53 N., R. 10 W., on line between secs. 34 and 35 , in top of upstream ond of $S$. abutment of bridge; standard tablet \{set by water-resources branch of U.S.Geol. Survey)
753.185

Tps. 52 and $53 \mathrm{~N} ., \mathrm{R} .10 \mathrm{~W} .$, cor. secs. $2,3,34$, and $35,30 \mathrm{ft}$. N. and 40 ft . E . from crossroad, on center of N . head wall of concrete culvert; chiseled square
Farmhouse, in front yard of, in root of $18-1 n$. ash tree; crossed nails
U.S.O. \& G.S. standard reference disk stamped "T T Ste No 16 M 1926 No $2^{\text {! }}$
797.08
789.61
796.715
T. 52 N., R. 10 W., S. sixteenth cor. between secs. I and $2,40 \mathrm{ft}$. N. and 30 ft. W. from crossroad, on center of $W$. head wall of concrete culvert; chiseled square
T. 52 N., R. 10 W. , on line between secs. 11 and 12 , on NE. concrete wing wall of steel bridge over Youngs Creek; chiseled square
780.44
746.91

Skinner, 2 mi. N. of, near cor. secs. $11,12,13$, and $14, \mathrm{~T}, 52 \mathrm{~N} .$, R. 10 W., on NW. concrete wing wall of small bridge over branchi' chiseled square
T. 52 N., R. 10 W., quarter cor. between secs. 13 and I4, SW. of T-rd. W., on concrete base of corner fence post; chiseled square
774.25
799.54

Skinner, 0.8 mi . N. of, N. sixteenth cor, between secs. 23 and 24 , T. 52 N., R. 10 W., on SW. concrete wing wall of steel bridge over branch; chiseled square
791.10

## 5. FROM MOBERLY QUADRANGLE EAST ALONG O.S. HIGHWAY 24 TO PARIS (by Cornish Beck in 1936) <br> (Continued from Moberly quadrangle; see line 5.)

T. 54 N., R. 12 W., near $\mathrm{F}_{\mathrm{o}}$ sixteenth cor. sec. $16,50 \mathrm{ft}$. N. and 12 ft . W. from junction of rd. S., in S. side of $16-1 \mathrm{n}$. water-oak tree; nail
T. $54 \mathrm{~N} ., \mathrm{R} .12 \mathrm{~W}$. , near quarter cor between secs. 15 and $16,50 \mathrm{ft}$. N. and 35 ft . W. from junction of rd. N., in concrete post; standard tablet atamped "64 C W A 1934"
805.44
T. 54 N., R. 12 W ., near center sec. $15,25 \mathrm{ft}$. S. and 18 ft . W. from junction of rd. S., on head wall of culvert; chiseled square
T. $54 \mathrm{~N}_{\text {. }}$ R. 12 W. , neas quarter cor. between secs. 14 and $15,25 \mathrm{ft}$. S. and 15 ft . E. from crossrosd, on head wall of culverty chiseled square
Madison, 0.6 mi . W. of, 22 ft . N. and 60 ft . E. from junction of rd. E., on head wall of culvert; chiseled equare
J.S.C. \& G.S. standard disk stamped "V 123 1935"

Madison, at E . limits of, 25 ft . S. and 20 ft . W. from junction of County Route $T$, on ond of curb; chiseled square
Madison, 1 mi. $\mathrm{E}_{\text {. of }} 48 \mathrm{ft}$. S. and 44 ft . W. from junction of rd. S., 3 ft . N. and 30 ft . W. from corner fence post, in concrete post; otanderd tablet stanped "1/4120 WA 1934"
791.368
776.72
807.71
777.05
796.088
786.98
T. 54 N., R. 11 W., in SE $1 / 4$ sec. 7, 75 ft . N. and 13 ft . W. from
803.462 junction of ra. N., on head wall of culvert; chiseled square
778.36
T. 54 N., R. 11 W., on 11 ne between seos. 7 and $8,25 \mathrm{ft}$. S. and 15 ft . E. from junction of rd. S., on head wall of culvert; chiseled square

Holliday triangulation sta.; ס.S.C. \& G.S. standard disk stamped "Holliday 1934 "
795.48
J.S.O. \& G.S. standard reference disk stamped "Holliday Azi 1934"
U.S.C. \& G.S. standard disk stamped "X 123 1935"
T. $54 \mathrm{~N}_{0}, \mathrm{R}_{\text {. }} 11$ W., in sec. $\mathrm{g}_{\mathrm{p}} 25 \mathrm{ft}$. $\mathrm{S}_{\text {. }}$ and 75 ft . E. from junction of rd. S., on head wall of cuivert; chiseled square
Holliday, 0.9 ml . S. of, 11 ft . N. and 90 ft . E. from junction of County Route A, on NW. Wing wall of bridge; chiseled square
Holliday, 0.9 mi . S. and about 0.2 mi . E. from, 20 ft . S. and 16 ft . E. from junction of rd. S., on head wall of culvert; chiseled square
U.S.C. \& G.S. standard disix stamped "Y 123 1935"

Holilidey, 1 mf. 3. and 1.5 mH . E. from, in NE $1 / 4$ sec. 21 , T. 54 N. , R. 11 W., 44 ft . S. and 56 ft . W. from orossroad, 143 ft . NE. of NE. corner of farmhouse of E . H. Williams, 2 ft . inside fence, in concrete post; standard tablet stamped "Illl 0 OW A 1934"
U. S.C. \& G.S, standard disk stamped "Z $1231935^{\prime \prime}$
 25 ft . N. and 12 ft . W. from crossroad, on head wall of culvert; chiseled square
768.95
T. 54 N., R. $10 \mathrm{~W} ., \mathrm{E}$. sixteenth cor. between secs. 7 and $18,24 \mathrm{ft} . \mathrm{s}$. and 16 ft . E. from crossroad, on head wall of culvert; chiseled square U.S.C, \& G.S. standard disk stamped "A 1241935

[^2]T. 54 N., R. $10 \mathrm{~W} .$, near quarter cor between secs. 8 and $17,235 \mathrm{ft}$. E. of junction of rd. N., 55 ft . S. and 24 ft . E. from junction of private rd. S., 131 ft . N. and 32 ft . W. from NW. corner of farmhouse of R. L. Clem, in concrete post; standard tablet stamped "141] C W A 1934"
T. $54 \mathrm{~N} .$, R. 10 W. , in $\mathrm{NE} 1 / 4 \mathrm{sec} .16,25 \mathrm{ft}$. S. and 16 ft . E. from junction of rd. S., on head wall of culvert; chiseled square
U.S.C. \& G.S. standard disk stamped "B $1241935^{\prime \prime}$
T. 54 N., R. 10 W., near 11 ne between secs. 15 and $16,35 \mathrm{ft}$. N. and 16 ft . E. from junction of rd. N., in telephone pole; nail
Feet
770.350
768.05
761.852
766.96

For an additional level line along Wabash Ry., refer to United States Coast and Geodetic Survey second-order line, Hannibal to Salisbury.

CENTRALIA QUADRANGLE
(Latitude $39^{\circ} 00^{\prime}-39^{\circ} 15^{\prime}$; longitude $92^{\circ} 00^{\prime}-92^{\circ} 15^{\prime}$ )
Audrain, Boone, and Callaway Counties


1. FROM STURGEON QUADRANGLE AT SEC. 27, T. 50 N., R. 12 W., EAST TO WABASH RY., THENCE SOUTHVEST ALONG WABASH RY. INTO STURGEON QUADRANGLE (by D. V. Vandiver in 1905 and P. W. McMillen and E. C. Bibbee in 1912)
(Continued from Sturgeon quadrangle; see line 4.)
Browns, 2.7 mi . N. of, 100 ft . SW. of Wabash Ry. at rd. crossing, in root of l2-In. thorn locust tree; copper nail
904.63
(Continued in Sturgeon quadrangle; see line 4.)
2. FROM MTLLERSBURG QUADRANGLE AT SEC. 26, T. 49 N., R. 10 W., NORTH ALONG ROADS AND COUNTY ROUTE E TO SEC. 34 , T. 52 N., R. 10 W.; THENCE WEST ALONG ROADS AND STATE HIGHWAY' 22 INTO STURGEON QUADRANGLE AT SEC. $34, T .52 \mathrm{~N} . \mathrm{R}$. 12 W. , INOLUDING THAT
 1927)*
(Continued from Millersburg quadrangle; see line 1.)
Aurvasse, 1 mi . S. and 6 mi . W. from, $\mathrm{SW} 1 / 4 \mathrm{sec} .23, \mathrm{~T} .49 \mathrm{~N} .$, R. 10 W ;
 No $9 \mathrm{~V} 1926^{\text {ti }}$ (elev. doubtful)
T. 49 N., R. 10 W., in $S W 1 / 4 \mathrm{sec} .23$, NE. of T-rd. E., in root of $20-1 \mathrm{n}$. elm tree; nail and washer
Auxpasse Creek, on top of E. end of concrete abutment of bridge; chiseled square
Auxvasse Creek, under bridge; surface of water April 15, 1927
832.244
832.88
836.97 824.7

Flint School, 0.2 mi . NE. of, near W. sixteenth cor. sec. I4, T. 49 N., R. 10 W .4 fO ft . N. of T-rd. S., in root on SE. side of 2 H -in. locust tree; apike (State Highway B.M.)
928.05
T. 49 N., R. 10 W., in $N W$ 1/4 sec. $11,20 \mathrm{ft}$. N. and 40 ft . W. from T-rd. N., in root on $N$. side of 18-1n. wainut tree; copper nail and washer

Tps. 49 and $50 \mathrm{~N} ., \mathrm{R}$. 10 W. , about 0.1 mi . E. of cor. secs. 2,3 , 34 , and 35, on Audrain-Callaway county line, 20 ft . N. and 3 ft . E. from Trra. S., in concrete post; standard tablet stamped "T T Sta No $10 \mathrm{M} 1926^{n}$

Reference mark, $218 \mathrm{ft} . \mathrm{S} .10^{\circ} \mathrm{W}$. of tablet, W . of rd., in bench on E . side of 12-In. cherry tree; copper nsil and washer
904.81
919.103
T. 50 N., R. 10 W., in $\mathrm{SW} 1 / 4 \mathrm{SW} 1 / 4 \mathrm{sec} .36$, on Audrain-Callaway county line, at NE. corner of T-rd. N., on head wall of concrete culvert; chiseled square
919.63
T. 50 N., R. 10 W. , cior. secs. $25,26,35$, and $36,10 \mathrm{ft} . \mathrm{N}$. and 15 ft . W. from T-rd. E., in root on NE. side of 18-in. black-oak tree; copper nail and washer
T. 50 N., R. 10 W., E. sixteenth cor. sec. $23,250 \mathrm{ft}$. W. of rd. corner, 70 ft . W. of bridge, 15 ft . N. of rd., in root on S . side of $24-\mathrm{in}$. red-oak tree; copper nail and washer
.

Fine 2 of Mexico quadrangle includes a portion of this line (see Bull.
898-C, p. 433).
T. 50 N., R. 10 W., 930 ft . N. of quarter cor. between secs. 14 and 23 , 45 ft . S. and 65 ft . W. from center of small bridge, 65 ft . W. of $\mathrm{N} .-\mathrm{S}$. rd., in root on E. side of $24-1 n$. elm tree; copper nail and washer
T. 50 N., R. 10 W., quarter cor. between secs. 11 and 14 , 20 ft . N. of T-rd. S., in concrete post; standard tablet stamped $\mathrm{TI}_{\mathrm{T}} \mathrm{T}$ Sta No il M 1926"
Reference mark, 445 ft . S. $85^{\circ} \mathrm{E}$. of tablet, 20 ft . S. of rd., in root on SE. side of 12-1n. ash tree; copper nail and washer
T. 50 N., R. 10 W , near $W$. sixteenth cor, between secs, 2 and $11,180 \mathrm{ft}$. S. and 135 ft . E. from $T-\mathrm{rd}$. E., in root on W. side of $30-1 \mathrm{n}$. maple tree; copper nail and washer
T. 50 N., R. 10 W., S. sixteenth cor. between secs. 2 and $3,40 \mathrm{f}$. N. and 10 ft . E. from T-rd. N., on top of E. head wall of concrete culvert; chiseled square

Feet
857.81
873.332
874.41
876.99
862.33
859.136
855.26
852.87
$774 \cdot 42$
851.3
854.9
852.141
853.47
835.38
794.06
831.180
830.65
821.21
834.65
840.34
835.63
825.692
825.53
837.76
862.50
844.46
863.55
865.690
864.93
863.58
834.5
860.00
865.164
865.23

Centralia, 2 ms . N. and 3.5 mi . W. from, cor. Tps. 51 and $52 \mathrm{~N} .$, Rs. 11
and 12 W., 18 ft . S. and 65 ft . E. from T-rd. N. (E. W. rd. now State Highway 22), in root on N. side of 12-1n. maple tree; copper nail and washer
T. 51 N., R. $12 \mathrm{~W} .$, in NE $1 / 4$ sec. 2, 550 ft . W. of farmhouse of J. L. Palmer, on top of $S$. head wall of concrete culvert; chiseled square
Tps. 51 and 52 N, , R. 12 W , on 11 ne between secs. 2 and 35, Alton R.R. at rd. crossing; top of N. rail

Foet
844.40
845.60
856.7
860.766
859.31
(Continued in Sturgeion quadrangle; see line 6.)

Skinner, 1.5 mi . S. and 1.2 mi . W. from, near E. sixteenth cor. sec. 34, T. $52 \mathrm{~N} ., \mathrm{R} .10 \mathrm{~W} ., 27 \mathrm{ft}$. N. and 95 ft . E. from rd. corner E.-S., at E. end of picket fence, in root on S. side of 27-in. tree; copper nail and washer
830.00

> 4. FROM MILLERSBURG QUADRANGLE AT SEC. $28, \mathrm{~T} .49 \mathrm{~N} ., \mathrm{R} .10 \mathrm{~W}$. WEST INTO STURGEON QUADRANGLE AT SEC. $22, \mathrm{~T} .49 \mathrm{~N}$. R. 12 W. (by Robert Glenn and Frank Lucky in 1934 ) (Continued from Millersburg quadrangle; see line 3.)
T. 49 N., R. 10 W., E. sixteenth cor between secs. 21 and 28 , SW. of T-rd. W., in root of 36-in, oak tree; copper nail
T. 49 N., R. $10 \mathrm{~W} .$, cor seas. $20,21,28$, and $29,50 \mathrm{ft} . \mathrm{N}$. and 12 ft . W. from rd. corner E.-N., in center of W. head wail of concrete culvert; standard tablet stamped $\mathrm{Tr}_{\mathrm{T}} \mathrm{T} 4 \mathrm{~V}$ C W A $1934^{\prime \prime}$
Reference mark, 30 ft . W. of tablet, in root of forked hedge tree; (mark not described)
T. 49 N., R. 10 W., in $\mathrm{S} 1 / 2 \mathrm{sec} .20$, on E.-W. rd., on S. head wall of concrete culvert; chiseled square
T. 49 N., R. 10 W., S. sixteenth cor. between secs. 19 and $20,150 \mathrm{ft}$. S. of T-rd. E., in root of wild-cherry treef nail
Hereford, 1 ml . NE. of, near cor. secs. 19, 20, 29, and 30, T. 49 N., R. 10 W., on $S$. head wall of concrete cuivert; chiseled square
887.299
887.28
899.78
907.28
902.74

Hereford, 0.8 mt . N . of, 60 ft . E . of cor. secs. 19, 24,25 , and 30 ,
T. 49 N., Rs. 10 and il W., on E.-W. rd., in root of hedge tree; nail 909.28

Stephens, 2 mi . N. and 1 mi . B. from, near cor. secs. $23,24,25$, and 26 , T. 49 N., R. 11 W., on E.-W. rd., on S. head wall of culvert; chiseled square
895.14

Stephens, 2 mf . N. and 0.5 mf . W. from, near quarter cor. between secs. 22 and 27 . T. $49 \mathrm{~N}, \mathrm{R}$. 11 W . on bridge over Cedar Creek, in centier of $N$, end of floort copper nail
824.36

Shaw, 2 mi . N. and 2 mi . E. from, quarter cor. between secs. 21 and 28 , T. 49 N., R. 11 W., N. of T-rd. S., in root of hedge tree; nail
888.17

Shaw, 2 mi . N. and 1.5 mi . E. from, cor, secs. $20,21,28$, and 29, T. 49 N., R. 11 W., on S. railing of bridge over small branch; painted square
857.09

Shaw, 2 mf. N. and 1 mi . E. from, W. sixteenth cor. between seas. 20 and 29, T. 49 N., R. 11 W., S. of T-rd. N., in root of 32-in. oak treet copper nail
863.84

Columbia, 3 mi . N. and 7 mr . E. from, N. sixteenth cor. between secs. 29 and 30, T. 49 N., R. 11 W., in front of farmhouse, 4 ft . S. and 33 ft . E. from rd. comer N.-W., 30 ft . SW. of $20-\mathrm{in}$, box-elder tree, in concrete post: standard tablet stamped MT T 5V C W A 1934"
Reference mark, 30 ft . NE. of tablet, in root of $20-\mathrm{in}$. box-elder tree; copper nall
T. 49 N., R. 11 W ., in $\mathrm{N} 1 / 2 \mathrm{sec}$. 30 , at T-rd. W., on E. head wall of concrete culverts chiseled square
Columbia, 3 ml . N. and 5 ml . E. from, quarter cor. between secs. 24 and 25, T. 49 N., R. $12 \mathrm{~W} ., 600 \mathrm{ft} . \mathrm{S}$. of rd., in barnyard, in root of 24-in. walnut tree; copper nail and washer
Columbia, 3 mi . N. and 4.5 mi . E. from, near quarter cor. between secs. 23 and $26, T .49$ N., R. 12 W., at T-rd. S., on N. head wall of concrete culvert; chiseled square
893.382
893.23
897.89
883.01
823.84

Columbia, about 5 mi. NB, of, along Palmer rd., cor. secs. $22,23,26$, and $27, T .49 \mathrm{~N}$, , R. $12 \mathrm{~W}, 30 \mathrm{ft}$. W. of junction of rd. E., 4 ft . N. and 6 ft . W. from fence corner, in concrete post; standard tablet stamped "6 C W A 1934"
Reference mark, $70 . \mathrm{ft} . \mathrm{N}$. of tablet, in root of walnut tree; copper nail
824.346
826.36
5. FROM STURGEON QUADRANGLE EAST ALONG COUNTY ROUTES B AND D (now State H1ghway 12l) BY WAY OF HALLSVILLE TO SEC. 10, T. 50 N., R. 11 W., THENCE SOUTH ALONG ROADS TO SEC. 23, T. 49 N., R. 11 W. (by O. D. Williams in 1934)
(Continued from Sturgeon quadrangle; see line 10.)
Hallsville, 0.2 mi . W. of, E. sixteenth cor. sec. $14, \mathrm{~T}, 50 \mathrm{~N} ., \mathrm{K} .12 \mathrm{~W} .$, 27 ft . S. of highway, lí ft. E. of telephone pole, 73 ft . sw. of 17-in. locust tree, 5 ft . N. of corner fence post, in concrete post; standard tablet
Hallsville, at W. limits of, 40 ft . N. and 19 ft . E. from junction of rd. N., 36 ft . $S W$. of $S W$. corner of porch, at W. end of concrete wall, in concrete post; U.S.C. \& G.S. and State Survey standard tablet
Hallsville, about 0.8 mi . NE. of, near E. sixteenth cor. between secs. 12 and 13, T. 50 N., R. 12 W. , in corner fence post; nail
Hallsvilie, $1: 2 \mathrm{mi}$. NE. of, near $W$. cor. secs. 7 and 18, T. 50 N.,
R. 11 W., 80 ft . N. and 25 ft . W. from Wabash Ry. crossing, in concrete post; U.S.C. \& G.S. and State Survey standard tablet

Feet
896.198
900.850
914.16

Hallsville, 1.5 mi . NE. of, in $\mathrm{SW} 1 / 4$ sec. 7, T. 50 N., R. $11 \mathrm{~W} ., 120 \mathrm{ft}$. N. of N. face of farmhouse on property of Ben Tate, 30 ft . N. of highway, in concrete post; U.S.C. \& G.S. and State Survey standard tablet
T. 50 N., R. 11 W., in SE $1 / 4$ sec. 7 , in root of 23-in. locust trees nail
T. $50 \mathrm{~N} .$, , R. il W., in NE $1 / 4$ sec. in, in front of farmhouse; in root of 12-in. codar trees nail
908.688
896.309
899.59
903.24

Hallsville, 3 mi. E. of, cor. seos. 8, 9, 16, and 17, T. 50 N., R. 11 W., 458 ft . SE. of dwelling, $42 \mathrm{ft} . \mathrm{S}$. and 28 ft . E. from crossroad, in concrete post; U.S.O. \& G.S. and State Survey standard tablet
T. 50 N., R. 11 W., cor. seos. 8, 9,16 , and $17,0.3 \mathrm{ml}$. E. of, 91 ft . NW. of NW. corner of farmhouse, 41 ft. S. of highway, 34 ft . NE. of 12-in. locust tree, 87 ft . NW. of 28 -in. locust tree; in concrete post; standard tablet
T. $50 \mathrm{~N}, \mathrm{R}$. 11 W ., in $\mathrm{SW} 1 / 4 \mathrm{sec} .10$, 19 ft . N. of highway, in root of 24-in. elm tree; (mark not desoribed)
T. 50 N., R. 11 W., in NE $1 / 4$ sec. 15 , 100 ft . S. of rd., in 22-in. apple tree; nall
909.173
916.242
916.37
T. 50 N., R. 11 W., near cor. secs. $10,11,14$, and $15,76 \mathrm{ft}$. S. of SE . corner of farmhouse on property of Elwood Adams, 20 ft . N. of rd., in concrete post) U.S.O. \& G.S. and State Survey standard tablet
914.53
910.846
T. $50 \mathrm{N}$. , R. 11 W. , in NW $1 / 4 \mathrm{sec}$. $14,30 \mathrm{ft}$. S. and 566 ft . W. from T-rd. S., 94 ft . NE. of NE . corner of barn, in concrete posti U.S.C. \& G.S. and State Survey standard tablet
T. 50 N., R. $11 \mathrm{~W}_{-}$, center seo. $1 \mathrm{l}_{\mathrm{i}}, 20 \mathrm{ft}$. F , of $\mathrm{N} .-\mathrm{S}$. rd., at end of hedge fence $\mathrm{E}_{\mathrm{o}}$, in root of hedge trees nail
T. 50 N., R. 11 W., near N. sixteenth cor. seo. $23,109 \mathrm{ft}$. SE, of NE. corner of dwelling, 21 ft . W. of rd., 34 ft . SE. of $25-1 \mathrm{n}$. maple tree, in conorete post; standard tablet
T. 50 N, , R. 11 W ., about 0.1 mi . S. of center sea. $23,74 \mathrm{ft}$. NE. of NE. corner of dwelling, 108 ft . SE, of NE. corner of barn, 20 ft . W. of rd., in conorete post; standard tablet
T. 50 N., R. il W., quarter cor. between sees. 23 and $26,20 \mathrm{ft}$. W. of rd., in root of stump; nail
T. 50 N ., R. 11 W., quarter cor, between secs. 26 and 35, NW. of T-rd.
W., in root of l2-in. hedge trees nail
T. $50 \mathrm{~N}_{\mathrm{r}}$, R. 11 W ., center seo. $35,27 \mathrm{ft}$. S. and 420 ft . E. from T-rd. N., 460 ft . NE. of SE, corner of barn, in conerete post; standard tablet
T. 49 N., R. 11 W., in INT $1 / 4$ sec. 2, near Hickory Grove School, on property of Harvey Hayden, $177 \mathrm{ft}$.E . of rd., 29 ft . NE. of NE. corner of dweliing of olyde ohrieman, 28 ft . SW. of SW. corner of sumer kitchen, in oonorete post; standard tablet
905.825
T. $49 \mathrm{~N}_{-}$, R. II $\mathrm{F}_{\text {. , in }} \mathrm{i}$ i/2 seo. 2, in root of 30-in. black-oak tree; nail
T. 49 N., R. 11 W., W. sixteenth cor, between secs. 2 and 11 , 150 ft . SE. of SE. corner of conorete storm cellar, 65 ft . W. of rd., in concrete post; standard tablet
Wade School, 37 ft . $\mathrm{SE}_{\text {. of }}$ of $\mathrm{SE}_{\text {; }}$ corner of, N . sixteenth cor. sec. 11, T. 49 N., R. 11 W., 45 ft . N. of rd., in conerete post; standard tablet
T. 49 N., R. 11 W., in NE $1 / 4$ sec. $14,69 \mathrm{ft}$. NW. of NW. corner of farmhouse of $\mathrm{K}_{\mathrm{B}} \mathrm{B}$. Rogers, 220 ft . Wi of N.-S. rd., in concrete post; standard tablet
T. $49 \mathrm{~N}_{0}, \mathrm{R}$. 11 W , , in $\mathrm{sE} 1 / 4$ sec, $14,31 \mathrm{ft}$. N. and 58 ft . E. from T-rd. N., 20 ft . E . of fence corner, in concrete post; standard tablet Stephens, 2.5 mi . N. of, near center sec. $23, \mathrm{~T} .49 \mathrm{~N} ., \mathrm{R} .11 \mathrm{~W}$. , W. of rd., in root of 24 -in. oak tree; nail

## 6. FROM SEC. $10, T$. 50 N*, R. 11 W., NORTH ALONG COUNTY ROUTE B (now State Highway 12l) TO CENTRALIA, THENCE NORTH ABOOT 1 MILE (by O. D. Williams in 1934)

Hallaville, 4 mi. E . of, near quarter cor. between secs. 10 and 15 , T. 50 N ., R. $11 \mathrm{~W} .$, SE. of junction of rd. E., on top of N . end of iron pipe culvert; painted square
Centralia. 5.3 mi . S. of, center sec. 10, T. $50 \mathrm{~N} ., \mathrm{R}, 11 \mathrm{w}$. , on W. end of sidewaik at Dunbar School; chiseled square
Centralia, 4 mi . S. of, in $\mathrm{NW} 1 / 4 \mathrm{sec}$. 3 , T. $50 \mathrm{~N}, \mathrm{R}$. 11 Tm , SW. of
junction of rd. W. on W. end of iron pipe culvert; painted square
Contralia, 4 mi. S. of, near N. sixteenth cor. seo. 3 , T. 50 N.,
R. $11 \mathrm{~W} ., 111 \mathrm{ft}$. S. of junction of rd. E., 87 ft . E. of highway,
in root of 10-in. soft-maple tree; nail

Centralia, 2.5 mi . S. of, N. sixteenth cor. sec. 34 , T. 51 N., R. 11 W., 28 ft . S. and 30 ft . W. from junction of rd. W., in concrete post; standard tablet stamped "C W A 1934"
Reference mark, 400 ft . N. of tablet, on top of S . end of iron pipe culvert; painted square
Centralia, 1.8 ml . S. of, near N. sixteenth cor. sec. 27, T. $51 \mathrm{~N} .$, R. 11 W., 28 ft . E. of highway, in telephone pole; nail

Centralia, 0.5 ml . S. of, center sec. 22, T. $51 \mathrm{~N} ., \mathrm{R}$. 11 W ., on S. end of W. head wall of culvert; chiseled square
Centralia, 20 ft . N. and 23 ft . W. from State Highway 22 (East Switzer Street) at North Jefferson Street, in E. end of N. abutment of concrete culvert; standard tablet stamped "C W A 1934"
Reference mark, 73 ft . S. of Alton R.R. track, E. of North Jefferson Street, on W. side of concrete sidewalk; chiseled square
Centralia, 0.9 ms . N. of, S. sixteenth cor. sec. 3, T. 51 N., R. 11 W., W. of rd., in telephone pole; nail
7. FROM SEC. 12, T. 50 N., R. 11 W., EAST TO SEC. 34, T. 51 N.,,$~$
R. 10 W. by 0. D. Williams in 1934)
T. 50 N., R. 11 W., on line between secs. 12 and $13,1,200 \mathrm{ft}$. E. of Audrain-Boone county line, on W. end of concrete culvert; chiseled square
T. $50 \mathrm{~N} ., \mathrm{R} .10 \mathrm{~W}$. , quarter cor. between secs. 7 and 12 , in top of fence post; nail
T. 50 N., R. $10 \mathrm{~W} .$, in NE $1 / 4$ sec. 7, in NE. corner of yard of J. 0. Sims, $30 \mathrm{ft} . \mathrm{S}$. of rd., in concrete post; standard tablet
T. 50 N., R. 10 W., center sec. $8,20 \mathrm{ft}$. SW. of stone, in stump; nail
T. $50 \mathrm{~N} ., \mathrm{R} .10 \mathrm{~W} .$, quarter cor. between secs. 4 and 9 , in top of fence post; nail
T. $50 \mathrm{~N} ., \mathrm{R} .10 \mathrm{~W} ., 75 \mathrm{ft}$. W. of S. sixteenth cor. sec. 3, on step; chiseled square
T. 50 N., R. 10 W., S. sixteenth cor. between secs. 2 and 3, NE. of T-rd. N., on E. head wall of concrete culvert; chiseled square

Feet $8 9 \longdiv { 8 . 1 7 1 }$

For additional level lines along Wabash Ry., refer to United States
Coast and Geodetic Survey second-order ilnes, Hurdland to St.
Charles and Lupus to Centralia.

Boone and Callaway Counties


1. FROM NEW BLOOMFIELD QUADRANGLE AT SEC. 24, T. 46 N., R. 10 W., NORTH INTO GENTRALIA QUADRANGLE AT SEC. 26, T. 49 N., R. 10 W., INCLUDING THAT PART OF THE LINE IN FULTON QUADRANGLE (by W. R. Broaddus in 1927)*
(Continued from New Bloomfield quadrangle; see line 1.)
Dixie, 3 ml . N. of, in $\mathrm{W} 1 / 2 \mathrm{sec} .13, \mathrm{~T} .46 \mathrm{~N} ., \mathrm{R} .10 \mathrm{~W} ., 85 \mathrm{ft}$. s . of Middle Creek, 20 ft . N. and 10 ft . E. from rdi. fork E., in concrete post; standard tablet stamped "T T Sta Nó 3 M 1926"

Feot 667.885

Reference mark, $85 \mathrm{ft} . \mathrm{N} .76^{\circ} \mathrm{W}$. of tablett; S : of rd., in root on N. side of 30-in. white-oak tree; copper nail añd washer
Middle Creek ford; surface of water at 1 pim. March 29, 1927
T. 46 N., R. 10 W., near S. sixteenth cor. sec. $12,90 \mathrm{ft}$. S. and 100 ft . W. from rd. forks, in root on SE. side of 18-in. walnut tree; copper nail and washer
789.33
T. 46 N., R. 10 W., quarter cor. between secs. 1 and $12,65 \mathrm{ft}$. S. and 45 ft . W. from crossroads, in root on N. side of 20-1n. maple tree; copper nail and washer
809.34

Fulton, 3.8 mf . SW. of, along U.S. Highway 54, near center of $\mathrm{S} 1 / 2$ sec. 36, T. 47 N., R: 10 W., 165 ft . N. and 25 ft . E. from crossroad, in SW. corner of Jard of Twin Church, in concrete post; standard tablet stamped "T T Sta No 4 i 1926 "
Reference mark, 181 ft . N. of tablet, in root on W . side of 20-1n. elm tree; copper nail and washer
T. 47 N., R. 10 W., N. sixteenth cor. sec. $35,15 \mathrm{ft} . \mathrm{S}$. and $15 \mathrm{ft} . \mathrm{W}$. from T-rd. E., in root on NE. side of $20-1 n$. maple tree; copper nail and washer
T. $47 \mathrm{~N}_{\text {. }}$ R. $10 \mathrm{~W} .$, near center sec. 26 , 135 ft . NW. of crossroads, 1 ft . from front of Middle Fork School, on E. edge of concrete walk; chiseled square
T. 47 N., R. 10 W., center sec. $23,0.2 \mathrm{mi}$. S. of T-rd. E., on top of $\mathfrak{w}:$ head wall of concrete culvert; chiseled square
T. $47 \mathrm{~N} ., \mathrm{R} .10 \mathrm{~W} .$, quarter cor. between secs. 24 and $23,220 \mathrm{ft}$. N. and 20 ft . E. from Alton R.R. at rd. crossing, 55 ft . S. and 25 ft . E. from crossroads, in concrete post; standard tablet stamped "T T Sta No 5 M 1926"
Reference mark, $490 \mathrm{ft} . \mathrm{S} .5^{\circ} \mathrm{W}$. of tablet, on top of W. head wall of concrete culvert; chiseled square
T. 47 N, , R. 10 W, N. sixteenth cor. sec. $14 ; 40 \mathrm{ft}$. S. and 70 ft . E. from junction of private lane W., in root on N. side of 16-in. cherry tree; copper nail and washer
T. 47 N., R. 10 W., near center sec. 11 , near Central Church, 80 ft . N. and 15 ft . E. from crossroads; on top of E . head wall of concrete culvert; chiseled square
T. 47 N., R. 10 W., center sec. 2, 5 ft . S. and 25 ft . W. from T-rd. E., 1 mi . N. of Central School, 2 ft . N. and 8 ft . W. from corner fence post, in concrete post; standard tablet stamped "T T Sta No 6 M $1926^{n}$
Reference mark; 24 ft . N. $85^{\circ} \mathrm{E}$. of tablet, in root on NW. side of 24-in. oak tree; copper nail and washer
Stinson Creek ford; surface of water at 8 a.m. April 6, 1927
T. 48 N., R. 10 W. , near center of NE $1 / 4 \mathrm{sec}$. $35,75 \mathrm{ft}$. S. and 40 ft . E. from T-rd. W., in root on W. side of $16-1 n$. white-oak tree; copper nall and washer
T. 48 N., R. 10 W., quarter cor. between secs. 25 and $36,50 \mathrm{ft}$. N. and 3 ft . W. from $T-\mathrm{rd}$. N., on top of W. head wall of concrete culvert; chiseled square
Wines and 2 of Fulton quadrangle includes a portion of this line (see Bull. 898-c; pp. 430-431).
T. 48 N., R. 10 W., 800 ft. S. of quarter cor. between secs. 24 and 25 , opposite farmhouse of H. T. Debo, 30 ft . W. of rd., in root on E. side of 30-in. white-oak tree; copper nail and washer

Feet 864.44

McCredie, 2 ml . S. and 2.5 mi . W. from, quarter cor. between secs. 13 and 24, T. 48 N., R. $10 \mathrm{~W} ., 28 \mathrm{ft} . \mathrm{N}$. and 20 ft . W. from crossroads, in SE. corner of yard of Christian Church, in concrete post; standard tablet stamped "T T Sta No $7 \mathrm{M} 1926^{\prime \prime}$
848.309

Reference mark, 30 ft . N. of tablet, in root on E. side of 30-in. whiteoak tree; copper nail and washer
(Continued in Centralia quadrangle; see line 2.)

> 2. FROM LUPUS QUADRANGLE NORTH ALONG U.S. HIGHWAY 63 INTO LUPUS QUADRANGLE (by L. V. Johnson in 1930)
> (Continued from Lupus quadrangle; see line 1.)

Ashland, 3.4 mi . N. of, at SE. corner of bridge over Bass Creek, on concrete abutment; chiseled square
Ashland, 4.1 ml . N. of, 105 ft . S . and 60 ft . W. from crossroad, at Elk Hurst store and service sta., 18 ft . W. of rail fence, in root on SE. side of $2_{4}-1 n$. oak tree; copper nail and washer
Ashland, 5.1 mi . N. of, $1 \mathrm{mi}: \mathrm{N}$. of Elk Hurst store and service sta., 1 mi . S. of Deer Park, $10 \mathrm{ft} . \mathrm{S}$. and 23 ft . W. from Junction of private rd. W. through gate to farmhouse, on E. end of S. concrete head wall of culvert; chiseled square
(Continued in Lupus quadrangle; see line 1.)

> 3. FROM SEC. 26, T. 49 N., R. 10 W. NORTHWEST INTO CENTRALIA QUADRANGLE AT SEC. $28, \mathrm{~T} .49 \mathrm{~N} .$, R. 10 W. (by Robert Glenn and Frank Lucky in 1934)
T. $49 \mathrm{~N} ., \mathrm{R} .10 \mathrm{~W}$. , near center sec. 27 , on S . end of concrete culvert; chiseled square
883.64
T. 49 N., $\mathrm{R}_{\text {. }} 10 \mathrm{~W}$., near $\mathrm{E}_{\mathrm{o}}$ sixteenth oor. sec. 28 , at T-rd. E., in root on NE. side of 20-in. hickory tree; nail
(Continued in Centralia quadrangle; see line 4.)
4. FROM LUPUS QUADRANGLE AT SEC. 3 , T. 48 N., R. 12 W., NORTH INTO
CENTRALIA QUADRANGLE AT SEC. 26, T. 49 N., R. 12 W. (by J. H.
Vinyard in 1934)
(Continued from Lupus quadrangle; see line 4.).
T. 48 N., R. 12 W., near quarter cor. between secs. 2 and 3, 200 ft. N. of ford across Hominy Branch, 100 ft . W. of rd., in root of 60-in. elm tree; copper nail and washer
T. 49 N., R. 12 W., near quarter cor. between secs. 34 and 35 , SW . of T-rd., on concrete foundation of fence corner; chiseled square
T. 49 N., R. 12 W ., N. of $\mathrm{S}^{2}$ cor. secs. 26 and 27 , near ra. across branch, $N$. of rd. at curve to E., in root of 48-in. oak tree; copper nail and washer
5. FROM SEC. 10, T. 48 N., R. 12 W., SOUTH INTO LUPUS QUADRANGLE AT SEC. 22, T. 48 N., R. 12 W. (by J. H. Vinyard in 1934)

Columbia, $4 \mathrm{mi} . \mathrm{E}$. of, on U.S. Highway 40 , N. sixteenth cor. sec. 11, T. 48 N., R. 12 W., on NW. wing wall of bridge over Grindstone Creek; chiseled square
Columbia, 4 mi. E. of, near quarter cor. between secs. 11 and 14 ,
T. 48 N., R. $12 \mathrm{~W} .$, opposite T-rd. N., 30 ft . S. of gate, in pasture, in root of $15-1 \mathrm{n}$. hickory tree; copper nail and washer
columbia, 3.5 ml . E. of, near NW. cor. sec. $\mathrm{J}_{4}$, T. 48 N., R. 12 W.,
SE. of T-rd. S., in corner fence post; nail 1 . $40 \mathrm{N}$. . R. 12 W. ,
. 48 N., R. 12 W., near NW. cor. sec. 23 , on top of N. end of E. girder of bridge; chiseled cross
T. 48 N., R. 12 W., near quarter cor. between secs. 22 and 23 , on old rd. to Fulton, opposite T-rd. N., in root of l2-in. elm tree; nail
765.12
855.00
791.09
831.95
818.53
$764: 87$
790.70

# 6. FROM LUPUS : QUADRANGLE AT SEC. 27, T. 48 N., R. 12 W., EAST TO MILLERSBURG; THENCE SOUTHRAST ALONG COUNTY ROUTE F TO SEC. 2, T. 47 N., R. 10 W. (by W. V. Kennedy in 1937) <br> (Continued from Lupus quadrangle; see line 11.) 

T. 48 N., R: 12 W., quarter cor. between secs. 25 and $26,25 \mathrm{ft}$. N. and 130 ft . E. from T-rd. N., 74 ft . SE. of SE. corner of Turner School, in concrete post; U.S.C. \& G.S. and State Survey standard tablet

Feet
857.741
T. 48 N., R. 12 W., W. sixteenth cor. sec. 25 , 140 ft . NW. of NW. corner of dwelling, $25 \mathrm{ft} . \mathrm{N}$. of rd., in concrete post; U.S.C. \& G.S. and State Survey standard tablet
856.723
T. $48 \mathrm{~N} .$, R. $12 \mathrm{~W}_{.}$, center sec. 25 , 15 ft . N. and 80 ft . E. from T-rd.
S. in root on S. side of ly-in. black-oak tree; copper nail
840.11
T. 48 N., R. 11 W., center sec. $30,35 \mathrm{ft}$. S. and 30 ft . W. from T-rd. W., in root on SE. side of $40+1 n$. black-oak tree; copper nail and washer
874.42
T. 48 N., R. 11 W., S. sixteenth cor. sec. 30,58 ft. NE. of center of concrete culvert, 8 ft . E. of N.-S. fence, 3 ft . S. of E, W. fence, E. of rd., in concrete post; U.S.C. \& G.S. and State Survey standard tablet
T. 48 N., R. 11 W., quarter cor. between secs. 30 and 31,20 ft. N. and 75 ft . E. from T-rd. E., in concrete post; U.S.C. \& G.S. and State
Survey standard tablet
Millersburg, 3.5 ml . W. of, 900 ft . W. of quarter cor. between secs. 29
871.660 and $32, T .48$ N., R. 11 W., 380 ft. N. and 155 ft . E. from junction of rd. N. to farm; 100 ft . S. of concrete steps to farmhouse, 7 ft . SE. of cedar tree, in concrete post; U.S.C. \& G.S. and State Survey standard tablet stamped "C W A 1934"
880.965

Millersburg, 3 mi . W. of, near E. sixteenth cor: between secs. 29 and 32, T. 48 N., R. 11 W., 30 ft . N. and 230 ft . W. from T-rd. N., 3 ft . N. of fence, 6 ft . S. and 19 ft . E. from $16-1 \mathrm{n}$. walnut tree, in concrete post; U.S.C. \& G.S. and State Survey standard tablet
852.979
T. 48 N., R. 11 W., near line between secs. 28 and 33, on Boone-Callaway county line, 60 ft . N. and 170 ft . W. from old ford across Cedar Creek, S. of abandoned rd., 6 ft. S. of fence, in root on S. side of 20-1n. elm tree; crossed nails
Millersburg, 2 mi . W. of, 115 ft . E. of cor. secs. $27,28,33$, and 34, T. 48 N., R. 11 W., 500 ft . NE. of Baumgartner farmhouse, 20 ft . N. of rd., in concrete post; J.S.C. \& G.S. and State Survey standard tablet stamped "C W A 1934"
760.45
851.476
(1) mi. of, in NW $1 / 4$ sec. 34, T. 48 N., R. 11 W., 14 ft S. and 430 ft . W. from T-rd. S., 51 ft. E. from private drive S., in concrete post; U.S.C. \& G.S. and State Survey standard tablet
841.246

Millersburg, 0.5 mi . NW. of, along County Route $J, 45 \mathrm{ft}$. N. and 75 ft . E. from junction of rd. W., in root on NW. side of 20-in. black-oak tree; copper nail and washer
851.48

Millersburg, 5 ft . NE. of Boone monument, 20 ft . E. of rd., in yard of dwelling of W. F. Robinett, in concrete post; U.S.C. \& G.S. and State Survey standard tablet stamped "C W A 19.34
812.364

Millersburg, 0.2 mi . S. of, at junction of County Route $J$, on center of N. head wall of concrete culvert under Highway J; chiseled square
801.24 25 ft . N. of highway, 2 ft . S. of fence, in concrete post; standard tablet stamped "I K 1937"
877.610

Millersburg, 1.5 mi . SE . of, 130 ft . S . of curve in highway to SE ., at N. end of rd. fork, 18 ft . W. of side rd., on center of W. head wall of concrete culvert; chiseled square
867.06

Junction of rd. N., $175 \mathrm{ft} . \mathrm{E}$. of, 28 ft . N. of highway at curve, on $W$. head wall of concrete culvert under private drive N. f chiseled square
Millersburg, 2 mi . SE. of, about 0.2 mi . W. of bridge over Miller Creek, 40 ft . S. of highway, 110 ft . E. of triangular-blazed, twin oak tree; in concrete post; standard tablet stamped "2 K 1937",
Millersburg, about 2.2 mi . SE. of, on top of wing wall at NE. corner of bridge over Miller Creek; chiseled cross
Millersburg, 3.5 mi . SE. of, on NE. comer of doorstep of White Cloud Church; chiseled square
T. 47 N., R. 10 W., near 1 ine between secs. 5 and $8,18 \mathrm{ft}$. N. and 30 ft . E. from junction of rd. S., on $N$. end of iron pipe culvert; painted squere
Millersburg; about 4.2 mi . SE. of, 20 ft . N. and 17 ft . E. from junction of rd. N., on E . end of iron pipe culvert; chiseled square
Dim crossroad, 15 ft . S. and 60 ft . W. from, on S. head wall of concrete culvert; chiseled square
860.43
millersburg, 5.2 mi . SE. of, $70 \mathrm{ft} . \mathrm{N}$. and 30 ft . W. from crossroad, in concrete post; U.S.C. \&G.S. and State Survey standard tablet stamped "I C W A 1934"
T. 47 N., R. 10 W., in NW $1 / 4$ sec. 10 , on NE. corner of bridge over Middle River; chiseled square
T. 47 N., R. 10 W., in NE $1 / 4$ seo. $10,60 \mathrm{ft}$. E. of junotion of rd. N., 35 ft . NE. of highway, in root on W. side of $16-1 \mathrm{n}$ : white-oak tree; lead-headed nail
807.95
882.22
T. $47 \mathrm{N}$. , R. $10 \mathrm{~W} .$, about 0.1 mi . S. of center seo: $11,200 \mathrm{ft}$. SE. of Central Church, $80 \mathrm{ft} . \mathrm{N}$. and 12 ft . W. from crossroad, on N. end of W. head wall of concrete culvert; cinseled square
7. FROM POINT 0.5 MILES NORTHWEST OF MILLERSEURG NORTH ALONG COUNTY ROUTE J TO U.S. HIGHWAY 40, THENCE NORTH INTO CENTRALIA QUADRANGLE AT SEC. 26, T. 49 N., R. 11 W. (by W. V. Kennedy in 1937)

Millersburg, $1.8 \mathrm{mi} . \mathrm{N}$. of, 27 ft . W. of highway, in root on E. side of 30-1n. elm tree; copper nail and washer
T. 48 N., R. 11 W., W. sixteenth cor. between secs. $J_{4}$ and $23,15 \mathrm{ft}$. N. and 27 ft . W. from junction of rd. W., in root on SW. side of 20-in. black-oak tree; copper nail and washer

Feet
T. $48 \mathrm{~N} ., \mathrm{R}$. $11 \mathrm{~W} .$, in $\mathrm{SW} 1 / 4 \mathrm{sec} .14,15 \mathrm{ft}$. N. and 20 ft . E. from junction of rd. E., on N. end of concrete head wall of culvert; chiseled square
T. 48 N., R. Il W., near W. sixteenth cor. sec. $l_{4}$, at Truitt School, on SE. corner of concrete platform of well; chiseled square
T. 48 N., R. 11 W., in SW $1 / 4$ sec. $11,3.8 \mathrm{mi}$. N. of Millersburg, about 0.3 mi . S. of junction of $\mathrm{U} . \mathrm{S}$. Highway $40,58 \mathrm{ft}$. W. of NW. corner of airway beacon tower $13,30 \mathrm{ft}$. E. of highway, in concrete post; standard tablet stamped "12 C W A 1934"
T. 48 N., R. 11 W., near W. sixteenth cor. sec. $11,25 \mathrm{ft} . \mathrm{S}$. and 27 ft . E. from junction of U.S. Highway 40 , on E. head wall of concrete culvert; chiseled square
T. 48 N., R. 11 W., in NW. cor. sec. $11,0.5 \mathrm{mi}$. NW. of junction of U.S. Highway 40 and County Route J, 135 ft . S. and 45 ft . E. from T-rd. W., in root on NW. side of $22-i n$. White-oak tree; copper nail and washer
Bridge over Manacle Creek, at SW. corner of, on concrete wing wall; chiseled square
Stephens, at NE. corner of entrance to post office and general store; chiseled square
Stephens, $1: 1 \mathrm{mi} . \mathrm{N}$. of, in $\mathrm{SW} . \operatorname{cor} . \sec .26, \mathrm{~T} .49 \mathrm{~N} ., \mathrm{R} .11 \mathrm{~W} ., 18 \mathrm{ft}$. N. and 25 ft . E. from T-rd. E., on base of brace post to concrete fence post; chiseled square
T. 49 N., R. 11 W., quarter cor. between secs. 26 and $27,1.5 \mathrm{mi}$. N. of Stephens, at SE. corner of Allen Cemetery, 13 ft . NW. of rd., in top of concrete retaining wall; standard tablet stamped "3 C W A 1934"
882.969
(Continued in Centralia quadrangle; see line 8.)
8. FROM NEW BLOOMFIELD QJADRANGLE AT SEC. 23 , T. 46 N., R. 11 W., WEST INTO LUPUS QUADRANGLE AT SEC. 11, T. 46 N., R. 12 W. (by W. V. Kennedy in 1937)
(Continued from New Bloomfield quadrangle; see line 9.)
Guthrie, 1.2 mi. W. of, cor. secs. $13,14,23$, and 24, T. 46 N., R. 11 W., 40 ft . N . and 25 ft . W. from crossroads, in concrete post; standard tablet stamped "T T 8 C 1930"
824.345
T. 46 N., R. 11 W., near quarter cor. between secs. 15 and 22 , about 900 ft . W. of T-rd. N., on S. head wall of concrete culvert; chiseled square
735.80
T. 46 N., R. 11 W., cor. secs. $15,16,21$, and $22,40 \mathrm{ft}$. N. and 45 ft . E. from T-rd. S., in root on SE. side of $30-1 n$. white-oak tree; copper nail and washer
T. 46 N., R. 11 W., near W. sixteenth cor. between secs. 16 and 21 , at Boone-Callaway county line, on concrete abutment at NW. corner of bridge over Cedar Creek; chiseled square
T. 46 N. , R. 11 W ., near W. sixteenth cor. between secs. 16 and 21 , 300 ft . W. of bridge over Cedar Creek, 100 ft . SE. of farmhouse of S. H. Hudson, 30 ft . N. of rd., in farmyard, 2 ft . E. of wooden fence, in concrete post; standard tablet stamped "3 K 1937"
Bridge over Conner Creek, at SW. corner of, on concrete wing wall; chiseled square
T. 46 N., R. 11 W ., near S . sixteenth cor. between secs. 17 and $18,55 \mathrm{ft}$. N. and 18 ft . E. from T-rd. E., 150 ft . S. of rd. corner from S.-W., in root on W. side of $30-1 \mathrm{n}$. white-oak tree; copper nail and washer
Bridge over Brushy Creek, at SW. corner of, on concrete abutment; chiseled square
T. 46 N., R. 11 W., in $S W 1 / 4$ sec. 18 , 110 ft . SE. of ras. E., NW., and SW., in root on SW. side of 24 -in. white-oak tree; copper nail and washer
T. 46 N., Rs. 11 and 12 W., cor. secs. 7, 12,13 , and $18,18 \mathrm{ft}$. E. of T-rd. W., in concrete post; standard tablet stamped "T T 6 C 1930"
Rd. forks, 50 ft . NW. of, in bottom of deep drain, in root on SE. side of twin 10-1n. white-oak tree; crossed nails
T. 46 N., R. $12 \mathrm{~W} .$, cor. secs. $11,12,13$, and $14,1.3 \mathrm{ml}$. E. of U.S. Highway 63 at Ashland, SE. of crossroads, 20 ft . NE. of farmhouse of Otis Calvin, in root on NW. side of $30-1 n$. maple tree; copper nail and washer

For an additional level Iine along U.S. Highway 54, refer to United States Coast and Geodetic Survey second-order iine, Mexico to Eldon.

Boone, Callaway, Cole, and Osage Counties


1. FROM JEFFERSON CITY NORTH TO NORTH JEFFERSON, THENCE NORTHEAST ALONG ALTON R.R. (now abandoned) TO NEW BLOONFIELD, THENCE NORTHEAST ALONG U.S. HIGHNAY 54 (formerly State Highway 15) TO SEC. 21, T. 46 N., R. 10 W., THENCE NORTHEAST ALONG ROADS INTO MILLERSBURG QUADRANGLE AT SEC. $24, T .46$ N., R. 10 W.
(by W: R. Broaddus in 1927)

Feot
U.S.C.E. (city b.m.)

Jefferson City, at $S$. entrance of Public Service Building (old post office building), in vertical face of pillar; standard tablet stamped "I B 1927 645"
Jefferson City, at $N$. side of Capitol Building, 48 ft . E. of walk leading N. from steps, 1 ft. from building face, 1 ft. above sidewalk, in bench; standard tablet stamped "2 B 1927 628"
Jefferson City, 240 ft . N. of Capitol Building, on top at SE. corner of wall around fountain pool; chiseled square
Jefferson City, 45 ft . E. of bridge over Missouri River, N. of Missouri Pacific R.R. track, on top of concrete wall at end of tile culvert; chiseled square
Jefferson City, on E. pier at N. end of bridge over Missouri River; chiseled square
555.00

Jefferson City, 0.4 mi . N. of N. end of bridge over Missouri River, at junction of U.S. Highway 54 (formerly State Highway 15) and E.S. Highway 63 , on top of W. head wall of concrete culvert under Highway 54 ; chiseled square
North Jefferson, 70 ft . NW. of M1ssouri-Kansas-Texas R.R. at abandoned right-of-way of Alton R.R., N. of R.R., W. of U.S. Highway 54 (formerly State Highway 15), in top of W. head wall of concrete culvert; standard tablet stamped "3 B 1927"
Reference mark, 280 ft . SE. of tablet, on top of NE. head wall of concrete culvert; chiseled square
Jefferson City, $3.1 \mathrm{mi} . \mathrm{N}$. of, 1.1 mi . NE. of North Jefferson, 0.2 mi . W. of rock cut, 50 ft . N. of R.R., 12 ft . N. of fence corner, in root on N. side of 24 -in. cottonwood tree; spike

Jefferson City, 4.3 mi . N. of, 0.5 mi . NE. of high trestle, 0.3 mi . S. of milepost Mex 46, in middle of third rock cut from trestie, 8 ft . E. of R.R., I ft. above rail, on top of limestone ledge; chiseled square

Hibernia sta. 0.5 mi . S. of, in SE $1 / 4 \mathrm{SW} 1 / 4$ sec. $25, \mathrm{~T} .45 \mathrm{~N} .$, R. 11. W., 58 ft. W. of R.R., 28 ft . N. of rd., in concrete post;

Reference mark 1 , 28 ft . W. of tablet, in root on S . aide of $15-\mathrm{in}$. elm tree; copper nail and washer
832.897

Reference mark 2, 171 ft . E. of tablet, in root on W. side of 30-in. elm. tree; copper nail and washer
Hibernia sta., 15 ft . N. of, 15 ft . E. of R.R., in root on w. side of 30-in. maple tree; copper nail and washer
Hibernia ata., 0.6 mi . N. of, 450 ft . N . of rd. crossing, on top of $E$. ond of rock cuivert under R.R.; chiseled square
857.56
848.47
T. 45 N., R. 11 W., in $S E 1 / 4 \mathrm{sec} .13$, at curve at end of long tangent where R.R. leaves highway, on top of center of N. stone at W. end of stone culvert; chiseled square
842.36
T. 45 N., R. 10 W., near. W. sixteenth cor. between secs. 7 and $18,80 \mathrm{ft}$. N. and 55.ft. W. from U.S. Highway 54 at rd. E. and private rd. W., 24 ft . E. of R.R., in concrete post; standard tablet stamped "5 B 1927"
Reference mark, 50 ft . S . and 60 ft . W. from tablet, on top of $E$. end of tile culvert; chiseled square

(Continued in Millersburg quadrangle; see line l.)

> 2. FROM NORTH JEFFERSON NORTHWEST ALONG MISSOURI-KANSAS-TEXAS R.R. TO SEC. $32, T .45$ N., R. 11 W., THENCE NORTHWEST ALONG J.S. HIGHWAX 63 INTO CENTERTOWN QUADRANGLE (by L. V. Johnson in 1930 ; rerun by W. V. Kennedy in 1937)

North Jefferson, 0.5 mi . NW. of, on concrete abutment at SW. corner of bridge over Turkey Greek; chiseled square
North Jefferson, 1.3 mi . NW. of, 0.3 mi . NW. of point where transmission line crosses R.R., 300 ft . W. of farmhouse, 100 ft . NW. of private rd. crossing, on $E$. end of N. concrete head wall of culvert; chiseled square
North Jefferson, 1.6 ml . NW. of, 600 ft . SE. of milepost I45, S. of R.R., on NW. corner of concrete base of semaphore; chiseled square
North Jefferson, 2.5 mi . NW. of, at NW. corner of highway bridge over R.R., on top of concrete abutment; chiseled square

Junction of U.S. H1 ghways 54 and $63,3.8 \mathrm{ml}$. NW. of, 50 ft . N. and 15 ft . W. from crossroad, 7 ft . N. of corner fence post, in concrete post; standard tablet stamped "9 K 1937"
Reference mark, 40 ft . N. and 20 ft . W. from crossroad, on W. end of concrete culvert; chiseled square
Bridge over Cedar Creek, 0.4 ml . NW. of, at junction of rd. E.; surface of highway
Junction of $\mathrm{U} . \mathrm{s}$. Highways 54 and $63,5 \mathrm{mi}$. NW. of, $0.2 \mathrm{mi}: \mathrm{NW}$. of rd. junction, at fililing sta., on SE. corner of concrete base of gasoline pumps; chiseled square
553.59
579.56
552.401
551.92
591.8
597.31

Junction of J.S. Highways 54 and $63,5.6 \mathrm{mi}$. NW, of, 0.6 mi . NW. of fliling sta., 550 ft . N. of rd. forks, 20 ft . E. of highway, on S . end of $E$. concrete head wall of culvert over creek; chiseled square
Junction of J.S. Highways 54 and $63,6.2 \mathrm{mi}$. NW. of, 50 ft . SW. of farmhouse of R. W. 01d, 40 ft . NE. of highway, in conorete post; standard tablet stamped " 8 K 1937 "
652.829

Reference mark, 0.1 ml . SE. of tablet, $300 \mathrm{ft} . \mathrm{S}$. of farmhouse, $20 \mathrm{ft} . \mathrm{W}$. of highway, on $S$. end of $W$. concrete head wall of culvert; chiseled square
Junction of U.S. Highways 54 and $63,6.9 \mathrm{mi}$. NW. of, 430 ft . S. of pilling sta., 90 ft . S. and 20 ft . W. from junction of rd. S., on W. head wall of concrete oulvert; chiseled square
810.16

Junction of $\mathrm{J} . \mathrm{S}$. Highways 54 and $63,7 \cdot 7 \mathrm{mi}$. NW. of, 38 ft . SE. of SE. corner of dwelling of P. J. Gilmore, in root on SE. side of 18-in. ash tree; copper nail and washer
819.79
(Continued in Centertown quadrangle; see line I.)
3. IN JEFFERSON CITY (not shown on diagram; by L. V. Johnson in

FROM STATE CAPITOL BUILDING AROUND CENTRAL SECTION OF CITY
Intersection of West Main and Walnut Streets, at E. corner of; top of fire hydrant
557.78
562.36
fire hydrant West Main and Harrison Streets, at E. corner of ; top of
Intersection of West McCarty and Harrison Streets, at W. corner of, on fire hydrant; arrowhead
Intersection of Weat McCarty and Walnut Streets, at W. corner of, on fire hydrant; arrowhead
Interseotion of West Miller and Mulberry Streets, at E. corner of, on fire hydrant; arrowhead

Intersection of West Miller and Washington Streets, at W. corner of, on concrete curb; chiseled square
Intersection of West Dunklin and Jefferson Streets, at $N$. corner of, on fire hydrant; arrowhead
Intersection of East Dunklin and Monroe Streets, at W. corner of, on fire hydrant; arrowhead
Intersection of East Dunklin and Jackson Streets, at W. corner of, on fire hydrant; arrowhead
Intersection of East Elm and Marshall Streets, at S. corner of, on northernmost point of concrete curb; chiseled square
Intersection of East McCarty and Marshall Streets, at N. corner of, on fire hydrant; arrowhead
Intersection of East High and Jackson Streets, at N. corner of; on fire hydrant; arrowhead
Intersection of East Capitol and Jackson Streets, at W. corner of, on fire hydrant; arrowhead
Intersection of East Capitol and Monroe Streets, at E. corner of, on fire hydrant; arrowhead
Intersection of East Capitol and Jefferson Streets, at S. corner of, on fire hydrant; arrowhead

## IN SOUTHEASTERN SECTION OF CITY

Intersection of Lafayette and East Elm Streets, at E. corner of, on fire hydrant; arrowhead
Intersection of Chestnut and East Elm Streets, at E. corner of, on concrete ourb; chiseled square
Intersection of Locust and East Elm Streets, at S. corner of, on fire hydrant; arrowhead
Intersection of East Elm Street and Clarke Boulevard, at E. corner of; on fire hydrant; arrowhead
Intersection of East McCarty Street and Clarke Boulevard, at s. corner of, on fire hydrant; arrowhead
Intersection of U.S. Highways 50 and 63 and Eest High Street, 150 et. W. of, at SE. corner of guardrails between highways, in top of wooden guardrail; copper nall and washer
Intersection of Hough and Buchanan Streets, at N. corner of, on top of

## fire hydrant; bolt

tersection of River Lane and Pierce Street, at $S$. corner of, on top of fire hydrant; bolt
Intersection of Hough and Polk Streets, at W. corner of, on top of fire hydrant; bolt
Missouri Pacific R.R. at $E$. city limits, 55 ft . S. of 'electric aignal box, 25 ft . E. of telephone booth, in wooden base of switch; copper nail and washer
Statef Penitentiary, 10 ft . E. of E. corner of, on $N$. end of concrete retaining wall of highway; chiseled square
Intersection of East Oapitol and Chestnut Streets, at S. corner of, on fire hydrant; arrowhead
Intersection of East Capitol and Lafayette Streets, at N. corner of, on fire hydrant; arrowhead

## IN CENTRAL NORTHWEST SECTION OF CITY

Intersection of West McCarty and Clay Streets, at E. corner of, on fire
hydrant; arrowhead
567.30

Intersection of West MoCarty and Brooks Streets, at E.corner of, on
fire hydrant; arrowhead

Intersection of West McCarty and Hamlin Streets, at E. corner of, on fire hydrant; arrowhead
Intersection of West McCarty and Hart Streets, at E. corner of, on top of fire hydrant; top of bolt
Intersection of West Main and Hart streets, at $S$. corner of, on fire hydrant; arrowhead
ntersection of West Main and Berry Streets, at E. corner of, on fire hydrant; arrowhead
Intersection of West Main and Fulkerson Streets, at E. corner of, on westernmost point of concrete curb; chiseled square
Intersection of West Main and Bolivar Streets, at E . hydrant; arrowhead.

## IN NORTHWEST AND WEST SECTION OF CITY

Intersection of West Main and Manilla Streets, at E . corner of, on fire hydrant; arrowhead
Intersection of West Main Street and Ware Avenue, at NW. corner of; on fire hydrant; arrowhead
Intersection of West Main and Jordan Streets, at SW. corner of, 5 ft . SE. of transmission-line pole, on concrete curb; chiseled square
Junction of West Main Street and rd. to Forest Hill Addition, 25 ft . N. of, 2 ft . SW . of telephone pole, 3 ft . W. of W. edge of sidewalk, on concrete head wall of culvert; chiseled square
West Main Street at city limits, 720 ft . E. of; 50 ft . sw . of filling sta: pump, 28 ft . S. of rd., in root on E. side of $18-1 \mathrm{n}$. cedar tree; copper nail and washer
Bagnell Branch of Missouri Pacific R.R. at W. city limits, 0.3 mi . S. of, 340 ft . S. of fork in creek, I8 ft. N. of transmisaion-ilne pole, in SW. corner of fence $S$. , on top of concrete block; chiseled square

Feet 549.51
580.31
U.S. Highway 50 at private rd. S., 52 ( 42 ?) ft. N. and 46 ft. E. from,
E. of junction of highway and St. Mary's Boulevard, 18 ft . E. of fence corner, in concrete post; standard tablet stamped "T.T 1 L 1931"

Feet 675.467

Reference mark, 0.2 mi . E. of tablet, 220 ft . E. of city limit line,
300 ft . SW. of brick farmhouse, S . of rd. , on W . end of concrete head wall of culvert; chiseled square
684.58
U.S. Highway 50 at city limits, 0.3 mi . E. of, 350 ft . NW. of NW. corner of ball park, NW. of crossroad; on W. end of iron pipe culvert; chiseled square
Intersection of U.S. Highway 50 and Beck Street, NW. of, 700 ft . E. of entrance to ball park, in top of $24-1 n$. stump; copper nail and washer
Intersection of U.S. H1ghway 50 and Beck Street, 700 ft . E. of, 150 ft . NW. of service sta., S. of highway, on concrete head wall of culvert; chiseled square
Intersection of U.S. Highway 50 and Virginia Street, at E. corner of, on top of fire hydrant; bolt
Intersection of Dunklin and Georgia Streets, at $N$. corner of, on fire hydrant; arrowhead
Intersection of Dunklin and Delaware Streets, at $N$. corner of, on fire hydrant; arrowhead
Intersection of Harrison and West Elm Streets, at SW. corner of, on fire hydrant; arrowhead

## FROM U.S. HIGHWAY 50 NORTH TO BAGNELL BRANCH OF MISSOURI PACIFIC RAILROAD

Junction of St. Mary's Boulevard and Beck Street, SW. of, 4 ft . NW. of telephone pole, on rock head wall of culvert; chiseled square
Bagneli Branch of Missouri Pacific R.R. at W. city limits, 0.8 mi . E. of
25 ft . N. and 50 ft . E. from private rd. crossing, in root on W. side of westernmost one of group of three elm trees; copper nall and washer

## NEAR NORTH BOUNDARY OF CITY FROM WEST MAIN STREET NORTHEAST

 AND SOUTHEAST TO POINT NEAR STATE CAPITOL BUILDINGJunction of Boonville Road and Hayselton Drive, 0.3 mi . NE. of, at edge of bluff, E. of sharp curve in Hayselton Drive, 25 ft . NW. of 12-in. oak tree, 3 ft . E. of 4-in. maple tree, in 4-in. stump; copper nail and washer
Missouri Pacific R.R. near NW. city limits, N. of tracks opposite semaphore l271-L, on $W$. corner of concrete base of electric signal box 1271-R; chiseled square
Bridge over Missouri River, 0.4 mi . W. of, along Missouri Pacific R.R., on W. corner of concrete base of semaphore 1264-L; chiseled square
Bridge over Missouri River, 100 ft. E. of, along Missouri Pacific R.R., on E. corner of concrete base of semaphore; chiseled cross

## IN SOUTHWEST SECTION OF CITY

Intersection of Jefferson and East Ashley Streets, at. S. corner of, on fire hydrant; arrowhead

Intersection of Jefferson Street and Swifts Highway, at E. corner of, on fire hydrant; arrowhead
unction of Swifts Highway and Jefferson Street, 0.2 mi . NW. of , along Swifts Highway, 100 ft . NW. of large brick house, on top of fire hydrant; bolt
Junction of Swifts Highway and Myrtle Road, at E. corner of, 7 ft . S. of SW. corner of stone wall around dwelling, 1 ft . SW. of transmissionline pole, on concrete curb; chiseled square

## IN SOUTE SECTION OF CITY

South city limits, about 250 ft . S. $2 \mathrm{f}, 193 \mathrm{ft}$. S. and 37 ft . W. from U.S. Highway 54 at rd. S., 17 ft . W. of fence corner, in concrete post; standard tablet stamped "T T 2 L 1931"
635.191
629.06
654.80
676.38
663.04
714.84

Reference mark, 340 ft . S. of tablet, 35 ft . E. of filling sta., on N. end of E. concrete head wall of culvert; chiseled square
729.94
711.68

Intersection of Monroe Street and Russell Avenue, at N . corner of, on fire hydrant; arrowhead
Intersection of Monroe Street and Union Avenue, at S. corner of, on fire hydrant; arrowhead
Intersection of Union Avenue and Adams Street, at S. corner of, on fire hydrant; arrowhead

| Intersection of Chestnut and East Dunklin Streets, at E. corner of, on fire hydrant; arrowhe ${ }_{a}$ d |  |
| :---: | :---: |
| Intersection of East Atchison and Chestnut Streets, at S. corner of, on top of fire hydrant; bolt |  |
| Intersection of East Atchison and Chestnut Streets, 800 ft . SW. of, on concrete wall at westernmost corner of McClung swimming pool; chiseled square | 613.03 |
| Intersection of East Atchison and Chestnut Streets, 0.5 mi . SW. of, at end of pavement on Chestnut Street, N. of creek, on westernmost point of concrete curb; chiseled square | 60 |
| Intersection of Chestnut Street and city limits, at $N$. corner of, in root :'on SW. side of lone $10-1 \mathrm{n}$. oak tree; copper nail and washer | 72 |
| Intersection of Jackson Street and Russell Avenue, at W. corner of, on S. end of concrete curb; chiseled square | 611. |

## IN SOUTHEASTERN SECTION OF CITY

Intersection of Clarke. Boulevard and East Dunklin Street, at S. corner of on fire hydrant; arrowhead
Intersection of Clarke Boulevard and East Atchison Street, at N. corner of, on top of fire hydrant; bolt
Intersection of Moreau and Oakwood Drives, at $N$. corner of, on top of fire hydrant; bolt
Intersection of Moreau Drive and Fairmont Boulevard, at S. point of triangle, on concrete curb; chiseled square
Intersection of Moreau Drive and Vineyard Square, at N. corner of, on top of fire hydrant; bolt
Intersection of Moreau Drive and Moreland Avenue, 800 ft . S. of, $50 \mathrm{ft} . \mathrm{N}$. of center of triangle formed by rd. forks, on NE. end of concrete head wall of culvert; chiseled square

## 4. FROM OSAGE CITY SOUTHWEST TO SCHUBERT, THENCE SOUTHEAST ALONG U.S. HIGHWAYS 50 AND 63 INTO META QUADRANGLE (by L. V. Johnson in 1932)

U.S.C.E. B.M. designated "99"

Copper bolt
Top of Cap
547.151
551.216

Osage City, $0.7 \mathrm{mi} . \mathrm{s}$. of, 20 ft . N. and 90 ft . E. from junction of private rd. E., 85 ft . NE. of mail box of Henry Bolting, in root on W. side of 20-in. oak tree; copper nail and washer

Osage City, 1.7 mi . S. of, 4 ft . NE. of NE. corner of Forest Hill School, on outside edge of concrete walk; chiseled square
Schubert, 1.8 mi . N. of, 40 ft . E. of rd. forks opposite cemetery, on property of Harrison Diedel, inside fence, in concrete post; standard tablet stamped. "T T 38 B 1932"
Schubert, $0.9 \mathrm{ml.n}$. of, 20 ft . N. and 8 ft . W. from rd. fork E., on center of $E$. concrete head wall of culvert; chiseled square
Schubert, 550 ft . S. of Catholic Church, 75 ft . N. and 45 ft . W. from junction of rd. N., in concrete post; standard tablet stamped "T T 37 B 1932"
Reference mark, 50 ft . E. of tablet, 45 ft . SW . of SW . corner of fililing sta., 4.5 ( 45 i) ft. S. of stop sign , on concrete head wall of culvert; chiseled square
Schubert, l.1 mi. SE. of, at SW. corner of bridge over Sanford Creek, on concrete foundation of ralling; chiseled square

## 5. FROM CENTERTOWN QUADRANGLE NORTHEAST ALONG U.S. HIGHWAY 54 TO JEFFERSON CITY (by O. F. Hodgdon in 1934) (Continued from Centertown quadrangle; see line 3.)

Jefferson City, 7 mi . SW . of, 38 ft . N. and 48 ft . W. from junction of rd. W. and private rd. N., 36 ft . W. of fence corner, in concrete post; standard tablet stamped "T T il L 1931 "
Reference mark, 8 ft . S. and 36 ft . E. from tablet, on concrete head wall of iron pipe culvert; chiseled square
Jefferson City, 5.7 mi . SW. of, at NW. corner of bridge a-302 over Neighorn Branch, on top of railing post; chiseled square
Jefferson City, 4.5 mi . SW. of, on top of E. head wall of iron pipe culvert; chiseled square
Jefferson city, 3.6 mi . SW. of, 38 ft . S. of junction of rd. W. (now County Route c) to Russellville, on edge of right-of-wsy, in concrete post; standard tablet stamped "T T 10 L 1931"
Reference mark, $25 \mathrm{ft} . \mathrm{S}$. and 215 ft . W. from tablet, 40 ft . S. of filling sta., on S. track of ofl draining well; chiseled square
Jefferson City, 2.6 mi . SW. of, about 320 ft . E. of farmhouse of Fred Schuricht, on top of $S$. concrete head wall of tile pipe culvert; chiseled square
Jefferson City, 1.5 mi . SW. of, on $N$. end of island for filling sta. pumps; chiseled square
Jefferson City, at S. 11 mits of, 193 ft . S. and 37 ft . W. from junction
of rd. S., 17 ft . W. of fence corner, in concrete post; standard tablet stamped "T T 2 L 1931"
Reference mark, 65 ft . N. and 17 ft . E. from tablet, on SE. corner of island for filling sta. pumps; chiseled square
6. FROM MOKANE QUADRANGLE AT SEC. 21, T. 44 N., R. 10 W., SOUTHWEST TO OSAGE CITY (by B. A. Barnes in 1934)
Osage triangulation sta.; Missouri River Commission iron post
Osage City, 0.5 mi . E. of, in NW $1 / 4 \mathrm{sec} .21$, T. 44 N., R. 10 W.,
$1,000 \mathrm{ft}$. E. of E. end of bridge over Osage River, on NE. corner of concrete base of semaphore; (mark not described)
U.S.C. \& G.S. standard disk stamped "F 37 1934"
U.S.C.E. B.M. designated "99"
Copper bolt
Top of cap
U.S.C. \& G.S. B.M. designated "XXIV"
7. FROM SCHUBERT SOUTHWEST INTO META QUADRANGLE AT SEC. 1, T. 43 N., R. 11 W. (by F. Y. Brown in 1936)
Schubert, junction of J.S. Highway 50 and rd. S. to Taos, on corner of concrete retaining wall around store; chiseled square
Gate to farm of Fred Snyder, 320 ft . W. of, 40 ft . S. of rd., 45 ft . W. of fence line, in root on N. side of 16 -in. White-oak tree; crossed na1ls
Taos, 45 ft . SE. of rd., 6 ft . NE. of NE. corner of filling sta., on N . corner of concrete cistern top; chiseled square
Taos, 0.6 mf . SW . of, $15 \mathrm{ft} . \mathrm{N}$. and 15 ft . W. from T-rd. S., at st. Xavier's Cemetery, in root on S. side of $36-1 n$. white-oak tree; nail and washer
Farmhouse of John J. Fork, 450 ft . W. of, 15 ft . N. of rd., in root on N . side of $20-1 n$. white-oak tree; crossed nails
(Continued in Meta quadrangle; see line 7.)

## 8. FROM SEC. 7, T. 45 N., R. 10 W., NORTH ALONG U.S. HIGHWAY 54 TO NEW BLOONFIELD (by W. V. Kennedy in 1937)

New Bloomfield, $2 \mathrm{mi} . \mathrm{s}$. of, $22 \mathrm{ft} . \mathrm{S}$. and 25 ft . E. from junction of rd. W., on S. end of iron pipe culvert; painted square
New Bloomfield, 1.5 mi . S. of, 17 ft . N. and 27 ft . E. from junction of rd. E., on N. head wall of concrete culvert; chiseled square
New Bloomfield, 1 mi . S. of, 10 ft . S . and 27 ft . W. from crossroad, on S. head wall of concrete culvert; chiseled square
9. FROM SEC. 7, T. 45 N., R. 10 W., WEST AND NORTH INTO MILLERSBURG QUADRANGLÉ AT SEC. 23, T. 46 N., R. 11 W. (by W. V. Kennedy in 1937)
Hibernia, 3.1 mi . N. of, 18 ft . S. and 20 ft . E. from T-rd. E., in concrete post; standard tablet stamped "T T 10 C $1930^{\text { }}$
T. 45 N., R. 11 W., in $S W 1 / 4$ sec. $1,90 \mathrm{ft} . \mathrm{N}$. and 25 ft . E. from T-rd.
N., in root on E. side of 14-in. walnut tree; copper nail and washer
T. 45 N., R. 11 W., in $W 1 / 2$ sec. $1,12 \mathrm{ft} . \mathrm{S}$. and 10 ft . W. from center of concrete culvert, on W. retaining wall; chiseled square
T. 46 N., R. 11 W., W. sixteenth cor. sec. $36,110 \mathrm{ft}$. N. and 50 ft . W. from T-rd. S., in root on S. side of 20-in. walnut tree; copper nail and washer
Guthrie, 1.2 ml . W., thence 2.5 ml . S. from, quarter cor, between secs. 35 and $36, T_{0} 46 \mathrm{~N} ., \mathrm{R}_{\mathrm{C}} 11 \mathrm{~W} ., 39 \mathrm{ft}$. S. of T-rd. N., in concrete post; standard tablet stamped "T T 9 C 1930" (as reset)
Guthrie, 1.2 ml . W., thence 1.5 mi . S. from, quarter cor. between secs. 25 and 26 , T. 46 N., R. 11 W., 15 ft. S. and 12 ft. E. from T-rd., on E. head wall of concrete culvert; chiseled square
Guthrie, 2.2 mi . W., thence 1 mi . S. from, cor. secs. $23,24,25$, and 26 , T. $46 \mathrm{~N} ., \mathrm{R}$. 11 W., $25 \mathrm{ft} . \mathrm{S}$. and 12 ft . E. from T-rd. E., on E. head wall of concrete culvert; chiseled square
Guthrie, 1.2 mi . W., thence 0.6 mi . S. from, on 11 ne between secs: 23 and 24, T. 46 N., R. 11 W., on iron brace at NW. corner of bridge over Big Branch Creek; painted square
(Continued in Millersburg quadrangle; see line.8.)

Feet
762.593
728.96
700.67
730.87
857.62
842.73
844.79
803.590
850.58
768.11
852.93
10. FROM SEC. 35 , T. 46 N., R. 11 W., WEST INTO CENTERTOWN QUADRANGLE AT SEC. 35 , T. 46 N., R. 12 W. (by W. V. Kennedy in 1937)
T. 46 N., R. 11 W., in $W 1 / 2$ sec. 35 , on concrete abutment at SW . corner of bridge over creek; chiseled square
T. 46 N., R. 11 W., quarter cor. between secs. 34 and $35,30 \mathrm{ft}$. N. of crossroads, on W. head wall of concrete culvert; chiseled aquare
822.47
T. 45 N., R. 11 W., near quarter cor. between secs. 2 and 3,48 ft. S. of gate to yard of Forrest Wilson, 20 ft . W. of rd., in concrete post; standard tablet stamped "T T 11 C 1930"
763.618
T. $45 \mathrm{~N} ., \mathrm{B}$. $11 \mathrm{~W} .$, quarter cor. between secs. 3 and $4,20 \mathrm{ft}$. S. and 35 ft . W. from T-rd. N., in root on E. side of 18-in. hickory tree; copper nail and washer
823.11
T. 45 N., R. 11 W., in $S W 1 / 4$ sec. $4,8 \mathrm{ft} . \mathrm{N}$. and 280 ft . E. from T-rd. S., on N. head wall of concrete culvert; chiseled square
T. 45 N., R. 11 W., near center sec. 5, 75 ft . N. and 20 ft . W. from T-rd. N. at farmhouse of T. R. Glennon, in concrete post; standard tablet stamped "T T 12 C 1930 "

Feet 812.889

Rd. fork, 30 ft . S. of, in root on S . side of $10-\mathrm{in}$. white-oak tree; crossed nalls
T. 45 N., R. 11 W., in NE $1 / 4 \mathrm{sec} .6,250 \mathrm{ft}$. SW. of farmhouse of Joe Lyon, 10 ft . $N$. of rd., in root on S . side of 24 -in. elm tree; copper na11 and washer
T. 45 N., R. 11 W., in NW $1 / 4$ sec. 6, on downstream pier at W. end of bridge over Cedar Creek; bolt hoad
Rd. forks, 80 ft . N. and 25 ft . E. from, in root on W. side of $40-\mathrm{in}$. sugar-maple tree; crossed nails
Oldham, 2.5 mi . E. of, 20 ft . N. and 50 ft . W. from T-rd. W. at farmhouse of Lee Forbs, in concrete post; standard tablet stamped "T T 13 C 1930"
T. 46 N., R. 12 W. , in $\mathrm{W} 1 / 2$ sec. 36 , 30 ft . S. of rd., in NW. corner of farmyard, in root on $E$. side of $1_{4}-1 n$. maple tree; crossed nails
Oldham, 1.3 ml . E. of, in NE $1 / 4$ sec. $35, \mathrm{~T} .46 \mathrm{N.}, \mathrm{R} .12 \mathrm{~W} ., 45 \mathrm{ft} . \mathrm{SE}$. of farmhouse of 0tis Sappington, 35 ft . N. of rd., in root on $E$. side of 24 -in. black-oak tree; copper nail and washer

## 11. FROM SEC. 21, T. 46 N., R. 10 W., SOUTH ALONG ROADS BY WAY OF DIXIE AND COTE SANS DESSEIN TO SEC. 12, T. 44 N., R. 10 W., INCLUDING THAT PART OF THE LINE IN MOKANE QUADRANGLE (by W. V. Kennedy in 1937)

T. 46 N., R. 10 W., quarter cor. between secs. 23 and $24,10 \mathrm{ft}$. S. and 20 ft . W. from T-rd. W., on W. end of S. concrete culvert; chiseled square
821.19
T. 46 N, R. $10 \mathrm{~W} .$, cor. secs. $23,24,25$, and $26,13 \mathrm{ft} . \mathrm{S}$, and 17 ft . E. from T-rd. E., on S. head wall of concrete culvert; chiseled square
T. 46 N., R. $10 \mathrm{~W} .$, cor. secs. 25,$26 ; 35$, and $36,12 \mathrm{ft}$. N. and 20 ft . W. from T-rd. W., on center of $N$. head wall of concrete culvert; chiseled square
Dixie, 30 ft . N. and 20 ft . E. from quarter cor. between secs. 35 and 36 , T. 46 N., R. 10 W., NE. of T-rd. E., 4 ft. N. of corner fence post, in concrete post; standard tablet stamped "T T Sta No 2 M 1926"
Dixie, 0.5 mi . S. of, cor. secs. $1,2,35$, and 36 , Tps. 45 and 46 N. , R. $10 \mathrm{~W} ., 20 \mathrm{ft}$. S. and 10 ft . W. from T-rd. W., on center of W. head wall of concrete culvert; chiseled square
T. $45 \mathrm{~N} ., \mathrm{R} .10 \mathrm{~W}$. , W. sixteenth cor. between secs. 1 and $12,325 \mathrm{ft} . \mathrm{N}$. and 10 ft. W. from T-rd. E., on W. head wall of concrete culvert; chiseled square
T. 45 N., R. 10 W., in NW $1 / 4$ sec. $13,65 \mathrm{ft}$. N. and 25 ft. W. from T-rd. E., in root on N. side of 5-in. oak tree; copper nail and washer
T. $45 \mathrm{~N} ., \mathrm{R} .10 \mathrm{~W}$. , near center of $\mathrm{SW} 1 / 4 \mathrm{sec}$. $13,20 \mathrm{ft} . \mathrm{S}$. and 15 ft . E. from T-rd. W., in root on E. side of 16-in. white-oak tree; copper nail and washer
T. $45 \mathrm{~N} ., \mathrm{R}$. $10 \mathrm{~W} .$, near center sec. $24,4 \mathrm{ml}$. S. and 0.4 ml . E. from Dixie, 48 ft . N. and 25 ft . E. from T-rd. E., 41 ft . W. of and in line with SW. corner of farmhouse, in concrete post; standard tablet stamped "T T Sta No 1 M 1926"
T. 45 N., R. 10 W., near center sec. $25,75 \mathrm{ft}$. N. and 40 ft . W. from junction of rds: N., NE., and SE., 250 ft . NW. of farmhouse of J. V. Williams, in root on N. side of 20-in. locust tree; copper nail and washer
T-rd. E., 140 ft . N. and 16 ft . E. from, on S . end of E. head wall of concrete culvert; chiseled square
T. $45 \mathrm{~N} ., \mathrm{R} .10 \mathrm{~W}$. , in $\mathrm{NE} 1 / 4 \mathrm{NE} 1 / 4 \mathrm{sec} .36$, at NW . pier of bridge over Little Murphy Creek, on top of rivet; chiseled cross
Rd. fork $S ., 30 \mathrm{ft}$. S. and 10 ft . E. from, on E . head wall of concrete culvert; chiseled square
Pres triangulation sta.; Missouri River Commission iron post stamped "Missouri River Commission" Top of cap
Cote sans Dessein, 1.1 mi . N. of store, near, cor. Tps. 44 and 45 N. , Rs. 9 and 10 W., at old location of High Hill Church, on W. side of small cemetery, 40 ft . NE. of rd., in root on SE. side of 32-in. white-oak tree; copper nail and washer
T-rd. W., 35 ft . N. and 35 ft . E. from, in NW. corner of yard of 0ak Grove School, in root on W. side of lo-in. hickory tree; crossed nails
Cote sans Dessein, 600 ft . S. of store, in NW I/4 sec. 7, T. $4+\mathrm{N}$. , R. 9 W., 20 ft . SW . of M1ssouri-Kansas-Texas R.R. at rd. crossing, on E. end of S. head wall of concrete culvert; chiseled square
12. FROM SEC. 12, T. 44 N., R. 10 W., WEST ALONG MISSOURI-KANSASTEXAS R.R. AND COUNTY ROUTE D BY WAY OF WAINWRIGHT TO NORTH JEFFERSON (by W. V. Kennedy in 1937)
 NW. of junction of rd. S., N. of R.R., 90 ft . SW . of SW . corner of farmhouse of Clyde Scott, 2 ft. E. of fence, in concrete post; standard tablet stamped "5 K $1937^{\circ}$
Junction of rd. N., 40 ft . N. and 100 ft . E. from, 40 ft . S. of R.R., in telegraph pole; spike
Wainwright, 1.5 mi . E. of, 275 ft . E. of private rd. crossing, on NE. corner of concrete abutment of trestle 136.0; chiseled square
Wainwright, 0.7 mi . E. of, in $\mathrm{SW} 1 / 4$ seo. 15 , T. $44 \mathrm{~N} ., \mathrm{R}$. $10 \mathrm{~W} ., 40 \mathrm{ft}$. E. of rd. crossing, on center of S. head wall of concrete culvert; chiseled square

Wainwright, 90 ft . NW. of sta., 75 ft . SE. of general store and post office, 22 ft. S. of rd., in line with transmission-line poles, in concrete post; standard tablet stamped "6 K 1937"

Feet 542.442
538.22
546.39
542.40
549.543
548.80
545.10
13. LINE TO DETERMINE ELEVATION OF WATER-RESOURCES GAGE NEAR JEFFERSON CITY (not shown on diagram; by W. V. Kennedy in 1937)
U.S. Highway 63 bridge over Missouri River, at E. end of first truss from N. end, on E. anchorbolt; chiseled cross (set by water-resources branch of U.S. Geol. Survey)
U.S. Highway 63 bridge over Missouri River, at E. end of second truss from N. end, on E. anchorbolt; chiseled cross (set by water-resources branch of U.S. Geol. Survey)

For additional level lines along north and south banks of Missouri River, Missouri Pacific R.R., and U.S. Highways 54 and 63, refer
to United States Coast and Geodetic Survey first-order lines,
Twelve Miles Above St. Louis to Jefferson City, St. Louis to
Jefferson Oity, Jefferson City to Pleasant Hill, Jefferson City to Kansas City, Cabool to Osage City; and second-order line, Mexico to Eldon.
564.98
574.47
(Latitude $38^{\circ} 15^{\prime}-38^{\circ} 30^{\prime}$; longitude $92^{\circ} 00^{\prime}-92^{\circ} 15^{\prime}$ )
Cole, Maries, Miller, and Osage Counties


1. FROM NEW BLOOMFIELD QUADRANGLE SOUTHEAST ALONG U.S. HIGHWAY 50 TO JUNCTION OF U.S. HIGHWAY 63, THENCE SOUTH ALONG U.S. HIGHWAY 63 INTO LINN QUADRANGLE (by L. V. Johnson in 1932) (Continued from New Bloomfield quadrangle; see line 4.)

Schubert, $2.1 \mathrm{mi} . \mathrm{SE}$. of, 35 ft . N. and 55 ft . W. from junction of rd. W., on S. concrete head wall of culvert; chiseled square (U.S.C. \& G.S. elev.) 547.076
Schubert, 2.6 mi . SE. of, at NW. corner of bridge over Osage River, on top of concrete wing wall; chiseled square
Westphalia, 4.2 mi . N. of, 53 ft . S. and 60 ft . E. from junction of U.S. Highway 63, in concrete post; standard $t_{a}$ blet stamped "T T 36 B 1932"
Reference mark, at $S$. corner of triangle formed by function, on pavement; chiseled square

Westphalia, 3.1 mi . N. of, 0.9 mi . S. of junction of U.S. Highway 50 , on
Feet

Westphalia, 2.1 mi . N. of, near foot of large hill, $30 \mathrm{ft} . \mathrm{N}$. and 50 ft . E. from junction of private rd. SE. to farmhouse, on $S$. end of $E$. concrete head wall of culvert; chiseled square (U.S.C. \& G.S. elev.)
Westphalia, 0.9 ml . N. of, near top of large hill, 80 ft . S. and 30 ft . W. from junction of rd. W., in root on W. side of 6-in. oak tree; copper nail and washer
Westphalia, at N. limits of, 45 ft . S. and 100 ft . E. from crossroad, 42 ft . NE. of highway, in concrete post; standard tablet stamped "T T 35 B 1932"
793.77
622.210

Reference mark, about 40 ft . NE. of tablet, in root on SW. side of 18-1n. locust tree; copper nail and washer

# 2. FROM TAVERN QUADRANGLE AT SEC. 34 , T. 41 N., R. 10 W., WEST INTO TAVERN QUADRANGLE AT SEC. 33, T. 41 N., R. 11 W. (by L. V. Johnson in 1932) <br> (Continued from Tavern quadrangle; see line 2.) 

T. 41 N., R. 10 W., near quarter cor between secs. 33 and 34 ; 15 ft . SE. of SE. corner of triangle formed by rd. forks, $30 \mathrm{ft} . \mathrm{N}$. of rd. at creek, 110 ft . S. of mail box of H. Deeken, in root on W. side of 15-1n. hickory tree; copper nail and washer
(For balance in Tavern quadrangle, see line 2.)
T. 41 N., R. 11 W., in $\mathrm{S} 1 / 2$ sec. 36 , 25 ft . S. and 20 ft . E. from W. corner of triangle formed by rd. forks, in root on W. side of triangular-blazed 10-in. oak tree; copper nail and washer
T. 41 N., R. 11 W., near center sec. $35,28 \mathrm{ft}$. N. of rd. at curve, 23 ft . W. of fence corner, at gatepost, in root on SW. side of twin oak tree; copper nail and washer
T. 41 N., R. 11 W., on line between secs. 34 and $35,15 \mathrm{ft}$. N. and 13 ft . E. from dim rd. fork NE., in root on SE. side of triangular-blazed 10-in. oak tree; copper nail and washer
T. 41 N., R. 11 W., in NW $1 / 4$ sec. 34 , 30 ft. W. of Meta-Tavern rd. (now State Highway 113) at rd. SE. to Vienna, in concrete post; standard tablet stamped "T T 138 B 1932"
Reference mark, 33 ft . N. and 7 ft . W. from rd. forks, in root on $E$. side of 8-in. oak tree; copper nail and washer
(Continued in Tavern quadrangle; see line 2.)

## 3. FROM SEC. 36, T. 41 N., R. 11 W., NORTHEAST THROUGH KOELTZTOWN TO WESTPHALIA (by L. V. Johnson in 1932)

T. 41 N., R. 10 W., in NW $1 / 4$ sec. $31,6 \mathrm{ml}$. SW. of Argyle, on top of divide between Sugar Creek and Littie Maries Creek, 20 ft . N. and 10 ft. W. from Meta-Vienna rd. at crossroad; in concrete post; standard tablet. stamped "T T 137 B 1932"
940.500

Reference mark, 10 ft . N. and 12 ft . E. from crossroad, in root on NW. side of $10-1 \mathrm{n}$. oak tree; copper nail and washer
T. 41 N., R. 10 W., in NW $1 / 4$ sec. 30 , 10 ft. S. of dim rd. fork sW., in root on $N$. side of triangular-blazed 12-in. oak tree; copper nail and washer
Koeltztown, 2.5 mi . W. of, along Meta rd., thence 4.4 .mi. S. from, 10 ft . N. and 30 ft . E. from dim rd. fork E., in root on SE. side of trian-gular-blazed 12-in. oak tree; copper nail and washer
Koeltztown, 2.5 mi . W. of, along Meta rd., thence 3.4 mi . S. from, 18 ft . S. and 20 ft . E. from rd. fork SE., 13 ft . SE. of NW. corner of triangle, in root on S. side of $3-1 n$. oak tree; copper nail and washer
Koeltztown, 2.5 mi . W. of, along Meta ra., thence 2.4 ml . S. from, 35 ft . W. of junction of private rd. to farmhouse of oliver Helton, in concrete post; standard tablet stamped "T T 136 B 1932"
Koeltztown, 2.5 mi . W. of, along Meta rd., thence 1.8 ml . S. from, near center sec. 18, T. 41 N., R. 10 W., $37 \mathrm{ft} . \mathrm{S}$ and 12 ft . W. from N. -S. ra. at private rd. SE., in root on N. side of triangular-blazed 12-1n. oak tree; copper nail and washer
Koeltztown, 2.5 mi . W. of, along Meta rd., thence $0.9 \mathrm{mi} . \mathrm{S}$. from, in SW . cor. sec. 7, T. 41 N., R. $10 \mathrm{~W} ., 18 \mathrm{ft}$. N. and 15 ft . W. from dim crossroads, in root on SE. side of 8-in. oak tree; copper nail and washer
Koeltztown, 2.4 mi . W. of, along Neta rd., in SW. 1/4 sec. 6, T. $41 \mathrm{~N} .$, R. 10 W., $30 \mathrm{ft} . \mathrm{N}$. and 50 ft . W. from crossroad, 20 ft . N. of rd., in concrete post; standard tablet stamped "T T 135 B 1932"
Reference mark, 18 ft . W. of tablet, in root on N. side of 10-in. oak tree; copper nall and washer
Koeltztown, 1.9 ml . W. of, along Meta rd., 28 ft . S. and 75 ft . E. from junction of private rd. S. to dwelling of Allen Curtiss, in root on N. side of $24-1 n$. oak tree; copper nail and washer

Koeltztown, 0.9 mi . W. of, along Meta rd., 15 ft . S . and 90 ft . E. from junction of rd. S., 100 ft . SE. of gate to pasture, in fence line, in root on SW. side of 10-1n. oak tree; copper nall and washer
Koeltztown, 74 ft . N. and 39 ft . E. from T-rd. W., $31 \mathrm{ft} . \mathrm{S}$. and 9 ft . E. from SW. corner post of fence around Catholic Parsonage, in concrete post; standard tablet stamped " 4 J 1932"
Reference mark, at $S W$. corner of parsonage, on SW. corner of concrete walk; chiseled square

Koeltztown, 0.7 ml . N. of, along rd. to Westphalia, $28 \mathrm{ft} . \mathrm{N}$. and 30 ft . E. from center of triangle formed by rd. forks, in root on $S$. side of 18-1n. oak tree; copper nail and washer
Koeltztown, $1.7 \mathrm{mi} . \mathrm{N}$. of, along rd. to Westphalia, $18 \mathrm{ft} . \mathrm{S}$. and 25 ft . W. from junction of private rd. E., at fence corner, in root on N. side of 18-in. oak tree; copper nail and washer
Koeltztown, 2.9 mi . N. of, along rd. to Westphalia, 4 ft . N. and 25 ft. W. from rd. fork W., $2 \mathrm{ft} . \mathrm{N}$. of telephone pole, in concrete post; standard tablet stamped "5 J 1932"
Reference mark, 50 ft . N. and 20 ft . W. from rd. forks, in root on $W$. side of small oak tree; copper nail and washer
Koeltztown, $3.8 \mathrm{mi} . \mathrm{N}$. of, along rd. to Westphalia, 115 ft . E. of rd. fork SW., 17 ft . N. of rd., in root on S. side of $18-1 \mathrm{n}$. oak tree; copper nail and washer
Koeltztown, 5 mi . N. of, along rd. to Westphalia, $27 \mathrm{ft} . \mathrm{N}$. and 55 ft . E. from rd. fork E., in root on W. side of triangular-blazed 18-1n. oak tree; copper nail and washer
Koeltztown, 5.7 mi . N. of, along rd. to Westphalia, $22 \mathrm{ft} . \mathrm{N}$. and 18 ft. W. from rd. fork N., 37 ft . S. of mail box of John Radmacher, 3 ft . S. and 24 ft. E. from triangular-blazed 15-in. oak tree, in concrete post; standard tablet stamped "6 J 1932"
Reference maris, 25 ft . N. and 40 ft . W. from rd. fork W., in root on E. side of triangular-blazed 15-in. oak tree; copper nail and washer
Westphalia, 4.6 ml . SW. of, along rd. to Koeltztown, $18 \mathrm{ft} . \mathrm{S}$, and 18 ft. W. from private rd, fork SE. through gate, 33 ft . S. of mail box of C. P. Henke, in root on S. side of twin 8-in. oak tree; copper nail and washer
Westphalia, 3.7 mi . SW. of, along rd. to Koeltztown, 20 ft . E. of rd. fork E., 5 ft . E. of mail box of Herm Wekenborg, in root on W. side of $15-1 \mathrm{n}$. oak tree; copper nail and washer
Westphalia, $2.5 \mathrm{mi} . \mathrm{SW}$. of, along rd. to Koeltztown, 25 ft . S. and 8 ft . W. from rd. fork S., 31 ft . S. and 12 ft . E. from mail box of John Fennewald, inside fence, in concrete post; standard tablet stamped "7 J 1932 "
Reference mark, 33 ft . NW. of tablet, in root on E. side of 22-in. oak tree; copper nail and washer
Westphalia, 1.6 mi . SW. of, along rd. to Koeltztown, on E. slope of large hill, 35 ft . E. of rd. fork SE.; 50 ft . NE. of mail box of George Luebbert, in root on NW. side of 20-1n. oak tree; copper nail and washer Westphalia, 0.8 mi . W. of junction of U.S. Highway 63 and rd. to Koeltztow, at top of hill, $35 \mathrm{ft} . \mathrm{N}$. and 45 ft . E. from rd. at wooden gate to pasture, 20 ft . E. of rd., in root on W. side of triangularblazed 18-1n. oak tree; copper nail and washer

## 4. FROM POINT 2.4 MILES WEST OF KOELTZTOWN NORTHWEST TO ST. THOMAS, THENOE SOUTH TO SEC. 35, T. 42 N., R. 12 W. (by 0. F. Hodgdon in 1934)

T. 41 N., Ks. 10 and 11 W., 572 ft . S. and 221 ft . E. from N. cor. secs. 1 and 6, 29 ft . NE. of Folk rd., 80 ft . N. of transmission line, in root on W. side of 18-in. white-oak tree; copper nail and washer
Kennedy triangulation sta.; U.S.C. \& G.S. standard disk designated "Kennedy 1879"
N. reference mark; U.S.C. \& G.S. standard reference disk S. reference mark; U.S.C. \& G.S. standard reference disk

Reference mark, 49 ft . SW. of sta., in root on W . side of 18-in. post-oak tree; copper nall and washer
T. 41 N., R. 11 W., in $N W 1 / 4$ sec. $12,60 \mathrm{ft}$. S. of rd. to Meta, in root of 14 -in. hickory tree; copper nail and washer
T. 41 N., R. 11 W., 88 ft . N. and 200 ft . W. from S. sixteenth cor. sec. 2, 34 ft . N. of rd. to Meta, in root on SW. side of $15-1 \mathrm{n}$. white-oak tree; copper nail and washor
T. 42 N., R. II W., in SE $1 / 4 \mathrm{sec} .34,20 \mathrm{ft}$. W. of rd. to Meta, in root on N. side of 16-in. post-oak tree; copper nail and washer
Babbtown, 375 ft . N. and 183 ft . E. from S. sixteenth cor. between secs. 33 and 34, T. 42 N., R. 11 W., 26 ft . SW. of SW . corner of schoolhouse, 110 ft . SW . of SW . corner of cemetery, 18 ft . N. of rd., in concrete post; standard tablet stamped "50 C W A 1934"
Reference mark, 18 ft . NE. of tablet, in root on SW. side of $24-\mathrm{in}$. post-oak tree; copper nail and washer
T. 42 N., R. 11 W., 323 ft . N. of E. sixteenth cor. sec. 33 , $\mathrm{l}_{4} \mathrm{ft}$. E. of County Route $M$ (now State Highway 133), on NW. corner of E. parapet wall of concrete culvert; chiseled square
Missouri River Commission tablet stamped "U.S. Missouri River Commission 1926"
T. 42 N., R. 11 W., in $S W 1 / 4$ sec. $28,75 \mathrm{ft} . \mathrm{N}$. of rd. to St. Thomas, in root on S. side of ll-in. post-oak tree; copper nail and washer
T. 42 N., R. 11 W., near quarter cor. between secs. 29 and 30, 25 ft . N. of rd. to St. Thomas, 75 ft . E. of W. fork of Williams ferry rd., 25 ft . S. of N . fork of Williams ferry rd., in root on SE. side of $2_{4}-i n$. white-oak tree; copper nail and washer
T. 42 N., R. 11 W., 258 ft . S. and 68 ft . E. from NW. cor. sec. 30 , near Cole-Osage county line, 30 ft . N. of rd. to St . Thomas, 60 ft . E. of 30-in. White-oak tree, in root on SE. side of 12-1n. white-oak tree; copper nall and washer
St. Thomas, about 0.4 mi . E. of, along rd. to Meta, in SW $1 / 4 \mathrm{sec} .24$, T. 42 N., R. $12 \mathrm{~W} .$, opposite farmhouse, 10 ft . S. of rd., in concrete post; standard tablet stamped "49 C W A 1934 "
447.027

Fe日t
891.751
892.76

St. Thomas, in SE $1 / 4$ sec. $23, \mathrm{~T} .42 \mathrm{~N} ., \mathrm{R} .12 \mathrm{~W} ., 20 \mathrm{ft}$. S. and 36 ft . E. from entrance to St. Thomas Catholic Church, in chiseled circle on concrete foundation of iron fence; chiseled square corner of sidewalk; chiseled square
T. 42 N., R. 12 W., near N. sixteenth cor. between secs. 35 and 36, 105 ft . N. $50^{\circ} \mathrm{E}$. of Junction of St. Thomas, Loethen Ferry, and Meta rds., in root on S. side of 15-in. hickory tree; copper nail and washer
T. 42 N., R. 12 W. , in $\mathrm{SW} 1 / 4 \mathrm{sec} .35$, on E. bank of Osage River, 15 ft . SE. of junction of St. Thomas, Loethen Ferry, and Morff's Ferry rds., in root on NW. side of 22-in. ash tree; copper nail and washer
T. 42 N., R. 12 W., in SW $1 / 4$ sec. $35,200 \mathrm{ft}$. S. of Morff's Ferry rd., 7 ft . W. of Loethen Ferry-St. Thomas rd., on NW. corner of concrete slab culvert; chisered square
T. 42 N., R. 12 W., in $\mathrm{SW} 1 / 4 \mathrm{sec} .35,2.5 \mathrm{mi}$. S. of St. Thomas, 0.3 ml . below Sugar Creek, on W. bank of Osage River, at Morff's Ferry landing, $2 \mathrm{~L}_{4} \mathrm{ft}$. S. and 42 ft . W. from SW. corner of pecorder house, ilf ft. S. and 3 ft . E. from 18-in. box-elder tree, in ooncrete post; standard tablet (set by water-resources branch of U.S.Geol. Surver)
757.24

## 5. FROM ST. THOMAS NORTH INTO EUGENE QUADRANGLE AT SEC. 16, T. 43 N., R. 12 W. (by O. F. Hodgdon in 1934)

St. Thomas, 0.5 mi . NW. of Gatholic Church, 8 ft . W. of Jefferson OitySt. Thomas rd., on top of W. partition wall of concrete culvert; chiseled square
St. Thomas, 1.6 mi . NW. of, along Jefferson City-St. Thomas rd., near W. sixteenth cor. sec. IL, T. 42 N., R. $12 \mathrm{~W} ., 20 \mathrm{ft}$. SW. of rd., in root on E. side of 16-1n. red-oak tree; copper nail and washer
St. Thomas, 2 mi. NW. of, along Jefferson City-St. Thomas rd., near W. sixteenth cor. between secs. 11 and $\mathrm{l}_{4}, \mathrm{~T} .42 \mathrm{~N} ., \mathrm{R} .12 \mathrm{~W} ., 25 \mathrm{ft} . \mathrm{W}$. of rd., in root of $8-1 n$. walnut tree; nail and washer
St. Thomas, 2.2 mj . N. of, along Jefferson City-St. Thomas rd., near center of $\mathrm{SW} 1 / 4 \mathrm{sec} .11, \mathrm{~T} .42 \mathrm{~N} ., \mathrm{R} .12 \mathrm{~W} ., 600 \mathrm{ft} . \mathrm{S}$. of T-rd. to school, 20 ft . W. of rd., 3 ft . W. of $\mathrm{l}_{4}$-in. walnut trese, in fence corner, in concrete post; standard tablet stamped "48 C W A 1934"
Reference mark, 60 ft . N. of tablet, in root on NE. side of $44-1 \mathrm{n}$. postoak tree; copper nail and washer
St. Thomas, 3.4 ml . NW. of, along Jefferson City-St. Thomas rd., 75 ft . E. of rd. forks, in root on $N$. side of 22-in. post-oak tree; copper nail and washer
St. Thomas, 4.3 mi . N. of, along Jefferson City-St. Thomas rd., 130 ft . S. of Osage River, 10 ft . W. of rd., in chiseled circle on concrete foundation of ferry tower; chiseled square
T. 43 N., R. 12 W., in NE $1 / 4$ sec. $35,0.2 \mathrm{mf}. \mathrm{S} .\mathrm{of} \mathrm{Osage} \mathrm{Bluff}$, of E. C. Brenner, 200 ft . E. of County Route B, in N. corner of small orchard, in concrete post; standard tablet stamped "47 C W A 1934"
Reference mark 155 ft . SW. of tablet, in root on S. side of 24-1n. maple tree; copper nail and washer
Osage Bluff, 0.9 ml . N. of, along County Route B, on line between secs. 23 and 26, T. 43 N., R. 12 W., 40 ft . W. of highway, in root on NE. side of $28-1$. post-oak tree; copper nail and washer
Osage Bluff, 1.9 mi . NW. of, along Honey Creek rd., $170 \mathrm{ft}$. . and 330 ft . W. from junction of Henley rd., in root on N. side of 22-in. hickory tree; copper nail and washer
in NW $1 / 4$ sec: 22, near junction of Tannar Bridge and Honey Greek rdse, 500 ft . E. of dwelling of H. A. Korsmeyer, in SW . corner of orchard, in concrete post; standard tablet. stamped "46 C W A 1934"
Reference mark, $70 \mathrm{ft} . \mathrm{S}$. and 20 ft . W. from tablet, in root on SE. side of 12-in. post-oak tree; copper nail and washer
(Continued in Eugene quadrangle; see line 5.)

## 6. FROM WESTPHALIA SOUTHWEST ALONG COUNTY ROUTE M (now State Highwey

 133) TO META (by F. Y. Brown in 1936)Westphalia, 1 mi . N. of, 115 ft . S. of junction of U.S. Highway 63, in root on NW. side of $6-1 n$. white-oak tree; copper nail and washer
T. 43 N., R. 10 W., in $S W 1 / 4$ sec. $22,160 \mathrm{ft}$. W. of rd. junction, in root on S. side of $14-1 n$. hickory tree; crossed nails
Westphalia, 1 mi . W. of, 90 ft . S. and 10 ft . E. from junction of rd. NE., 50 ft . E. of highway, in root on W. side of 20-in. black-oak tree; copper nail and washer
Junction of rd. W. at curve, 24 ft . S. of, in E. side of 14-in. black-oak tree; orossed nalls
unction of rd. W., $240 \mathrm{ft} . \mathrm{S}$. and 180 ft . W. ffom, 35 ft . E. of highway, in root on E. side of l2-in. black-oak tree; crossed nails
Large barn, 600 ft . N. and 150 ft . E. from, 50 ft . E. of highway, in root on W. side of $30-1$. white-oak trees copper nail and washer
Gate, in N. -S. fence ilne, 50 ft . W. of, 40 ft . S. of highway, in root on N. side of 12-in. White-oak tree; crossed nails
estphalia, 3.6 mi. SW. of, in NW $1 / 4$ sec. 32, T. 43 N., R. 10 W., 105 ft. S. and 10 ft . W. from junction of private rd. SE., 5 ft . W. of painted black-oak tree in fence line, in concrete post; standard tablet stamped "T T 40 J J 1936 "
Reference mark l, 5 ft . E. of tablet, in root on N. side of tree; copper nall and washer

Reference mark 2, 175 ft . W. of tablet, in fence line, in root on N . side of $14-1 n$. black-oak tree; copper nail and washer
Junction of wood trail N. at curve, 110 ft . W. of, 40 ft . N. of highway, in root on S. side of twin 8-in. black-oak tree; crossed nails
Junction of private rd. S. to farm of Joe Fechtel, 75 ft . S. of, at gatepost; surface of ground
T. 43 N., R. 10 W., in sec. $31,270 \mathrm{ft}$. E. of junction of rd. N. at curve, in fence line, in root on N. side of 22-in. white-oak tree; copper nail and washer
Filling sta., 35 ft . E. of highway, on concrete base between gasoline pumps; painted square
Junction of rds. S., 45 ft . S. and $2_{4} \mathrm{ft}$. W. from, in corner of field, in root on N. side of 16-in. white-oak tree; copper nail and washer
T. 42 N., R. 11 W., in $\mathrm{NW} 1 / 4$ sec. 1 , about 0.2 mi . SW. of Folk, $80 \mathrm{ft} . \mathrm{N}$. and 3 ft . E. from junction of rd. NW., in concrete post; standard tablet stamped "T T 41 J J 1936"
Reference mark $1,6 \mathrm{ft}$. N. and 15 ft . E. from tablet, in root on N . side of 8-1n. white-oak tree; copper nail and washer
Reference mark 2, $80 \mathrm{ft} . \mathrm{S}$. and 20 ft . W. from tablet, in root on E. side of 20-in. black-oak tree; copper nail and washer
Painted Rock Club, 10 ft . SE. of N. entrance to, 45 ft . W. of highway, in fence line, in root on E. side of $10-1 \mathrm{n}$. whiteooak tree; crossed nails
Painted Rock Club, 12 ft . N. of main entrance gate, 60 ft . W. of highway, in fence line, in root on E. side of 20-in. black-oak tree; copper nail and washer
Junction of rd. E., 50 ft . S. and 50 ft . E. from, at entrance to picnic. grounds on farm of P. Heckman, in root on E. side of 14-1n. black-oak tree; crossed nails
Junction of wood trail S. at curve, 60 ft . W. of, in fence line, in root on E. side of $14-i n$. white-oak tree; crossed nails
Junction of rd. E., 40 ft . E. of highway, 6 ft . S. of rd., in root on W. side of $14-1 n$. white-oak tree; copper nail and washer
Babbtown, 3.8 mi . NE. of, in SW $1 / 4 \mathrm{sec}$. IH, T. $42 \mathrm{~N} ., \mathrm{R}$. $11 \mathrm{~W} ., 60 \mathrm{ft}$. S. and 35 ft . W. from junction of rd. S., in concrete post; standard tablet stamped "T T 42 J J 1936 "
Reference mark, 150 ft . N. of tablet, in root on E . side of 20-1n. blackoak tree; copper nall and washer
Junction of rd. NW., 300 ft . S. of, 40 ft . E. of highway at top of hill, in field, in root on SE. side of l6-in. walnut tree; crossed nails
Junction of rd. E., 40 ft . N. and 20 ft . W. from, 40 ft . N. of gate to field, 3 ft. E. of fence line, in root on $W$. side of $16-1 n$. white-oak tree; copper nail and washer
Top of hill $S$. of farm of C. A. Schoenen, 45 ft . E. of highway, in fence ine, in root on w. side of 12-in. white-oak tree; crossed nails
Fence corner, 20 ft . W. of, 35 ft . N. of highway, near right-of-way post, in root on S. side of 14-in. white-oak tree; copper nail and washer
Gate at junction of lane N., 10 ft . E. of, 65 ft . N. of highway, in fence ilne, in root on S. side of $16-1 n$. white-oak tree; crossed nails
Babbtown, 1 mi . NW. of, $40 \mathrm{ft} . \mathrm{s}$. of highway at top of hill, $10 \mathrm{ft} . \mathrm{s}$. of fence line, in root on N. side of lo-in. hickory tree; copper nail and washer
Babbtown, 0.3 mi . W. of, $24 \mathrm{ft} . \mathrm{N}$. and 15 ft . E. from junction of rd. E., on NW. corner of $E$. head wall of concrete culvert; painted square
Barnyard of F. A. Otke, 200 ft . E. of highway, at NE. corner of barn, on top of $N$. end of concrete well top; painted square
Meta, 1.8 mi . N. of, 45 ft . S. and 60 ft . E. from junction of rd. E., in fence line, in root on S. side of 30-in. white-oak tree; copper nail and washer
Junction of rd. W., 100 ft . S. and 40 ft . E. from, in root on W. side of 20-1n. black-oak tree; crossed nails
Meta, l.l mi. N. of, 300 ft . N. of dwelling of Joe Schensneyer, 25 ft . E. of junction of private rd. NE., in root on E. side of 22-in. white-oak tree; copper nail and washer
Gate to farm of Henry Parker, 20 ft . S. and 10 ft . E. from, in root on s . side of $36-1 \mathrm{n}$. black-oak tree; crossed nalls
Meta, 0.5 ml . N. of, at junction of rd. W., on concrete between gasoline pumps; chiseled square
U.S.C. \& G.S. standard disk stamped "W 98 1935"

## 7. FROM NEW BLOOIAFIELD QUADRANGLE AT SEC. 1, T. 43 N., R. 11 W., WEST TO WARDSVILLE, THENCE SOUTHWEST ALONG COUNTY ROUTE B ABOUT 4 MILES (by F. Y. Brown in 1936) <br> (Continued from New Bloomfleld quadrangle; see line 7.)

T. 43 N., R. 11 W., in NW $1 / 4$ sec. $12,8 \mathrm{ft}$. N. and 45 ft . W. from crossroads, in fence corner, in concrete post; standard tablet stamped "T T 37 J J 1936"
Cedar Grove School, near front porch of, 20 ft . S. of rd., in root on $E$. side of 12-1n. hickory tree; crossed nails
Taos, 2.6 mi . SW. of, 15 ft . N. of T-rd. S., 450 ft . E. of T-rd. NW., in root on W. side of 14 -in. pine tree; copper nail and washer
Taos, 3.2 ml . SW. of, 18 ft . N. and 8 ft . E. from wood trail N., in crotch of twin 10-in. black-oak tree; copper nail and washer
Wardsville, 2.5 mi . E. of, 25 ft . S. and 60 ft . E. from T-rd. SE., in fence corner, in root on N. side of 16-in. white-oak tree; copper nail and washer
Nardsville, 2 mi . E. of, 110 ft . W. of private rd. N., $20 \mathrm{ft} . \mathrm{N}$. of rd., in fence line, in root on N. side of $10-1 n$. hickory tree; crossed nails
817.793

Feet 779.40
774.65
791.8
800.39
826.83
820.18
843.430
842.09
841.07
825.58
831.36
883.81
864.28
848.16
861.847
853.60
808.43
802.65
781.54
830.26
843.98
894.88
842.50
930.71
930.09
867.41
859.77
767.60
703.10
610.084
T. 43 N., R. 11 W., near center sec. $9,20 \mathrm{ft}$. S. and 12 ft . W. from T-lane S., in concrete post; standard tablet stamped "T T. 38 J J 1936"
Rd . fork S., in center of traingle, 25 ft . S. of rd., in root on S . side of $\mathrm{l}_{4}$-in. white-oak tree; crossed nails
799.066

Wardsville, 1.2 mi . E. of, 85 ft . N. and 30 ft . W. from T-rd. N., in root on N. side of Il4-in. white-oak tree; copper nail and washer
T-rd. S., 15 ft . S. and 15 ft . E. from, in fence corner, in root on N . side of 20-in. elm tree; crossed nails
Wardsville, 1 mi . E. of, $45 \mathrm{ft} . \mathrm{S}$. and 15 ft . W. from Tra. S., in root on N. side of lo-in. black-walnut tree; copper nail and washer
T-rd. W., 140 ft . S. of, 20 ft . E. of rd., in fence corner, in root on E. side of 26-in. white-oak tree; crossed nails
Wardsville, $120 \mathrm{ft} . \mathrm{S}$. of County Route $\mathrm{B}, 60 \mathrm{ft}$. N. of crossroads, 25 ft . W. of rd., in root on W. side of 20-1n. maple tree; copper nail and washer
Concrete culvert, on $E$. end of S. head wall; chiseled square
T-rd. S., 25 ft . N. and 70 ft . W. from, 6 ft . S. of fence line, in root on E. side of $36-1 n$. white-oak tree; crossed nails
Wardsville, 1.1 ml . W. of, 45 ft . S. of highway at curve, 240 ft . E. of NE. corner of barn, in root on N. side of $\mu_{4}-1 n$. hickory tree; copper nail and washer
Wardsville, 1.7 mi . W. of, $40 \mathrm{ft} . \mathrm{N}$. and 10 ft . W. from junction of rd. NW., in concrete post; standard tablet stamped "T T $39 \mathrm{~J} \mathrm{~J} 1936^{\circ}$
Junction of lane to farmhouse of L. Frank, 40 ft . N. and 40 ft . W. from, in fence line, in root on S. side of $30-1 \mathrm{n}$. white-oak tree; crossed nails
Wardsville, 3.3 ml . W. of, 15 ft . E. of highway, on S. ond of E. head wall of concrete culvert; chiseled square
Wardsville, 3.8 mi . W. of , 500 ft . NE. of blacksmith shop of A. Engelbrecht, 18 ft . E. of highway, on N. end of E. head wall of concrete culvert; chiseled square
Junction of rd. W., 450 ft . S. and 150 ft . (?) from, 60 ft . N. of junction of rd. E., 35 ft . W. of highway, in root on N. side of 14-1n. white-oak tree; nall

For additional level lines along U.S. Highway 63 and Chicago, Rock Island \& Pacific Ry., refer to United States Coast and Geodetic Survey first-order line, Cabool to Osage City; and second-order line, Eldon to Labadie.

## TAVERN QUADRANGLE

(Latitude $38^{\circ} 00^{\prime}-38^{\circ} 15^{\prime}$; longitude $92^{\circ} 00^{\prime}-92^{\circ} 15^{\prime}$ )
Maries, Miller, Phelps, and Pulaski Counties


1. FROM RICHLAND QUADRANGLE AT SEC. 33 , T. 38 N., R. 12 W., EAST BY WAY OF HANCOCK AND HELM TO DIXON (in Weynesville quadrangle; by W. R. Broaddus in 1925)*
Crocker, 2.7 mi . N., thence 1.2 mi . E. from, along rd. to Hencock, in NE ' $1 / 4$ sec. $33, \mathrm{~T}$. 38 N., R. $12 \mathrm{~W} ., 100 \mathrm{ft}$. NE. of two-story dwelling, 15 ft . N. of rd., in root on S. side of 14-in. oak tree; copper nail and washer
Hancock, 3.6 mi . W. of, 0.2 mi . E. of center sec. 27 , T. 38 N., R. 12 W., N. of creek, 23 ft . S. and 5 ft . E. from rd. forks, in root on S. side of 9-1n. white-oak tree; copper nail and washer
Hancock, 3 mi . W. of, about 0.3 mf . W. of center sec. 26, T. 38 N.,
R. $12 \mathrm{~W} ., 0.4 \mathrm{mi}$. E. of creek, 620 ft . W. of T-rd. N. on top of hill,
on W. slope of hill, 13 ft . N. of rd., 3 ft . from fence, in top of
limestone ledge; standard tablet stamped "19 B $1925 \mathrm{Mo}^{\prime \prime}$
[^3]Reference mark, 110 ft . N. $60^{\circ} \mathrm{E}$. of tablet, in root on S . side of $1 \mathrm{l}_{4}-\mathrm{in}$. post-oak tree; copper nail and washer

Feet
986.37
933.44

1,035.38

1,041.81

1,108.927
$1,113.20$
1,215.88
$1,216.62$

1,194.665
1,194.18
$1,199.55$
1,196.38

1,175.409
1,179.97
$1,189.8$
922.65
925.62
850.293
(For balance in Meta quadrangle, see line 2.)
T. 41 N., R. $10 \mathrm{~W} .$, in $\mathrm{SE} 1 / 4$ sec. $33,3.3 \mathrm{mi}$. S. of Argyle, 40 ft . N. and 10 ft . E. from rd. forks, in fence ine, in root on SE. side of 10-1n. hickory tree; copper nail and washer
753.78
T. $40 \mathrm{~N} ., \mathrm{R} .10 \mathrm{~W} .$, in $\mathrm{NE} 1 / 4 \mathrm{sec}$. $5,4.4 \mathrm{mi}$. SW. of Argyle, 75 ft . N. and 20 ft . E. from private rd. fork NW. to dwelling of Frank Bode, 95 ft . NE. of mail box, in fence line, in root on SE. side of $18-1 \mathrm{n}$. walnut tree; copper nail and washer
744.55
T. 40 N., R. $10 \mathrm{~W} .$, in $\mathrm{SW} 1 / 4 \mathrm{sec} .5,5.5 \mathrm{mi}$. SW. of Argyle along Little Maries rd., 34 ft . S. and 60 ft . E. from rd. fork $\mathrm{SE} ., 15 \mathrm{ft}$. N. and 12 ft. E. from fence corner, in concrete post; standard tablet stamped "3 J 1932"
Reference mark, 100 ft . E. of rd. forks, S. of rd., in root on w. side of 30-1n. oak tree; copper nall and washer
744.620
742.99
T. 41 N., R. 10 W., in $S W 1 / 4$ sec. 31, on Meta-Vienna rd., 200 ft . NW. of dim rd. fork E. to field, 15 ft . E. of rd., in root on NW. side of triangular-blazed 12-1n. oak tree; copper nail and washer
806.15

## (For balance in Meta quadrangle, see line 2.)

Van Cleve, 2 mi . NE. of, along ra. to Meta (now State Highway 133), 8 ft. S. and 22 ft . W. from rd. in front of dwelling of A. h. Barnhart, 3 ft . S. of SE. corner of garage, in root on N. side of 12-in. locust tree; copper nail and washer
817.28

Van Cleve, 0.9 mi . N. of, along rd. to Meta (now State Highway 133), 75 ft . N. and 12 ft . E. from junction of rd. N., in root on SE. side of $22_{4-1 n}$. oak tree; copper nail and washer
Van Cleve, 12 ft . S. and 80 ft . W. from junction of rd. W., in root on NW. side of 20-in. oak tree; copper nail and washer
768.81
T. 40 N., R. 11 W., cor. secs. 5, 6, 7, and 8, 21 ft . N. and 13 ft . W. from stone at rd. corner W.-NE., in concrete post; standard tablet stamped "T T 139 B 1932"

Reference mark, 50 ft . NE. of tablet, in root on w. side of 18-in. oak tree; copper nail and washer
T. 40 N., R. 11 W., 30 ft . N. of W. cor. secs. 6 and 7 , on Maries-Miller county line, at $S$. gatepost, in root on NW. side of $24-1 n$. oak tree; copper nail and washer
T. 40 N., R. 12 W., near W. sixteenth cor. between secs. 1 and 12 , about 600 ft . N. of rd. forks, $55 \mathrm{ft} . \mathrm{S}$. and 70 ft . E. from rd. at fence E., in ropt on $W$. side of triangular-blazed 15-in. oak tree; copper nall and washer
St. Ellzabeth; 3.3 mi. E. of, about 0.2 ml . W. of NE. cor. sec. 2, T. 40 N., R. 12 W., 40 ft. S. and 20 ft . W. from crossroads, in concrete post; standard tablet stamped "T T 140 B 1932"
Reference mark, 16 ft . N. and 20 ft . E. from crossroads, in root on W. side of l2-1n. hickory tree; copper nail and washer
St. Elizabeth, 2.6 ml . E. of, near cor. secs. $2,3,34$, and 35 , Tps. 40 and $41 \mathrm{~N} ., \mathrm{R} .12 \mathrm{~W} ., 10 \mathrm{ft}$. S. of rd. at curve to SW., at S. corner of jog in E.-W. fence line, in root on N. side of l2-in. oak tree; copper nail and washer
752.22
581.03
bridge over creek, in root on SW. side of $15-1 \mathrm{n}$. walnut tree; copper nail and washer
(Continued in Eugene quadrangle; see line 1.)

$$
\text { 3. FROM SEC. 12, T. } 40 \text { N., R. } 12 \mathrm{~W} ., \text { SOUTH INTO IBERIA QUADRANGLE }
$$ AT SEC. 33, T. 39 N., R. 12 W. (by L. V. Johnson in 1932)

T. 40 N., R. 12 W., in $S E 1 / 4$ sec. 12, 250 ft . S. of T-rd. E., 22 ft . W. of rd., in line with N. face of dwelling of Theodore Bax, 3 ft . E.
of barn, in concrete post; standard tablet stamped "T T 187 B 1932"
804.922
T. 40 N., R. 12 W. , in $\mathrm{SW} 1 / 4$ sec. 13 , 180 ft . S. of rd. fork NE. to stone farmhouse, $270 \mathrm{ft} . \mathrm{N}$. of mail box, 40 ft . S. of ford across small creek, 15 ft . E. of rd. in line with dim rd. W. to field, in root on $W$. side of 15-in. hickory tree; copper nail and washer
642.81
T. $40 \mathrm{~N} ., \mathrm{R} .12 \mathrm{~W} .$, near center sec. $24,0.2 \mathrm{mi}$. S. of farmhouse of H. E. Farlis, on $N$. slope of hill, 40 ft . N. of rd. corner, in fence line, in root on NE. side of triangular-blazed 15-in. oak tree; copper nail and washer
774.97
T. 40 N., R. 12 W., near center sec. $25,10 \mathrm{ft}$. $S$, and 50 ft . E. from SE. corner of dwelling of Joe Dake, 22 ft . N. and 18 ft . W. from T-rd. E., in root on E. side of twin oak tree; copper nail and washer
T. 40 N., R. 12 W., in NE $1 / 4 \mathrm{sec} .36,85 \mathrm{ft}$. N. and 25 ft . E. from T-rd. N., 63 ft . S. and 30 ft . W. from SW. corner of dwelling of W. M. Duncan, in concrete post; standard tablet stamped "T T 186 B 1932"
797.154

Reference mark, 35 ft . N. and 15 ft . E. from T-rd. N., in root on w. side of $24-1$ n. oak tree; copper nail and washer
794.77
T. 39 N., R. 12 W., in NE $1 / 4$ sec. 2, 15 ft . S. and 60 ft . E. from SE. corner of dwelling of Ed Pelden (Pelten ?), 35 ft . W. of rd., in root on E. side of 15-in. walmut tree; copper nail and washer
774.71
T. 39 N., R. 12 W., about 0.8 mi . S. of N. cor. secs. 1 and $2,110 \mathrm{ft}$. N. of rd. fork E., 30 ft . N. and 10 ft . E. from rd. fork W., in concrete post; standard tablet stamped "T T 185 B 1932"
Reference mark, 12 ft . N. of tablet, in root on NW. side of elm tree; copper nail and washer
T. $39 \mathrm{~N} ., \mathrm{R}$. 12 W. , in $\mathrm{SE} 1 / 4 \mathrm{sec}$. 2, about 400 ft . SW. of ford, 60 ft . E. of rd. forks, 1 ft . N. of fence line, in root on $N$. side of tri-angular-blazed $10-1 n$. oak trees copper nail and washer
T. 39 N., R. 12 W., near quarter cor. between secs. 1 and 2, $20 \mathrm{ft} . \mathrm{S}$. and 35 ft . W. from rd. fork $\mathrm{SW} .$, about 80 ft . NW. of farmhouse, 12 ft . S. and 35 ft . E. from mail box, in root on SW. side of 18-in. oak tree; copper nail and washer
867.40
T. $39 N_{0}, R .12$ W., near quarter cor. between secs. 12 and $13,13 \mathrm{ft} . \mathrm{S}$. and $23^{\prime} \mathrm{ft}$. E. from rd. fork E., in root on NW. side of triangularblazed 2l4-1n. oak tree; copper nall and washer
T. 39 N., R. 12 w., about 680 ft . E. of quarter cor. between secs. 13 and $80^{\prime} \mathrm{ft} . \mathrm{ft}$. N. and 30 ft . E. from NE. corner of Mount Gilead Church, 80 ft . W. of rd. forks, 20 ft . N. of rd., in concrete post; standard tablet stamped "T T 184 B 1932"
Reference mark, 8 ft . NE. of NE. corner of church, in root on SE. side of 15-in. hickory tree; copper nail and washer
T. 39 N., R. 12 W., in $S E 1 / 4$ sec. $23,20 \mathrm{ft}$. S. and 65 ft . W. from W. point of triangle formed by rd. forks, 10 ft . N. of rd., in root on SW. side of triangular-blazed 10-in. oak tree; copper nail and washer
T. 39 N., R. 12 W., in NE $1 / 4 \mathrm{sec} .26,20 \mathrm{ft}$. N. and 18 ft . W. from N. point of triangle formed by rd. fork NW., in root on S. side of 28-in. oak tree; copper nail and washer
T. 39 N, , R. $12 \mathrm{~W} .$, in NW $1 / 4$ sec. $35,20 \mathrm{ft}$. N. of rd., 52 ft . E. of E. corner of dwelling of Dewey Thompson, in concrete post; standard tablet stamped "T T 183 B 1932"
T. 39 N., R. 12 W., in NW $1 / 4$ sec. $34,25 \mathrm{ft}$. S. and 20 ft . W. from rd. in front of dwelling of Mrs. Joel Alwell, 12 ft . NW. of N. gatepost to pasture, 2 ft . W. of fence line, in root on E. side of $12-1 \mathrm{n}$. oak tree; copper nail and washer
Iberia, 3.7 mi . SE. of, near center sec. 33 , T. $39 \mathrm{~N} ., \mathrm{R} .12 \mathrm{~W} ., 15 \mathrm{ft}$.
S. and 40 ft . E. from junction of rd. forks NE . and SE ., in root on
S. side of 24 -in. oak tree; copper nail and washer
927.68
994.32
991.592

1,027.51
896.58
924.795
786.40
4. FROM VIENNA SOUTH TO DIXON, INCLUDING THAT PART OF THE LINE IN VIENNA AND WAYNESVILLE QUADRANGLES (by O. F. Hodgdon in 1934)*
T. 40 N., R. 9 W., 3 ft . S. and 227 ft . E. from NW. cor. sec. $32,62 \mathrm{ft}$. E. of rd., in root on W. side of $24-1 \mathrm{n}$. elm tree; nail and washer
T. 40 N., R. 9 W., about 175 ft . N. of center sec. $31,15 \mathrm{ft}$. S. of rd., in root on $N$. side of 6-in. pin-oak tree; nail and washer

Feet 883.95
827.74
T. 40 N., R. 10 W., $520 \mathrm{ft}$. . of probable S . quarter cor. sec. 36, 2.9 mi . SW. of Vienna, 40 ft . W. of rd., in concrete post; standard tablet stamped "T T 325 C WA 1934"
Reference mark, $101 \mathrm{ft} . \mathrm{S} .15^{\circ} \mathrm{W}$. of tablet, in root on S. side of 16-in. white-oak tree; copper nail and washer
T. 39 N., R. 10 W., in NW $1 / 4$ sec. $2,30 \mathrm{ft}$. W. of rd., in root on W. side of 16-in. hi ckory tree; copper nail and washer
T. 39 N., R. 10 W., in NW $1 / 4$ sec. $2,20 \mathrm{ft}$. E. of rd., in root on N. side of 12-in. post-oak tree; copper nail and washer
T. 39 N., R. 10 W., 127 ft . S. and 30 ft . W. from SW. cor. sec. 2, 30 ft . W. of rd., in root on E. side of 14-in. post-oak tree; copper nail and washer
Vienna, 7.1 mi . SW. of, on line between secs. 10 and 15, T. 39 N., R. 11 W., 40 ft . N. of State Highway 28 , in concrete post; U.S.C. \& G.S. and State Survey standard tablet stamped "T T 326 C W A 1934"
Reference mark, $28 \mathrm{ft} . \mathrm{N}$. and 73 ft . W. from tablet, 30 ft . N. of highway, in root on N. side of $16-1 \mathrm{n}$. post-oak tree; copper nail and washer
T. 39 N., R. 10 W., in NE $1 / 4 \mathrm{sec} .14,8 \mathrm{ml} . \mathrm{SW}$. of Vienna, along State Highway 28, at junction of Hayden rd., $15 \mathrm{ft} . \mathrm{S}$. of rd., on top of W. head wall of tile pipe culvert; chiseled square
T. 39 N., R. $10 \mathrm{~W} .$, cor. secs. $13,14,23$, and $24,166 \mathrm{ft} . \mathrm{S}$. and 307 ft . W. from, on Hayden rd., about 0.9 mi . S. of State Highway 28, 20 ft. W. of rd., in root on NE. side of 16-in. post-oak tree; copper nail and washer
T. 39 N., R. $10 \mathrm{~W} .$, cor. secs. $23,24,25$, and $26,177 \mathrm{ft} . \mathrm{N}$. and 217 ft . W. from, 12 ft . W. of Hayden rd., in root of 16-1n. Spanish-oak tree; copper nail and washer
Hayden, 0.5 ml . W. of, quarter cor. between secs. 25 and 26, T. 39 N., R. 10 W., 695 ft . S. and 55 ft . W. from stone, 90 ft . S. and 25 ft . W. from T-rd. E., in concrete post; standard tablet stamped "T T 327 C W A 1934"
Reference mark, 111 ft . N. and 37 ft . E. from tablet, in root on S. side of 20-1n. post-oak tree; copper nail and washer
T. 39 N., R. 10 W., on line between secs. 35 and 36 , 15 ft . E. of rd., in root on W. side of 16-1n. whi te-oak tree; copper nail and washer
T. 38 N., R. 10 W., N. cor. secs. 1 and $2,35 \mathrm{ft}$. S. of rd., in root on N. side of 16-1n. white-oak tree; copper nail and washer
T. 38 N., R. 10 W., quarter cor. between secs. 1 and $2,2 \mathrm{mi}$. S. of Hayden, $12 \mathrm{ft} . \mathrm{S}$. and 132 ft . E. from T-rd. N., in concrete post; standard tablet stamped "T T 328 C W A 1934 "
Reference mark, 162 ft . N. and 102 ft . W. from tablet, in root on S . side of 22-in. Spandsh-oak tree; copper nail and washer
T. $38 \mathrm{~N} ., \mathrm{Rs} .9$ and $10 \mathrm{~W} .$, quarter cor. between secs. 1 and $6,177 \mathrm{ft} . \mathrm{S}$. and 124 ft . W. from, $10 \mathrm{ft} . \mathrm{S}$. of rdi, in root on N. side of l7-in. Spanish-oak tree; nail and washer
T. 38 N., R. 9 W., N. sixteenth cor. sec. 6, $440 \mathrm{ft} . \mathrm{S}$, and 110 ft . E. from, 2 ml . S., thence 1.5 mi . E. from Hayden, 40 ( 46 ?) ft. E. of rd. forks, in concrete post; standard tablet stamped "T T 329 CW A 1934"
Reference mark, 185 ft . N. and 111 ft . E. from tablet, in root on S. side of 11-1n. Spanish-oak tree; lead-hoaded nail and washer
T. $38 \mathrm{~N} .$, R. $9 \mathrm{~W} ., 15 \mathrm{ft}$. N. and 78 ft . W. from center of $\mathrm{sW} 1 / 4 \mathrm{sec} .6$, 8 ft . S. of Cliftydale rd., 20 ft . SW . of spring, in root on E. side of 34-in. Spanish-oak tree; copper nail and washer
T. 38 N., R. $10 \mathrm{~W} ., 410 \mathrm{ft}$. N. and 15 ft . E. from center of $\mathrm{NE} 1 / 4$ sec. $12,40 \mathrm{ft}$. N. of Cliftydale rd., in root on S . side of 12-in. hickory tree; copper nail and washer
Dixon, 7.8 ms . NE. of, in SW $1 / 4 \mathrm{SE} 1 / 4 \mathrm{sec} .11, \mathrm{~T} .38 \mathrm{~N} ., \mathrm{R} .10 \mathrm{~W} .$, 25 ft . E. of Cliftydele rd., 2 ft . W. of wire fence, in concrete post; standard tablet stamped "T T 320 C W A $1934^{\text {" }}$
Reference mark, $56 \mathrm{ft} . \mathrm{S}$. and 56 ft . W. from tablet, in root on SW . side of 12-1n. white-oak tree; copper nall and washer
T. 38 N., R. 10 W., 0.2 ml . S. of NW. cor. sec. $14,40 \mathrm{ft}$. SE. of cliftydale rd., in root on N. side of 22-in. white-oak treej. copper nail and. washer
T. $38 \mathrm{~N}_{-}, R_{\text {. }} 10 \mathrm{~W} ., 43 \mathrm{ft}$. E. of quarter cor. between secs. 15 and 16 , 27 ft . E. of Cliftydale rd., in root on $W$. side of 16 -in. white-oak tree; copper nall and washer
T. $38 \mathrm{~N} ., \mathrm{R} .10 \mathrm{~W} ., 13 \mathrm{ft}$. S. and 28 ft . W. from quarter cor. between secs. 16 and $17,13 \mathrm{ft}$. S. of Cliftydale rd., in root on N . side of 30-1n. post-oak tree; copper nail and washer
Dixon, 4 ml . NE. of, along State Highway $28,50 \mathrm{ft}$. N. of junction of rd. E. to Cliftydale, 35 ft . E. of highway, in conorete post; U.S.C. \& G.S. and State Survey standard tablet stamped "T T 319 CW A 1934"
972.680
976.76

1,000.76
1,029.26

1,082.08

1,102.982
1,101.70
$1,051.04$
953.82
864.42
880.610
882.97
955.65
810.10
950.273
951.23
870.10
707.161
716.74
657.84
834.58
917.367
912.98
960.57
980.62
992.15
$1,179.026$
Reference mark, 68 ft . E. of tablet, 45 ft . N. of Cliftydale rd., 70 ft. SW. of highway, in root on W. side of 10-in. hickory tree; copper nail and washer
Dixon, 3.5 mi . NE. of, along State Highway $28,15 \mathrm{ft}$. S. of Maries-Pulaski county ine, 40 ft . E. of highway, in root on SW. side of $12-1 \mathrm{n}$. red-oak tree; copper nall and washer

1,178.13

Dixon, about 2.1 mi . E. of, along State Highway 28 , in $\mathrm{SE} 1 / 4 \mathrm{sec} .19$, T. $38 \mathrm{~N} ., \mathrm{R} .10 \mathrm{~W} ., 65 \mathrm{ft}$. SE. of highway, $15 \mathrm{ft} . \mathrm{sW}$. of White House Ferry rd., in root on W. side of 12-in. Spanish-oak tree; copper nail and washer
${ }^{4}$ Line 4 of Vienna quadrangle includes a portion of this line (see Bull. 898-C,
p. 4i8); also line 9 of Waynesvilie quadrangle (seo Bull. 898-B, p. 277):

Dixon, about 1.3 mi . E. of, along State Highway 28 , in $\mathrm{SW} 1 / 4 \mathrm{sec}$. 19 ,
Feet
T. $38 \mathrm{~N} ., \mathrm{R}$. $10 \mathrm{~W} ., 50 \mathrm{ft}$. N. of highway, in root on SE. side of $20-\mathrm{in}$.
blackjack-cak tree; nail and washer
1,213.07
5. FROM SEC. 2, T. 39 N., R. 12 W., SOUTH INTO WAYNESVILLLE QUADRANGLE
AT SEC. 22, T. 38 N., R. 12 W. (by W. L. Presley in 1934)
T. 39 N., R. 12 W., in sec. 1 (?), 222 ft . E. of dwelling of E. T. Tauner, 22 ft . N. of E.-W. rd., in root on $S$. side of $10-1 \mathrm{n}$. post-oak tree; nail
T. 39 N., R. 12 W., in sec. l (?), 38 ft. N. and 600 ft . W. from junction of rd. along Miller County line and N.-S. rd., in root on S. side of twin post-oak tree; copper nail and washer
T. 39 N., R. 12 W., in sec. l (?), 20 ft . S. and 65 ft . E. from SE. corner of dweliling of W. H. Humphrey, il ft. W. of rd. along Maries-Miller County line, in root of 6-in. silver-maple tree; copper nail and washer
County Route A (now State Highway 42), 8 ft . S. of highway, in root of 30-1n. elm tree; copper nail and washer
T. 39 N., R. 11 W., in $S W 1 / 4$ sec. $6,48 \mathrm{ft}$. E. of SW . corner of dwelling, 10 ft . W. of N.-S. rd., in root of $14-1 \mathrm{n}$. black-oak tree; copper nail and washer
T. 39 N., R. $12 \mathrm{~W} ., 950 \mathrm{ft}$. E. of NE. cor. sec. 12 , in $\mathrm{SW} 1 / 4 \mathrm{sec} .6$, T. 39 N., R. 11 W., 950 ft . E. of Sudheimer Store, 12 ft . S. of T-rd., in concrete post; U.S.C. \& G.S. and State Survey standard tablet stamped "T T 315 CWA 1934"
Reference mark, 30 ft . N. and 312 ft . E. from tablet, in top of stump of 16-1n. White-oak tree; copper nail and washer
T. 39 N., R. 11 W., near line between secs. 6 and 7, N. of rd., on NW. corner of head wall of culvert; chiseled square
T. 39 N., R. 11 W., in NW $1 / 4 \mathrm{sec} .8,30 \mathrm{ft}$. E. of Little Tavern Creek, 18 ft . S. of E. W. rd., in root on $N$. side of 24-in. walnut tree; copper nail and washer
T. 39 N., R. 11 W., in $S W 1 / 4 \mathrm{sec} .8,60 \mathrm{ft}$. E. of T-rd., 50 ft . N. of NW. corner of dwelling, in root on W. side of $24-1 n$. black-oak tree; copper nail and washer
947.71
. 39 N., R. 11 W., in $S W 1 / 4$ sec. $17,82 \mathrm{ft}$. N. of crossroads, W. of rd., in concrete post; ס.S.C. \& G.S. and State Survey standard tablet stamped "T T 316 C W A 1934"
923.392
906.67
850.06
798.39
933.79

Reference mark, 300 ft . S. and 28 ft . E. from tablet, in root on $W$. side of 16-1n. white-oak tree; copper nail and washer
T. 39 N., R. 11 W., in NW $1 / 4$ sec. $29,60 \mathrm{ft}$. S. of crossroads, 28 ft . from ra., in root on W. side of $18-1 \mathrm{n}$. white-oak tree; copper nail and washer
976.73
T. 39 N., R. 11 W., in $w 1 / 2$ sec. $29,0.5 \mathrm{mi}$. S. of crossroads, 15 ft . E. of rd., in root on W. side of 18-in. white-oak tree; copper nail and washer
$1,095.07$
T. 39 N., R. 11 W., in SW 1/4 sec. 29, 130 ft . E. of SE. corner of dwelling, in root on $N$. side of 12-in. white-oak tree; copper nail and washer

1,100.26
ing, in root on N. side of $12-1 \mathrm{n}$. white-oak tree; copper nail and wash.
T. $39 \mathrm{~N} ., \mathrm{R}$. $11 \mathrm{~W} .$, in $\mathrm{NW} 1 / 4 \mathrm{sec}$. 32 , 28 ft . N. of rd. forks, 12 ft . E. of rd. NW., 14 ft . W. of rd. NE., in root on N. side of 24-1n. white-oak tree; copper nail and washer
T. 39 N., R. 11 W., in $S 1 / 2$ sec. 32 , $S$. of junction of rd. to Iberia and Brinktown-Dixon ra., 550 ft . S . of transmission line, $320 \mathrm{ft} . \mathrm{s}$. of dwelling of E. C. Hale, in concrete post; U.S.C. \&G.S. and State Survey standard tablet stamped "T T 317 C W A 1934"

1,171.87

Reference mark, 25 ft . N. and 200 ft . E. from tablet, in root on S . side of 12-in. white-oak tree; copper nail and washer
T. $38 \mathrm{~N} ., \mathrm{R}$. $11 \mathrm{~W} .$, in NE $1 / 4$ sec. 5 , 32 ft . SE. of rd. forks, $14 \mathrm{ft} . \mathrm{s}$. of N. rd., 26 ft . N. of S . rd., in root on N. side of 18-in. blackjackoak tree; copper nail and washer
$1,145.10$
T. 38 N., R. 11 W., in $S E 1 / 4$ sec. 4, on NE. corner of head wall of bridge over Little Maries Creek; chiseled square

1,133.689
1,126.54

Dironge over R. $11 \mathrm{~W} ., 85 \mathrm{ft}$. S. of S. entrance to Ajax Pipe Line pumping sta., in concrete post; U.S.C. \& G.S. and State Survey standard tablet stamped "T T 318 C W A 1934"
Reference mark, 120 ft . SE., thence 20 ft . NE. from tablet, in root on SW. side of $24-1 n$. white-oak tree; copper nail and washer

1,019.20

Dixon, 1 ml . N. and 1 ml . W. from, in NE $1 / 4 \mathrm{sec} .22, \mathrm{~T} .38 \mathrm{~N} ., \mathrm{R} .11 \mathrm{~W}$. , 125 ft . S. and 25 ft . E. from Maries-Pulaski county line, $36^{\prime} \mathrm{ft}$. N. and 25 ft . E. from T-rd. W., 10 ft . S. and 100 ft . W. from dweling, in root on E. side of $16-1 n$. post-oak tree; copper nail and washer

## 6. FROM VIENNA QUADRANGLE WEST ALONG COUNTY ROUTE A (now state Highway 42) TO SEC. 1, T. 39 N., R. 12 W. (by S. M. Hayes in 1934)

Vienna, 3.4 mi . W. of, 50 ft . S. of highway, at gatepost, in twin whiteoak tree; copper nail and washer
940.64

Vienna, $3.7 \mathrm{mi} . W_{.}$of, 460 ft . NW. of crossroad, 35 ft . N. of highway, in concrete post; U.S.C. \& G.S. and State Survey standard tablet stamped "T T 308 C W A 1934"
957.910

Vienna, 4.2 mi . W. of, 35 ft . S. of highway at $\mathrm{N} .-\mathrm{S}$. fence, in concrete post; U.S.C. \& G.S. and State Survey standard tablet stamped "T T 309 C W Á 1934"
931.176

Vienna, 4.7 mi . W. of, 40 ft . N. of highway, in S. side of white-oak tree; copper nall and washer

Vienna, 5.3 mi . W. of, 45 ft . S. of highway, 45 ft . W. of junction of rd. S. to Venus, in root on N. side of l2-1n. white-oak tree; copper nail and washer
Vienna, 5.8 ml . W. of, 35 ft . N. of highway, in root on s. side of $14-\mathrm{in}$. blackjack-oak tree; copper nail and washer
Vienna, 6.5 ml . W. of, 50 ft . S. of highway, in root on w. side of $12-\mathrm{in}$. white-oak tree; copper nail and washer
Vienna, 6.6 ml . W. of, 250 ft . SW. of farmhouse of Thomas Edwards, 100 ft . S. of highway at curve SE, -SW., in concrete post; U.S.C. \& G.S. and State Survey standard tablet stamped "T T 310 C W A 1934"
Vienna, 6.9 mi . W. of, 35 ft . N. and 32 ft . E. from rd. fork NW., in concrete post; U.S.C. \& G.S. and State Survey standard tablet stamped "T T 311 C W A 1934"
Vienna, 7.7 mi . W. of, 45 ft . S . of highway, in root on S . side of $26-1 \mathrm{n}$. white-oak tree; copper nail
Vienna, 8.2 ml . W. of, 60 ft . E. of junction of rd. S., 45 ft . s. of highway, in fence line, in root on $N$. side of large white-oak tree; copper nail and washer
Vienna, 8.6 mi . W. of, on S. concrete wall of bridge; chiseled square
Vienna, 8.9 mi . W. of, in Yerd of Prosperity School, 30 ft . S. of highway, in root on W. side of 12-in. white-oak tree; copper nail and washer
Vienna, $9 \mathrm{ml} . W$. of, $30 \mathrm{ft} . \mathrm{N}$. of highway, 20 ft . E. of entrance to farm of Anvil Martin, in concrete post; U.S.C. \& G.S. and State Survey standard tablet stamped "T T 312 C W A 1934"
Vienna, 9.2 mi . W. of, 30 ft . S. of highway, 5 ft . E. of $6-1 \mathrm{n}$. black-oak tree, in concrete post; U.S.C. \& G.S. and State Survey standard tablet stamped "T T 313 C W A 1934"
Vienna, 10.3 mi . W. of, on N . wall of bridge; chiseled square
Vienna, 10.6 ml . W. of, on concrete walk of bridge over Little Maries Creek; chiseled square
Vienna, 11 mf . W. of, 600 ft . E. of junction of County Route M (now State Highway 133), 40 ft . N. of highway; (mark not described)
Vienna, 11.1 mi . W. of, 30 ft . N. of highway at junction of ra. S., in SW. side of $16-1 n$. hickory tree; copper nail and washer
Vienna, 11.9 ml . W. of, in sec. 34 , T. $40 \mathrm{~N} ., \mathrm{R}$. $11 \mathrm{~W} ., 30 \mathrm{ft}$. N. of rd., in root on SE . side of $8-1 \mathrm{n}$. post-oak tree; copper nail and washer
Vienna, 11.9 ml . W. of, 650 ft . W. of junction of rd. S., 30 ft . N. of highway, in concrete post; U.S.C. \& G.S. and State Survey standard tablet stamped "T T 314 C W A 1934"
Reference mark, 45 ft . E. of rd. $3 ., 35 \mathrm{ft}$. N. of highway; (mark not described)
Vienna, 12.9 mi . W. of, 30 ft . N. of highway, in fence line, in root on S. side of large, hollow, white-oak tree; copper nail and washer

Vienna, 13.3 mi . W. of, 70 ft . E. of Little Tavern Creek, 35 ft . N. of highway, in root on S. side of 14-in. walnut tree; copper nail and washer
Vienna, 13.9 mi . W. of, $40 \mathrm{ft} . \mathrm{S}$. of highway, 35 ft . N . of rd., in root on N. side of $16-1 n$. spice tree; copper nail and washer
Vienna, $l_{4} .8 \mathrm{mi}$. W: of, 60 ft . S. of junction of rd. N., 25 ft . W. of rd., in root of 6-in. black-oak tree; copper nail and washer
Vienna, 15.3 mi . W. of, in sec. 6, T. $39 \mathrm{~N} ., \mathrm{R}$. Il W., 20 ft . E. of rd., in root on W. side of $20-1 n$. black-oak trees copper nail and washer

## 7. FROM SEC. 2, T. 39 N., R. 10 W., WEST BY WAY OF BRINKTOWN TO SEC. 12, T. 39 N., R. 11 W., THENCE NORTHWEST ALONG COUNTY ROUTE M (now Staté Highway í33) TO JUNCTION OF COUNTY ROUTE A (now state Highway 42) (by F. Y. Brown in 1936)

T-rd. N., 25 ft . N. and 20 ft . E. from, in root on W. side of $16-1 \mathrm{n}$. black-oak tree; crossed naila
Culvert, 8 ft . E. of rd., on center of E . head wall; chiseled square
T. 39 N., $R_{\text {. }} 10 \mathrm{~W}$., in $\mathrm{s} 1 / 2 \mathrm{sec} .10 ; 50 \mathrm{ft}$. N. and 45 ft . E. from State Highway 28 at rd. NE., in root on N. side of 12-1n. black-oak tree; copper nail and washer
T. 39 N., $R_{.} 10$ W., in $N W 1 / 4$ sec. $15,24 \mathrm{ft}$. S. and 30 ft . E. from State Highway 28 at junction of rd. to Brinktown, 6 ft . S . of fence corner, in concrete post; standard tablet stamped "T T 193 D"
Reference mark, 30 ft . N. of tablet, on center of E . head wall of concrete culvert; chiseled square
Wood trail S., 12 ft . S. and 8 ft . E. from, in root on $N$. side of $12-\mathrm{in}$. black-oak tree; crossed nails
T. 39 N., R. 10 W., in SW $1 / 4$ sec. $9,45 \mathrm{ft}$. N. and , 100 ft . W. from rd. forks, 45 ft . N. and 40 ft . E. from entrance to farm of R. Blanton, in root on N. side of $20-1 n$. black-oak tree; copper nail and washer
T. 39 N., R. 10 W., near quarter cor. between secs. 8 and 9, 35 ft . N. and 21 ft. W. from T-rd. W., in root on E. side of 18+in. black-oak tree; copper natl and washer
Top of hili, 15 ft . N. of rd. opposite dwelling of F. A. Sudheimer, at gate; in fence line, In root on E. side of l6-in. white-oak tree; crossed nalls
T. 39 N., R. 10 W., near E. sixteenth cor. sec. 7, 20 ft. W. of Tr-rd. E., 2 ft . W. of fence; in concrete post; standard tablet stamped $\mathrm{n} \cdot \mathrm{T}$ T 35 J J 1936"
T. 39 N., R. 10 W., near E. sixteenth cor. between sees. 6 and 7, 500 ft . NW. of concrete low-water bridge; 15 ft . S. and 70 ft . W. from T-rd. N., 210 ft. W. of rde comer S.-W., in root on N. side of 30-1n. black-oak tree; copper nail and washer
Farmhouse of G. T. Wiles, 35 ft . S. and 50 ft . W. from SW. corner of, in root on $N$. side of $16-1 \mathrm{n}$. hickory tree; crossed nails
725.90
829.67

1,055.64
1,020.95

1,100.71

1,089.931
1,088.63
1,055.02

1,029.96
$1,069.63$
Foot 995.55
992.89
971.94

1,002.952

1,071.104
1,012.15

1,010.33
914.74
995.72
908.894
887.590
833.38
826.87
923.05
954.58
890.94
868.615
866.44
844.22
865.56
868.68

1,035.99
927.684
985.77
T. 39 N., R. 11 W., in NE $1 / 4$ sec. $12,15 \mathrm{ft}$. S. and 75 ft . E. from T-rd. S., in fence line, in root on N. side of 8-in. black-oak tree; crossed nails

Feet
1,008.28
Brinktown, 120 ft . E. of SE . corner of post office, 60 ft . E. of T-rd. N., in E.-W. fence line, in root on S. side of 20-in. locust tree; copper nall and washer
Brinktown, 0.3 mi . W. of, $45 \mathrm{ft} . \mathrm{S}$. and 30 ft . W. from junction of rd. E., in root on NE. side of 16-in. black-oak tree; copper nail and washer
T. 39 N., R. 11 W., near 11 ne between secs. 1 and $12,200 \mathrm{ft}$. S. of junction of rd. E., 100 ft . N. and 25 ft . W. from junction of wood trail W., in root on E. side of 12-1n. post-oak tree; crossed nails
Brinktown, 0.3 mi . W., thence 1.2 mi . N. from, 30 ft . W. of highway, in root on E. side of 12-in. white-oak tree; copper nall and washer
T. 39 N., R. 11 W., in NW $1 / 4$ sec. 2 , 25 ft . S. and 20 ft . W. from highway at entrance to farm, 27 ft . N. and 4 ft . W. from triangular blazed 8-in. oak tree, in concrete post; standard tablet stamped TT 736 J J 1936"
936.914
T. 39 N., R. 11 W., in NW $1 / 4$ sec. $2,15 \mathrm{ft}$. S. of highway, on top of S . end of E. abutment of concrete bridge over Littie Maries Creek; chiseled square
Top of hill, 110 ft . S. of corner of rail fence, 36 ft . w. of highway, in root on NE. side of 8-1n. white-oak tree; copper nail and washer
Junction of rd. E., 50 ft . N. and 45 ft . E. from, 175 ft . N. of junction of rd. W., in root on S. side of $24-1$. black-oak tree; crossed nails
Junction of rd . SW ., 50 ft . W. of, on S . end of E . head wall of concrete culvert; chiseled square
County Route A (now State Highway 42), S. Junction of, 255 ft . SE. of, 60 ft . S. of S . corner of highway maintenance depot, 18 ft . NE. of highway, in root on W. side of 16-in. white-oak tree; copper nail and washer
934.94
940.70
(Latitude $38^{\circ} 00^{\text {IBERIA }}-38^{\circ} 15^{\prime}$; longitude $92^{\circ} 15^{\prime}-92^{\circ} 30^{\prime}$ )
Camden, Miller, and Pulaski Counties


1. FROM EJGENE QUADRANGLE AT SEC. 6, T. 40 N., R. 12 W., WEST TO POINT ABOUT 1.3 MILES SOUTHEAST OF TUSCUMBIA, THENCE SOUTHEAST ALONG STATE HIGHWAY 17 TO JUNCTION OF COONTY ROUTE C, THRNCE SOUTHWEST ALONG COUNTY ROTJTE O TO ULMAN, THENCE WEST BY WAY OF DOG GREEK SCHOOL INTO VERSAILLLES NO. 4 QUADRANGLE AT SEC. 7, T. 39 N., R. 14 W. (by L. V. Johnson in 1932)
(Continued from Eugene quadrangle; see line 1.)
St. Elizabeth, 2.8 mi . W. of, along rd. to Capps, about 300 ft . SW. of junction of private rd. SE. to farmhouse of G. A. Hodges, 70 ft . N. of ford across Sullivan Branch, in root on S. side of triangular-blazed 24 -in. oak tree; copper nail and washer
Capps, in W $1 / 2$ sec. 1. T. 40 N., R. 13 W., about 0.2 mi . SE. of store, 650 ft . W. of bridge over Humphrey Creek, 15 ft . S . and 15 ft . W. from
rd. corner, in concrete post; standard tablet stamped "T T $150 \mathrm{~B} 1932^{\text {n }}$
Reference mark, 75 ft . E. of tablet, in root on w . side of twin oak tree; copper nail and washer
Capps, 1.2 mi . W. of, along rd. to Tuscumbia (now County Route E), 18 ft . S. and 70 ft . W. from junction of private rd. NW., in deep saddie of ridge, in root on W. side of 15-in. oak tree; copper nail and washer
Capps, 2.1 mi. W. of, along rd. to Tuscumbia (now County Route F ), 25 ft . SW. of S. end of bridge over Panther Creek, on N. end of concrete anchor for large wire cable; chiseled square
(For balance in Eugene quadrangle; see line l.)
T. 40 N., R. 13 W., in $\mathrm{NW} 1 / 4$ sec. 6, in Coon Creek Valley, 230 ft . S. of farmhouse of Oscar Abbott, 15 ft . W. of rd., in root on NE. side of twin walnut tree; copper nail and washer
T. 40 N., R. $13 \mathrm{~W} .$, in NE $1 / 4 \mathrm{sec}$. 12, on St. Elizabeth rd. (now County Route E), 2.2 mi . NE. of junction of State Highway $17,440 \mathrm{ft}$. E. of bridge over Dog Creek, 14 ft . N. and 40 ft . W. from rd. corner, in concrete post; standard tablet stamped "T T 153 B 1932"
Reference mark, 600 ft . W. of tablet, 45 ft . W. of W. end of bridge, on concrete anchor for large wire cable; chiseled square
T. $40 \mathrm{~N} ., \mathrm{R}$. ll $\mathrm{W} .$, in $\mathrm{SE} 1 / 4$ sec. $12,1.4 \mathrm{mi}$. E. of State Highway 17 , 30 ft . N. and 80 ft . E. from ra. fork E., 13 ft . E. of mail box, in root on W. side of 18-in. elm tree; copper nail and washer
T. 40 N., R. 14 W., in SE $1 / 4 \mathrm{SE} 1 / 4 \mathrm{sec} .11,0.5 \mathrm{mi}$. E. of State Highway 17, at foot of hill, 30 ft . S. and 10 ft . E. from junction of dim lane S. through gate, at cormer fence post, in root on SE. side of i5-in. elm tree; copper nail and washer
Tuscumbia, 1.3 ml . E. of, 50 ft . S. and 45 ft . E. from State Highway 17 at rd. SE., on $S$. concrete head wall of culvert; chiseled square
Tuscumbia, 2.2 mi . SE. of, in top of concrete railing at SE. corner of concrete bridge over Dog Creek; standard tablet stamped "8 J 1932"
Tuscumbia, 2.9 mi . SE. of, 170 ft . SE. of junction of rd. E., $30 \mathrm{ft} . \mathrm{S}$. of highway, on center of $S$. concrete head wall of culvert; chiseled square
Tuscumbia, 4 mi . SE. of, 22 ft . E. of highway, on N. end of E. head wall of large, concrete culvert over creek; chiseled square
Tuscumbia, 4.8 mi . SE. of, 250 ft . NW. of junction of private rd. NE. to farmhouse, 22 ft . E. of highway, on E. concrete head wall of culvert; chiseled square
Olman, 3.5 mi . NE. of, $50 \mathrm{ft} . \mathrm{S}$. and 110 ft . W. from junction of rd. SW . to Ulman (now County Route C), in N. concrete head wall of culvert; standard tablet stamped "9 J 1932"
Reference mark, 110 ft . N. and 100 ft . W. from junction of rd. SW., on concrete head wall of culvert; chiseled square
Ulman, 2.4 mi . NE. of, 100 ft . S. and 30 ft . W. from junction of private rd. SE., 100 ft . SW. of mail box, in root on W. side of triangularblazed 15-1n. oak tree; copper nail and washer

Foot 589.46
569.574
568.97
577.68
616.70
741.54
609.141
636.17
675.64
820.93
963.977
956.88
932.66

Olman, 0.6 mi . NE. of, 135 ft . N. and 15 ft . E. from junction of ra. N., in root on SE. side of 12-in. oak tree; copper nail and washer
Ulman, 1 ft . W. of SE. corner of post office, in conorete porch; standard tabiet stamped "10 J 1932"
Reference mark, 60 ft . W. of tablet, on concrete driveway to filling sta.; chiseled square
$01 \operatorname{man}, 1.1 \mathrm{mi}$. W. of, in E $1 / 2 \mathrm{sec} .4$, T. $39 \mathrm{~N} ., \mathrm{R} .14 \mathrm{~W} ., 12 \mathrm{ft}$. S. and 55 ft . W. from junction of dim private rad. NW. through gate, $12 \mathrm{ft} . \mathrm{s}$. and 15 ft . W. from rd. at fence S., in root on N. side of $18-\mathrm{in}$. oak tree; copper nail and washer
Ulman, 2.1 mi. W. of, in NW $1 / 4 \mathrm{sec} .4$, T. $39 \mathrm{~N} ., \mathrm{R} . \mathbb{L}_{+}$W., 40 ft . S. of S. entrance to Dog Creek School, in root on W. side of $30-1 \mathrm{n}$. oak tree; copper nail and washer
Ulman, 3 ml . W. of, on rd. to Bagnell, 0.8 mi . W. of Dog Wood School, in W $1 / 2$ sec. 5 , T. 39 N., R. $l_{4}$ W., 15 ft . S. and 20 ft . W. from rd. forks, in concrete post; standard tablet stamped "T T 156 B 1932"
Reference mark, 35 ft . NE. of tablet, in root on SW. side of large oak. treo; copper nail and washer
T. 39 N., R. 14 W., on line between secs. 5 and 8, about 350 ft . N. of curve in rd., 60 ft . S. and 23 ft . E. from rd. at E.-W. fence, in root on W. side of triple oak tree; copper nail and washer
T. 39 N., R. $\mathbb{H}_{4}$ W., in SE $1 / 4$ sec. $7,20 \mathrm{ft}$. N. and 60 ft . W. from NW. corner of farmhouse of Sam Cooper, 25 ft . W. of rd., in root on SE. side of $10-1 \mathrm{n}$. oak tree; copper nail and washer

## 2. FROM TAVERN QUADRANGLE AT SEC. 33, T. 39 N., R. 12 W., NORTHWEST TO IBERIA (by L. V. Johnson in 1932) (Continued from Tavern quadrangle; see line 3.)

Iberia, 2.6 mi . SE. of, in SE $1 / 4 \mathrm{NE} 1 / 4$ sec. 32 , T. $39 \mathrm{~N} .$, R. $12 \mathrm{~W} .$, about 0.2 ml . W. of ford across Tavern Creek, 35 ft . S. and 35 ft . E. from T-rd. S., in concrete post; standard tablet stamped "T T 182 B 1932"
Reference mark, about 300 ft . W. of T-rd. S., 20 ft . S. of rd., in root on N. side of $36-1 n$. oak tree; copper nail and washer
Iberia, 1.7 mi . SE. of, in $\mathrm{SW} 1 / 4 \mathrm{sec} .29$, T. 39 N., R. 12 W., about 750 ft . SE. of dwelling of S. F. Irwin, 10 ft . W. of rd., on S , end of W. concrete head wall of culvert; chiseled square
Iberia, 0.7 mi . E. of, 15 ft . N. of rd., on W. end of N . concrete railing of bridge over arain; chiseled square
745.785
764.08

Iberia, opposite E. entrance to campus of Iberia Junior College, $30 \mathrm{ft} . \mathrm{S}$. and 10 ft . E. from crossroads, 3 ft . S. of N . corner of front yard of
dwelling of Mrs . G. A. Mace, in concrete post; standard tablet stamped "T T 175 B 1932"
3. FROM EUGENE QUADRANGLE SOUTHEAST ALONG STATE HIGHWAY 52 TO TUSCUMBIA (by L. V. Johnson in 1932)
(Continued from Eugene quadrangle; see line 2.)

Feet
776.95
742.04
744.612

Tuscumbia, 0.9 ml . NW. of, $45 \mathrm{ft} . \mathrm{S}$. and 25 ft . E . from junction of rd . NE., on $S$. concrete head wall of culvert; ohiseled square
Tuscumbia, at SW. corner of high school grounds, $25 \mathrm{ft}_{\mathrm{ft}} \mathrm{N}$. and 23 ft . E. from crossroad, in root on SE. side of l2-in. maple tree; copper nail and washer
Tuscumbia, 1.3 mi . E. of, at junction of rd. E. to St. Elizabeth, $80 \mathrm{ft} . \mathrm{S}$. , thence 170 ft . E. from center line of highway 17 , in concrete post; standard tablet stamped "T T 154 B 1932"
4. FROM VERSAILLES NO. 4 QUADRANGLE AT SEC. 19, T. 39 N., R. 14 W., SOUTH BY WAY OF BRUMLEY INTO RICHLAND QUADRANGLE AT SEC. 29, T. 38 N., R. $l_{4}$ W. (by C. E. Reick in 1932)
(Continued from Versailles No. 4 quadrangle; see line 2.)
T. 39 N., R. 14 W., in $S W 1 / 4$ sec. 20, NE. of rd. fork S., in root of 12-1n. oak tree; copper nail
883.48

Brumley, 120 ft . S. of general merchandise store of E. C. Thompson \& Son, 27 ft . W. of $r \mathrm{~d}_{\mathrm{i}}$ to Toronto, in concrete post; standard tablet stamped "T T 162 B $1932^{\circ}$
Reference mark, 500 ft . NW. of tablet,' in front of hotel, on ledge; chiseled square
Brumley, 1.1 mi. S. of, in $\mathrm{SW} 2 / 4 \mathrm{sec} .32, \mathrm{~T} .39 \mathrm{~N} ., \mathrm{R} .14 \mathrm{~W} ., \mathrm{E}$. of rd., on ledge; chiseled square
T. 38 N., R. $l_{4}$ W., in NW $1 / 4$ sec. 5 , 10 ft . SW . of T-rd. W., on head wall of culvert; chiseled square
Brumley, 3.1 mi . S. of, on rd. to Toronto, on line between secs. 5 and 8 , T. 38 N., R. 14 W., 300 ft . N. of ford across Brumley Creek, $35 \mathrm{ft} . \mathrm{S}$. and 25 ft . W, from T-rd. S., in concrete post; standard tablet stamped "T T 163 B 1932"
Keference mark, 400 ft . S. of tablet, in root of $30-1 \mathrm{n}$. oak tree; copper nail
T. 38 N., R. 14 W., on line between secs. 8 and $17,50 \mathrm{ft}$. NE. of rd. fork E., in root of $12-1 n$. oak tree; copper nail
5. FROM BRUMLEY EAST TO IBERIA, THENCE SOUTH ALONG STATE HIGHWAY 17 INTO RICHLAND QUADRANGLE (by C. E. Reick in 1932)
 in root of $2 l_{1}-1 n$. oak tree; copper nail
T. 39 N., R. $\mathrm{l}_{4}$ W., in $\mathrm{SW} 1 / 4 \mathrm{SW} 1 / 4 \mathrm{sec} .22,50 \mathrm{ft}$. NE. of rd. fork N., in root of $20-1 n$. oak tree; copper nail
T. 39 N., R. $\mathrm{l}_{4}$ W., in NE $1 / 4$ NE $1 / 4$ sec. $27,100 \mathrm{ft}$. NE. of rd. forks, 30 ft. N. of rd., in concrete post; standard tablet stamped "T T 172 B 1932"
Reference mark, 490 ft . SE. of tablet, in root of $20-\mathrm{in}$. oak tree; copper nail
T. $39 \mathrm{~N}_{.}, \mathrm{R} . \mathbb{y}_{4}$ W., in NW $1 / 4$ SE $1 / 4$ sec. $26,200 \mathrm{ft}$. SE. of Honey Spring School, in triangle of rd. fork SW., in 24 -in. oak tree; copper nail
T. $39 \mathrm{~N} .$, R. IH W., 400 ft . SW. of cor. secs. $23,24,25$, and $26,60 \mathrm{ft}$. NW. of rd. forks, in root of 15-in. oak tree; copper nail
T. 39 N., R. 14 W., in NE $1 / 4 \mathrm{NE} 1 / 4 \mathrm{sec} .25,15 \mathrm{ft}$. N. of rd., in root of 15-1n. oak tree; copper nail
T. 39 N., R. 13 W., in NE $1 / 4 \mathrm{NE} 1 / 4 \mathrm{sec} .30$, on W. bank of Barren Fork Creek, S. of rd.', in root of 20-in. oak tree; copper nail
Iberia, 5 ml . W. of, along ra. to Brumley, in SW 1/4 sec. 29, T. 39 N. , R. 13 W., 0.3 mi . NW. of Spearman School, 70 ft . SE. of dwelling of E. Barton, $55 \mathrm{ft} . \mathrm{N}$. of rd., in concrete post; standard tablet stamped "T T 173 B 1932 "
978.327
984.29
987.47
987.38
840.65
755.58
828.556

Reference mark, 390 ft . E. of tablet, in root of $20-1 \mathrm{n}$.-oak tree; copper nall
832.41

Iberia, about 4 mi . W. of, on line between secs. 28 and 33, T. 39 N., R. 13 W., S. of rd., in root of $30-1 \mathrm{n}$. oak tree; copper nail

Iberla, about 3 mi . W. of, in $\mathrm{SE} 1 / 4 \mathrm{SW} 1 / 4$ sec. 27 , T. $39 \mathrm{N}$. , R. 13 W ., 10 ft . N. of rd., in root of $2 \mu_{4}-1 \mathrm{n}$. oak tree; copper nail
Iberla, 2.5 mi . W. of, along rd. to Brumley, in $\mathrm{SE} 1 / 4 \mathrm{SE} 1 / 4 \mathrm{sec} .27$, T. 39 N., R. $13 \mathrm{~W} ., 35 \mathrm{ft}$. N. and 10 ft . E. from NE. corner of dweling of Willard Duncan, $85 \mathrm{ft} . \mathrm{S}$. of rd., in concrete post; standard tablet stamped "T T 174 B 1932 "
Reference mark, 340 ft . E. of tablet, in root of $10-1 \mathrm{n}$. oak tree; copper nail
Iberia, about 1.5 mi . W. of, in NE $1 / 4$ seo. 26 , T. 39 N., R. 13 W., SE. of crossroads, in top of corner fence post; copper nail
946.06

Iberia, 1 mi . S. of, E. of highway, in root of 24-in. oak tree; copper nail
T. 39 N., R. 13 W., in $S E 1 / 4$ sec. $36,50 \mathrm{ft}$. SE. of crossroad, in root of $2 l_{1}$-in. oak tree; copper nall
T. $38 \mathrm{~N}_{.}, \mathrm{R}_{\mathrm{c}} 12$ W., in $\mathrm{NW} 1 / 4 \mathrm{sec} .6,0.3 \mathrm{mi}$. E. of highway, in root of 30-in. oak tree; copper nail

1,015.08
1,033.40
816.46
T. 38 N., R. 12 W., in NE $1 / 4 \mathrm{NW} 1 / 4$ sec. 7, about 500 ft . S. of bridge over Tavern Creak, 40 ft . N. and 30 ft . W. from farmhouse of $D$. R. ..... Feet
Reference mark, 0.2 mi . S. of tablet, on SE. abutment of bridge; chiseled square

T. $38 \mathrm{~N} ., \mathrm{R} .12 \mathrm{~W} .$, in $\mathrm{NW} 1 / 4 \mathrm{SE} 1 / 4 \mathrm{sec} .18,130 \mathrm{ft}$. S. of junction of
rd. E., on W. head wall of culvert; chiseled square

T. $38 \mathrm{~N} ., \mathrm{R}$. 12 W ., on line between secs. 17 and $20,5 \mathrm{ml}$. N. of Crocker,
5 ft . N. and 35 ft . E. from highway at Miller-Pulaski county line, in
concrete post; standard tablet stamped "T T 177 B 1932"

997.350

1,049.79

## 6. FROM IBERIA NORTHWEST ALONG STATE HIGHWAY 17 TO SEC. 5, T. 39 N., R. 13 W., THENGE NORTHEAST ALONG ROADS TO CAPPS (by C. E. Reick

 in 1932)Iberia, l mi. NW. of, on top of hill, E. of highway, in root of 30-in. locust tree; spike
Iberia, 2 ml . NW. of, W. of highway, in base of gatepost; spike
902.09
Iberia, 3.2 mi . NW. of, 240 ft . W. of farmhouse of James A. Farster, 100 ft . E. of highway, 2 ft . S. of fence, in concrete post; standard tablet stamped "T T 178 B 1932"
Reference mark, 0.2 mi . N. of tablet, on $E$. wall of culvert; chiseled square
T. 39 N., R. 13 W., on line between secs. 3 and 10, on SE. abutment of bridge over Barren Fork Creek; chiseled square
T. 39 N., R. 13 W., in $S W 1 / 4$ sec. 4, NE. of crossroad, E. of highway, on concrete culvert; chiseled square
T. 39 N., R. 13 W., about 0.2 ml . S. of N. cor. secs. 4 and 5 , about 0.2 mi . NW. of bridge over Brushy Fork Creek, $145 \mathrm{ft} . \mathrm{N}$. and 28 ft . E. from function of rd. N., in corner of barnyard, in sandstone boulder; standard tablet stamped "T T 179 B 1932"
Reference mark, 0.3 mi . S. of tablet, on NE. abutment of bridge over Brushy Fork Creok; chiseled square
T. 40 N., R. 13 W., in $S W 1 / 4$ sec. 34 , S. of rd. at lane S., in root of 18-in. oak tree; copper nail
T. 40 N., R. 13 W., in $\mathrm{W} 1 / 2$,sec. 26 , 30 ft . N. and 55 ft . E. from crossing of Capps-Iberia and Tuscumbia-Vienna rds., in concrete post; standard tablet stamped ${ }^{n} T$ T 180 B $1932^{n}$
Reference mark, 240 ft . N. of tablet, on small boulder; chiseled square
T. 40 N., R. 13 W., on line between secs. 22 and $23,20 \mathrm{ft}$. N. of rd. forks, in root of 18-in. oak tree; copper nail
691.60
864.42
T. 40 N., R. 13 W., in $S W 1 / 4 \mathrm{NW} 1 / 4$ sec. 13 , 118 ft . W. of rd. forks, 30 ft . S. and 15 ft . E. from SE. corner of farmhouse of Ed. Wickham, in concrete post; standard tablet stamped nT T 181 B 1932"
. 40 N., R. 13 W., in $\mathrm{SW} 1 / 4 \mathrm{SW} 1 / 4 \mathrm{sec} .12$, W. of rd., on head wall of culvert; chiseled square
T. 40 N., R. 23 W., near cor. secs. $1,2,11$, and $12,30 \mathrm{ft}$. sW. of rd. fork, in root of $30-1 \mathrm{n}$. elm tree; copper nail
909.670
900.52
704.87
621.946
606.24
7. FROM RICHLAND QUADRANGLE AT SEC. $30, T$ T. 38 N., R. 13 W., NORTH
at SEC. 29, T. 38 N., R. 13 W. (by C. E. Reick in 1932)
Hawkeye, 125 ft . S. of post office, 20 ft . N. and 25 ft . W. from T-rd.

| E., in concrete post; standard tablet stamped $\mathrm{n}_{\mathrm{T}} \mathrm{T} 168 \mathrm{~B} 1932^{1 \prime}$ |
| :--- |
| Reference mark, 270 ft . SE. of tablet, in root of $20-1 \mathrm{n}$. walnut tree; |
| copper nail |

8. FROM EUGENE QUADRANGLE SOUTHWEST ALONG STATE HIGHWAY 17 TO TUSCUMBIA (single-mun unchecked spur line by J. H. Vinyard in 1934)*
(Continued from Eugene quadrangle; see line 4.)
Tuscumbia, 1.2 mi . N. of, at jurction of rd. W., on W. head wall of culvert; chiseled square
Tuscumbia, 0.5 mi . N. of, 200 ft . S. of junction of State Highway 52 , on E. head wall of culvert; chiseled square
Tuscumbia, on bottom step of entrance to Havenstems general store; chiseled square

Glevations on this line are preliminary only and should be used with caution.


1. FROM META QUADRANGLE AT SEC. 34, T. $41 \mathrm{~N} ., \mathrm{R} .12 \mathrm{~W} .$, WEST INTO IBERIA QUADRANGLE AT SEC. 6, T. 40 N., R. 13 W. (by L. V. Johnson in 1932)
(Continued from Tavern quadrangle; see line 2.)

| St. Elizabeth, 0.7 ml . E. of, in $\mathrm{S} 1 / 2$ sec. 33, T. 4 N., R. 12 W., about 350 ft . SW. of large farmhouse, 28 ft . S. of junc'tion of private rd. SE., in root on N . side of $10-1 \mathrm{n}$. oak tree; copper nail and washer | $\frac{\text { Feet }}{}$ |
| :---: | :---: |
| St. Elizabeth, at SE. corner of yard of Catholic Church, 50 ft . N. and |  |
| 30 ft . W. from street intersection, in concrete post; standard tablet stamped "T T 141 B 1932" | 812.252 |
| Reference mark, 50 ft . E. of tablet, on E . concrete head wall of culvert; chiseled square | 810.88 |
| St. Elizabeth, 0.7 mi . W. of, along rd. to Capps, about 450 ft . E. of ford across creek, 45 ft . S. and 18 ft . W. from junction of rd. S., |  |
| in root on E. side of 30-in. locust tree; copper nail and washer | 658.41 |
| St. Elizabeth, 1.7 mi . W. of, along rd. to Capps, 17 ft . N. and 5 ft . W. from junction of private rd. NW., in root on S. side of 12-in. oak tree; copper nall and washer | 761.96 |

(For balance in Iberia quadrangle, see line 1.)
Capps, about 3 mi . W. of, along rd. to Tuscumbia, 25 ft . N. and 30 ft . W. from junction of private lane, in concrete post; standard tablet stamped "T T 151 B $1932^{\text {n }}$
560.26

Capps, 3.6 ml . W. of, along rd. to Tuscumbia, about 200 ft . N. of dwelling of Joseph Huhman, 15 ft . NE. of junction of private rd. SW., in root on SW. side of $12-1 n$. elm tree; copper nail and washer
Capps, 4.5 ml . W. of, along rd. to Tuscumbis, 300 ft . E. of junction of private rd. $s$. to dwelling of $B$. J. Leutkemeyer, 8 ft . N. of rd., on center of $N$. concrete head wall of culvert; chiseled square
567.21

Capps, 5.4 mi . W. of, along rd. to Tuscumbia, about 400 ft . NW. of dwelling of B. M. Tyler, 25 ft . SE. of SE. corner of barn, 30 ft . N. of rd., in root on S. side of 18-1n. oak trees copper nail and washer
Tuscumbia, about 6.8 mi . E. of, along rd. to Capps, 110 ft . SE. of farmhouse of G. W. Edwards, 25 ft . E. of rd., in concrete post; standard tablet stamped "T T 152 B 1932"
Reference mark, 2 ft . N. of post at SE . corner of yard, on concrete coping; chiseled square
Tuscumbia, 5.7 mi . E. of, along rd. to Capps, 60 ft . E. of junction of rd. SE., 35 ft . E. of mail boxes, in root on N . side of triangularblazed i8-in. hickory tree; copper nall and washer
(Continued in Iberia quadrangle; see line 1.)

> 2. FROM ELDON QUADRANGLE SOUTHEAST ALONG STATE HIGHWAY 52 INTO IBERIA QUADRANGLE (by L. V. Johnson in 1932) (Continued from Eldon quadrangle; see line 2.)

Tuscumbia, 3.8 mi . Ntw. of, 1 ml . F. of Halls store, about 300 ft . SE. of dwelling of J. A. Harbison, 28 ft . S. of highway, in root on N. side of twin walnut tree; copper nail and washer
Tuscumbia, 2.5 mi . NW. of, 30 ft . S. of jumction of private rd. SW . to farmhouse, 10 ft . SW. of mail box, on E . end of iron pipe.culvert;

Tuscumbia, 1.8 mi . NW. of, 18 ft . N . and 18 ft . W. from junction of rd. NW., 30 ft . W. of mail box of L. E. Admire, in concrete head wall of culvert; standard tablet stamped ${ }^{2} 28 \mathrm{~J} 1932^{n}$

# 3. FROM SEC. 29, T. 42 N., R. 44 W., EAST TO ETTERVILLE, THENCE SOUTH TO SEC. 33, T. 41 N., R. 14 W. (by J. H. Vinyard in 1934) 

Etterville, 1.5 ml . W. of, along U.S. Highway 54, opposite twin culverts under Chicago, Rock Island \& Pacific Ry., on S. head wall of culvert; chiseled square

Feet
Etterville, 104 ft . W. of concrete walk to Christian Church, lif ft . N. of NW. corner of Chicago, Rock Island \& Pacific Ry. Sta., $26 \mathrm{ft} . \mathrm{N}$. of old State Highway $54,3 \mathrm{ft}$. S. of fence, in concrete post; standard tablet stamped "T T 1154 W 1934"
Reference mark, 100 ft . E. of tablet, at entrance to church, on walk; chiseled square
Etterville, 1 mi . SW. of, in $\mathrm{SW} 1 / 4$ sec. $28, \mathrm{~T} .42 \mathrm{~N} ., \mathrm{R}$. 24 W. , at rd. fork, in 36-in. oak tree; copper nail and washer
Ettervilie, 1.5 mi . SW. of, E. sixteenth cor. between secs: 29 and 32, T. 42 N., R. $14 \mathrm{~N}_{4}$., 300 ft . S. of T-rd. S., S. of rd., in root of 30-in. white-oak tree; copper nail and washer
804.44

Etterville, 2.1 ml . SW. of, in sec. $32, \mathrm{~T} .42 \mathrm{~N} ., \mathrm{R} . \mathrm{l}_{4} \mathrm{~W}$. , near two log cabins, at T-rd. W., in root of $8-1 \mathrm{n}$. oak tree; copper nail and washer
Etterville, $2 \mathrm{mi} . S$. and 0.5 mi . W. from, N. sixteenth cor. between secs. 4 and $5, \mathrm{~T} .41 \mathrm{~N} .$, R. 14 W., 45 ft . N. of rd. fork NE., 11 ft . N. of blazed 16-in. white-oak tree, in concrete post; standard tablet stamped "T T 1155 W 1934"
Reference mark, 10 ft . W. of tablet, in root of $24-1 \mathrm{n}$. oak tree; copper na1l and washer
Etterville, 3.7 mi. S. of, in $\mathrm{SW} 1 / 4 \mathrm{sec} .4, \mathrm{~T} .4 \mathrm{~N}$., R. $\mathrm{J}_{4}$ W., in front of farmhouse at T-rd. E., in root of $15-1 n$. locust tree; copper nail and washer
Etterville, 4.8 mi . S. of, in $\mathrm{SW} 1 / 4 \mathrm{sec} .9, \mathrm{~T} .41 \mathrm{N},. \mathrm{R} . \mathrm{I}_{4} \mathrm{~W} ., 50 \mathrm{ft}$. W. of rd. comer, in wood pasture, in root of 10-in. hickory tree; copper nail and washer
Etterville, 5.5 mi . S. of, in NW $1 / 4 \mathrm{sec} .16, \mathrm{~T} .41 \mathrm{~N} ., \mathrm{R} .14$ W., at entrance to church, in root of $15-1 \mathrm{n}$. White-oak tree; copper nail and washer
T. 41 N., R. 14 W., W. sixteenth cor. sec. 16,30 ft. E. of rd. cormer W. -S., 980 ft . N. of ford across Saline Creek, 400 ft . SE. of rd. forks, 12 ft . SE. of blazed elm tree, in concrete post; standard tablet stamped "T T 1156 W 1934"
Reference mark, 300 ft . W. of tablet, 20 ft . N. of rd., in root of 24 -in. oak tree; copper nail and washer
T. 41 N., R. $l_{4}$ W., near center sec. 21 , about 0.4 mi . S. of spring at farmhouse, at top of steep hill on abandoned rd., in root of twin 36-1n. black-oak tree; copper na1l and washer
T. $41 \mathrm{N}$. , R. 14 W. , near cor. secs. 21, 22,27 , and $28,0.7 \mathrm{~ms}$. N. of farmhouse of Wililam Kallenbach and Littie Saline Creek rd., on top of ridge at intersection of fences, in root of 20-1n. black-oak tree; copper nail and washer
T. 41 N., R. 14 W., in SW $1 / 4$ sec. 27, at farmhouse of William Kallenback, in root of 48-in. elm tree; copper nail and washer
880.228
879.60
917.46
890.78
905.79
851.096
849.78
841.96
823.39
769.02
605.541
606.68
795.02
855.39
626.62
649.493
649.78
827.86
657.66

## 4. FROM U.S. HIGHWAY 54 SOUTH ALONG STATE HIGHWAY 17 INTO IBERIA QUADRANGLE (singie-run unchecked spur line by J. H. Vinyard in 1934)*

Eugene, 1.5 mi . N. of, E. of junction of U.S. Highway 54 and State Highway 17, near entrance to filling sta., on $N$. head wall of culvert; chiseled square
Eugene, 0.7 mi . N. of, 0.8 mi . S. of junction of U.S. Highway 54, 100 ft . N. of crossroad, on E. head wall of culvert; chiseled square

Eugene, at N. Iimits of, N. of rd. junction, on E. head wall of culvert; chiseled square
Eugene, 0.5 mi . S. of, 50 ft . S. of entrance to cemetery, at crossroad, in root of $21-1 n$. black-oak tree; copper nail and washer
Eugene; 1.5 mi . SE. of, 38 ft . W. of highway at Cole-miller county line sign, 100 ft . W. of entrance to farm of A. J. Schwaller, 2 ft . E. of right-of-way fence, in concrete post; standard tablet stamped "T T 1163 W 1934
Reference mark, opposite tablet, on top of right-of-way post; chiseled square
Eugene, 2 mi . S. of, NE. of junction of rd. E., in corner fence post; crossed nails
Eugens, about 3 ml . S. of, at junction of rd. N., W. of rd., in fence inne, in root of $18-1 n$. oak tree; copper nail and washer
975.42
859.30
864.85
883.65
873.727
873.142
862.10

Eugene, about 4 ml . S. of, opposite rd. E., W. of highway, on top of right-of-way post; chiseled square
865.13

Eugene, 5.5 mi . SE. of, 12 ft . E. of NW. corner of farmyard of F. P. Buster, 43 ft . E. of highway, 67 ft . NW. of NW. corner of concrete porch, in concrete posti standara tablet stamped "T T $1164 \mathrm{~W} 1934^{\prime \prime}$
Tuscumbia, about 4.5 mi . N. of, at junction of rd. W., on W. head wall of culvert; chiseled square
Elevations on this line are preliminary only and should be used with caution.

Tuscumbia, 4 ml . N. of, on S. end of W. curb of bridge over Saline Creek; chiseled square
Tuscumbia, 3 mi . N. of, at private entrance to field, on E. head wall of culvert; chiseled square
Puscumbia, 1.9 mi . NE. of, about 0.2 mi . SE. of farmhouse, in upstream head wall of concrete culvert; standard tablet stamped "T T 1165 W 1934"
(Continued in Iberia quadrangle; see line 8.)

## 5. FROM META QUADRANGLE AT SEC. 16, T. 43 N., R. 12 W., WEST INTO CENTERTOWN QUADRANGLE AT SEC. 4, T. 43 N., R. 13 W. (by 0. F. Hodgdon in 1934) <br> (Continued from Meta quadrangle; see line 5.)

T. 43 N., R. 12 W., near center sec. 16 , 1.1 mi. NW. of junction of Honey Creek and Tanner rds., on top of $W$. retaining wall of bridge over Honey Creek; chiseled square
617.14

Honey Creek Bridge, l.l mi. W. of, along Honey Creek ra., near center sec. 12, T. 43 N., R. 12 W., at entrance to dwelling of Paul Hager, in root on S . side of twin 38-in. white-oak tree; copper nail and washer
Jefferson City, 9.9 mi . SW. of, along U.S. Highway 54, 3 mi . NE. of Brazito, 37 ft . S. and 32 ft . E. from Junction of rd. E., 32 ft . E. of gate, inside fence, in concrete post; standard tablet'stamped "T T 12 L 1931"
Reference mark, $127 \mathrm{ft} . \mathrm{N}$. and 45 ft . (?) from tablet, in root on W. side of $26-1 \mathrm{n}$. red-oak tree; copper nail and washer
Pleasant Valley School, 0.2 mi . N. of, along U.S. Highway $54,23 \mathrm{ft}$. W. of highway, on SE. corner of head wall of iron pipe culvert; chiseled square
Junction of U.S. Highway 54 and Bratschi rd., 0.6 ml . NW. of, along Bratschi rd., 10 ft . N. of rd , in root on SE. side of $14-1 \mathrm{n}$. white-oak tree; nall
Junction of U.S. Highway 54 and Bratschi rd., 1.4 mi . NW. of, along
Bratsch1 rd., in SW $1 / 4 \sec .6, \mathrm{~T} .43 \mathrm{~N} ., \mathrm{R} .12 \mathrm{~W}$. , in root on NW. side of 28-in. post-oak tree; copper nail, and washer
774.54
T. 43 N., R. 13 W., in NE $1 / 4$ sec. $12,18 \mathrm{ft}$. W. of rd., in root on $E$. side of 15-in. white-oak tree; copper nail and washer
T. 43 N., R. 13 W., quarter cor. between secs. 11 and 12, on Pleasant Hill rd., 80 ft . W. of rd. junction, on top of E . head wall of 12-1n. iron pipe culvert; chiseled square
T. $45 \mathrm{~N} ., \mathrm{R} .13 \mathrm{~W}$. , near center sec. $14,30 \mathrm{ft}$. N. and 50 ft . E. from T-rd. (second one E. of Pleasant Hill Baptist Church), in concrete post; U.S.C. \& G.S. and State Survey standard tablet stamped " 45 C W A 1934"
Reference mark, 30 ft . N. and 39 ft . W. from tablet, in N.-S. fence line, in root on S. side of poet-oak tree; copper nall and washer
leasant Hill Baptist Church, 0.7 ml . NW. of, along Brazito-Lohman rd. 25 ft . NE. of rd., in root on S. side of $22-\mathrm{in}$. red-oak tree; copper nall and washer
T. 43 N., R. 13 W., in NE $1 / 4$ sec. 10 , on retaining wall at $S W$. corner of Taylor Bridge over South Moreau River; chiseled square
(Continued in Centertown quadrangle; see line 2.)
For additional level lines along Missouri Pacific R.R. and Chicago, Rock Island \& Pacific Ry., refer to United States Coast and Geodetic Survey second-order Iines, Mexico to Eldon and Eldon to Labadie.
(Latitude $38^{\circ} 30^{\prime}-38^{\circ} 45^{\prime}$; long1 tude $92^{\circ} 15^{\prime}-92^{\circ} 30^{\prime}$ )

## Boone, Cole, and Moniteau Counties



1. FROM NEW BLOOMFIELD QUADRANGLE NORTH ALONG U.S. HIGHWAY 63 INTO LUPUS QUADRANGLE (by L. V. Johnson in 1930; rerun by W. V. Kennedy in 1937)
(Continued from New Bloomfield quadrangle; see line 2.)
Junction of rd. E., 20 ft . N. and 40 ft . E. from, in base of corner fence post; spike
Claysville, 2.5 ml . N. of, 5.7 ml . S. of Ashland, $35 \mathrm{ft} . \mathrm{N}$. and $90 \mathrm{ft} . \mathrm{W}$. from junction of rd. W., in concrete post; standard tablet stamped "T T 3 C 1930 "
Reference mark, 6 ft . NW. of tablet, in root on E. side of $6-1 n$. maple trees copper nail and washer
Claysville, 3.5 ml . N. of, 4.7 ml . S. of Ashland, 10 ft . S. of junction of private rd. W., 400 ft . N. of farmhouse, 40 ft . S. and 25 ft . W. from highway at fence $W$., on $S$. concrete head wall of culvert; chiseled square
Ashland, $3.9 \mathrm{mi} . S$. of, 10 ft . N. and 22 ft . W. from center of crossroad, on $N$. concrete head wall of culvert; chiseled square
Oldham, $35 \mathrm{ft} . \mathrm{N}$. and 45 ft . W. from crossroad, $153 \mathrm{ft}$. . of store, in concrete post; standard tablet stamped "T T 4 C 1930
Reference mark, $12 \mathrm{ft} . \mathrm{S}$. and 20 ft . W. from crossroad, on concrete head wall of culvert; chiseled square

Feot
831.28
849.836
850.21
802.73
878.42
884.594
882.62
867.71
(Continued in Lupus quadrangle; see line 1.)
2. FROM EUGENE QUADRANGLE AT SEC. 4, T. 43 N., R. 13 W., NORTH TO COUNTY ROUTE C, THENCE WEST ALONG COUNTY ROUTE C TO COLEMOAITTEAU COUNTY LINE, THENCE WEST ALONG ROADS INTO CALIFORNIA QUADRANGLE AT SEC. 6, T. 43 N., R. 14 W. (by O. F. Hodgdon in 1934)
(Continued from Eugene quadrangle; see line 5.)
T. 43 N., R. $13 \mathrm{~W} .$, in SE $1 / 4$ sec. 4 , 24 ft . N. and 32 ft . W. from Junction of Lohman and Millbrook rds., on N. end of retaining wall; chiseled square
626.48
T. $43 \mathrm{~N} ., \mathrm{R} .13 \mathrm{~W} .$, in $\mathrm{S} 1 / 2 \mathrm{sec} .4$, about 0.2 mi . NE. of Millbrook, 195 ft . N. of dwelling of A. A. Doehla, 17 ft . E. of rd., in concrete post; U.S.C. \& G.S. and State Survey standard tablet
Reference mark, 13 ft . S. and 13 ft . E. from tablet, in root on SE. side of 32-in. post-oak tree; copper nail and washer
705.256

Russellville, 4.2 mi . E. of, near center sec. 33 , T. $\psi_{4}$ N., R. 13 W., 585 ft . S. of junction of Millbrook rd., W. of rd., on S. wing wall of culvert; chiseled square
704.78
765.87

Russellvilie, 4 mi . E. of, 410 ft . W. of Lohman rd., 255 ft . W. of filling sta., N. of highway, in root on S. side of 18-in. white-oak tree; copper nail and washer
814.22
T. 44 N., R. 13 W., in $S 1 / 2 \mathrm{sec} .32$, about 1.1 mi . W. of junction of County Route D, on property of Annie Weber, S. of highway, in concrete post; U.S.C. \& G.S. and State Survey standard tablet
877.378

Reference mark, 80 ft . W. of tablet, 25 ft . S. of rd., in 36-1n. stump. flush with ground; nail and washer
876.54
boundery fence of property of Henry scott, in concrete post; U.S.C \& G.S. and State Survey standard tablet

| Russellville, 2.1 mi . E. of, 275 ft . W. of dwelling of Oscar Heminger, 60 ft . N. of highway, in root on S. side of $30-1 \mathrm{n}$. white-oak tree; nail and washer | $\frac{\text { Peet }}{889.38}$ |
| :---: | :---: |
| Russellville, 1.3 mi . E. of, 105 ft . N. of highway, in SE. corner of chicken yard, in W. side of 12-1n. catalpa tree; nail and washer | 877.93 |
| Russellville, 0.8 mi . E. of, 155 ft . E. of barn, 85 ft . W. of dwelling, 65 ft . N. of highway, in root on S . side of $30-\mathrm{in}$. elm tree; nail and washer | 838.12 |
| Russellville, 200 ft . E. of junction of main street, 625 ft . E. of Evangelical Lutheran Church, 3 ft . from side of highway, in concrete post; U.S.C. \& G.S. and State Survey standard tablet | 7 |
| Russellville, 0.4 mi . W. of, 25 ft . N. of highway, on property of S. D. Damp, in concrete post; U.S.C. \& G.S. and State Survey standard tablet | 866.962 |
| Reference mark, 85 ft . SW, of tablet, in N . side of $12-1 \mathrm{n}$. walnut tree; nail and washer | 864.18 |
| Russelloille, 0.8 mi . W. of, 205 ft . W. of Missouri Pacific R.R. crossing, N . of highway, in root on S. side of l2-in. black-oak tree; nail and washer | 881.83 |
| Russellville, 2.5 mi . W. of, in NE $1 / 4$ sec. 5, T. 43 N., R. $\mathcal{l}_{4}$ W., 42 ft . N. of Russellvilie rd., 27 ft . S. and 24 ft . E. from gate to cemetery, in root of $36-1 \mathrm{n}$. locust tree; nails |  |
| Russellville, 3 mi. W. of, in SW $1 / 4$ sec. 5, T. 43 N., R. l4 W., 27 ft. S. of rd., $27 \mathrm{ft} . \mathrm{S}$. and $2 l_{4} \mathrm{ft}$. E. from old concrete culvert, in root of 2 -in. sycamore tree; nails | 824 |

(Continued in California quadrangle; see line 8.)
3. FROM EUGENE QUADRANGLE NORTHEAST ALONG U.S. HIGHWAY 54 INTO NEW BLOOMFIBLD QUADRANGLE (by 0. F. Hodgdon in 1934).

Knernschield filling sta., 0.7 mi . NE. of, on concrete abutment of SE. corner of bridge J-16; chiseled square
(Continued in New Bloomfield quadrangle; see line 5.)
4. FROM CALIFORNIA QUADRANGLE AT SEC. 31, T. 45 N., R. 14 W., SOUTH TO SEC. 5, T. 43 N., R. 14 W. (by O. F. Hodgdon in 1934 ) (Continued from Oalifornia quadrangle; see line 7. )

Oaliformia, 5 mi . SE. of, along J.S. Highway 50, $40 \mathrm{ft} . \mathrm{S}$. and 25 ft . E. from junction of rd. S., 52 ft . S. of highway, 17 ft . SE. of head wall of culvert, in concrete post; U.S.C. \& G.S. and State Survey standard tablet stamped "33 C W A 1934"
869.528

Reference mark, 10 ft . N. and 10 ft . W. from tablet, on top of E . concrete head wall of iron pipe culvert; chiseled square
T. 44 N., R. $\mu_{4}$ W., near quarter cor. between secs. 5 and 6, 20 ft . E. of rd., in root on W. side of $18-i n$. maple tree; copper nail and washer
Winckey Branch, 480 ft . S. of, on NW. corner of W. partition wall of concrete oulvert; chiseled square
in 14 W., in SE 1/4 side of 15-1n. post-oak tree; copper nail and washer
Califormia-Russeliville and Lammert ford rds. 15 ft . W of rd., in root on N. side of 26-in. post-oak trees copper nail and washer
T. ${ }^{4} 4 \mathrm{~N}$, , R. $14 \mathrm{w.} \mathrm{in} \mathrm{NE} 1 /$,4 seo. 19 , 15 ft . E. of Lambert ford rd., 500 ft . S. of large barn, in concrete post; U.S.C. \& G.S. and state Survey standard tablet stamped "32 C W A 1934"
Reference mark, 50 ft . N. and 25 ft . W. from tablet, in 15-in. post-oak trees copper nail and washer
(For balance in Califormia quadrangle, see line 7.)
T. 44 N., R. $l_{4}$ W., in NE $1 / 4$ sec. 30 , on S. bank of Moreau River, 100 ft . S. and 25 ft . W. from Lamert ford, in root on S. side of $40-\mathrm{in}$. burr-oak tree; copper nail and washer
673.90
T. 44 N., R. 14 W., in NE $1 / 4$ sec. $30,0.7$ mi. SE. of Lammert ford, 30 ft . S. of SE. corner of farmhouse of S. V. Amos, $25 \mathrm{ft}$. . of rd., in root on S. side of l6-in. post-oak tree; copper nail and washer
809.18
T. 44 N., R. 14 W., in $S W 1 / 4$ sec. 29, 1.1 mi . SE. of Lammert ford, in front yard of Robert Geiger, 25 ft . N. of rd., in root on S. side of 27-in. English-walnut tree; copper nail and washer
727.86
T. 44 N., R. 14 W., in $N W 1 / 4 \mathrm{sec} .32,1.9 \mathrm{mi}$. SE. of Lammert ford, 30 ft . NW. of T-rd., in root on E. side of 22-1n. post-oak tree; nails
814.02

Van Pool Branch, 1 mi . SE. of, along Lammert ford rd., in sec. 32,
T. 44 N., R. i4 W., in root on SE. side of 22-in. blackjack-oak treej copper nail and washer
857.04

> 5. FROM CALIFORNIA QUADRANGLE AT SEC. 19, T. 45 N., R. ly W., NORTH INTO LUPUS QUADRANGLE AT SEC. $18, \mathrm{~T} .46 \mathrm{~N}$. R. 14 W (by A. L. Detweiller in 1934)
> (Continued from California quadrangle; see line 5.)

[^4]California, $1 \mathrm{mi} . \mathrm{N}$. and 3.5 mi. E. from, in $\mathrm{E} 1 / 2 \mathrm{sec} .19, \mathrm{~T} .45 \mathrm{~N}$. R. 14 W., at junction of old Marion rd. and rd. E., in sandstone ledge; standard tablet stamped "T T 31 C W A 1934"
T. $45 \mathrm{~N} ., \mathrm{R} .14 \mathrm{~W} .$, in sec. $18,40 \mathrm{ft}$. W. of Little Moniteau Creek, in root on E. side of 36-in. elm tree; lead-headed nail
T. 45 N., R. 14 W., in center of sec. 7, 25 ft . NW. of Eldorado School, on SW. corner of flagpole base; chiseled square
T. 45 N., R. 14 W., in $8 \mathrm{E} 1 / 4 \mathrm{sec} .6$, 40 ft . E. of rd. forks, 6 ft . E. of 12-in. white-oak tree, in concrete post; standard tablet stamped " 24 C W A 1934 "
(For balance in California quadrangle, see line 5.)
T. 46 N., R. 14 W., near line between secs. 19 and 30 , at State Highway 87 bridge over Moniteau River, in NW. concrete wing wall; standard tablet
586.644
671.32
$46 \mathrm{~N}, \mathrm{R}$. $\mathrm{IL}_{4} \mathrm{~W} .$, in $\mathrm{E} 1 / 2$ sec. $19,0.5 \mathrm{mi}$. N. of Moniteau Rive
of State Highway 87 , on SW . corner of well top; chiseled cross
822.88

87, about 60 ft . NW. of $30-1 \mathrm{n}$. white-oak tree, on $E$. end of smali culvert; chiseled square
822.88
(Continued in Lupus quadrangle; see line 9.)
For additional level lines along south bank of Missouri River and Missouri Pacific R.R., refer to United States Coast and Geodetic Survey first-order lines, Jefferson City to Kansas City and Jefferson City to Pleasant Hill; and second-order line, Mexico to Eldon.

LUPUS QUADRANGLE
(Latitude $38^{\circ} 45^{\prime}-39^{\circ} 00^{\prime}$; longitude $92^{\circ} 15^{\prime}-92^{\circ} 30^{\prime}$ )
Boone and Moniteau Counties


1. FROM CENTERTOWN QUADRANGLE NORTH ALONG U.S. HIGHWAY 63 TO COLUMBIA, THENCE WEST ALONG U.S. HIGHWAY 40 TO SEXTON ROAD, THENCE NORTH AND WEST ALONG SEXTON ROAD TO SEC. 5, T. 48 N ., R. 13 W., THENCE WEST ALONG U.S. HIGHWAY 40 TO SEC. 4 , T. 48 N., R. 14 W., THENCE NORTH ALONG ROADS INTO STURGEQN QUADRANGLE AT SEC. 34 , T. 49 N., R. 34 W. (by L. V. Johnson in 1930; that portion south of Ashland rerun by W. V. Kennedy in 1937)
(Continued from Centertown quadrangle; see line l.)
Ashland, 1.3 mi . S. of, 20 ft . N. and 20 ft . W. from gunction of rd. W., 20 ft . SE. of SE . corner of cattle pen, on N . concrete head wall of culvert; chiseled square
Ashland, 1.1 ml .3 . of, 5 ft . N. and 20 ft . W. from junction of rd. E., on $S$. end of concrete head wall of culvert; chiseled square
Ashland, 0.5 mi . S. of, $12 \mathrm{ft} . \mathrm{N}$. and 20 ft . W. from junction of rd. W., on $N$. concrete head wall of culvert; chiseled square
885.70
889.10

Ashland, in yard of Baptist Church, 8 ft . S . and 20 ft . E. from front doorstep, in concrete post; standard tablet stamped "T T 5 C 1930"
Reference mark, 900 ft . E. of tablet, 80 ft . N. and 60 ft . E. from junction of main street, at private rd. to dwelling, on SW. concrete head wall of culvert; chiseled square
Ashland, 1.1 mi . N. of, 12 ft . N. and 25 ft . E. from function of rd. E., 2 ft . E. of stop sign, on W. end of N. concrete head wall of culvert; chiseled square
Ashland, 1.7 mi . N. of, about 400 ft . SE. of New Salem Church, 13 ft . N. and 30 ft . E. from junction of rd. E., on E. end of N. concrete head wall of culvert; chiseled square

Ashland, about $2.5 \mathrm{ml} . \mathrm{N}$. of, near quarter cor. between secs. 34 and 35 , T. 47 N., R. 12 w., 25 ft . S. and 35 ft . W. from crossroad, in concrete post; standard tablet stamped "T T 15 C 1930 "
Reference mark, 160 ft . S . of crossroad, 20 ft . W. of highway, on N. end of $W$. head wall of concrete culvert; chiseled square

Feot
816.264
814.08
(For balance in Millersburg quadrangle, see line 2.)
Deer Park, 175 ft . W. of cor. secs. 10, 11,14 , and $15, \mathrm{~T} .47 \mathrm{~N}$. , R. 12 W., 15 ft . S. and 30 ft . W. from crossroad, in concrete post; standard tablet stamped "T T 16 C 1930"
Reference mark, 7 ft . N. of tablet, 8 ft . S. and 28 ft . W. from crossroad, on $S$. concrete head wall of culvert; chiseled square
Deer Park, 0.5 ml . N. of, about 200 ft . SE. of brick school, $13 \mathrm{ft} . \mathrm{S}$. and 23 ft . W. from junction of rd. W., on $S$. concrete head wall of culvert; chiseled square
Deer Park, 1.5 mi . N. of, 0.2 mi . N. of bridge over Bonne Femme Creek, 510 ft . N. of crossroad, 20 ft . W. of highway, on N. end of W. head wall of large concrete culvert; chiseled square
Deer Park, 2 mi . N. of, 120 ft . NW, of Grandview Store, 4 ft . SE. of stop aign, in SE. corner of rd. junction, on S. concrete head wall of culvert; chiseled square
Columbia, 5.7 mi . SE. of E. junction of U.S. Highway $40,0.9 \mathrm{mi}$. NW. of Grandview, 485 ft . W. of Gans Creek, 30 ft . S. and 135 ft . E. from function of rd. SW., in concrete post; standard tablet stamped HT T 17 C $1930^{\circ}$
Reference mark, NW. corner of bridge over Gans Creek, on concrete abutment; chiseled square
Columbia, 4.6 mi . SE. of E. junction of J.S. Highway $40,10 \mathrm{ft}$. S. and 40 ft . E. from Junction of rd. E., on $S$. concrete head wall of culvert; chiseied square
Columbia, 3.9 mi . SE. of E. Junction of U.S. Highway 40, at Grindstone School, 36 ft . N. and 65 ft . W. from crossroad, in concrete post; standard tablet stamped "T T 18 C 1930"
Reference mark, on $S$. end of concrete culvert under rd. W. to schoolyard; chiseled square
Columbia, 2.7 mi . SE. of E. function of U.S. Highway. 40 , at NW. corner of concrete bridge over Grindstone Creek, on concrete abutment; chiseled square
Columbia, 1.8 mi . SE . of junction of $\mathrm{J} . \mathrm{S}$. Highway 40 , at top of hill, 15 ft . S. and 35 ft . E. from private crosaroad, 6 ft . S. of gatepost; on concrete base of iron brace; chiseled square
Columbia, at E. edge of, NE. of junction of East Broadway, in root on S. side of $24-1 n$. maple tree; copper nail and washer
Columbia, 15 ft . N. of junction of U.S. Highways 40 and 63 , in concrete post; standard tablet stamped "T T 19 C 1930 "
Reference mark, 8 ft . W. of tablet, on concrete curb; chiseled square
Columbia, $25 \mathrm{ft} . \mathrm{S}$. and $7 \mathrm{ft.W}$. from W. junction of U.S. Highways 40 and 63, on N. side of transmisaion-line pole, on second concrete step of wall around pole; chiseled square
Columbia, near NW. edge of, 35 ft . N. and 12 ft . W. from junction of North Garth Avenue, N. of highway opposite service sta., 1 ft . S. of corner fence post, on concrete right-of way post; chiseled square
Columbia, at NW. edge of, S. of highway opposite grocery store of G. L. Melloway, 27 ft . S. and 70 ft . E. from junction of rd. NW., 22 ft . NW. of NW. corner of Cozy Cafe, on W. end of concrete culvert; chiseled square
Columbia, 0.3 mi . N. of junction of U.S. Highway 40 and Sexton Road, 25 ft . S. and 10 ft . W. from junction of rd. N., 4 ft . E. of NW. corner of yard of Alex Hicks, in concrete post; standard tablet stamped "T T 20 C 1930"
Reference mark, about 50 ft . S. of tablet, 2 ft . E. of gate, on concrete walk; chiseled square
Columbia, 1.1 mi . NW. of junction of U.S. Highway 40 and Sexton Road, 45 ft . E. of junction of rd. N., 150 ft . S. of stucco farmhouse, 7 ft . S. of E.-W. fence line, in root on S. side of l2-in. tree; copper nail and washer
Columbia, 1.6 mi . NW, of junction of U.S. Highway 40 and Sexton Road, 200 ft . NE. (? Nh.) of crossroad, 25 ft . N. of rd., in fence line, in root on S. side of 18-1n. wainut trees copper nail and washer
Tps. 48 and 49 N., R. 13 W., near cor. secs. $3,4,33$, and $34,110 \mathrm{ft}$. W. of rd. junction, 13 ft . S. of E.-W. rd., on E. end of concrete head wall of culvert; chiseled square
T. 49 N., R. 13 W., near quarter cor. between secs. 28 and 33, on old Sexton Road, 20 ft . S. and 30 ft . W. from bridge over Bear Crgek; 1ron post stamped "Prim Trav Sta No 6 Mo 1912"
Reference mark, 25 ft . N. and 35 ft . W. from W. end of bridge, in knot on E. side of l2-1n. elm tree; copper nail and washer
T. 49 N., R. 13 W. , cor. secs. $28,29,32$, and $33,15 \mathrm{ft} . \mathrm{s}$. and 40 ft . E. from T-rd. S., 400 ft . W. of bridge over creek, 5 ft . E. of corner fence post, on top of corner stone; chiseled square
T. 49 N., R. 13 W., quarter cor. betweon secs. 29 and 32, 18 ft. S. and 28 ft . W. from T-rd. S., 140 ft . N. of farmhouse, 4 ft . S. of W. post of gate to farmyard, in root on E . side of $30-1 \mathrm{n}$. elm tree; copper nail and washer
Tps. 48 and 49 N., R. 13 W., near quarter cor. between secs. 5 and 32, 55 ft . N. of farmhouse, 25 ft . W. of rd., in root on N. side of $20-\mathrm{in}$. maple tree; copper nail and washer
591.51

M1dway, 2.2 mi . E. of, 183 ft . N. and 16 ft . W. from junction of rd. N., 7 ft . N. of corner fence post, in concrete post; standard tablet stamped "1 J 1930"

```
Reference mark, 38 ft . N. of corner fence post, in root on NW. side of
    twin oak tree; copper nall and washer
```f stop sign，on \(E\) ．end of \(N\) ．concrete head wall of culvert；chiseledsquare
Midway， 0.7 mi ．E．of， 22 ft ．N．and 3 ft ．E．from Junotion of private rd．N．， 7 ft．NW．of mail box of R．H．Wood，on E．concrete head wall of culvert；chiseled square
Midway，about 150 ft ．SE．of SE ．corner of Henderson Cafe， \(39 \mathrm{ft} . \mathrm{S}\) ．and 22 ft ．E．from junction of rd．S．， 5 ft ．S．of corner fence post，in concrete post；standard tablet stamped＂2 J 1930＂
Reference mark，SE．of junction of rd．S．，on concrete head wall of culvert；chiseled square
Midway， 1 mi．W．of， \(12 \mathrm{ft} . \mathrm{SW}\) ．of S ．end of sidewalk in front of dwelling of E．S．Wilthite， 20 ft ．N．of highway，on W．concrete head wall of culvert；chiseled square
779.70
Midway， 1.6 mi ．W．of， \(24 \mathrm{ft} . \mathrm{S}\) ．and 160 ft ．W．from junction of rd．N．， \(2{ }_{4} \mathrm{ft}\) ． S ．and 10 ft ． W ．from junction of ra．S．，on \(W\) ．concrete head wall of concrete culvert；chiseled square
Midway 2.5 ml ．W．of，cor．secs．3，4，33，and 34，Tps． 48 and \(49 \mathrm{N}\). ， R． 14 W．， 42 ft ．N．and 24 ft ．E．from junction of rd．N．， 13 ft ．N． of corner fence post，in concrete post；standard tablet stamped ＂3 J 1930＂
Reference mark，NE．of crossroad；on \(N\) ．end of concrete culvert；chiseled square
（Continued in Sturgeon quadrangles see line 7．）

\section*{2．FROM COLUMBIA NORTHEAST ALONG WABASH RAILWAY INTO STURGEON QUADRANGLE（by J．H．Vinyard in 1933）}

Columbia，at water and light plant on S．side of Moore Boulevard（U．S． Eighway 40 i）on top of N．bolt of hydrant；chiseled cross
Columbia，at junction of U．S．Highway 40，on NW．corner of W．side of N． bridge abutment；chiseled cross
782.92

Columbia； 1 mi．N．of，at SE．corner of service sta；on SE．corner of pipe footing；chiseled square
Persinger， 30 ft ．W．of，in concrete corner post；top of bolt
（Continued in Sturgeon quadrangle；see ilne 8：）

> 3. FROM SEO. 28, T. 49 N., R. 13 W., EAST INTO MILLERSBURG QUADRANGLE AT SEC. 34, T. 49 No, R. 12 W. (by J. H. Vinyard in 1934)

T． 49 N．，R． 13 Wr，about 0.2 mi ．B．of N．cor．secs． 33 and 34 ，at bridge over Rocky Fard Creek，at SE，ond of upstream girder over pier； top of rivet（surrounded by chiseled square）
601.84
（For balance in sturgeon quadrangle，see line 9．）
Columbia， 2 mi．N．of near E．cor．secs． 25 and 36，T： 49 N．，R． 13 W．， W．of U．S．Highway 63 at rd．E．，in concrete post；standard tablet
Reference mark， 60 ft ．E．of tablet，on W．end of N．head wall of culvert under side rdo；chiseled square
740.096

T． 49 N．，R． 12 ⿴囗．，near cor．secs．29，30，31，and 32，at junction of rd．W．， 50 ft．W．of Oakland rd．，in root of 18 －in．elm trees oopper nail and washer
737.23

T． \(49 \mathrm{~N} ., \mathrm{R} .12 \mathrm{~W}, 0.2 \mathrm{mi}\) ．N．of s ．cor．secs． 31 and \(32 ; 0.4 \mathrm{ml} . \mathrm{N}\) ．of Wabash Ry，on Oakland rdi，on NE．wing wall of bridges chiseled square
Columbia， 1 mi ．NE．of，along Wabash Ry，y near S．line sec．32，T． 49 N．， R． 12 W．，at rd．crossing，in NE．fence corner；in concrete post； standard tablet
Reference mark， 125 ft ． SW ．of tablet，in root on NW．side of 30－1n． elm treeg copper nail and washer
T． 49 N．，R． 12 ⿴囗十．，in \(\mathrm{SW} 1 / 4 \mathrm{sec} .33\) ；on old Mexico rd．，on SE．wing wall of bridge over Hinkson Creek！chiseled square
705.09
725.29
791.942
791.60
694.16

T． 49 N．，R． 12 W．，quarter cor：between secs： 33 and 34 ， 100 ft ．E．of crossroads，\(N\) ．of rdi，in root of \(60-1 n\) ．blackfoak trees copper nail and washer
781.88

T． 49 No，R． 12 ⿴囗．，center sec． \(34,150 \mathrm{ft}\) ．W．of T－rd．N．，in root of ash trees copper nail and washer
824.13

4．FROM COLUMBIA EAST ALONG U．S．HIGHWAY 40 INTO MILLERSBURG QJADRANGLE（by J．H．Vinyard in 1934）

Columbia， 1 mi．E．of，SW．of highway，on NW．wing wall of bridge ove Hinkson Creek；chiseled square
Columbia， 2 mil．E．of，at private crossroad，in root of 30 in．black－oak tree；copper nall and washer
780.26

Columbia， 3.1 mi ：E．of，at Lake of The Woods Tourist Oamp， 70 ft ．N． and 30 ft：E．from crossroad，in concrete post 3 standard tablet stamped \(\mathrm{TT} T \mathrm{~T} \mathrm{H}_{\mathrm{C}} 1930^{\circ}\)
Reference mark， 75 ft ．SW．of tablet，on concrete foundation of F ． gasoline pump of Lake of The Woods service sta；chiseled square

\title{
5. FROM MILLERSBURG QUADRANGLE AT SEC. 22, T. 48 N., R. 12 W., SOUTH TO POINT 0.5 MILE NORTH OF DEER PARK (by J. H. Vinyard in 1934) \\ (Continued from Millersburg quadrangle; see line 5.)
}

Columbia, 4.5 mi . SE. of, on Fulton Gravel Road, at Carlisle School, 27 ft . S. and 45 ft . E. from junction of rd. S., in concrete post; standard tablet stamped "T T 23 C 1930"
Reference mark, 100 ft . W. of tablet, S. of rd., in root of twin elm tree; nail
T. 48 N., R. 12 W., center sec. 27,25 ft. N. and 80 ft. E. from crossroads, in conerete post; U.S.C. \& G.S. and State Survey standard tablet
Reference mark, 100 ft . W. of tablet, W. of crossroads, on SW. corner of S. head wall of culvert; chiseled square

Foet
745.440
741.92
815.299
810.04
771.56 on top of \(N\). end of W. bansiter of bridge over Gans Creek; chiseled square
834.44
787.04
840.995
837.82
755.32
824.30
797.639
800.54
769.79
734.01
742.259
742.10
724.55
583.30
611.89
595.86
673.115
672.21
715.62
636.60
680.41
601.964
597.12
711.37
727.46
760.70

\title{
7. FROM BOONVILLE QUADRANGLE AT SEC. 31, T. 48 N., R. I4 W., SOUTHEAST TO LUPUS (by J. H. Vinyard in 1934 ) \\ (Continued from Boonvilie quadrangle; see line 3.)
}

Lupus, 2.5 mi . NW. of, in SE \(1 / 4\) sec. \(31, \mathrm{~T} .48 \mathrm{~N} .\), R. 14 W , about
Feet all and washer
Mount Vernon triangulation sta.; Missouri River Commission iron post
806.35 798.881
586.167
590.278
574.026

\section*{8. FROM POINT ABOUT 1 MILE WEST OF McBAINE NORTHEAST ALONG MISSOUTRI-KANSAS-TEXAS RAILROAD (Columbia Branch) TO COLUMBIA (by R. G. McClain in 1934)}
U.S.C.E. B.M. designated "129"

Copper bolt
Top of cap
McBaine, 1 mi . W. of, on rd. to Huntsdale, at T-rd., in yard of Starr School, on concrete flagpole base; monel metal rivet

Brushwood, about 300 ft . S. of, in SW . corner of S . abutment of bridge over Perche Greek, inside bridge spanners, on top of large bolt on inside of sadde; chiseled cross
576.96

Turners, 0.2 mi . SW. of, on SE. corner inside of SE. corner of SW. abutment of bridge over Hinkson Creek, in expansion slot; top of bolt
578.18

Sheppard, 0.2 mi. S. of, on NE. corner of N. abutment, inside of spanner beams, on top of rivet; chiseled cross
Sheppard, at entrance to sta., in post in center of dooway; copper nail
Limerick, 0.2 mi . N. of, W. of R.R., on drain tile; chiseled cross
Columbia, at septic tanks, about 50 ft . W. of R.R., on top of rim of manhole cover; chiseled cross
582.76
604.47
594.77
626.94

Columbia, at Stewart Bridge, W. of spur line to power-house of University of Missouri, at \(S E\). corner of bridge footing, on top of bolt; chiseled cross
679.26

Columbia, at University of Missouri, just N. of entrance on E. side of College of Engineering Building, on water table; (mark not described)
745.29

> 9. FROM CENTERTOWN QUADRANGLE NORTH ALONG STATE HIGHWAY 87 TO
> JAMESTOVN, THENCE WEST ALONG ROADS INTO BOONVILLE QUADRANGLE AT SEC. 6, T. 46 N., R. I4 W. (by A. L. Detweiler in 1934) (Continued from Centertown quadrangle; see line 5.)
T. 46 N., R. 14 W., in E \(1 / 2\) sec. \(8,300 \mathrm{ft}\). S. of rd. junction, on E. end of culvert; chiseled square
Jamestown, at S. side of, 20 ft . E. of church, on SE. corner of entrance walk; chiseled square
Jamestown, 0.8 mi . W. of, in \(\mathrm{SW} 1 / 4\) sec. 6, T. \(46 \mathrm{~N} ., \mathrm{R} . \mathcal{H}_{4}\) W., 490 ft . W. of junction of rd. W., 21 ft . N. of rd., 2 ft . N. of large fence post, in concrete post; U.S.C. \& G.S. and State Survey standard tablet stamped " 25 C W A \(1934^{n}\)
(Continued in Boonville quadrangle; see line 6.)
10. FROM LUPUS SOUTHWEST AND SOUTH ALONG COUNTY ROUTE P AND STATE HIGHWAY 87 TO JAMESTOWN, THENCE EAST ALONG COUNTY ROUTE A TO SANDYHOOK, THENCE NORTH ALONG MISSOURI PACIFIC RAILROAD TO LUPUS (by Charles E. Hunter in 1937)

Lupus, 0.4 mi . SW. of, 15 ft . N. and 100 ft . W. from junction of rd. W., in root on SE. side of \(10-1 n\). elm tree; crossed nails
608.69

Lupus, about 1 mi . SW. of, near line between seas. 8 and 9, T. 47 N. , R. 14 W., 35 ft . S. of highway, in root on N. side of \(30-1 \mathrm{n}\). oak tree; copper nall and washer
Lupus, about 1.9 mi . SW. of, near line between secs. 8 and 17, T. 47 N. , R. \(I_{4}\) W., 15 ft . S. and 20 ft . E. from junction of rd. W., in root on W. side of 20-in. oak tree; copper nail and washer T. 47 N., R. \(l_{4}\) W., 20 ft. S. and 15 ft . W. from rd. corner N. - W., 20 ft . S. and 200 ft . W. from junction of rd. E., in root on W. side of 18-in. oak tree; copper nail and washer
(For balance in Boonville quadrangle, see line 8.)
Jamestown, 0.8 mi . SE. of, 45 ft . S. and 20 ft . E. from rd. junction, in
root on N. side of \(28-1 \mathrm{nn}\). elm tree; copper nail and washer
Jamestown, 1.8 ml . E. of, \(20 \mathrm{ft}. \mathrm{N}\).and 8 ft . E. from junction of rd. N., 854.45

Jamestown, 1.8 mi . E. of, 20 ft . N. and 8 ft . E. from junction of rd. N.,
amestom, 2.5 mi . E. of, at top of hill, in farmyard of Mary Gatschel,
9 ft. SE. (NW. ?) of right-of-way post, in concrete post; standard
tablet reamped "T T 42 C 1936"
807.425
T. 46 N., R. I4 W., near line between secs. 10 and \(11,12 \mathrm{ft} . \mathrm{N}\). and

Feet painted square
T. 46 N., R. 14 W., in sec. \(11,20 \mathrm{ft}\). S. of junction of rd. N., in root on E. side of \(10-1 n\). hickory tree; copper nall and washer

Sandyhook, about 1 mi . N. of, on NE. corner of concrete baise of signal box; chiseled square
Fisher triangulation sta.; Missouri River Commission iron post designated "Fisher triangulation sta."
Private rd. crossing, 285 ft . N. of, E. of R.R., on SW. corner of concrete base of semaphore 1457; ch1seled square
Sandyhook, about 2.8 mi . N. of, at milepole 146.20 , W. of R.R., on NE. corner of concrete base of semaphore control box; chiseled square
corner of concrete base of semaphore control box; chiseled square
Sandyhook, about 3.5 mi . N. of, about 525 ft . N. of rd. crossing, E. of R.R., on SW. corner of concrete base of semaphore 1475; chiseled square

Lupus, about 2.8 mi . SE. of, at rd. crossing, in W. end of S. abutment of wooden trestle 24; copper nall and washer
Lupus, about 2 ml . SE. of, NE. of R.R., on \(S\). corner of concrete base of sempahore 1491; chiseled square
Lupus, 1.4 ml . SE. of, W. of R.R., on E. corner of concrete base of semaphore control box; chiseled square
Lupus, about 0.6 mf . SE. of, E. of R.R., on S. corner of concrete base of semaphore 1507; chiseled square
11. FROM SEC. 29, T. 48 N., R. 12 W., EAST INTO MILLERSBURG QUADRANGLE AT SEC. 27, T. 48 N., R. 12 W. (by W. V. Kennedy in 1937)
T. 48 N., R. 12 W., quarter cor. between secs. 28 and 29,50 ft. N. and 10 ft . E. from junction of private rd. N., in concrete post; U.S.C. \& G.S. and State Survey standard tablet
814.997
T. 48 N., R. 12 W., 375 ft . E. of center sec. 28 , in front yard of farmhouse of R. J. Estes, 55 ft . N. of rd.,' in concrete post; U.S.C. \& G.S. and State Survey standard tablet
T. 48 N., R. 12 W., E. sixteenth cor. sec. \(27,23 \mathrm{ft}\). S. of rd., 42 ft . W. of \(36-1 n\). oak tree, in concrete post; U.S.C. \& G.S. and state Survey standard tablet
(Continued in Miolersburg quadrangle; see line 6.)

\footnotetext{
For additional level lines along Missouri River, J.S. Highway 40, and Wabash Ry., refer to United States Coast and Geodetic Survey first-order line, Jefferson City to Kansas 0ity; and second-order line, Lupus to Centralia.
}

\author{
STURGEON QUADRANGLE \\ (Latitude \(39^{\circ} 00^{\prime}-39^{\circ} 15^{\prime}\); longitude \(92^{\circ} 15^{\prime}-92^{\circ} 30^{\prime}\) ) \\ Audrain, Boone, Howard, and Randolph Counties
}

1. FROM FAYETTPE QUADRANGLE AT SEC. 9, T. 49 N., R. 14 W., NORTH BY WAY OF HARRISBURG TO RUCKER (by D. V. Vandiver in 1905 and P. W. McMillen and E. C. Ribbee in 1912)
(Continued from Fayette quadrangle; see line 1.)
Woodlandville, 0.3 mi . SW. of, in NW \(1 / 4\) sec. \(10, T .49\) N., R. 14 W., E. of rd., 2 ft . W. of fence opposite \(\mathrm{T}-\mathrm{rd}\). W.; iron post stamped "811"
\(\frac{\text { Peet }}{810.526}\)
Woodlandivile, \(1.2 \mathrm{mi} . \mathrm{N}\). of, near S. quarter cor. sec. 34, T. 50 N. , R. Il W., 420 ft . NW. of Richland School, NW. of T-rd. W., in root of oak tree; copper nail
817.95

Harrisburg, 4.4 mi. S. of, near center sec. 34 , T. 50 N., R. 14 W.., NW. of crossroads, in root of \(24-1 n\). oak tree; copper nall.
Harrisburg, 3.4 mi . S. of, near center sec. 27, T. \(50 \mathrm{N.}, \mathrm{R} .14 \mathrm{~W} ., 75 \mathrm{ft}\). S. of SW. corner of crossroads; iron post stamped ".798
806.03
796.631

Harrisburg, 2.2 mi . S. of, in \(\mathrm{W} 1 / 2 \mathrm{sec} .23\), T. \(50 \mathrm{~N} ., \mathrm{R} .14 \mathrm{~W}\). , W. of rd. opposite T-rd. E., in root of hickory tree; copper nail
814.38

Harrisburg, 24 ft . S. and 40 ft . W. from SW . corner of school; iron post stamped "Prim Trav Sta No 91912 Mo 843"
Harrisburg, \(0.7 \mathrm{mi}: \mathrm{N}\). of, at rd. fork W.; surface of rd.
Harrisburg, 1.2 mi . N. of, on line between secs. 2 and 3, T. 51 N., R. \(I_{4} \mathrm{~W} ., 0.2 \mathrm{mi}\). N. of rd. corner, E. of rd., in root of \(15-\mathrm{in}\). oak tree; copper nall
841.863
829.1
841.10

Minnie, 1.7 mi . SW. of, at rd. corner S.-E., in front of log dweliling, in root of 18-in. oak tree; copper nail
Minnie, 0.8 mi . SW. of, at rd. forks; surface of rd.
Minnie, 0.2 mi . N. of, near Boone-Howard county line, 25 ft . NW. of rd. forks; iron post.stamped " 848 "
Minnie, 0.6 mi . N. of, at rd. forks; surface of rd.
T. 51 N., R. 14 W., in NE \(1 / 4 \mathrm{SW} 1 / 4\) sec. \(2 L_{4}, 440 \mathrm{ft}\). E. of T-rd. S., S. of rd., in root of 18-in. elm tree; copper nail
Bridge over Coon Creek; surface of floor
Perche Church, 0.5 mi . W. of, at T-rd. N.; surface of rd.
T. 51 N., R. 14 W., near line between secs. 13 and 24 , at rd. corner S.-W., in root of 10-in. oak tree; copper nall
T. 51 N., R. 14 W., E. sixteenth cor. between secs. 12 and 1.3 ; corner stone
T. 51 N., R. \(l_{4}\) W., in \(S E 1 / 4\) sec. \(12,100 \mathrm{ft}\). S. of T-rd. S., E. of rd.; iron post stamped "847"
837.50
843.8
847.475
850.4
758.41
735.2
806.7
806.36
789.53
846.326

Rucker, 0.4 mi . W. of, at rd. fork NW.; surface of rd.
Rucker, 0.2 ml . W. of, at bridge over Perche Creek; surface of floor
2. FROM SEC. \(11, T .51 \mathrm{~N} ., \mathrm{R} .14 \mathrm{~W} .\), WEST TO SEC. \(16, \mathrm{~T}, 51 \mathrm{~N} .\), R. \(\mathrm{I}_{4}\) W. (by D. V. Vandiver in 1905 and P. W. McMillen and E. C. Bibbee in 1912)

Naylor School, 0.5 ml . S. of, in SE \(1 / 4\) sec. 11, T. 51 N., R. \(\mathrm{l}_{4}\) W., at E. end of large triangle formed by rd. forks, in root of 12-in. oak tree; copper nail
862.01

Naylor School, 1.8 ml . SW. of, in \(\mathrm{SE} 1 / 4 \mathrm{sec} .15\), T. \(51 \mathrm{~N} ., \mathrm{R} .24 \mathrm{~W} .\), in large triangle formed by rd. forks, in root of 12-in. black-oak tree; copper nail
T. 51 N., R. \(14_{4}\) W., in NW \(1 / 4\) sec. \(16,130 \mathrm{ft}\). NW. of bridge over Moniteau Creek, N. of rd.; 1ron post stamped "695"
846.67
694.550
3. FROM SEC. 17, T. 50 N., R. 12 W., WEST TO SEC. 15, T. 50 N.,
R. 13 W., THENGE SOUTH BY WAY OF DRIPPING SPRINGS TO SEC. 3,
T. 49 N., R. 13 W. (by D. V. Vandiver in 1905 and P. W. McMillen and E. C. Bibbee in 1912)
T. 50 N., R. 12 W. , center sec. \(27,150 \mathrm{ft}\). W. of T-rd. S., in root of \(24 \div\) in. elm tree; copper nail
T. \(50 \mathrm{~N} .\), R. 12 W. , in \(\mathrm{SE} 1 / 4\) sec. \(18,300 \mathrm{ft}\). NE. of Middletown School, 75 ft . W. of T-ra. S., S. of rd.; iron post stamped " \(827^{\mathrm{n}}\).
T. 50 N ., Rs. 12 and 13 W ., approximate quarter cor. between secs. 13 and \(18, \mathrm{~N}\). of rd., in root of \(20-1 \mathrm{n}\). hackberry tree; copper nail
T. 50 N., R. 13 W., cor. secs. \(13,14,23\), and \(24,40 \mathrm{ft}\). N. of crossroads, in root of \(2 L_{4}-1 n\). elm tree; copper nail
T. 50 N., R. 13 W., in \(S\). \(1 / 2\) sec. \(15,30 \mathrm{ft}\). S. of rd. forks N., E., and SW.; 1ron post stamped " 832 "
T. 50 N ., R. 13 W ., in NE \(1 / 4\) seo. \(21,150 \mathrm{ft}\). E. of crossroads, N. of rd., in root of i2-in. hickory tree; copper nail
Dripping Springs Church, 2.2 ml . N. of, 200 ft . S. of dwelling of James E. Barnes, W. of rd., 7 ft . E. of fence, in root of 18-in. hickory tree; copper nail

8 Foot 882.94 826.422
791.95
687.74
830.904
789.09
733.46

Dripping Springs Church, 1 mi . N. of, 500 ft . N. of dwelling, W. of rd.,
2 ft . W. of fence, in root of 18 -in. maple tree; copper nail
T. 50 N., R. 13 W., in NW \(1 / 4\) sec. 34 , about 800 ft . E. of Dripping Springs Church, E. of N.-S. rd., near fence; iron post stamped "Prim Trav Sta No \(81912 \mathrm{Mo}^{\prime \prime}\)
Dripping Springs Church, \(1 \mathrm{mi} . \mathrm{S}\). of, 40 ft . W. of T-rd. E., in root of twin oak tree; copper nail
Dripping Springs Church, 1.9 mi . S. of, near center sec. 3, T. 49 N., R. 13 W., 85 ft . E. of T-rd. E., in root of 24 -in. oak tree; copper nall
4. FROM MOBERLY QUADRANGLE AT SEC. 31, T. 52 N., R. 13 W., SOUTH TO RUCKER, THENCE EAST TO STURGEON, THENCE SOUTH BY WAY OF BROWNS TO STEPHENS, THENCE WEST INTO FAYETTE QUADRANGLE AT SEC. 16, T. 49 N, R. \(\mathrm{I}_{4} \mathrm{~W}\).: (by D. V. Vandiver in 1905 and P. W. McMillen and E. C. Bibbee in 1912)
(Continued from Moberly quadrangle; see line 1.)
Rucker, lel mi. N. of, 50 ft . N. of T-rd. E., N. of dwelling, W. of rd., in root of 15-in. oak tree; copper nail
851.05

Rucker; 0.8 mi . N. of, at rd. fork E.; surface of rd.
Ruoker, 75 ft . E. of Sword and Sons Store, 40 ft . N. of dwelling, in root of 12-in. hickory tree; copper nail
Rucker, 0.3 ml . E. of, at bridge over Sugar Creek; surface of floor
Rucker, 0.9 mi . E. of, at private rd. SW., N. of rd., in root of 12-in. oak treej copper neíl
T. 51 N., R. 13 W., in \(S W 1 / 4\) sec. 4 , at T-rd. S.; surface of rd.
T. \(51 \mathrm{~N} ., \mathrm{R}\). \(13 \mathrm{~W} .\), in \(\mathrm{E} 1 / 2 \mathrm{sec} .4\), NW . of rd . forks; iron post stamped " \(866^{n}\)
T. 51 N., R. \(13 \mathrm{~W} .\), in \(W 1 / 2\) sec. 3 , at T-rd. S.; surface of rd.
T. 51 N., R. 13 W ., center sec. 3, SE. of T-rd. S., in root of i2-in. oak tree; copper nail
T. 51 N., R. 13 W., center sec. 2, 90 ft. NE. of crossrosds, in root of 12-in. oak tree; copper nail
T. 51 N., R. 13 W., near center sec. 1, on U.S. Highway \(63,0.5 \mathrm{ml}\). S. of junction of State H1ghway \(22,30 \mathrm{ft} . \mathrm{N}\). and 40 ft . W. from crossroad; iron post stamped "869"
Sturgeon, 1.9 mi. W. of, on line between secs. 1 and 6, T. 51 N., Rs. 12 and 13 W., at rd. cormer; surface of rd.
Sturgeon, 1.5 mi . W. of, in \(\mathrm{W} 1 / 2 \mathrm{sec} .6, \mathrm{~T} .51 \mathrm{~N} .\), R. \(12 \mathrm{~W} ., 300 \mathrm{ft}\). E. of T-rd. S., S. of rd., in root of 10-in. ash tree; cepper nail
Sturgeon, 0.6 ml . NW. of Wabash Ry. sta., at rd. crossing; center of track
Sturgeon, \(0.2 \mathrm{mi} . \mathrm{W}_{\mathrm{i}}\) of Wabash Ry; sta., 60 ft . SW. of rd. crossing; iron post- ttamped "858"
Sturgeon, 0.5 ml . S. of Wabash Ry. sta., at bridge over creak; surface of floor
Sturgeon, 0.6 mi . S. of, at bridge over Saling Creek; surface of floor
Sturgeon, \(1: 1 \mathrm{mi}\). S. of, on line between secs. 8 and 17. T. 51 N ., R. \(12 \mathrm{~W}_{*}, 70 \mathrm{ft}\). W. of crossroads, N. of rdi, in root of \(24-1 \mathrm{n}\). honey-locust tree: copper nall
Sturgeon, 1.6 mi . S. of, near E. sixteenth cor. sec. 17, T. 51 N., R. 12 W., at T-rd. W.; surface of rd.

Sturgeion, 2.1 mi . S . of, at rd. corner; surface of rd.
T. \(51 \mathrm{~N} ., \mathrm{R}\). 12 W ., on ine between secs. 17 and 20 , at rd. corner W.-S.,
in root of 30-in' honey-locust tree; copper nail
T. \(51 \mathrm{~N} ., \mathrm{R}\), 12 W. , in \(\mathrm{SW} 1 / 4\) seo. 2l, at rd. E. to dwelling of \(C . W\). Eubank, E. of rd., iron post stamped "821"
T. \(51 \mathrm{~N} ., \mathrm{R}_{\mathrm{o}} 12 \mathrm{~W} .\), in \(\mathrm{W} 1 / 2 \mathrm{sec} .28\), at \(\mathrm{T}-\mathrm{rd}\). W. (E. ? ) ; surface of rd .
T. 51 N, , R. 12 W ., in \(\mathrm{NW} 1 / 4\) sec. \(33,200 \mathrm{ft}\). s . of bridge over Silver Fork Oreek, \(E_{\text {. of }}\) rd. in root of \(30-1 \mathrm{n}\). oak tree; copper neil
Tps. 50 and \(51 \mathrm{~N}_{0}, \mathrm{R}_{\mathrm{o}} 12 \mathrm{~W}\)., on line between secs. 4 and \(33,75 \mathrm{ft}\). S. of T-rd. W., W. of rd., in root of l2-in. hickory tree; copper nail
T. \(50 \mathrm{~N}, \mathrm{R} .12 \mathrm{~W} ., \mathrm{E} . \operatorname{sixteenth}\) cor. betweet secs. 4 and 9 , 15 ft . N. and 40 ft . E. from crossroads, near fence; iron post stamped "Prim Trav Sta No 101912 Mo \(862^{\text {1 }}\)
T. \(50 \mathrm{~N} ., \mathrm{R}\). 12 W ., in SE \(1 / 4 \mathrm{sec}\). 9 , at rd. corner, W. of rd., in root of 24 -in. oak tree; copper nail
Barnes School, E. of, in root of \(24-1 n\). hickory tree; copper nail
T. 50 N., R. \(12 \mathrm{~W} ., \mathrm{S}\). sixteenth cor. sec. \(21,150 \mathrm{ft}\). S. of crossroads, E. of rdb, in root of \(20 \div 1 n\). wild-cherry tree; copper nail
T. 50 N., R. 12 W., near center sec. 28 , S. of private rd. W., W. of rd.; iron post stamped "843"
T. 50 N., R. 12 W., center sec. 27, at T-rd. S.; surface of rd.

Feet
842.273
908.2
919.24
908.794
873.45
853.0
817.88
792.9
837.238
734.79
689.65
776.231
717.85
713.85
609.8
589.2
757.365
664.48
616.020
733.33
831.45
810.7
857.5
850.3
852.33
845.8
771.873
839.59
825.52
747.7
750.25
777.4
796.9
782.1
812.00
802.3
830.7
834.549
817.5
806.90
787.7
792.95
769.616
662.65

Butler, at bridge over Perche Creek; surface of floor
Perche Creek, under bridge; surface of water Oct. 5, 1912
T. 50 N., R. 13 W., on line between secs. 7 and 18 , N. of rd., in root of 18-in. oak tree; copper nail
T. 50 N. . R. 14 W ., in \(\mathrm{N} 1 / 2 \sec .13\), at T-rd. E.; surface of rd.
T. \(50 \mathrm{No}, \mathrm{R}\). \(14 \mathrm{~W} ., 140 \mathrm{ft}\). N. of cor. secs. \(11,12,13\), and 14 , E. of rd., in root of \(12-1 n\). oak tree; copper nail
Harrisburg, 0.6 mi . SE. of, at rd. forks; surface of rd.
826.6
822.8

> 6. FROM CENTRALIA QUADRANGLE AT SEC. 34 , T. 52 N., R. 12 W. , WEST AND SOUTH TO STURGEON (by W. R. Broaddus in ig27)
> (Continued from Centralia quadrangle; see line 2.)

Tps. 51 and \(52 \mathrm{~N} ., \mathrm{R} .12 \mathrm{~W}\). , approximate cor. secs. \(3,4,33\), and 34 , S . of rdi., on top of \(S\). head wall of concrete culvert; chiseled square T. 52 N., R. 12 W., in \(S E 1 / 4\) SE \(1 / 4 \mathrm{sec} .32,20 \mathrm{ft}\). N. and 210 ft . E.
from Trrd. S., 20 ft . N. and 55 ft . W. from T-rd. N., in root on SE. side of 30-1n. maple tree; copper nail and washer
7. FROM LUPUS QUADRANGLE AT SEC. 34 , T. 49 N., R. 14 W., NORTH AND WEST INTO FAYETTE QUADRANGLE AT SEC. 28, T. 49 N., R. 14 K. (by L. V. Johnson in 1930)
(Continued from Lupus quadrangle; see line 1.)
T. 49 N., R. \(14 \mathrm{~W} .\), about 400 ft . N. of cor. secs. \(27,28,33\), and 34 , 325 ft . S. of crossroads, 10 ft . W. of rdi , on S . end of W . concrete head wall of culvert; chiseled square
(Continued in Fayette quadrangle; see line 2.)
8. FROM LUPUS QUADRANGLE NORTHEAST ALONG WABASH RAILWAY TO BROWNS (by J. H. Vinyard in 1933)
(Continued from Lupus quadrangle; see line 2.)
Switzler, SW. of rd. crossing, in base of crossing signpost; nail
9. FROM LUPUS QUADRANGLE AT SEC. 26 , T. 49 N., R. 13 W., EAST INTO LUPUS QUADRANGLE AT SEC. 25, T. 49 N., R. 13 W. (by J. H. Vinyard in 1934)
(Continued from Lupus quadrangle; see line 3.)
T. 49 N., R. 13 W., near center sec. \(26,300 \mathrm{ft}\). E. of T-rd. E., N. of rd. at entrance to farmhouse, in root of \(18-1 n\). walnut tree; copper nail and washer
T. 49 N., R. 13 W. , near quarter cor between secs. 25 and 26 , in yard of Brown School, on NE. Corner of concrete well top; chiseled square
Columbia, 2.5 mi . N. of, along U.S. Highway \(63,100 \mathrm{ft}\). W. of junction of rd. W., on S. end of E. abutment of bridge; chiseled square
(Continued in Lupus quadrangle; see line 3.)
10. FROM SEC. 4, T. 50 N., R. 12 W., SOUTH TO COUNTY ROUTE D (now State Highway 124), THENCE EAST ALONG COUNTY ROUTE D INTO CENTRALIA QUADRANGLE (by O. D. Williams in 1934)
T. \(50 \mathrm{~N} .\), R. \(12 \mathrm{~W} .\), in \(\mathrm{W} 1 / 2 \mathrm{sec} .15,61 \mathrm{ft}\). N. of highwey, 41 ft . E. of fence, in root of 22-in. locust tree; nail
880.25
(Continued in Centralia quadrangle; see line 5.)
11. FROM STURGEON NORTH INTO MOBERLY QUADRANGLE AT SEC. 33, T. 52 N., R. 12 W. (by O. D. Williams and J. H. Vinyard in 1934)

Sturgeon, 0.7 ml . N. of, on State Highway 22, on W. end of S. head wall of concrete culvert; chiseled square
(Continued in Moberly quadrangle; see line 3.)
12. FROM FAYETTE QUADRANGLE EAST ALONO COUNTY ROUTE C (now State Highway 124) TO HARRISBURG (by B. D. Harsha in 1934) (Continued from Fayette quadrangle; see line 3.)
T. 50 N., R. 14 W., about 660 ft . S. of quarter cor. between secs. 4 and 9, 30 ft . N. of highway at \(N .-S\). fence, at corner fence post, in root on E. side of \(24-1 n\). oak \(t_{r} \theta \theta\); copper nail and washer
T. \(50 \mathrm{~N} ., \mathrm{R} . \mathcal{I}_{4}\) W., about 800 ft . S. of quarter cor. between secs. 3 and 10, 36 ft . S. and 33 ft . E. from junction of rd. S., at corner fence post, in root on NW. side of 30-1n. oak tree; copper nail and washer

TIE BETWEEN UNITED STATES COAST AND GEODETIC SURVEY SECOND-ORDER LINE AND UNITED STATES GEOLOGICAL SURVEY THIRD-ORDER LINE NEAR STURGEON (by B. A. Barnés in 1935)
T. 51 N., R. 13 W., near center sec. 1 , on U.S. Highway \(63,0.5 \mathrm{mi} . \mathrm{S}\). of junction of State Highway \(22,30 \mathrm{ft}\). N. and 40 ft . W. from cross road; iron post \(s\) tamped \({ }^{\prime \prime} 869^{\prime \prime}\)
U.S.C. \& G.S. standard disk stamped "V 122 1935"

Sturgeon; 0.2 mi . W. of Wabash Ry. sta., 60 ft . SW. of rd. crossing; iron post stamped " 858 "

For additional level lines along Wabash Ry., refer to United States Coast and Geodetic Survey second-order lines, Hurdland to St. Charles and Lupus to Centralia.

MOBERLY QUADRANGLE

Audrain, Howard, Monroe, and Randolph Counties

1. FROM HUNTSVILLE QUADRANGLE AT SEC. 17, T. 52 N., R. I4 W., SOUTHEAST INTO STURGEON QUADRANGLE AT SEC. 31, T. 52 N. , R: 13 W. (by D. V. Vandiver in 1905)
(Continued from Huntsville quadrangle; see line 1.)
Higbee, 1.1 mi . SE. of; 400 ft . S. of coal mine, 20 ft . E. of.spur of Alton R.R. to mine, in root of \(24-1 n\). elm trees copper nail
\(T-52 \mathrm{No}, \mathrm{R}\). 14 W\%, near center sec. 21 , opposite small dwelling, S. of
rd., in root of 18-in. oak tree; copper nail.
T. 52 N., R. \(1_{4}\) W., in. NW \(1 / 4\) sec: \(22,75 \mathrm{ft}\). E. of bridge over Moniteau

Creek; S. of rd., in root of \(12-1 \mathrm{n}\). elm tree; copper nail
Oak Grove Sohool; 150 ft . NW. of, 160 ft . E. of crossroads, S. of rd., in root of di-ín oak treej copper nail
747.58
ask Grove School, 1 mi . S. of, opposite dwelling, in root of 20-in. oak tree; copper nail
Oak Grove School, 2.1 mi . S. of, at rdi fork SW., E. of N.-S. rd., in root of 12-in. oak tree; copper nail
877.42
870.26
881.41
T. 52 N., Rs. 13 and 14 W., near cor. secs. \(25,30,31\), and 36 , E. of Hardin Creek, 60 ft . S. of bridge, in root of \(24-1 \mathrm{n}\). elm trees copper nail
Rucker, 2.5 ms . NW. of, 100 ft . E. of bridge over Perche Creek, N. of rd., in root of 10-in. ash tree; copper nail
(Continued in Sturgeon quadrangle; see line 4.)
2. FROM HUNTSVILLE QUADRANGLE NORTHEAST ALONG MISSOURI-KANSASTEXAS RAILROAD TO MOBERLY (by D. V. Vandiver in 1905)

Elliott, 700 ft . N. of sta., on NW. base of fomation stone of culvert; aluminum tablet stamped "1905 857 Adj"
Moberly, at Wabash Ry. sta., 4 ft . N. of S . edge of foundation of expresa office; aluminum tablet stamped "1905 872 Adj"

\title{
3. FROM STURGEON QUADRANGLE AT SEC. 33, T. 52 N. , R. 12 W., NORTE INTO MACON QUADRANGLE AT SEC. 6, T. \(54 \mathrm{~N} ., \mathrm{R} .12\) W. (by Q.D. Williams and J. H . Vinyard in 1934) (Continued from Sturgeon quadrangle; see line II.)
}

Sturgeon, \(2 \mathrm{mi} . \mathrm{N}\). of, near N. sixteenth cor. sec. \(33, \mathrm{~T} .52 \mathrm{~N} \cdot \mathrm{R}\). \(12 \mathrm{~W} .\),

540 ft . N. of Alton R.R., on S. ond of W. head wall of concrete oulvert; chiseled square
Sturgeon, 3 mi: N. of, near N. sixteenth cor. sec. \(28, \mathrm{~T} .52 \mathrm{~N} ., \mathrm{R} .12 \mathrm{~W} .\), 30 ft . S. and 29 ft . E. from T-rd. S., in conorete post; standard tablet
Reference mark, W. of tablet, in root of 20-in. elm trees copper nail and washer
Sturgeon, 3 mi . N. and 0.5 mi : E. from, N. sixteenth cor. between secs. 27 and 28 , T. 52 N., R. 12 W., at T-rd. N., in corner fence post; copper nail and washer
sturgeon, \(3.7 \mathrm{mi} . \mathrm{N}\). and 0.5 mi . E. from, near quarter cor. between seos. 21 and 22, T. 52 N., R. 12 W., E. of Ti., in toot of \(36-1 n \cdot\) oak treel copper nail and washer

Feot
820.43
821.259
821.46
\(847 \cdot 57\)
834.24
838.53
849.632
848.69
847.85
834.66
(For balance in Madison quadrangle, see line l.)
T. 54 N., R. 12 W., near center sec. 16 , N. of U.S. Highway 24 , in root of 30-in. maple trees copper nail and washer
T. 54 N., R. 12 W., near quarter cor. between secs: 16 and 17 , N. of U:S. Highway 24 , on E. head wall of culvert; chiseled square
T. 54 N., R. 12 We\%, near quarter cor. between secs: 8 and \(9,800 \mathrm{ft}\). S . of T-rd. \(E_{*}, S\). of rd. in front of farmhouse, in root of \(24-1 n\). maple tree; copper nail and washer
T. 54 N:, R: 22 W. in NE \(1 / 4 \mathrm{sec} \cdot 8\), on S . foundation of bridge over Flat Creeky top of W. end of channel
T. 54 N., R. 12 W., near quarter cor. between secs: 5 and 8, about 75 ft . NE. of rd. corner N.-E., in pasture; in 24ini ash trees copper nail and washer
801.28
804.69
726.20
796.09
805.119
804.06
4. FROM MADISON QUADRANGLE AT SEC. 21, T. 53 N., R: 12 市., NORTHWEST TO MIDDLE GROVE (by B. A. Barnes in 1935)
(Continued from Madison quadrangie; see line 2.)
T. \(53 \mathrm{~N}+\), R. 12 W. , near oenter sec. 21 , at top of hlll , in front of Payee dwelling, in base of corner fence post; spike
5. FROM MACON QUADRANGLE AT SEC. 6, T. 54 N., R. 12 W., SOUTHEAST ALONG U.S. HIGHWAY 24 INTO MADISON QUADRANGLE (by Cornish Beck in 1936)

(Continued in Madison quadrangle; see line 5.)
For additional level lines along Wabash Ry., refer to United States Coast and Geodetic Survey second-order lines, Hannibal to Salisbury and Hurdiand to St. Charles.

HUNTSVILLE QUADRANGLE
(Latitude \(39^{\circ} 15^{\prime}-39^{\circ} 30^{\prime}\); longitude \(92^{\circ} 30^{\prime}-92^{\circ} 45^{\prime}\) )
Chariton, Howard, and Randolph Counties

1. FROM FAYETTE QUADRANGLE NORTHEAST ALONG ALTON RAILROAD INTO MOBERLY QUADRANGLE (by D. V. Vandiver in 1905)
(Continued from Glasgow quadrangles see line 1.)
Armstrong, 100 ft . S. of sta., in SW. corner of stone curb of platform; aluminum tablet stamped "1905 832 Adj"
830.342

Howard-Randolph county line, 0.2 mi . W. of, 0.2 mi . E. of milepost
Chicago 368 St. Louls 199, in NE corner of concrete foundation of bridge \(\mathrm{D}-3677\); aluminum tablet stamped "1905 835 Adj "
833.587
814.235
in top of second culvert stone from end; aluminum tablet stamped "1905 816 Adj"
Higbee, in NW. corner of jewelry store of C. W. Williams; aluminum plug (formerly stem of aluminum tablet)
884.977
(Continued in moberly quadrangle; see line 1.)
For an additional level line along Wabash Ry., refer to United States Coast and Geodetic Survey second-order line, Hannibal to Salisbury.

Boone and Howard Counties

1. FROM BOONVILLE QUADRANGLE AT SEC. 31, T. 49 N., R. IL W., NORTHEAST INTO STURGEON QUADRANGLE AT SEC. 9, T. 49 N., R. \(1_{4} \mathrm{~W}\). (by D. V. Vandiver in 1905)
(Continued from Boonville quadrangle; see line 1.)
Rocheport, 1.7 mi . NE. of, in SE \(1 / 4 \mathrm{sec} .30, \mathrm{~T} .49 \mathrm{~N} ., \mathrm{R} .14 \mathrm{~W} ., 150 \mathrm{ft}\). S. of lane to dwelling of A. T. Selt, E. of rd., in root of wainut tree; copper nail

Feet 692.87

Rocheport, 3.9 mi . NE. of, in front of Walnut Grove Baptist Church, at NE. corner of cemetery; iron post stamped "Prim Trav Sta No 51912 Mo \(773^{\text {" }}\)
Rocheport, 5 mi . NE. of, opposite old barn, S. of rd., on granite rock; highest point
Rocheport, 6.2 mi . NE. of, near quarter cor. between secs. 16 and 21 , T. 49 N., R. \(1_{4}\) W., NE. of T-rd. E., in root of locust tree; copper nail
(Continued in Sturgeon quadrangle; see line 1.)
2. FROM STURGEON QUADRANGLE AT SEC. 28, T. 49 N., R. \(\mathrm{I}_{4} \mathrm{~W} .\), WEST TO POINT 3.9 MILES NORTHEAST OF ROCHEPORT (by L. V. Johnson in 1930)
(Gontinued from Sturgeon quadrangle; see line 7.)
T. 49 N., R. I4 W., in SE. quarter sec. 29, 260 ft . N. of T-rd. E., 120 ft . SE. of SE. corner of Wainut Grove School, W. of rd., in root on NE. side of 15-in. hickory tree; copper nail and washer
T. 51 N., R. 16 W., near quarter cor: between secs. 29 and \(30,21 \mathrm{ft}\). S . and 10 ft . E. from rd. fork SE. to Fagette, in concrete post; standard tablet stamped "1 H 1934"
(For balance in Glasgow quadrangle, see line 2.)
T. 50 N., R. \(16 \mathrm{~W} .\), in NW \(1 / 4\) sec. 5 , 32 ( 57 ? ) ft. S. and 23 ft. W. from junction of rd. S., 5 ft . W. of fence corner, in conerete post; standard tablet stamped "2 H 1934"
T. 50 N., R. 16 W., near center sec. 5 , 12 ft . N. of rd., in root on SE. side of 12-in. locust tree; copper nail
T. 50 N., R. 16 W. , near E. sixteenth cor. sec. \(5,110 \mathrm{ft}\). S. and 6 ft . W. from farm ra. N., in root on NE. side of \(10-1 n\). hickory tree; copper nail and washer
T. 50 N., R. 16 W., near E. sixteenth cor. sec. \(8,40 \mathrm{ft}\). S. and 6 ft . W. from SE. corner of Guthrie School, 40 ft . N. of rd., at rd. corner S.-E., in root on SE. side of \(24-1 n\). walnut tree; copper nail and washer
T. 50 N., R. 16 W., about l,000 ft. E. of quarter cor. between secs. 8 and \(9,14 \mathrm{ft}\). N. of rd., in top of \(6-1 n\). post of retaining wall; copper nail
T. 50 N., R. 16 W., about 600 ft . E. of W. sixteenth cor. sec. 9, about 200 ft . N. of gate to farm of I. B. Manion, N. of ra., in root on S. side of 24 -in. oak trees copper nail

Feot
820.13
812.109
722.2
655.55
699.717
706.920
. R. R. near center sec. 25 ft . N. and 42 ft . W. from N corner of dwelling of T. V. Teller, 40 ft . S. of rd., 3 ft . E. of fence, in concrete posti standard tablet stamped 13 н 1934
T. 50 Ne , R. 16 W. , near quarter cor: between secs. 9 and 10 , at abrupt drop, in line with fence post E. of rd.; surface of rd.
T. 50 N \& R. 16 W. , near center sec. \(10,18 \mathrm{ft}\). N. and 48 ft . W. from bridge over Adam Creek, in root on S. side of 30 -in. elm tree; copper na11 and washer
Fayette, at NE. corner of Linn and Morrison Streets, 10.ft. N. of N. and of steps to post office, in concrete post; standard tablet stamped " 4 H \(1934^{\text {n. }}\)
Reference mark, at NE. corner of stone retaining wall around courthouse yard, about 2 in . above surface of sidewalk, in limestone block marked "Datum \(200 \mathrm{ft} . "\); iron rod
Fayette, in front of Missouri-Kansas-Texas R.R. sta., top of E. rail
T. 50 N., R. 16 W., near quarter cor. between secs. 12 and 13,100 ft. S. of Junction of State Highway 240 , on W. end of N. concrete abutment of bridge over Bonne Feme Creak; chiseled square
635.27
T. \(50 \mathrm{~N}_{\text {. }}\) Rs. 15 and \(16 \mathrm{~W}_{\text {. }}\), near quarter cor. between secs. 7 and 12 , 155 ft . N. and 65 ft . E. from junction of rd. N., in root on S. side of 14 -in. walnut tree; copper nail
T. \(50 \mathrm{~N} ., \mathrm{R} .15 \mathrm{~W}\). , center sec. 7 , about 900 ft . W. of junction of rd. \(N_{\text {. }}\) on center of \(N\). head wall of concrete culvert; chiseled square
T. \(50 \mathrm{~N} . \mathrm{R}_{\text {. }} 15 \mathrm{~W}\), about 0.1 mi . W. of quarter cor. between secs. 7 and 8, at high point opposite telephone pole 5 . of highway; surface of highway
T. 50 N, , \(\mathrm{R}_{0} 15 \mathrm{~W}\). , in \(\mathrm{W} 1 / 2 \mathrm{sec} \cdot 8\), 52 ft . E. of NE. corner of Deatherago School, 23 ft . W. of rd., in concrete post; standard tablet stamped "5 H 1934 "
T. 50 N., R. 15 W., quarter cor. between secs. 8 and 9, W. of crossroad, on SW. corner of \(S\). head wall of conorete culvert over Doe Creek; ch1seled square
T. \(50 \mathrm{~N}_{+}, \mathrm{R}_{\mathrm{t}} 15 \mathrm{~W} .\), quarter cor between secs. 9 and 10 , at junction of rd. S., 36 ft . N. of NE. corner of church, 72 ft . S. of highway, in root on NW. side of 30-in. maple tree; copper nail and washer
T. 50 N., R. 15 W., near center sec. 10 , at bottom of dip, \(25 \mathrm{ft} . \mathrm{S}\). of highway, in fence corner, in root on NE. side of lone lo-in. cottonwood tree; copper nall
T. \(50 \mathrm{~N} ., \mathrm{R}\). 15 W ., near W. sixteenth cor. sec. \(11,21 \mathrm{ft}\). E. of NE. corner of Dakdale school, 500 ft . S. and 55 ft . W. from junction of rd. S., in concrete post; standard tablet stamped \(116 \mathrm{H} 1934^{\circ}\)
T. 50 N., R. 15 W., near quarter cor. between secs; 11 and 12 , about 0.2 mi . W. of junction of rd. N., on N . head wall of concrete culvert; chiseled square
T. \(50 \mathrm{~N}_{\text {. }} \mathrm{R}^{2} .15 \mathrm{~W}\)., near center sec. 12 , on \(N\). end of W. concrete abutment of bridge over Hungary Creek; chiseled square
T. 50 N., R. 14 W., near N. sixteenth cor. sec. 7, 180 ft . S. and 95 ft . W. from junction of rd. N., in NE. oorner of field; in root on NE. side of \(30-1 n\). elm tree; copper nail and washer
T. 50 N, , R. \(\mathrm{l}_{4} \mathrm{~W}_{\mathrm{L}}, 250 \mathrm{ft}\). W. of quarter cor. between secs: 5 and 8, 0.2 mi . E. of bridge over Moniteau Creek, 100 ft . N. of new highway, 23 ft . S. of old highway, 10 ft . N. and 4 ft . W. from W. gatepost, 3 ft . S. and \(\mathrm{l}_{4} \mathrm{ft}\). E. from lone \(\mathrm{L}_{4}-\mathrm{in}\). elm tree, in concrete post; standard tablet stamped "7 H 1934"
651.340
(Continued in Sturgeon quadrangle; see line 12.)
4. FROM SEC. 8, T. 50 N., R. I \(_{4}\) W., SOUTH TO SEC. 20, T. 50 N., R. \(]_{4}\) W. (by B. D. Harsha in 1934)
T. \(50 \mathrm{~N} ., \mathrm{R}_{\mathrm{L}} \mathrm{l}_{4} \mathrm{~W}\). , near quarter cor. between secs. 8 and \(17,17 \mathrm{ft}\). N . and 180 ft . E. from comer post at cross fences, in root on S . side of 22-1n. elm tree; copper nail and washer
T. 50 N., R. 14 W., center sec. \(17,20 \mathrm{ft}\). N. and 22 ft . E . from fence corner, 200 ft . E. of E.-W. rd., in root on W. side of 10-in. elm trees notch
T. 50 N., R. 14 W., about 900 ft . N. of quarter cor. between secs. 17 and 20 , about 250 ft . S. and 50 ft . E. from corner post at T-fence N., 12 ft . W. of wagon trail, in pasture, in root on E. side of 10-in. locust tree; copper nall and washer
760.37
710.72
694.21
T. \(50 \mathrm{~N}_{0}, R_{\text {. }} 14_{4} \mathrm{~W}\). , about 600 ft . W. of N. sixteenth cor. sec. 20, 12 ft . S. of fence, in root on NW. side of 18-1n. elm tree; notch
T. 50 N., R. 14 W., about 400 ft . E. of center sec. \(20,20 \mathrm{ft} . \mathrm{N}\). and 220 ft . W. from rd. fork \(\mathrm{SW} ., 2 \mathrm{ft}\). N. and 2 ft . E. from fence corner; iron post stamped "Prim Trav Sta No 41912 Mo"

\footnotetext{
For an additional level line along U.S. Highway 40, refer to United States Coast and Geodetic Survey second-order iline; Lupus to Centralia.
}

BOONVILLE QUADRANGLE
(Latitude \(38^{\circ} 45^{\prime}-39^{\circ} 00^{\prime}\); longitude \(92^{\circ} 30^{\prime}-92^{\circ} 45^{\prime}\) )
Boone, Cooper, Howard, and Moniteau Counties

1. FROM POINT 3 MILES DOWNSTREAM FROM ROCHEPORT NORTHWEST TO ROCHEPORT, THENCE NORTH INTO FAYETTE QUADRANGLE AT SEC. 31, T. 49 N., 'R. I4 W. (by D. V. Vandiver in 1905)
U.S.C.E. B.M. designated " \(1322^{n}\)

Feet
Copper bolt
Top of cap
Old Overton, 2 ml . SE. of, at lane to dwelling of Gilbert Karles, 15 ft . S. of rdi, in root of \(24-1 n\). honey-locust tree; copper nail

Old Overton, \(1,000 \mathrm{ft} . \mathrm{S}\). of river, at SE. comer of T-rd., in root of large maple tree; copper nall
587.08

Missouri River at Rocheport; surface of water Nov. 13, 1912
Hotel, on SE. corner of concrete sidewalk; chiseled square
581.51
(Continiued in Fayette quadrangle; see line 1.)

\section*{2. FROM SEC. 11, T. 47 N., R. 17 W., SOUTH BY WAY OF LONE ELM TO SEO. 13, T. 46 N., R. 17 W. (by J. H. Vinyard in 1934)}
T. 47 N., R. 17 W., E. sixteenth cor. sec. 11 , about 0.8 mi . W. of junction of Lone Elm rd., N. of 30 ft . \(j 0 \mathrm{~g}\) in rd., 6 ft . W. of N. gatepost at entrance to farm of Ernest Aldridge; in concrete post; U.S.C. \& G.S. and State Survey standard táblet
808.046
T. \(47 \mathrm{~N}, \mathrm{R}_{\mathrm{R}} 17 \mathrm{~W}\), quarter cor: between secs. 11 and \(12,0.5 \mathrm{mi}\). W. of Lone EIm rd., 18 ft . N . and 4 ft . W. from rd. at \(\mathrm{N} .-\mathrm{S}\). fences, 3 ft . N. and 4 ft . W. from fence corner, in concrete post; U.S.C. \& G.S. and State Survey standard tablet stamped " 12 F "
802.514
T. 47 N., R. 17 W., near quarter cor between secs. 12 and 13 , about 500 ft . N. of T-rd. N., W. of rd., in root of 12-in. tree; spike
. 47 N., R. 17 W., near W. sixteenth cor. sec. 13 , E. of rd., in root of l8-in. ash tree; spike
Lone Elm, near center of SW \(1 / 4\) sec. \(24, T .47 \mathrm{~N} ., \mathrm{R} .17 \mathrm{~W} .\), in yard of zion Lutheran Churoh, in \(N\). concrete carriage block; standard tablet stamped "T T 19 C WA 1934"
Lone Elm, 0.8 mi . S. of, near W. sixteenth cor. sec. 25, T. \(47 \mathrm{~N} .\),
R. 17 W., E. of rde, in root of \(18-1 \mathrm{n}\). elm tree; copper nail and washer

Lone Elm, 2.3 mi . S. of, in \(\mathrm{SW} 1 / 4 \mathrm{sec} .36, \mathrm{~T} .47 \mathrm{~N} ., \mathrm{R} .17 \mathrm{~W} ., 100 \mathrm{ft}\).
W. of County Route J at rd. N., on E . end of N . head wall of concrete
culvert; chiseled square
849.75
T. 46 N., R. 17 W., near quarter cor. between secs. 11 and 12 , in schoolyard, on concrete well top; chiseled square

\section*{3. FROM SEC. 12, T. \(47 \mathrm{~N} ., \mathrm{R}_{\cdot} 17 \mathrm{~W}_{\bullet}\), EAST INTO LUPUS QUADRANGLE AT SEC. 31, T. 48 N., R. 14 W. (by J. H. Vinyard in 1934)}

post, in root of 24 -in. black-oak trees copper nail and washer
T. 47 N., R. 16 W.; on line between secs: 8 and \(17,500 \mathrm{ft} . \mathrm{N}\), of rd. corner No-W., E. of rd., in root of twin 36-1n. elm trees copper nail and washer
T. 47 N., R. 16 W., W. sixteenth cor. sec. 9, near Trinity Lutheran Church, at T-rd. S., on head wall of culvert; chiseled square
T. \(47 \mathrm{~N} ., \mathrm{R}\). \(16 \mathrm{~W} ., 0.1 \mathrm{mi}\). E. of quarter cor. between secs. 9 and 10 , 0.8 mi . E. of Trinity Lutheran Church, at top of steep hill, in stump of twin 48-in. oak tree; copper nail and washer
T. 47 N., R. 16 W., near quarter cor. between secs. 10 and \(11,1 \mathrm{ml} . \mathrm{W}\). of New Salem School, at gate to farm, in root of \(20-1 n\). elm tree; copper nail and washer
Prairier Home, 3 mi . NW. of, along State Highway 87, in SE. corner of yard of New Salem School, 25 ft . N. and 175 ft . E. from crossroad, \(4 \mathrm{ft} . \mathrm{N}\). and 6 ft . W. from fence corner, in concrete post; U.S.C. \& G.S. and State Survey standard tablet stamped "21 C W A 1934"
T. \(47 \mathrm{~N} ., \mathrm{R}\). \(16 \mathrm{~W}_{.}, 0.3 \mathrm{mi}\). E. of center sec. \(12,0.8 \mathrm{mi}\). E. of New Salem School, 15 ft . E. of gate to farm, N. of rd., on flat rock; chiseled square
790.766
T. 47 N. , Rs. 15 and \(16 \mathrm{~W} ., 600 \mathrm{ft}\). E. (W. ?) of quarter cor, between socs. 7 and 12, 1 mi . E. of New Salem School, 0.2 mi . E. of farmhouse on \(N\). side of rd., in creek bottom, in root of twin walnut tree; copper nail and washer
T. 47 N. . Rs. 15 and \(16 \mathrm{~W} .\), quarter cor. between secs. 7 and 12 , at top of steep hill, in root of \(20-1 n\). white-oak tree; copper nail and washer
T. 47 N., R. 15 W ., in \(\mathrm{NW} 1 / 4\) sec. \(8,60 \mathrm{ft}\). S . and 90 ft . E. from T-rd. S., in root of \(15-1 n\). white-oak tree; copper nail and washer
T. 47 N., R. 15 W., near quarter cor. between secs. 5 and 8, SE. of T-rd. E., in telephone pole; nails
T. 47 N., R. 15 W., in SE \(1 / 4\) sec. \(5,0.3 \mathrm{ml}\). E. of T-rd. N., on N. head wail of culvert; chiseled square
T. 47 N., R. 15 W., in NW \(1 / 4\) sec. 9, in front yard of farmhouse of Mrs. Farris, in root of 18-in. maple tree; copper nail and washer
T. 47 N., R. \(15 \mathrm{~W} .\), in \(\mathrm{SE} 1 / 4 \mathrm{sec} .4\), at foot of hill, 12 ft . N. and 22 ft . E. from center of triangle formed by rd. forks, 3 ft . N. and 3 ft . E. from sign marked "Pleasant Grove Evangelical Church \(\frac{1}{2}\) Mile", in concrete post; U.S.C. \& G.S. and State Survey standard tablet stamped "22 C W A 1934"
Reference mark, 50 ft . N. of tablet, on \(E\). head wall of culvert; chiseled square
Lupus, 6.5 ml . W. of, in \(\mathrm{SW} 1 / 4 \mathrm{sec} .3\), T. \(47 \mathrm{~N} .\), R. \(15 \mathrm{~W} ., 0.2 \mathrm{mi}\). W. of crossroads, in front of farmhouse of Mrs. Mary Whalen, S. of rd., in root of 12-in. cottonwood tree; copper nail and washer
842.45

Lupus, 5.8 mi . W. of, in \(\mathrm{SE} 1 / 4\) sec. 3 , T. \(47 \mathrm{~N} ., \mathrm{R} .15 \mathrm{~W}, 0.5 \mathrm{mi} . \mathrm{E}\). of crossroads, 200 ft . E. of rd. corner, S. of rd., in root of \(48-1 \mathrm{n}\). oak tree; copper nail and washer
Lupus, about 4.3 ml . NW. of, in \(\mathrm{S} 1 / 2 \mathrm{sec} .36\), T. \(48 \mathrm{~N} ., \mathrm{R} .15 \mathrm{~W} ., 0.5 \mathrm{mi}\). W. of crossroads, at old Renfrow store, 46 ft . S . of rd ., on property of Mrs. Clara Hackseman, in concrete well top; standard tablet stamped " 23 C W A 1935 "
Reference mark, 150 ft . W. of tablet, in root of \(18-\mathrm{in}\). elm tree; copper nail and washer
(Continued in Lupus quadrangle; see line 7.)

> 4. FROM SEG. 5, T. 47 N., R. 16 W., WEST TO SEC. 12, T. 47 N., R. 17 W. (by J. H. Vinyard in 1934 )
T. 47 N., R. 16 W., in \(\mathrm{SE} 1 / 4 \mathrm{sec} .5\), 1 mi . NW. of Trinity Lutheran Church, in N. wing wall of E. abutment of bridge over Little Clarks Fork Creeks standard tablet stamped "20 C W A 1934"
T. 47 N., R. 16 W., 0.2 m . W. of center sec. 5 , about 2 ml . E. of Lone Elm rd., 0.1 mi. W. of T-rd. N., at bottom of hill., on S. head wall of culvert; chiseled square
T. \(47 \mathrm{~N} ., \mathrm{R}^{2} 16 \mathrm{~W}\). , near center sec. \(6,1.2 \mathrm{mi}\). E. of Lone Elm rd.; 0.1 ml . E. of 500 ft . jog in rd., on S . head wall of culvert; chiseled square
T. 47 N. , Rs. 16 and 17 W. , about 0.2 ms . E. of quarter cor. between secs. 1 and \(6,0.7 \mathrm{mi}\). E. of Lone Elm rd., on N. edge of bridge over
T. 47 N ., Rs. 16 and 17 W ., near quarter cor. between secs. 1 and 6 , 0.5 ml . E. of Lone Elm rd., at entrance to farm of \(I\). Hosp, N. of rd., at gatepost, in root of \(30-1 n\). wild-cherry tree; copper nail and washer
T. 47 N., R. 17 W., center sec. \(1,300 \mathrm{ft}\). S. of T-rd., on W. head wall of culvert; chiseled square

\section*{5. FROM BOONVILLE SOUTH TO SEC. 12, T. 47 N., R. 17 W., THENCE WEST INTO PILOT GROVE QUADRANGLE AT SEC. \(11, \mathrm{~T} .47 \mathrm{~N} ., \mathrm{R} .17 \mathrm{~W}\). (by B. A. Barnes in 1934)}
U.S.C.F. B.M. designated "lyl"

Copper bolt

Boonville, about 0.6 mi . S. of, in E \(1 / 2 \mathrm{sec}\). 2, T. \(48 \mathrm{~N} ., \mathrm{R} .17 \mathrm{~W} .\), 2 ft . W. of N. post of gate at driveway to farm of D. G. Davis, in concrete post; U.S.C. \& G.S. and State Survey standard tablet

Boonville, 4 mi . S . of, along Lone Elm rd., 290 ft . E. of rd. junction, 3 ft . N. and 3 ft . W. from tree at N. end of hedge, \(N\). of ra., in concrete post; U.S.C. \& G.S. and State Survey standard tablet
Boonville, about 4.2 mi . S. of, along Lone Elm rd., about 0.2 mi . S. of rd. junction, in grove of large oak trees at top of hill, 40 ft . E. of rd., 3 ft . S. and 10 ft . W. from twin 30-in. oak tree, in concrete post; U.S.C. \& G.S. and State Survey standard tablet
Boonville, about 5 mi . S. of, along Lone Elm rd., 0.3 mi . S. of bridge, 160 ft . E. of rd., in root of \(48-1 \mathrm{n}\). walnut tree; spike
Boonville, about 6 ml . S. of, along Lone Elm ra., 25 ft . N. of NE. corner of Mount Herman Baptist Church, 20 ft . W. of rd., 5 ft . W. of telegraph pole, in concrete post; U.S.C. \& G.S. and State Survey standard tablet
Boonville, 6.5 mi . S. of, along Lone Elm rd., 0.5 ml . S. of Mount Herman Baptist Church, 20 ft . N. of E. gatepost at entrance to farm of C. G. Bouer, in concrete post; U.S.C. \& G.S. and State Survey standard tablet stamped "10 F"
(Continued in Pilot Grove quadrangle; see line 2.)
6. FROM LUPUS QUADRANGLE AT SEC. 6, T. 46 N., R. I4 W., WEST AND NORTH BY WAY OF PISGAH TO POINT 2.5 MILES NORTHWEST OF PRAIRIE HOME (by A. L. Detweiler in 1934)
(Continued from Lupus quadrangle; see line 9.)
T. 46 N., R. 15 W., in NE \(1 / 4 \mathrm{sec} .12,700 \mathrm{ft}\). N. of large barn, 100 ft . S. of branch, at well, in root of 36-in. black-oak tree; nail
T. 46 N., R. 15 W., in SW \(1 / 4\) sec. \(12,400 \mathrm{ft}\). W. of small farmhonse, at intersection of two small branches, in root on N. side of 20-in. walnut tree; copper nail and washer
T. 46 N., R. 15 W., in \(S W 1 / 4 \mathrm{sec} .11,0.7 \mathrm{mi}\). E. of Elliot School, 100 ft . W. of Howard Creek, at foot of ravine, in root on S. side of 48-1n. elm tree; copper nail and washer
amestown, \(1 \mathrm{ml} . S\) and 3.5 ml . W. from, near quarter cor between secs. 10 and 15, T. 46 N., R. 15 W., in S. part of yard of Elliot School, in concrete post; standard tablet stamped "T T 22 C W A 1934"
(For balance in California quadrangle, see line 6.)
T. 46 N., R. 15 W., near quarter cor. between secs. 8 and \(17,0.2 \mathrm{ml}\). N. of Moniteau River, about 0.2 mi . E. of dwelling, 80 ft . E. of small creek, on SW. end of concrete culvert; chiseled square
T. \(46 \mathrm{~N} ., \mathrm{R} .15 \mathrm{~W}\)., near center sec. 7 , 150 ft . W. of T-rd. N., opposite T-rd. S., in NW. head wall of culvert; standard tablet stamped "27 C W A 1934"
T. 46 N., R. 16 W., in W \(1 / 2\) sec. 12 , on NW. corner of siding, at \(W\). end of bridge over Pisgah Creek; chiseled square
Pisgah, 0.5 mi . S. of, at pump sta., at NE. corner of engine house, on E. end of step; chiseled square

Pisgah, near quarter cor. between secs. 2 and 3, T. 46 N., R. 16 W., on bottom step of Pisgah Baptist Church; chiseled square
Pisgah, 0.5 mi . N. of, N. cor. secs. 2 and 3, T. 46 N., R. 16 w., 105 ft. E. of ra. N., 36 ft . E. of \(\mathrm{r}_{\mathrm{o}} \mathrm{rd}\). corner S. \(-W\). in NW. corner of field, in concrete post; standard tablet stamped "T T 28 C W A 1934 "
Pisgah, 1.5 mi . N. of, cor. secs. \(26,27,34\), and 35 , T. \(47 \mathrm{~N} ., \mathrm{R} .16 \mathrm{~W} .\), at rd. junction, on \(w\). end of culvert; chiseled square
T. 47 N., R. 16 W. , in sec. 26, in schoolyard, on base of flagpole; chiseled square
T. \(47 \mathrm{~N} .\), R. \(16 \mathrm{~W} .\), cor . secs. \(23,24,25\), and 26 , at T-rd. S., in S. side of gatepost; spike
T. 47 N., R. 16 W., quarter cor. between secs. 24 and 25 , on SW . corner of concrete base of corner fence post; chiseled square
T. 47 N., R. \(16 \mathrm{~W}_{.}\), in sec. \(13,0.5 \mathrm{mi}\). S. of State Highway 87, W. of rd., in gatepost; nail
7. FROM PILOT GROVE QUADRANGLE AT SEC. \(14, \mathrm{~T} .46 \mathrm{~N} ., \mathrm{R} .17\) W., EAST

AND SOUTH INTO CALIFORNIA QUADRANGLE AT SEC. 13 , T. 46 N., R. 17 W. (by J. H. Vinyard and P. A. Castle in 1934)
(Continued from Pilot Grove quadrangle; see line 1.)
Cotton, 1.5 ml . N. and 1.5 ml . W. from, 20 ft . N. and 15 ft . E. from stone at quarter cor. between secs. 13 and \(14, \mathrm{~T} .46\) N., R. 17 W., \(5 \mathrm{ft} . \mathrm{N}\). and \(20 \mathrm{ft}\). . from T-rd. W., in concrete post; standard tablet stamped "T T 18 C W A 1934"
Reference mark, 0.3 ml . N. of tablet, at T-rd. E., on N. head wall of stone culvert; chiseled square
T. 46 N., R. 17 W., about \(1,000 \mathrm{ft}\). S. of quarter cor. between secs. 12 and 13, at top of hill, \(N\). of rd., in root of tree; copper nail and washer
857.53
871.034

Feet
667.505
659.659
615.28
762.299
766.131
.
865.17
857.39
819.83
839.82
834.89
8. FROM LUPUS QUADRANGLE SOUTHWEST ALONG COUNTY ROUTE P TO JUNCTION OF STATE HIGHWAY 87, THENCE SOUTHEAST ALONG STATE HIGHWAY 87 INTO LUPUS QUADRANGLE (by Charles E. Hunter in 1937 ) (Continued from Lupus quadrangle; see line 10.)
T. 47 N., R. 15 W., 600 ft. E. of quarter cor. between secs. 13 and 24 , \(25 \mathrm{ft} . \mathrm{N}\). and 15 ft . E. from Junction of rd. N., in base on NW. side of corner fence post; spike
T. 47 N., R. 15 W., near center sec. \(24,50 \mathrm{ft}\). N. and 15 ft . W. from junction of ra. W., on W. end of iron pipe culvert; painted square
T. 47 N., R. 25 W., near quarter cor. between secs. 24 and \(25,200 \mathrm{ft}\).
N. and 90 ft . W. from crossroad, in root on NE. side of 20-in. hickory tree; copper nail and washer

Peet
831.08
806.24
814.24
823.90
847.13
874.05
(Continued in Lupus quadrangle; see line 10.)
For additional level lines along south bank of Missouri River and U.S. Highway 40, refer to United States Coast and Geodetic Survey first-order line, Jefferson City to Kansas City; and second-order line, Lupus to Centralia.

CALIFORNIA QUADRANGLE
(Latitude \(38^{\circ} 30^{\prime}-38^{\circ} 45^{\prime}\); longitude \(92^{\circ} 30^{\prime}-92^{\circ} 45^{\prime}\) )
Cooper, Koniteau, and Morgan Counties

1. FROM ELDON QUADRANGLE NORTH ALONG STATE HIGHWAY 87 TO SEC. 33, T. 14 N., R. 15 W., THENCE WEST AND SOUTH ALONG ROADS INTO ELDON QUADRANGLE AT SEC. 12, T. 43 N., R. 17 W. (by C. P. Thompson in 1934)

High Point, 2 ml . NE. of, near E. sixteenth cor. between secs. 4 and 9 , T. 43 N. , R. \(15 \mathrm{~W} ., 12 \mathrm{ft}\). N. and 31 ft . E. from junction of rd. W., 12 ft . N. of fence corner, in root on W. side of \(24-1 \mathrm{n}\). elm tree; copper nail and washer
High Point, 3 mi . NE. of, near E . sixteenth cor. on N. Ine sec. 4, T. \(43 \mathrm{~N} ., \mathrm{R} .15 \mathrm{~W} ., 60 \mathrm{ft}\). N. and 90 ft . W. from junction of rd. E., on property of Roy and Oscar Porter, 12 ft . S. of NE. corner of garden, in root on E. side of 18-1n. elm tree; copper nail and washer
High Point, 3.6 mi . NE. of, near center sec. \(33, \mathrm{~T} .44 \mathrm{~N} ., \mathrm{R} .15 \mathrm{~W} .\), 410 ft . N. of crossroad, 15 ft . W. of highway, in S . end of w . head wall of concrete culvert; steel rivet
T. 44 N., R. 15 W., near W. sixteenth cor. sec. \(32,17 \mathrm{ft}\). W. of T-rd. E., 2 ft . N. of fence corner, in concrete post; U.S.C. \& G.S. and State Survey standard tablet stamped " 1580 C W A 1934"
T. 44 N., R. 15 W., in NE \(1 / 4\) sec. \(31,98 \mathrm{ft}\). N. and 21 ft . W. from NW. corner of farmhouse of W. L. Kelsay, 18 ft . S. of ra., in concrete post; U.S.C. \& G.S. and State Survey standard tablet stamped " 1581 C W A 1934"
Reference mark, \(30 \mathrm{ft} . \mathrm{N}\). and 60 ft . W. from tablet, in root on S . side of \(2 l_{-1}\). oak tree; copper nail and washer
904.85
869.14
791.88
828.715
864.762
863.59
T. 44 N., R. \(15 \mathrm{~W} .\), near NW, cor. sec. \(31,210 \mathrm{ft}\). E. of T-rd., 10 ft . S. of rd., on \(S\). head wall of concrete culvert; chiseled square
T. 4 N., R. 16 W., in NW \(1 / 4\) sec. 36 , about 100 ft . S. and 100 ft . W. from SW. corner of farmhouse of Marvin H. Crawford, 20 ft . N. of rd., in fence corner, in root on S. side of 20-in. elm tree; copper nail and washer
Latham, 5 ml . SE. of, in NW \(1 / 4\) sec. \(36, \mathrm{~T} . \mathrm{L}_{4} \mathrm{~N} ., \mathrm{R}\). 16 W , on property of Marvin H . Crawford, 83 ft . N. of rd., 15 ft . N. of gate to pasture, 1 ft . W. of fence, in concrete post; U.S.C. \& G.S. and State Survey standard tablet stamped "1582 C W A 1934"
Latham, 4.6 mi . SE. of, in NE \(1 / 4 \mathrm{sec} .35, \mathrm{~T} .44 \mathrm{~N} ., \mathrm{R} .16 \mathrm{~W} ., 70 \mathrm{ft} . \mathrm{N}\). and 19 ft . E. from rd. Junction, on property of Marvin H. Crawford, 1 ft . E. of right-of-way fence, in concrete post; U.S.C. \& G.S. and State Survey standard tablet stamped "1583 C W A 1934"
Reference mark, 55 ft . S. and 36 ft . W. from tablet, in root on N. side of 10-in. hedge tree; copper nail and washer
Latham, 3.7 mi . SE. of, 640 ft . N . and 9 ft . W. from quarter cor, between secs. 34 and 35, T. 44 N., R. \(16 \mathrm{~W} ., 200 \mathrm{ft}\). S. of T-rd. E., 640 ft . N. of T-rd. W., on \(N\). end of \(W\). concrete head wall of iron pipe culvert; chiseled square
Latham, 2.9 ml . SE. of, center sec. 34, T. \(44 \mathrm{~N} ., \mathrm{R}, 16 \mathrm{~W} ., 669 \mathrm{ft} . \mathrm{W}\). of junction of rd. N., 20 ft . N. of rd., 2 ft . N. of fence, in concrete post; U.S.C. \& G.S. and State Survey standard tablet stamped "1584 C W A 1934"
Reference mark, 71 ft . E. of tablet, in fence corner, on large boulder; chiseled mark
Latham, 2.5 ml . S. of, quarter cor. between secs. 33 and \(34,33 \mathrm{ft}\). N. and 99 ft . E. from T-rd. E., 57 ft . S. and 15 ft . E. from SE. corner of Inglebreak farmhouse, 27 ft . SE. of 8 -in. maple tree, in concrete post; U.S.C. \& G.S. and State Survey standard tablet stamped " 1585 C W A 1934"
857.74
886.211
907.337
904.35
897.04
883.581
882.70
935.183

Latham, 1.5 ml . S. of, in SE \(1 / 4\) sec. \(28, \mathrm{~T} .4 \mathrm{H}_{\mathrm{N}}\)., R. \(16 \mathrm{~W} ., 18 \mathrm{ft} . \mathrm{N}\). and 105 ft . W. from crossroads, in \(S W\). corner of yard, in root on \(W\). side of \(12-1 n\). hedge tree; copper nall and washer
892.71

Latham, \(1.5 \mathrm{mi} . \mathrm{S}\). and 1 ml . W. from, in \(\mathrm{SE} 1 / 4 \mathrm{sec}, 29, \mathrm{~T} . \mathrm{L}_{4} \mathrm{~N}\). , R. \(16 \mathrm{~W} ., 16 \mathrm{ft} . \mathrm{N}\). and 44 ft . E. from T-rd. E., 24 ft . E. of SW . corner of cemetery, 1.5 ft . N. of fence, in concrete post; U.S.C. \& G.S. and State Survey standard tablet stamped "1586 C W A 1934"
911.394

Latham, 3 mi . SW. of, about 660 ft . S. of center sec. 29, T. य4 N., R. \(16 \mathrm{~W} ., 25 \mathrm{ft}\). S. and 18 ft . W. from junction of rd.E., at top of hill, 2 ft. W. of fence, in concrete post; U.S.C. \& G.S. and State Survey standard tablet stamped "1578 o W A 1934"
Latham, 3.7 mi . SW. of, near W. sixteenth cor. between secs. 29 and 32, T. \(\psi_{4} \mathrm{~N} \cdot \boldsymbol{\mathrm { R }}\). \(16 \mathrm{~W} ., 29 \mathrm{ft}\). N. and 24 ft . E. from T-rd. N., in root on NW. side of \(22-1 n\). elm tree; copper nail and washer
906.

Latham, 4.2 mi . SW. of, in NE \(1 / 4\) sec. \(31, \mathrm{~T} .44 \mathrm{~N} ., \mathrm{R}\). 16 w, , 114 ft . s. and 100 ft . E. from T-rd. E., 228 ft . N. of Hazel Dell School, in root on NW. side of 30-in. oak tree; copper nall and washer
\(824 \cdot 32\)

Latham, 5.4 ml . SW. of, in SE \(1 / 4 \mathrm{sec}\). 31 , T. \(44 \mathrm{~N} ., \mathrm{R} .16 \mathrm{w} ., 365 \mathrm{ft} . \mathrm{s}\). of farmhouse of Mrs. D. L. Hofsetter, 24 ft . N. and 24 ft . E. from T-rd. E., 84 ft . N. and \(2 \mathrm{l}_{4} \mathrm{ft}\). E. from T-rd. W., in root on NW. side of 20-in. maple tree; copper nail and washer
910.49

Latham, 6.7 ml . SW. of, in NE \(1 / 4 \mathrm{sec} .7, \mathrm{~T} .43 \mathrm{~N} .\), R. \(16 \mathrm{w} ., 15 \mathrm{ft} . \mathrm{E}\). of rd., on \(N\). concrete head wall of culvert; chiseled square
T. \(43 \mathrm{~N}, \mathrm{R} .17 \mathrm{~W} .\), about 0.2 ml . N. of quarter cor. between secs. 1 and \(12,69 \mathrm{ft}\). S . and 60 ft . W. from SW. corner of garage of Ed. Lehman, 18 ft . E. of ri., in concrete post; U.S.C. \& G.S. and State Survey standard tablet stamped "1579 C W A 1934"
Reference mark, 108 ft . S. and 40 ft . W. from tablet, in root on \(N\). side of \(16-1 \mathrm{n}\). hedge tree; copper nail and washer
(Continued in Eldon quadrangle; see line 7.)
2. FROM. SEC. 29, T. \({ }^{4} 4\) N., R. 16 W., NORTH TO SEC. 30, T. 45 N., R. 16 W. (by C. P. Thompson in 1934)

Latham, 0.8 ml . S., thence 1.2 ml . W. from, quarter cor. between secs. 20 and 29, T. 44 N., R. 16 W., 156 ft . N. and 10 ft . W. from T-rd. W., on S. erd of W. head wall of concrete culvert; chiseled square

Latham, 0.2 mi . N., thence 1.2 mi . W. from, quarter cor. between secs. 17 and \(20, T .44 \mathrm{~N} ., \mathrm{R} .16 \mathrm{~W}_{.}, 130 \mathrm{ft}\). N. and 3 ft . W. from stone at crossroads, about 20 ft . W. of rd., 2 ft . W. of fence, in concrete post; U.S.G. \& G.S. and State Survey standard tablet stamped 11587 C W A \(1934^{\prime \prime}\)
Latham, 1.2 ml . W., thence 0.6 mi . N. from, about 700 ft . S. of center sec: 17, T. \(44 N_{0}, R_{0} 16\) W., 250 ft . W. of barn, 20 ft . E. of rd., 22 ft . S. of \(20-1 \mathrm{n}\). maple tree, 3 ft . E. of fence, in concrete post; U.S.C. \& G.S. and State Survey standard tablet stamped "1588 C W A 1934 m

Reference mark, 23 ft . N . and 6 ft . E. from tablet, in root on E. side of 20-1n. maple tree; copper nail and washer
Latham; 1.2 mi'. W., thence 1.2 mi. N. from, quarter cor. between secs. 8 and \(17, \mathrm{~T} .44 \mathrm{~N} .: \mathrm{R}\). \(16 \mathrm{~W} ., 42 \mathrm{ft}\). S. and 40 ft . E. from rd. corner S.-E., in root on W. side of 18-in. hickory tree; copper nail and washer

Latham, 1.2 ml . W., thence \(2: 1 \mathrm{mi} . \mathrm{N}\). from, about 600 ft . N . of center sec. 8, T. 44 N., R. 16 W., 45 ft . S. and 18 ft . E. from rd. corner S.-W., 3 ft. E. of fence; in concrete post.; U.S.C. \& G.S. and State Surver standard tablet stamped " 1589 C W A 1934 "
Reference mark, 10 ft . S. and 58 ft . W. from tablet, in root on N . side of 30-1n. black-oak tree; copper nail and washer
798.76
874.934
894.234
894.69
851.99
832.880
830.85

Latham, \(2.1 \mathrm{mi} . \mathrm{N}\), and 1.5 mi . W. from, in \(\mathrm{NW} 1 / 4 \mathrm{sec} .8\), T. \(\mathrm{L}_{4} \mathrm{~N}\). ,
R. \(16 \mathrm{~W} ., 300 \mathrm{ft}\). NE. of farmhouse of R. H. Boggs, 31 ft . S. of old
concrete foundation, 19 ft . N. of rd., in concrete post; U.S.C. \& G.S.
and State Survey standard tablet stamped "l590 C W A 1934"
Feot

Tipton, \(3.8 \mathrm{ml} . \mathrm{S}\). and 3.8 mi . E. from, in \(\mathrm{SE} 1 / 4 \mathrm{sec} .6, \mathrm{~T} .44 \mathrm{~N} .\),
R. 16 W., 18 ft . N. and 33 ft . W. from T-rd. W., in fence line, in root on S. side of 8-in. oak tree; copper nail and washer
Tipton, about 3 mi . S . and 3.8 mi . E. from, in SE \(1 / 4 \mathrm{sec} 31\), T. 45 N. ,
R. 16 W ., in woods at top of hill, 22 ft . E. of fence, 5 ft . W. of

36-in. oak tree, in concrete post; U.S.C. \& G.S. and State Survey standard tablet stamped "1591 C W A 1934"
Reference mark, \(65 \mathrm{ft} . \mathrm{N}\), and 30 ft . E. from tablet, in root on W. side of 30-1n. black-oak tree; copper nail and washer
Tipton, about 2.8 ml . S. and 3.8 ml . E. from, near E. sixteenth cor.
sec. 31, T. 45 N., R. \(16 \mathrm{~W} ., 22 \mathrm{ft}\). S. and 47 ft . W. from SW. corner
of dwelling of E. W. Howard, 30 ft . E. of rd., in concretie post;
U.S.C. \& G.S. and State Survey stendard tablet stamped "1592 C W A 1934"

Tipton, 3.2 mi . E., thence 1.5 mi . S. from, W. sixteenth cor. between
secs. 30 and \(31, T .45\) N., R. \(16 \mathrm{~W} ., 7 \mathrm{ft}\). S. and 180 ft . E. from T-rd.
N., on \(S\). end of \(E\). abutment of concrete bridge; rivet

Cole triangulation sta.; U.S.C. \& G.S. triangulation sta. designated "Cole"
S. reference mark
N. reference mark
851.564
861.61
835.710
838.58
861.041
845.48
922.439
922.730
922.796

> 3. FROM CLARKSBURG WEST ALONG MISSOURI PACIFIC RAILROAD TO SEC. I8, T. \(45 \mathrm{~N} ., \mathrm{R} .16 \mathrm{~W} .\), THENCE SOUTH ALONG ROADS TO SEC. 30 , T. \(45 \mathrm{~N} ., \mathrm{R} .16 \mathrm{~W}\). (by C. P. Thompson in 1934)
U.S.C. \& G.S. copper bolt designated "XXXIV"
903.673

Clarksburg, 2.5 ml . W. of, about 100 ft . W. of rd. crossing, N. of R.R., in concrete post; U.S.C. \& G.S. and State Survey standard tablet
Clarksburg, 3 mi . W. of, 0.5 mi . W. of rd. crossing, 30 ft . N. of R.R., 10 ft . S. of right-of-way fence, in concrete post; U.S.C. \& G.S. and State Survey standard tablet
901.460
917.426

> 4. FROM SEC. 18, T. 45 N., R. 16 W., NORTH TO SEC. \(19, \mathrm{~T} .46 \mathrm{N.}\), R. 16 W., THENCE EAST TO SEC. 31 , T. 46 N., R. \(15 \mathrm{~W} .\), THENGE SOUTH TO CALIFORNIA (by C. P. Thompson in 1934 )
T. 45 N., R. 16 W., near E. sixteenth cor. between secs. 6 and \(7,14 \mathrm{ft}\). S. and 100 ft . E. from rd. junction, in concrete post; U.S.C. \& G.S. and State Survey standard tablet
906.702
T. \(45 \mathrm{N}\). . R. 16 W. , in \(\mathrm{NE} 1 / 4 \mathrm{sec}\). 6 , in SE . corner of cemetery, about 100 ft . E. of rd., in concrete post; U.S.C. \& G.S. and State Survey standard tablet
T. 46 N., R. 16 W., near center sec. 31 , about 1.5 mi . S. of Cotton, in NW. wing wall of concrete bridge; monel rivet
Cotton, in N \(1 / 2\) sec. \(30, \mathrm{~T} .46 \mathrm{~N} ., \mathrm{R}\). 16 W ., on NE. pier of bridge;
NE. rivet
Cotton, near quarter cor. between secs. 19 and \(30, T .46 \mathrm{~N} ., \mathrm{R} .16 \mathrm{~W}\). , in SE. corner of schoolyard, in concrete post; U.S.C. \& G.S. and State Survey standard tablet
T. 46 N., R. 16 W., near cor. secs. 19, 20, 29, and 30, about 500 ft . SW. of bridge over Moniteau Creek, 15 ft . SE. of creek, in concrete post; U.S.C. \& G.S. and State Surver standard tablet
T. \(46 \mathrm{~N} ., \mathrm{R}\). 16 W. , in \(\mathrm{S} 1 / 2 \mathrm{sec} .20,0.4 \mathrm{mi}\). SE. of steel bridge, 50 ft . E. of small bridge, on SE. corner of small culvert; chiseled square
T. 46 N., R. \(16 \mathrm{~W} .\), in \(\mathrm{SW} 1 / 4 \mathrm{sec}\). 21 , about. 300 ft . E. of ra. corner, S. of rd., in concrete post; U.S.C. \& G.S. and State Survey standard tablet
T. 46 N., R. 16 W., near center sec. 28 , on \(E\). side of rd. opposite old farmhouse, in concrete post; U.S.C. \& G.S. and State Survey standard tablet
T. \(46 \mathrm{~N} ., \mathrm{R}\). 16 W ., cor secs. \(27,28,33\), and \(34,30 \mathrm{ft}\). NW. of junction of rds., in root of \(10-1 n\). white-oak tree; nail'
T. 46 N., R. 16 W ., near quarter cor. between secs. 27 and 34 , N. of rd., 40 ft . E. of walnut tree, in concrete post; U.S.C. \& G.S. and State Survey standard tablet
T. 46 N., R. 16 W., E. sixteenth cor. between secs. 27 and \(34,100 \mathrm{ft}\). N. of T-rd. W., E. of rd., in concrete post; U.S.C. \& G.S. and State Survey standard tablet
T. \(46 \mathrm{~N} ., \mathrm{R} .16 \mathrm{W.}\), in \(\mathrm{NW} 1 / 4\) sec. 35 , about 150 ft . W. of New Zion Church, 50 ft. S. of rd., in root on N. side of hickory tree; leadheaded nail.
T. 46 N., R. 16 W ., cor. secs. \(25,26,35\), and \(36,25 \mathrm{ft}\). S. and 200 ft . W. from 'crossroads, 10 ft . S. of fence, in concrete post; U.S.C. \& G.S. and State Survey standard tablet
919.719
778.02
695.43
774.154
681.924
684.19
884.968
915.730
\(857 \cdot 50\)
837.918
780.869
834.88
818.834
corner of farmhouse of J. A. Allee, 35 ft . S. of rd., in concrete post; U.S.C. \& G.S. and State Survey standard tablet
T. \(46 \mathrm{~N} ., \mathrm{R} .15 \mathrm{~W} .\), in \(\mathrm{S} 1 / 2 \mathrm{sec} .30,300 \mathrm{ft}\). W. of dwelling of Abe

Douglas, 200 ft . W. of barn, on prominent sandstone; chiseled square \& G.S. and State Survey standard tablet
T. 46 N., R. 15 W., in NW \(1 / 4\) sec. 32 , W. of rd. opposite private drive, in concrete post; U.S.C. \& G.S. and State Survey standard tablet
T. 46 N., R. 15 W., near quarter cor. between secs. 32 and 33 , about 400 ft . W. of Hartman dweling, on SW. corner of concrete culvert; chiseled square

Feet
832.19
T. 45 N., R. 15 W., in NW 1/4 sec. 3, on SE, bank of East Brush Creek, in fence corner, in concrete post; U.S.C. \& G.S. and State Survey standard tablet
639.738

California, 2 mi. N. of, in NE \(1 / 4\) sec. 10, T. 45 N., R. 15 W., 100 ft. E. of rd. junction, 60 ft . NW. of small dwelling, 30 ft . S. of rd., in concrete post; U.S.C. \& G.S. and State Survery standard tablet
California, 0.5 mi . N. of, in \(\mathrm{SW} 1 / 4 \mathrm{sec} .15, \mathrm{~T} .45 \mathrm{~N} ., \mathrm{R} .15 \mathrm{~W} ., 200 \mathrm{ft}\). NE. of rd. forks, 20 ft. SE. of rd., in concrete post; U.S.C. \& G.S. and State Survey standard tablet
California, about 0.2 mi . N. of, in NW \(1 / 4 \mathrm{sec} .22, \mathrm{~T} .45 \mathrm{~N} ., \mathrm{R} .15 \mathrm{~W} .\), 300 ft . SE. of rd., 50 ft . E. of fence corner, in concrete post; U.S.C. \& G.S. and State Survey standard tablet

California, on State Highway 87, on W. wing wall of culvert over Brush Creek; chiseled square
U.S.C. \& G.S. B.M. designated "XXXIII"

\title{
5. FROM CALIFORNIA EAST TO SEC. 19, T. 45 N., R. Il W., THENCE NORTH INTO GENTERTOWN QUADRANGLE AT SEC. \(30, T .46\) N., R. IL W. (by A. L. Detweiler in 1934)
}

California, 0.8 mi . SE. of, at county fair grounds, within race track, 35 ft . from W. fence on inside of track, 122 ft . from S. fence, 210 ft . SW. of SW. corner of new concrete committee house in infield, in limestone post; U.S.C. \& G.S. standard disk (magnetic sta.)
Reference mark, 150 ft . SE. of disk, on \(N\). end of culvert; chiseled square
Califormia, 1 mi. E. of, on Missouri Pacific R.R., quarter cor. between secs. 26 and 27, T. 45 N., R. 15 W., \(300 \mathrm{ft}\). N. of U.S. H1ghway 50, 250 ft . W. of rd. at brick house, S. of R.R., on base of signal control box; ch1seled square
California, 2 mi . E. of, on Missouri Pacific R.R., near quarter cor. between secs. 25 and 26, T. 45 N., R. 15 W., N. of right-of-way at rd. crossing, 200 ft . SW. of dweliing, on NW. corner of concrete base of switch signal post 1479 ; chiseled square
886.85
T. 45 N., R. 15 W., in NW 1/4 sec. 25, on old Marion rd., at SW. corner of dwelling of Sam Scmutz, 30 ft . N. of rd., on SW. corner of well top; chiseled square
(For balance in Centertown quadrangle, see line 5.)
T. 45 N., R. 15 W., about 1,000 ft. N. of center sec. 1, at New Salem Baptist Church, on \(S\). end of second step at W. entrance; chiseled square
Kllever Store, in \(\mathrm{SE} 1 / 4 \mathrm{sec} .36, \mathrm{~T} .46 \mathrm{~N} ., \mathrm{R} .15 \mathrm{~W}\). , on N . end of step at SW. corner of store; chiseled square
T. 46 N., Rs. 14 and 15 W., near cor. secs. \(25,30,31\), and 36 , on State Highway 87, on N. end of culvert under private drive; chiseled square
T. 46 N., R. 14 W., in \(W 1 / 2\) sec. 30 , on State Highway \(87,0.5 \mathrm{mi}\). SW. of bridge over Moniteau Creek, in root on S. side of 30-in. white-oak tree; copper nail and washer
(Continued in Centertown quadrangle; see line 5.)
6. FROM BOONVILLE QUADRANGLE AT SEC. 14 , T. \(46 \mathrm{~N} ., \mathrm{R} .15 \mathrm{~W} .\), SOUTH, WEST, AND NORTH INTO BOONVILLE QUADRANGLE AT SEC. 17, T. 46 N., R. 15 W. (by A. L. Detweiler in 1934)
(Continued from Boonville quadrangie; see line 6.)
T. 46 N., R. \(15 \mathrm{~W}_{*}\), in \(\mathrm{SW} 1 / 4\) sec. \(15,0.5 \mathrm{mi}\). NW. of bridge over Moniteau River, 100 ft . N. of rd., 10 ft . W. of branch, on S . end of rock ledge; chiseled square
601.72
T. 46 N., R. 15 W., in SE \(1 / 4\) sec. 16 , at crossroads, on NW. wing wall of bridge over branch; chiseled square
593.91
(Continued in Boonville quadrangle; see line 6.)
7. FROM CALIFORNIA SOUTHEAST ALONG U.S. HIGHWAY 50 4. 3 MILES, THENCE
SOUTH ALONG ROADS INTO CENTERTOWN QUADRANGLE AT SEC. 19, T. 44 N., R. 14 W. (by O. F. Hodgdon in 1934)

California, 10 ft . S. and 12 ft . E. from SW. corner of courthouse, in top of first step above sidewalk; standard tablet
Reference mark, at corner of Main and East Streets, on stone step of Luzier Hall; chiseled square
California, l .1 mi : E. of, on N . partition wall of first concrete culvert E. of city limits; chiseled cross
874.179
870.17
868.00

California, 0.6 ml . S. and 1.1 mi . E. from, in NE \(1 / 4\) sec. \(27, \mathrm{~T} .45 \mathrm{~N}\), R. 15 W., \(300 \mathrm{ft} . \mathrm{S}\). of Missouri Pacific R.R., \(19 \mathrm{ft} . \mathrm{N}\). of highway, on head wall of concrete culvert; chiseled square
California, 2.7 mi . SE. of, at junction of rd. S., 40 ft . S. of highway, 35 ft . W. of N.-S. rd.; top of concrete right-of-way post
California, 3.2 ml . SE. of, 37 ft . S. of highway, in root on w. side of 24 -in. mapie tree; copper nail and washer
```

California, 4.3 mi. SE. of, at junction of rd. N., 20 ft. N. of highway,
15 ft. E. of N.-S. rd., on head wall of concrete pipe culvert; chiseled
square
(For balance in Centertown quadrangle, see line 4.)
T. 44 N., R. 14 W., in $S W 1 / 4$ sec. 19, on Lammert ford rd., 2 mi. SW. of rd. junction, 400 ft . S. and 75 ft . W. from farmhouse of H. H. Remmert, 35 ft . E. of rd., in root on W. side of $36-1 \mathrm{n}$. elm tree; copper nail and washer
703.50
(Continued in Centertown quadrangle; see line 4.)

> 8. FROM CENTERTOWN QUADRANGLE AT SEC. 6, T. $43 \mathrm{N.}, \mathrm{R} .\mathrm{Il} \mathrm{W.}, \mathrm{SOUTH-}$ WEST INTO ELDON QUADRANGLE AT SEC. $9, \mathrm{~T} .43 \mathrm{~N} ., \mathrm{R} .15 \mathrm{~W}$. (by 0. F. Hodgdon in 1934)
> (Continued from Centertown quadrangle; see line 2.)

Russellvilie, 4 mi. W. of, in NW $1 / 4$ sec. 6, T. 43 N., R. $l_{4}$ W., 25 ft . S. and 35 ft . W. from T-rd. S., in root of $36-1 \mathrm{n}$. iocust tree; nails

Russellvilie, 4.5 mi . W. of, in NE $1 / 4 \mathrm{sec} .1, \mathrm{~T} .43 \mathrm{~N} ., \mathrm{R}$. $15 \mathrm{~W} ., 50 \mathrm{ft}$.
S. of SE. corner of farmhouse, 30 ft . N. of rd., in root of $12-1 \mathrm{n}$. poplar tree; nails
Russellville, 5 ml . W. of, in sec. 1, T. 43 N., R. 15 W., 27 ft. N. and 36 ft . E. from crossroads at Corticello, 71 ft . NW. of NE. corner of Baptist Church, in corner of cemetery, in concrete post; standard tablet stamped "31 C W A 1934".
Reference mark, $S$. of rd., in root of 18-in. wild-cherry tree; nails
High Point, $3 \mathrm{mi} . \mathrm{E}$. of, in NE $1 / 4 \mathrm{sec} .2$, T. $43 \mathrm{~N} ., \mathrm{R} .15 \mathrm{~W} ., 100 \mathrm{ft}$. E. of T-rd. E., in right-of-way fence, in root of 24-in. locust tree; nails
High Point, 2.5 mi . E. of, 35 ft . E. of T-rd. E., in telephone pole; nail
High Point, 2 mi . NE. of, in NE $1 / 4 \mathrm{sec} .10, \mathrm{~T} .43 \mathrm{~N} ., \mathrm{R} .15 \mathrm{~W} ., 75 \mathrm{ft}$. S. and 65 ft . W. from T-rd., 60 ft . S. of ra., in root of $18-1 \mathrm{n}$. wiliow tree; copper nail and washer
(Continued in Eldon quadrangle; see line 6.)
9. FROM BOONVILLE QUADRANGLE AT SEC. 13. T. 46 N., R. 17 W., SOUTH
TO COTTON (by J. H. Vinyard and P. A. Castle in 1934)
(Continued from Boonville quadrangle; see line 7.)
Cotton, 1.2 mi . NW. of, cor. secs. 13, 18, 19, and $24, \mathrm{~T} .46 \mathrm{~N} .$, Rs. 16 and $17 \mathrm{~W} ., 50 \mathrm{ft}$. E. of gate to farmhouse, s. of rd., in root of $30-\mathrm{in}$. oak tree; copper nail and washer
Cotton, near quarter cor. between secs. 19 and 30 , T. 46 N., R. 16 W. , in SE. corner of schoolyard, in concrete post; U.S.C. \&G.S. and State Survey standard tablet
Reference mark, 15 ft . E. of tablet, in root of 36-1n. elm tree; copper nail and washer
774.154
774.11

For an additional level line along Missouri Pacific R.R., refer to
United States Coast and Geodetic Survey first-order ińne,
Jefferson City to Pleasant Hill.

ELDON QUADRANGLE
(Latitude $38^{\circ} 95^{\prime}-38^{\circ} 30^{\circ} ;$ long1tude $92^{\circ} 30^{\prime}-92^{\circ} 45^{\prime}$ )
Miller, Moniteau, and Morgan Counties


1. ISOLATED BENCHMARKS (not shown on diagram; by 0. Laurgaard in 1902)

Rocky Mount, opposite post office, in foundation of church; standard tablet stamped "996 Vrsls"

Feet
Barnett, opposite Beckman's store, in foundation of church; aluminum tablet stamped "917 Vrsls"
Excelsior, 0.1 mi . E. of, $150 \mathrm{ft} . \mathrm{S}$. of rd., in bed of creek, in large, flat rock; standard tablet stamped " 863 Vrsls "

$$
915.855
$$

llat rock; in brick front of tisingi
High Point, in brick front of Tising's store; standard tablet stamped
Olean, in brick front of Dr. Allee's drug store; aluminum tablet stamped "770 Vrsls"
Eldon, in brick front of bank; aluminum tablet stamped "934 Vrsls"
2. FROM VERSAILLES NO. 4 QUADRANGLE AT SEC. 1, T. 40 N., R. 15 W., NORTH TO SEC. 36, T. 41 N., R. 15 W., THENGE EAST ALONG STATE HIGHWAY 52 INTO EUGENE QJADRANGLE (by L. V. Johnson in 1932) (Continued from Versailles No. 4 quadrangle; see line 3.)

Tuscumbia, 4.2 mi . NW. of, in SE $1 / 4 \mathrm{sec}, 36, T .41 \mathrm{~N} ., \mathrm{R} .15 \mathrm{~W} ., 241 \mathrm{ft}$. S. and $93 \mathrm{ft} . \mathrm{E}$. from junction of rd. S., at W . entrance to Hail's store, in concrete porch; standard tablet stamped "27 J 1932"
Reference mark, 150 ft . NW. of tablet, on E. head wall of culvert; chiseled square
Tuscumbia, 3.8 mi . NW. of, 1 ml . E. of Hall's store, about 300 ft . SE. of dwelling of J. A. Harbison, 28 ft . S. of highway, in root on N . side of twin walnut tree; copper nail and washer
(Continued in Eugene quadrangle; see line 2.)

> 3. FROM VERSAILLES NO. 4 QUADRANGLE AT SEC. 1, T. 40 N., R. $16 \mathrm{~W} .$, WEST INTO GRAV̄OIS MILLS QUADRANGLE AT SEC. 7 , T. 40 N., R. 16 W. (by J. H. VInyard in 1934)
> (Continued from Versailies No. 4 quadrangle; see line 4.)

Bagnell, 4.2 ms . NW. of, in NW $1 / 4$ sec. 1, T. 40 N., R. $16 \mathrm{~W} ., 90 \mathrm{ft}$. N. (?) and 17 ft . W. (?) from rd. forks at farm of John Conner, in concrete post; standard tablet stamped "T T 542 C W A 1934"
637.473

Referenoe mark, 120 ft . N. of tablet, at group of mail boxes, in root of walnut tree; copper nail and washer
T. 40 N., R. 16 W, in $\mathrm{NW} 1 / 4$ NE $1 / 4 \mathrm{sec}, 2,3.7 \mathrm{mi}$. NW. of $\mathrm{J} . \mathrm{S}$. Highway 54 bridge over Little Gravois Creek, about 0.2 ml . W. of ford across creek, opposite old tiff mine, 30 ft . N. of rd., 12 ft . inside fence, in root of 20-in. white-oak tree; copper nail and washer
T. 40 N., R. 16 W., in NE $1 / 4$ NE $1 / 4 \mathrm{sec} .3,0.1 \mathrm{mi}$. S. of rd. forks, at top of steep hill, W. of rd., in root of $6-1 \mathrm{n}$. black-oak tree; nail and tin washer
T. 40 N., R. $16 \mathrm{~W} .$, in $\mathrm{SW} 1 / 4 \mathrm{NE} 1 / 4 \mathrm{sec} .3$, at top of hill, at entrance to farmhouse, S. of rd., in line with private rd. N., in root of 24-in. black-oak tree; copper nail and washer
T. 40 N., R. $16 \mathrm{~W} .$, in $\mathrm{SW} 1 / 4 \mathrm{sec} .3,0.2 \mathrm{ml}$. W. of T-rd., on top stone at SW . corner of foundation of Hutchison farmhouse; highest point
 E. from rd. forks, in concrete post; standard tablet stamped "I T 543 C W A 1934:

Reference mark, 100 ft . S. of tablet, at SW . corner of rd. forks, in root of 12-in. black-oak tree; copper nall and washer

Feet
819.03
663.37
918.63
853.26
842.918
840.15
679.70

## 4. FROM SEC. 1, T. 40 N., R. I6 W., NORTH TO BARNETT, THENCE WEST INTO GRAVOIS MILLS QUADRANGLE AT SEC. 36, T. 42 N., R. 17 W. (by J. H. Vinyard in 1934)

T. 41 N., R. 16 W., in NW $1 / 4$ sec. $36,0.3$ mi. SE. of Blue Springs Church, in front of farmhouse, $E$. of rd., in root of $30-1 n$. white-oak tree; copper nail and washer
T. 41 N., R. $16 \mathrm{~W} .$, near center sec. 26, at bottom of hill, 500 ft . W. of $\log$ dwelling, 300 ft . E. of T-rd. N., on N. head wall of culvert; chiseled square
T. 4 I N., R. I6 W., in SW $1 / 4$ sec. 23, about 2.5 ml . S. of Rocky Mount Church, 25 ft . E. of rd., 25 ft . N. of fence, 10 ft . E. of blazed 14-in. water-oak tree, in concrete post; standard tablet stamped "T T. 531 C W A 1934"
Roference mark, 25 ft . S. of tablet, at rd. corner, in root of 12-in. black-oak tree; copper nail and washer
T. 41 N., R. 16 W., about 0.2 ml . S. of center sec. $\mathrm{I}_{4}$, about 800 ft . S. of E. -W. jog in rd., about halfway between two farmhouses, in fence line, W. of rd., in root of $10-1 n$. elm tree; copper nail and washer
T. 41 N., R. 16 W. , in $\mathrm{NW} 1 / 4 \mathrm{sec} .14,0.8 \mathrm{ml}$. SW. of Rocky Mount Church, at rd. forks, $E$. of rd., near mail boxes, in root of 20-in. black-oak tree; copper nail and washer
. 41 N., R. 16 W., in $S W 1 / 4$ NW $1 / 4$ sec. 11, about 0.1 mi . NE., thence 0.3 mi . NW. from Rocky Mount Church, 15 ft . S. of junction of rd. N., in concrete post; standard tablet stamped "T T 532 CW A 1934"
Reference mark, 140 ft . N. of tablet, in root of 8 -in. black-oak tree; copper nall and washer
Barnett, about 3 mi. S. of, near W. sixteenth cor. sec. 2, T. 41 N., R. 16 W., W. of rd. opposite farmhouse, at SE. end of NW.-SE. jog in rd., in root of $15-1 n$. white-oak tree; copper nail and washer
Barnett, 2 mi. S. of, in SW $1 / 4$ sec. 35, T. 42 N., R. 16 W., at T-rd. W. (E. ?) at E.-W. jog in rd. near farmhouse, in fence corner, in root of 15-1n. black-oak tree; copper nail and washer
983.98

Barnett, about 0.8 mi . S. of, in NW $1 / 4 \mathrm{sW} 1 / 4 \mathrm{sec} .26, \mathrm{~T} .42 \mathrm{~N} .$,
R. 16 W., $55 \mathrm{ft} . \mathrm{S}$. and 35 ft . E. from junction of rd. E., on land of F. A. McConnell, in concrete post; U.S.C. \& G.S. and State Survey standard tablet stamped "T T 533 C W A 1934"
992.544

Reference mark; 100 ft . N. of tablet, in front yard of farmhouse, in root of walnut tree; copper nail and washer
992.46
(fmett, $165 \mathrm{ft} . \mathrm{N}_{\mathrm{o}}$ of Chicago., Rock Island \& Pacific Ry. sta., 12 ft . W. of main track, in concrete post; U.S.C. \& G.S. standard disk stamped "C 331934 "
969.916

Reference mark, 240 ft . S. of disk, on concrete base of semaphore; chiseled square
973.78
. 42 N., R. 16 W., near center sec. $21,1.2 \mathrm{mi}$. W. of Barnett, on State Highway 52, at crossroad, at SW. corner of Chicago, Rock Island \& Pacific Ry, right-of-way fence, in root of tripie $4-1 n$. oak tree; copper nail and washer

1,003.63
T. 42 N., R. 16 W., in NE $1 / 4$ sec. 29, NE. of T-rd. E., 50 ft. E. of Routon Church, in root of $30-1 n$. white-oak tree; copper nail and washer
T. $42 \mathrm{N},$.R . 16 W ., in $\mathrm{NE} 1 / 4 \mathrm{SW} 1 / 4 \mathrm{sec} .29,40 \mathrm{ft}$. SE. of SE. corner of Routon School, in concrete post; standard tablet stamped "T T 534 C W A $1934^{\prime \prime}$
Reference mark, on SE. corner of concrete well top; chiseled square T. 42 N., R. 16 W., in $S W I / 4$ NW $1 / 4$ sec. $32,1.1 \mathrm{mi}$. SW. of Routon School, in front of farmhouse, in root of 10-1n. elm tree; copper nail and washer
940.92
875.086
876.11
752.43

Versailies to Barnett, on private ridge rd., at wooden gate, in wooded pasture, in root of $15-1 n$. oak tree; copper nall and washer
, 5. FROM SEC. $11, T$. 41 N., R. 16 W., WEST INTO GRAVOIS MILLS Quadrangle at sec. 24, T. 41 N., R. 17 W. (by J. h. vinyard in 1934)
T. 41 N., R. 16 W., in NE $1 / 4$ sec. $10,125 \mathrm{ft}$. SW. of rd. forks, 50 ft . NW. of fence corner, N. of rd., in root of $15-\mathrm{in}$. oak tree; copper
T. $41 \mathrm{~N} ., \mathrm{R} .16 \mathrm{~W}$. , in $\mathrm{NE} 1 / 4$ sec. 9 , about 1.5 mi . W. of Rocky Mount Church, at top of hill, 200 ft. W. of rd. forks, N. of rd., in root of $24-1 \mathrm{n}$. black-oak tree; copper nail and washer
T. 41 N., R. 16 W., in SE $1 / 4$ sec. $8,0.4 \mathrm{mi}$. NE. of McKinley School, S. of rd., in corner of field, in root of $15-1 \mathrm{n}$. oak tree; copper nail and washer
T. 41 N., R. $16 \mathrm{~W} .$, in SW $1 / 4$ SE $1 / 4$ ser. 8 , about 6 ml . SW. of Barnett, in center of concrete porch of McKinley School; standard tablet stamped T T 1158 W 1934
T. 41 i., R. 16 W., in SW $1 / 4 \mathrm{sec} .17$, about 1 mi . S. of McKinley School, 300 ft . E. of T-rd. E., 400 ft . NE. of chimney, N. of rd., in root of 18-1n. elm tree; copper nail and washer
. 41 N., R. 16 W. , in NE $1 / 4 \mathrm{sec} .19$, in front of farmhouse, in root of 12-1n. maple tree; copper nail and washer
T. $41 \mathrm{~N} ., \mathrm{R} .17 \mathrm{~W}$. , in NE $1 / 4 \mathrm{NE} 1 / 4 \mathrm{sec}$. 24 , at point where old rd. is submerged at high water, in root of $25-\mathrm{in}$. oak tree; copper nail and washer
(Continued in Gravois Mills quadrangle; see line 6.)
6. FROM CALIFORNIA QUADRANGLE AT SEC. $9, \mathrm{~T} .43 \mathrm{~N} ., \mathrm{R} .15 \mathrm{~W} .$, SOUTH TO HIGH POINT (by O. F. Hodgdon in 1934)
(Continued from Californis quagarangle; see line 8.)

High Point, 1.1 ml . E. of, in SE $1 / 4$ SE $1 / 4 \mathrm{sec} .9$, T. 43 N., R. 15 w., 300 ft . SW. of junction of State Highway 87, at rd. SW. to High Point, in root of $24-\mathrm{in}$. walnut tree; nails
7. FROM CALIFORNIA QUADRANGLE AT SEC. 12, T. 43 N., R. 17 W., SOUTHWEST INTO GRAVOIS MILLS QUADRANOLE AT SEC. 13 , T. 43 N., R. 17 W. (by C. P. Thompson in 1934)
(Continued from California quadrangle; see line 1.)
T. 43 N., R. 17 W., near quarter cor. between secs. 12 and 13 , 177 ft . s. and 33 ft . E. from T-rd. E., in SW. corner of yard of Providence School, on NW. corner of concrete well top; chiseled square
(Continued in Gravois mills quadrangle; see line 9.)
For additional level lines along Missouri Pacific R.R. and Chicago, Rock Island \& Pacific Ry., refer to United States Coast and Geodetic Survey second-order lines; Mexico to Eldon, Mansfield to Versailles, and Eldon to Labadie.

VERSAILLES NO. 4 QUADRANGLE
(Latitude $38^{\circ} 00^{\prime}-38^{\circ} 15^{\prime}$; 1ongitude $92^{\circ} 30^{\prime}-92^{\circ} 45^{\prime}$ )
Camden, Miller, and Morgan Counties


1. FROM VERSAILLES NO. 3 QUADRANGLE EAST ALONG U.S. HIGHWAY 54 TO CAMDENTON, THENCE SOUTHEAST ALONG STATE HIGHWAY 5 INTO STOUTLAND QUADRANGLE (by George W. Moore in 1931)
(Continued from Versailles No. 3 quadrangle; see line 4.)
Camdenton, 0.1 mi . SW . of, $120 \mathrm{ft} . \mathrm{N}$. and 70 ft . E. from crossroad, N . of highway, in root on S. side of 19-in. oak tree; copper nail and washer Camdenton, 95 ft . E. of junction of U.S. Highway 54, in S. head wall of concrete culvert; standerd tablet stamped "100 M 1931"

1,005.13
1,039.710
Reference mark, 150 ft . S. of tablet, on $N$. head wall of concrete culvert; chiseled square

1,042.46
2. FROM CAMDENTON NORTHEAST ALONG J.S. HIGHWAY 54 TO SEC. 6,
T. 39 N., R. 15 W., THENCE SOUTH ALONG ROADS BY WAY OF KAISER TO SEC. 20, T. 39 N., R. 15 W., THENCE EAST INTO IBERIA QUADRANGLE AT SEC. i', T. 39 N., R. 14 W. (by C. E. Reick in 1932)

Camdenton, 1.3 mi . NE. of courthouse, 25 ft . E. of highway, in root of 18-1n. oak tree; copper nall
Linn Creek, 1 mi . S. of, SE. of junction of rd. SE., on head wall of culvert; chiseled square
Linn Creek, at E. edge of, on SW. abutment of bridge J-378; chiseled square
Linn Creek, 0.4 mi . E. of, 35 ft . SE. of crossroad, in concrete post; standard tablet stamped "28 R 1932"
Reference mark, 430 ft . SW . of tablet, on N . corner of bridge J-344; chiseled square
Linh Creek, 1.5 mi . NE. of, 20 ft . S. of highway, in root of $20-\mathrm{In}$. hickory tree; copper nail
Linn Creek, 2.7 mi . NE. of , E. of highway, in root of 24 -in. oak tree; copper nail
Iinin Creek, 3.4 ml . NE. of, 60 ft . NW. of crossroad, in concrete post; standard tabiet stamped " 29 R 1932"
Reference mark, 130 ft . E. of tablet, on head wall of oulvert; chiseled square
Damsel, 1.9 mi . S. of, 4.6 mi . NE. of IInn Creek, W. of highway, 140 ft . N. of store, in root of $20-1 n$. oak tree; copper nail and washer

Damsel, 0.8 mi . S. of, 30 ft . E. of highway, in root of $20-1 \mathrm{n}$. oak tree; nail
696.396
692.96
909.69

Damsel, 320 ft . NE. of store, 20 ft . E. of highway, in concrete post; standard tablet stamped "R 30 1932"
Reference mark, 670 ft . N. of tablet, on E . head wall of concrete culvert; chiseled square
Damsel, I mi. NE. of, SW. of junction of rd. W., on head wall of culvert; chiseled square
Zebra, 2.4 mi . SW. of post office, 1.2 mi . W. of W. ond of bridge over Lake of the Ozarks, $78 \mathrm{ft} . \mathrm{N}$. of highway, 23 ft . S. and 55 ft . E. from SE. corner of school, in concrete post; standard tablet stamped ${ }^{n} T$ T 161 B 1932"
792.492

Zebra, 2 ml . SW. of post office, 0.8 ml . SW. of bridge over Lake of the Ozarks, 130 ft . SE. of junction of rd. S., in root of 30-in. oak tree; copper nail
Zebra, 1.2 ml . SW. of post office, on NW. comer of bridge over Lake of the Ozarks; chiseled square
Zebra, 270 ft . S. of post office, 80 ft . NE. of junction of rd. E., in root of 18-in. hickory tree; copper nail
Zebra, 1.l mi. NE. of, 13 Pt . N. of junction of old U.S. Highway 54, 51 ft . W. of hi chway, in concrete post; standard tablet stamped $\mathrm{h}_{\mathrm{T}} \mathrm{T} 160 \mathrm{~B} 1932^{\text {म (as reset Sept. } 30,1938 \text { ) }}$

Reference mark, 370 f.t. NE. of tablet, on W. head wall of oulvert; Feot
ohiseled square
Kalser, 2 ml . NW . of, 100 ft . NE, of orossroad, on head wall of culvert; obiseled square
888.10
898.41
898.36
913.184
852.60
841.82
724.13
835.956
832.67
883.03
923.13
909.05
948.115
954.56
(Continued in Iberia quadrangle; see line 4.)
3. FROM POINT 1 MILE NORTHEAST OF ZEBRA POST OFFICE NORTHWEST AND NORTHEAST ALONG U.S. HIGHWAY 54 TO SEC. 4 , T. 40 N., R. 15 W., THENGE EAST ALONG ROADS INTO ELDON QUADRANGLE AT SEC. 1 , T. 40 N., R. 15 W. (by L. V. Johnson in 1932)

Zebra post office, 3 ml . NE. of, 800 ft . NW. of Camden-Miller county line, 50 ft . NE. of highway, inside fence, in root on W. side of triangular-blazed 15-1n. oak tree; copper nail and washer
836.43

Bagnell Dam, $2.4 \mathrm{mi} . \mathrm{S}$. of, 4.2 mi . NW. of Zebra, 90 ft . S. and 90 ft . W. from arossroad, at entrance to Arrowhead Beach Club, in root on W. side of 12-in. hiokory tree; copper nail and washer
830.45

Bagreil Dam, 1.3 mf . SW. of, 30 ft . S. and 65 ft . W. from junction of rd. NW., in root on NE. side of $10-1 \mathrm{n}$. oak tree; copper nail and washer
Bagnell Dam, at W. end of, 13 ft . S. of center of pavement, in concrete walk; standard tablet stamped "25 J 1932"
Reference mark, 13 ft . N. of tablet, on concrete walk; chiseled square
Bagnell Dam, 0.4 mi . N. of E. end of, near summit of hill, 50 ft . S. and 45 ft . E. from crossroad, in root on W. side of l2-in. oak tree; copper nail and washer
Bagnell Dam, 1.2 mi . NW. of, 130 ft . S. of junction of rd. W. to Rockwood Farm, W. of highway, on concrete head wall of culvert; chiseled square
Bagnell Dam, 2.6 ml . NW. of, on wing wall at NW. corner of bridge over Blue Springs Creek; chiseled square
Bagnell, 510 ft . NW. of Missouri Pacific R.R. sta., $21 \mathrm{ft} . \mathrm{SE}$. of switch, 12 ft . N. of track, in rock; standard tablet stamped " 589 Vrsis "
Begnell Dam, 3.8 mi . NE. of, at NE. corner of bridge over drain, on top of concrete railing; chiseled square
786.84
673.450
673.45
673.33
798.98
843.82
590.52
585.560
604.70
621.678
bridge over Wrights Oreek, in concrete wing wali; standard tablet stamped "26 J 1932"
Reference mark, at SW. corner of bridge, on concrete wing wall; chiseled square
T. 40 N., K. 15 W., in $S W 1 / 4$ sec. 3, about 300 ft . NE. of dwelling of D. W. Bond, 50 ft . NE. of NE. corner of barn, 10 ft . E. of rd., in root on SE. side of 12-1n. oak tree; copper nail and washer
T. 40 N., R. 15 W., near cor. secs. $2,3,10$, and 11 , about $200 \mathrm{ft} . \mathrm{W}$. of rd. fork N., 90 ft . NW. of NW. corner of log farmhouse, 20 ft . S. of ra., in root on N. side of 15-1n. oak tree; copper nail and washer
T. 40 N., R. 15 W. , in $\mathrm{SW} 1 / 4 \mathrm{sec}$. 1 , on concrete porch of Harmony School; chiseled square
(Continued in Eldon quadrangle; see line 2.)
4. FROM BAGNELL DAM NORTH ALONG U.S. HIGHWAY 54 TO SEC. 7, T. 40 N., R. 15 W., THENCE NORTHWEST ALONG ROADS INTO ELDON QUADRANGLE AT SEC. 1, T. 40 N., R. 16 W. (by J. H. Vinyard in 1934)

Bagnell Dam, on extreme NE. end of sidewalk on downstream side of dam; chiseled square
Bagnell Dam, 1.6 mi . N. of W. end of, 100 ft . E . of highway, in root of
10-in. black-oak tree; copper nail and washer
670.27
821.44

Bagnell, 1.5 mi . N. of, in $\mathrm{SE} 1 / 4 \mathrm{SE} 1 / 4 \mathrm{sec} .7, \mathrm{~T} .40 \mathrm{~N} ., \mathrm{R} .15 \mathrm{~W} .$, near N. right-of-way line, 33 ft . N. and 100 ft . W. from sw . corner of
filling sta. of Robert Rustin, in concrete post; standard tablet stamped "T T 541 C W A 1934"
Reference mark, 200 ft . W. of tablet, on N. head wall of culvert; chiseled square
T. 40 N., R. 15 W., in $N 1 / 2$ sec. $7,0.8 \mathrm{mi}$. NW. of U.S. Highway 54
bridge over Blue Springs Creek, 300 ft. S. of farmhouse, at rd.
corner, in root of $12-1 n$. pecan tree; copper nail and washer
T. 40 N., R. 16 W., in SE 1/4 SE $1 / 4 \mathrm{sec} .1,1.6 \mathrm{ml}$. NW. of U.S. Highway 54 bridge over Blue Springs Creek, at SE. corner of farmhouse of V. B. Simpson, on top of bottom stone; chiseled mark
(Continued in Eldon quadrangle; see line 3.)
For additional level lines along. U.S. Highway 54 and State Highway 5, refer to United States Coast and Geodetic Survey second-order ilnes, Mansfield to Versailles and Linn Creek to Brownington.

VERSAILLES NO. 3 QUADRANGLE
(Latitude $38^{\circ} 00^{\prime}-38^{\circ} 15^{\prime}$; longitude $92^{\circ} 45^{\prime}-93^{\circ} 00^{\prime}$ )
Camden and Morgan Counties


1. FROM MACKS CREEK QUADRANGLE AT SEC. $36, T .38$ N., R. 19 W., NORTHWEST INTO CROSS TIMBERS QUADRANGLE AT SEC. 15, T. 38 N., R. 19 W. (by George W. Moore in 1931)

Macks Creek, 3 mi . N. of, 11 ft . W. of rd., in root on E. side of 27-in. oak tree; copper nail and washer
Macks Creek, $4.1 \mathrm{mi} . \mathrm{N}$. of, at edge of timber, 40 ft . W. of rd., in root on E. side of $14-1 n$. oak tree; copper nail and washer
T. $38 \mathrm{~N} ., \mathrm{R}$. $19 \mathrm{~W} .$, in $\mathrm{SW} 1 / 4 \mathrm{NE} 1 / 4 \mathrm{sec}$. 24 , about 4.5 ms . N. of Macks

Creek, about 1.5 mi . SE. of Bannister School, in NW. corner of rd.
fork N., 9 ft . E. of triangular-blazed $20-1 \mathrm{n}$. walnut tree, 20 ft . N. and 30 ft . W. from triangular-blazed triple oak tree, in concrete post; standard tablet stamped "T T Sta 10 W 1931"
Reference mark, 35 ft . SE. of tablet, in triangle of rd. forks, in root
on NE. side of twin oak tree; copper nail and washer
chiseled square
aldiel aciaro
old Banister, 265 ft . E. of rd. forks at abandoned store building, in root on N. side of 15-1n. oak tree; copper nail and washer
T. $38 \mathrm{~N} ., \mathrm{R}_{0} 19 \mathrm{~W}$, near center of $\mathrm{SW} 1 / 4 \mathrm{sec}$. $\frac{14}{}$, 29 ft . S. and 8 ft . W. from SE. Corner of new Bannister School, 16 ft . N. of rd., 3 ft . S. or $2_{4}$-in. oak tree, in concrete post; standard tablet stamped "T T Sta 11 W 1931"
742.92

Reforence mark, $27 \mathrm{ft} . \mathrm{N}$. and 43 ft . W. from tablet, 18 ft . W. of
sohool, in root on S. side of 18-in. oak tree; copper nail and washer
Banister, 0.6 mi . NW. of, at top of hill, 70 ft . SE. of T-rd. NE., in root on N. side of 25 -in. oak trees copper nail and washer
(Continued in Cross Timbers quadrangle; see line 1.)
2. FROM CROSS TIMBERS QUADRANGLE AT SEC. 22, T. 39 N., R. 19 W., EAST TO SEC. 21, T. 39 N., R. 18 W., THENGE SOUTHEAST INTO MACKS CREEK QUADRANGLE AT SEC. 30 , T. 38 N., R. 17 W. (by George W. Moore in 1931)
(Continued from Cross Timbers quadrangle; see line 2.)
Climax Springs, 4.5 mi . E. of on line between seas, 22 and 23 , T. 39 N, ,
R. $19 \mathrm{~W} ., 24 \mathrm{ft}$. $\mathrm{S}_{\text {. }}$ and 46 ft . E. from rd. fork SE., 2 ft . S. and 6 ft . W. from oak tree, in concrete post; standard tablet stamped "T T Sta 14 W $1931^{11}$

Feet
999.321
999.19
996.32
985.70
929.29
940.130
942.29
970.65
990.18
$1,044.74$
Rererence mark, 7 ft . E. of tablet, s . of rd., in root on SE. side of Climax Springs, 5.2 mi . E. of, at Crocker School, 110 ft . S. and 60 ft . W. from T-rd. N., on NE. corner of concrete platform; chiseled square

Climax Springs, 6.1 ml . E. of, in Jard of R. V. Jackson, 21 ft . W. of well, $25 \mathrm{ft} . \mathrm{N}$. of rd., in root on s. side of 18-in. sycamore tree; copper nail and washer
Climax Springs, 6.7 ml . E. of, 170 ft . NE. of bend in rd., on SW. end of NW. head wall of concrete culvert; chiseled square
Climax Springs, about 7 ms . E. of, center sec. 19, T. 39 N., R. 18 W. , 48 ft . N. and 42 ft . E. from crossroads, 64 ft . N. and 21 ft . W. from oak tree and mail box, in large rock flush with ground; standard tablet stamped "T T Sta 15 W 1931"
Referonce mark, 64 ft . S. and 21 ft . E. from tablet, S . of rd., in root on N. side of 20-1n. oak tree; copper nail and washer
Barnumton, 8 ft . SE. of store and post office, on SE. corner of concrete platform of gasoline pump; chiseled square
Barnumton, 0.7 ml . E. of, 70 ft . S. and 25 ft . W. from school, 45 ft . E. of rd., in root on Nw. side of $20-1 n$. oak tree; copper nail and washer
Barnumton, 1.5 mi . E. of, 40 ft . S. and 75 ft . W. from junction of rd. NE., S. of rd., in root on NW: side of $24-1 n$. oak tree; copper nail and washer
T. 39 N., R. 18 W., near center sec. 2l, about 1.7 mi . E. of Barnumton School, at top of hill, 520 ft . E. of rd. forks, $150 \mathrm{ft} . \mathrm{S}$. and 220 ft . W. from old rd. forks, $S$. of rd., at edge of field, 1 ft . S. of fence, in concrete post; standard tablet stamped "T T Sta No 16 W 1931 "
Reference mark, 250 ft . E. of tablet, 25 ft . S. and 100 ft . W. from T-rd. S. to Nonsuch, in root on N. side of 10-in. oak tree; copper nail and washer

1,032.799
washer
1,027.41
hill, 45 . $18 \mathrm{~W} .$, in $\mathrm{SE} 1 / 4 \mathrm{sec} .21,3.1 \mathrm{mi}$. N. of Nonsuch, at foot of side of twin oak tree; copper nail and washer
857.37
T. 39 N., R. 18 W., in SE $1 / 4$ sec. $28,2.1 \mathrm{ml}$. N. of Nonsuch, on hill, 20 ft . E. of rd., in root on S . side of $8-1 \mathrm{n}$. oak tree; copper nail and washer
801.79
T. 39 N., R. 18 W., in $S E 1 / 4$ sec. $33,1.3 \mathrm{mi}$. N. of Nonsuch, at sharp bend in rd., W. of rd. at S. gatepost to pasture, in root on SE. side of $50-1 \mathrm{n}$. elm tree; copper nall and washer
710.66
T. $38 \mathrm{~N} .$, R. $18 \mathrm{~W} .$, in $\mathrm{NE} 1 / 4 \mathrm{NW} 1 / 4 \mathrm{sec}$. 3, about 0.4 mi . NW. of Nonsuch, on W. bank of creek, 90 ft . E. of private rd. to farmhouse of Ben Moulder, 30 ft . N. of fence corner, in top of prominent shelf rock outcrop; standard teblet stamped "95 M 1931"
688.547

Reference mark, 70 ft . N. and 40 ft . W. from tablet, at corner fence post, in root on SE. side of 16-1n. walnut tree; copper nail and washer
693.16

Nonsuch, 350 ft . SW. of store building, 170 ft . S. of ferry landing, in root on NW. side of 20-in. apple tree; copper nail and washer
660.33

Nonsuch, across lake from, 420 ft . E. of ferry landing, 40 ft . s . of lake, in root on NW. side of 20-in. locust tree; copper nail and washer
663.22
T. $38 \mathrm{~N} ., \mathrm{R} .18 \mathrm{~W} .$, in SE $1 / 4 \mathrm{sec} .3,0.5 \mathrm{mi}$. SE. of Nonsuch, at top of hill, 20 ft . E. of rd. forks, N. of rd., in root on NE. side of $10-1 \mathrm{n}$. oak tree; copper nail and washer
T. 38 N., R. 18 W., in $S W 1 / 4$ sec. 2, 0.9 mi . SE. of Nonsuch, 430 ft . NW. of Prairio Hollow School, 40 ft . NE. of rd. forks, in root on SE. side of 22-in. oak tree; copper nail and washer
T. 38 N., R. 18 W., in NE $1 / 4 \mathrm{NW} 1 / \mu_{4}$ sec. $11,1.3 \mathrm{mi}$. SE. of Nonsuch,
T. ft . NW. of rd. forks E. of ford, in S. side of 15-in. oak tree; spike such, at E. end of concrete walk to dwelling of W. R. Eadson, in top of concrete platform; standard tablet stamped "96 M 1931 "
693.497

Reference mark, 31 ft . S. and 11 ft . W. from tablet, on concrete retaining wall; chiseled square
693.20
T. 38 N., R. 18 W. , in NE $1 / 4 \mathrm{SE} 1 / 4 \mathrm{sec} .15,4.5 \mathrm{mi}$. NW. of Roach, 150 ft . N. of rd. forks, 23 ft . W. of rd., in root on SE. side of $14-1 n$. oak tree; copper nail and washer
736.34
T. 38 N., R. 18 W ., in $\mathrm{SE} 1 / 4 \mathrm{sec} .14,3.6 \mathrm{ml}$. NW. of Roach, 70 ft . W. of rd. forks, in root on NW. side of 16-in. elm tree; copper nail and washer
T. $38 \mathrm{~N} ., \mathrm{R} .18 \mathrm{~W} .$, in $\mathrm{SW} 1 / 4 \mathrm{sec} .24,2.7 \mathrm{mi}$. NW. of Roach, 150 ft . SE. of bridge, 50 ft . E. of rd., in root on W. side of $15-1 \mathrm{n}$. elm tree; copper nail and washer
T. $38 \mathrm{~N} ., \mathrm{R} .18 \mathrm{~W} . \mathrm{I}^{2} \mathrm{SE} 1 / 4 \mathrm{SE} 1 / 4 \mathrm{sec}$. 24 , about 1.9 ml . NW. of Roach, 100 ft . N. and 48 ft. W. from rd. forks, at N . edge of rd., 54 ft . E. of blazed tree, 22 ft . W. of blazed tree, in top of rock outcrop flush with ground; standard tablet stamped "97M1931"
Reference mark, 70 ft . N. and 50 ft . W. from tablet, 38 ft . NE. of rd., in root on SW. side of $20-\operatorname{In}$. oak tree; copper nail and washer
T. 38 N., R. $18 \mathrm{~W}_{\mathrm{o}}$, in SE $1 / 4$ sec. 25 , 1 ml . NW. of Roach, $26 \mathrm{ft} . \mathrm{N}$. and 100 ft . E. from rd. cormer N.-E., in root on E. side of 12-1n. oak tree; copper nall and washer
3. FROM SEC. $21, \mathrm{~T} .39 \mathrm{~N} ., \mathrm{R} .18 \mathrm{~W}$, , EAST TO SEC. $21, \mathrm{~T} .39 \mathrm{~N} .$, R. 17 W. (single-run unchecked spur line by George W. Moore in 1931)

Barnumton, 2.4 mi . E. of, in $S W 1 / 4$ sec. 22 , T. $38 \mathrm{~N} ., \mathrm{R}$. $18 \mathrm{~W} .$, in saddle, 35 ft. S. of rd., in root on E. side of 18 -in. oak tree; copper nail and washer

Feot

Barnumton, 3 mi . E. of, in $\mathrm{SE} 1 / 4 \mathrm{sec} .22$, T. $39 \mathrm{~N} ., \mathrm{R} .18 \mathrm{w}$. , 14 ft . S. and 5 ft . E. from junction of rd. S., in triangle of rd. forks, in root on N. side of 20-1n. oak tree; copper nail and washer
Barnumton, 3.9 mi . E. of, in SW $1 / 4$ sec. 23 , T. 39 N., R. $18 \mathrm{~W} ., 20 \mathrm{ft}$. S. of rd., in root on NE. side of 10-in. oak tree; copper nail and washer
Barnumton, 4.2 ml . E. of, in SE $1 / 4 \mathrm{sec} .23, \mathrm{~T} .39 \mathrm{~N} ., \mathrm{R} .18 \mathrm{~W} ., 30 \mathrm{ft}$. W. of rd. junction, 20 ft . N. of rd., in root on N . side of $30-\mathrm{in}$.
oak tree; copper nail and washer
Bernumton, 4.9 mi . E. of, in NW $1 / 4 \mathrm{NW} 1 / 4 \mathrm{sec} .25, \mathrm{~T} .39 \mathrm{~N} ., \mathrm{R}, 18 \mathrm{~W}$. , 240 ft . W. of SW. corner of Mount Taber School, 20 ft . S. of rd., in root on $N$. side of 26-1n. oak tree; copper nall and washer
Barnumton, 5.4 ml . E. of, in NW $1 / 4 \mathrm{sec} .25, \mathrm{~T} .39 \mathrm{~N} ., \mathrm{R} .18 \mathrm{~W} ., 25 \mathrm{ft}$. S. and 30 ft . E. from rd. forks, in concrete post; standard tablet stamped "104 M 1931"
Reference mark, 12 ft . N. of tablet, 30 ft . E. of rd. forks, in root on W. side of $20-1 n$. oak tree; spike

Barnumton, 6.3 mi . E. of, in NW l/4 sec. $30, \mathrm{~T} .39 \mathrm{N.}, \mathrm{R} .17 \mathrm{~W} ., 50 \mathrm{ft}$. S. and 120 ft . E. from rd. forks, in root on N . side of $24-1 \mathrm{n}$. oak tree; copper nail and washer
Barnumton, 7.1 mi . E. of, in NE $1 / 4$ sec. 30, T. $39 \mathrm{~N} ., \mathrm{R} .17 \mathrm{~W}$. , at top of hill, 15 ft . N. and 55 ft . W. from rd. forks, in root on N. side of 12-1n. oak tree; copper nail and washer
Barnumton, 8.2 ml . E. of, in SW $1 / 4 \mathrm{sec} .20, \mathrm{~T} .39 \mathrm{~N} ., \mathrm{R} .17 \mathrm{~W} ., 20 \mathrm{ft}$.
SE. of rd. cormer, in root on NE. side of 18-1n. oak tree; copper nail and washer
951. 58
966.80
926.97
985.40
982.30
951.829
953.31
957.33
965.08

Barnumton, 9 mi . E. of, in NE $1 / 4 \mathrm{sec} .20, \mathrm{~T} .39 \mathrm{~N} ., \mathrm{R} .17 \mathrm{~W}, 260 \mathrm{ft} . \mathrm{N}$. of abandoned school, 20 ft . N. and 12 ft . E. from rd. corner S.-E.,
$29 \mathrm{ft} . \mathrm{N}$. and 12 ft . E. from fence corner, in root on SW. side of $16-1 \mathrm{n}$. elm tree; copper nail and washer
Barnumton, 9.8 mi . E. of, in NW 1/4 SE $1 / 4$ sec. 21 , T. 39 N., R. 17 W.,
200 ft . W. of end of rd., 30 ft . N. of rd., 18 ft . W. of blazed $20-1 \mathrm{n}$.
oak tree, in stone outcrop; standard tablet stamped " $105 \mathrm{M} 1931^{\prime \prime}$
Reference mark, 55 ft . NE. of tablet, 65 ft . N . of rd., in root on SE . side of $10-i n$. walnut tree; copper nail and washer
4. FROM MACKS GREEK QUADRANGLE NORTHEAST ALONG U.S. HIGHWAY 54 INTO VERSAILLES NO. 4 QUADRANGLE (by George W. Moore in 1931)

Camdenton, 0.7 ml . SW. of, 62 ft . SE. of highway, in root on NW. side of
$22-1 \mathrm{n}$. oak tree; copper nail and washer
946.43
(Continued in Versailles No. 4 quadrangle; see line l.)
5. FROM VERSAILLES NO. 4 QUADRANGLE NORTH ALONG STATE HIGHWAY 5 TO
SEC. 34, T. 40 N., R. 17 W. (by C. E. Reick in 1932)

Camdenton, 1 mi . NW. of, at junction of ra. N., NE. of highway, on W. end of pipe culvert; chiseled oross
T. 38 N., R. 17 W., in $S W 1 / 4$ sec. $14,100 \mathrm{ft}$. E. of junction of rd. W., in root of $12-1 n$. oak tree; copper nail
999.01

1,012.82
942.523 ton, 260 ft . S . of rd . function, 20 ft . S . and 20 ft . from function of lane $E$. to dwelling of $T$. $B$. Evans, in concrete post; standard tablet stamped "T T 240 B 1932"
T. 38 N., R. 17 W. , near center sec. 11, E. of highway, on head wall of culvert; chiseled square
935.89
T. 38 N., R. 17 W. , in $N E 1 / 4$ sec. 2 , $E$. of highway, in root of triangu-lar-blazed oak tree; copper nail
905.91
T. $39 \mathrm{N.}, \mathrm{R}$.17 W ., in SW $1 / 4 \mathrm{NE} 1 / 4$ sec. $35,0.3 \mathrm{ml}$. SW. of S. landing of ferry across Lake of the ozarks, 33 ft . W. of junction of ra. NE. along ridge, in concrete post; standard tablet stamped "239 B 1932"
Reference mark, 180 ft . N. of tablet; in root of 12-1n. oak tree;
806.163
copper nail
Lake of the Ozarks; surface of water at 4 p.m. Sept. 3, 1932
796.49
656.4
. 39 N., R. 17 W., near center sec. $26,70 \mathrm{ft}$. N. of N . landing of ferry across Lake of the Ozarks, $\frac{14}{} \mathrm{ft}$. above water level, in concrete post; standard tablet stamped "T T $238^{\circ} \mathrm{B} 1932^{\prime \prime}$
T. 39 N., R. 17 W., in $S W 1 / 4$ sec. 23 , on summit, W. of highway, in root of 20-in. hickory tree; copper nail
T. $39 \mathrm{~N} ., \mathrm{R} .17 \mathrm{~W} .$, in $\mathrm{SE} 1 / 4 \mathrm{NW} 1 / 4 \mathrm{sec} .14$, E. of highway, in root of 24-in. oak tree; copper nail
670.077
856.20
928.36
T. $39 \mathrm{~N} ., \mathrm{R} .17 \mathrm{~W} .$, in $\mathrm{NE} 1 / 4 \mathrm{NW} 1 / 4 \mathrm{sec} .14,2.8 \mathrm{ml}$. N. of N. landing of ferry across Lake of the ozarks, 60 ft . S. and 30 ft . E. from Junction of rd. E. to Aero Club, in concrete post; standard tablet stamped "T T 237 B 1932"
929.507
T. 39 N., R. 17 W., near cor. secs. $2,3,10$, and $11,75 \mathrm{ft}$. SE. of junction of rd. E. to Lakeview Beach, in root of 20-in. oak tree; copper nail
T. 39 N., R. 17 W., 1 mi . S. of N. quarter cor. sec. 3 , about $1.6 \mathrm{mi} . \mathrm{S}$. of junction of rd. to Sunrise Beach, 130 ft . SE. of junction of rd.
SE., 34 ft . E. of highway, 7 ft . E. of triangular-blazed tree, in concrete post; standard tablet stamped "T T 236 B 1932"

Feet
861. 247
T. 39 N., R. $17 \mathrm{~W}_{\mathrm{L}}$, in $\mathrm{NE} 1 / 4 \mathrm{sec}, 4,40 \mathrm{ft}$. NW. of junction of rd. W. to Hurricane Deck, in root of $28-1 \mathrm{n}$. oak tree; spike
938.79
T. 40 N., R. $17 W_{0}$, in $S W 1 / 4$ sec. $35,40 \mathrm{ft}$. N. of junction of rd. E. to Sunrise Beach, in root of 10-1n. oak tree; copper nail
859.95
. $40 \mathrm{~N}, \mathrm{R} .17 \mathrm{~W}$., in $\mathrm{NE} 1 / 4 \mathrm{SW} 1 / 4 \mathrm{sec}$. 34 , in saddle of ridge, 80 ft . SW. of highway, 20 ft . W. of rd. S., 43 ft . S. of triangular-blazed oak tree, in concrete post; standard tablet stamped "T T 235 B 1932" (as reset in 1938)
Reference mark, 160 ft . W. of tablet, in root of $15-1 \mathrm{n}$. oak tree; copper nall
809.214
812.91
6. FROM SEC. 19, T. 39 N., R. 18 W., NORTHEAST TO SEC. 12, T. 40 N., R. 17 W . (by C. E. Reick in 2932)
T. $39 \mathrm{~N} ., \mathrm{R} .18 \mathrm{~W}$. , in $\mathrm{SW} 1 / 4$ sec. 18, W. of ferry rd., on head wall of culvert; chiseled square
T. 39 N., R. 18 W., in $S W 1 / 4$ sec. $7,200 \mathrm{ft}$. N. of ford, W. of rd., in base of large, corner fence post; spike
T. 39 N., R. 18 W., in $N W 1 / 4 \mathrm{SW} 1 / 4$ sec. 5, in front of Lee farmhouse, $25 \mathrm{ft}_{\mathrm{i}} \mathrm{N}$. of $\mathrm{rd}$. . in concrete post; standard tablet stamped " $\mathrm{T} T 229$ B $1932^{\prime \prime}$
Reference mark, $140 \mathrm{ft} . \mathrm{S}$. of tablet, on W. head wall of culvert; chiseled square
Lake of the Ozarks; surface of water at 2 p.m. Sept. 7, 1932
T. 39 N., R. 18 W., in N $1 / 2$ sec. 3, near S. landing of Irontown Ferry, 30 ft . S. of Lake of the Ozarks shore line, about 5 ft . above water level, in concrete base of gasoline pumps; standard tablet stamped "T T 230 B 1932"
Reference mark, $90 \mathrm{ft} . \mathrm{S}$. of tablet, in base of 24-in. oak tree; spike
T. $39 \mathrm{~N} ., \mathrm{R} .18 \mathrm{~W}$. , in NE $1 / 4 \mathrm{sec} .2$, about 1.3 ml . SE. of N. landing of Irontown Ferry, along Irontown Ferry Road, at top of high ridge, 20 ft . N. and 70 ft . W. from rd. Junction, in concrete post; standard tablet stamped " T T 231 B $1932^{\prime \prime}$
Reference mark, 180 ft . E. of tablet, in root of 20-in. oak tree; copper nail
T. 40 N., $R_{1} 17$ W., in NW $1 / 4$ sec. 31 , at summit, E. of rd., in root of 24-in. oak tree; copper nail
T. 40 N., R. 17 W., in SE. cor. sec. $19,80 \mathrm{ft}$. S. and 40 ft . W. from State Highway 5 at junction of Irontown Ferry Road, in concrete post; standard tablet stamped "T T 232 B 1932" (as reset in 1938)
Reference mark, $1,000 \mathrm{ft}$. S. of tablet, on E. head wall of culvert; ch1seled square
T. 40 N., $\mathrm{R}_{\mathrm{i}} 17 \mathrm{~W} .$, in NE $1 / 4 \mathrm{SW} 1 / 4 \mathrm{sec} .29,80 \mathrm{ft}$. W. of State Highway 5 at rd. E. to Gladstone, in root of l8-in. oak tree; copper nail
T. 40 N., R. 17 W., in SE $1 / 4$ SE $1 / 4 \mathrm{sec} .20$, $10 \mathrm{ft} . \mathrm{S}$. of rd., in root of 24 -in. oak tree; copper na11
T. $40 \mathrm{~N} ., \mathrm{R} .17 \mathrm{~W}$. , in $\mathrm{NE} 1 / 4 \mathrm{NW} 1 / 4 \mathrm{sec}$. 21 , s. of rd., in root of $30-\mathrm{in}$. oak tree; copper nail
T. 40 N., R. $17 \mathrm{~W}_{0}$, near center of $\mathrm{SW} 1 / 4$ sec. $15,10 \mathrm{ft}$. s . and 15 ft . E. from crossroads, in large sandstone ledge; standard tablet stamped "T T 233 В $1932^{\text {" }}$
T. 40 N., R. 17 W., in NW $1 / 4$ NW $1 / 4$ sec. 4 , 90 ft. SE. of T-rd. S., in root of 12-in, oak tree; copper nail
T. $40 \mathrm{N}$. , R. 17 W ., about 500 ft . S. of cor. secs. $11,12,13$, and 24 , 250 ft . NW. of sohool, 30 ft . E. of rd. forks, in root of $30-1 \mathrm{n}$. oak tree; copper nail
T. 40 N., R. 17 W., in $\mathrm{SE} 1 / 4 \mathrm{NW} 1 / 4$ sec. 12 , near old site of Gladstone, 80 ft . S. of water edge of Lake of the Ozarks, 15 ft . W. of old rd., in conorete post; standerd tablet stamped "T T 234 B 1932"
Lake of the Ozarks, at Gladstone; surface of water at 4 p.m. Sept. 12, 1932
663.004
656.0
7. FROM SEC. 19, T. 40 N., R. 17 W., SOUTHWEST TO SEC. $36, T .40 \mathrm{~N} .$,
R. 18 W., THENCE NORTHWEST INTO GRAVOIS MILLS QUADRANGLE
AT SEC. $9, T .40$ N., R. 18 W. (by C. P. Thompson in 1934 )
T. 40 N., R. 17 W., in NE $1 / 4 \mathrm{SE} 1 / 4 \mathrm{sec} .19,50 \mathrm{ft}$. W. of dwelling, 12 ft . S. and 27 ft . E. from State Highway 5 at rd. W., in root on W. side of $26-1 n$. oak tree; copper nall and washer
T. 40 N., R. 17 W ., in $\mathrm{SW} 1 / 4 \mathrm{SW} 1 / 4 \mathrm{sec}$. $19,90 \mathrm{ft} . \mathrm{s}$. and 96 ft . E. from farmhouse of H . E. Landrun, 18 ft . S. of rd., in root on S. side of 20-in. oak tree; copper nail and washer
T. 40 N., R. 18 W ., in NW $1 / 4 \mathrm{NE} 1 / 4$ sec. $36,70 \mathrm{ft} . \mathrm{N}$. (?) and 20 ft . E. (?) from rd. forks, in concrete post; standard tablet stamped "T T 545 C W A 1934"
Reference mark, 96 ft . N. and 16 ft . W. from tablet, in root on S . side of $1.8-1 n$. oak tree; copper nall and washer
T. $40 \mathrm{~N}, \mathrm{R}_{\mathrm{R}} 18 \mathrm{~W}$, in $\mathrm{NW} 1 / 4 \mathrm{SW} 1 / 4 \mathrm{sec}$. 25 , about 300 ft . SE. of farmhouse of Frank Sutton, 24 ft. W. of ra., in root on $N$. side of 22-in. walnut tree; copper nail and washer
712.47

40 N, , R . $18 \mathrm{~W} .$, in $\mathrm{SW} 1 / 4 \mathrm{sec} .23,8 \mathrm{ft} . \mathrm{S}$. and 66 ft . E. from SE. corner of farmhouse of Frank Jenkin, 12 ft . S. of rd., int root on NE. side of $24-1 n$. elm tree; copper nail and washer
782.26

| T. 40 N., R. 22 W., near center sec. $22,10 \mathrm{ft}$. S. and 45 ft . E. from rd. forks at mall box of William Moore, in concrete post; standard tablet stamped "T T 546 C W A 1934" | $\frac{\text { Feet }}{963.288}$ |
| :---: | :---: |
| Reference mark, 21 ft . W. of tablet, in root on $W$. side of 22-in. post-oak tree; copper nail and washer | 962.13 |
| T. 40 N., R. 18 W. , in NW $1 / 4 \mathrm{NW} 1 / 4 \mathrm{sec} .22$, at top of hill, 21 ft . W. of rd., in root on E. side of $10-1 n$. oak tree; copper nail and washer | 891.62 |
| Proctor, $1.2 \mathrm{mi} . \mathrm{S}$. of, in $\mathrm{SW} 1 / 4 \mathrm{SE} 1 / 4$ sec. $16, \mathrm{~T} .40 \mathrm{~N} ., \mathrm{R} .18 \mathrm{~W} .$, about 0.2 mi . NE. of dwelling of Leo Holst, 189 ft . W. of Y-rd., in root on SE. side of $26-1 \mathrm{n}$. white-oak tree; copper nail and washer | 713.76 |
| Proctor, $40 \mathrm{ft} . \mathrm{S}$. and 60 ft . E. from NE. corner of old post office building, in concrete post; standard tablet stamped "T T 547 C W A 1934" | 706.454 |
| Reference mark, 105 ft . N. $45^{\circ}$ W. of tablet, on center of W. side of well platform; chiseled square | 714.12 |

(Continued in Gravois Mills quadrangle; see line 8.)
8. FROM SEC. 22, T. 39 N., R. 19 W., NORTHWEST INTO CROSS TIMBERS QUADRANGLE AT SEG. 15, T. 39 N., R. 19 W. (by C. P. Thompson in 1934)
Climax Springs, 4 mi. E. and 1 mi . N. from, in SW $1 / 4 \mathrm{SE} 1 / 4 \mathrm{sec} .15$, T. $39 \mathrm{~N}_{.}, \mathrm{R}_{\mathrm{c}} 19 \mathrm{~W}$. , at top of ridge, on property of Fred Rowland, 25 ft . E. of rd., in root on W. side of 24 -in. red-oak tree; copper nail and washer
(Continued in Cross Timbers quadrangle; see Ine 5.)
9. FROM GRAVOIS MILLS QUADRANGLE SOUTH ALONG STATE HIGHWAY 5 TO SEC. 19, T. 40 N., R. 17 W. (by J. H. Vinyard in 1935) (Continued from Gravois M1lls quadrangle; see ine 7.)

Gravois Mills, 5.2 ml . S. of, in SE $1 / 4$ NE $1 / 4$ sec. $7, \mathrm{~T} .40 \mathrm{~N} ., \mathrm{R} .17$ W., at junction of private ras. E. and $W_{0}$, $W_{\text {. }}$ of rd., in root of $2_{4}-i n$. oak tree; copper nail and washer
Gravois Mills, 5.8 ml . S. of, in SE $1 / 4$ sec. $7, \mathrm{~T} .40 \mathrm{~N} ., \mathrm{R} .17 \mathrm{~W} .$, at junction of rd. W., on $S$. end of side ra. culvert; chiseled square
Gravois Mills, 6 mi. S. of, in SE $1 / 4 \mathrm{sec} .18, \mathrm{~T} .40$ N., R. 17 W., at top of steep hill, W. of rd., in root of 18-in. oak tree; copper nail and washer

For an additional level line along U.S. Highway 54, refer to United States Ooast and Geodetic Survey second-order line, Linn Creek to Brownington.

GRAVOIS MILLS QUADRANGIF
(Latitude $38^{\circ} 15^{\prime}-38^{\circ} 30^{\prime}$; longitude $92^{\circ} 45^{\prime}-93^{\circ} 00^{\prime}$ )
Morgan County


1. ISOLATED BENCHMARKS (not shown on diagram; by O. Laurgaard in 1902)

Hunter triangulation sta.; U.S.C. \& G.S. copper bolt designated "Hunter" Versailles, in SW. corner of foundation of courthouse; aluminum tablet stamped "1037 Vrsls"
Versailles, 3.5 mi . N. of, along Missouri Pacific R.R., about 300 ft . W. 1,035.835 of bridge 23 over Straight Fork of Moreau Creek, in flat stone; aluminum tablet stamped " 903 Vrsls "

Versailles North Base triangulation sta.; U.S.C. \& G.S. standard disk stamped "Versailles North Base 1880"
T. 42 N., R. 18 W., in $S W 1 / 4$ sec. 21 , near Coffin Spring Branch, N. of creok, 450 ft . S. of McDaniel dwelling, 171 ft . W. of rd., in rock; aluminum tablet stamped "818 Vrsis"
T. 41 N., R. 18 W., in $W 1 / 2$ sec. $1,1 \mathrm{mi}$. W. of Huln's store, 45 ft . NW. of rd., in projeating rock beneath 8-in. tree; standard tablet stamped "719 Vrsis"
ravois Mills; in foundation of store of J. T. Washburn; aluminum tablet stamped "673 Vrsis"
Proctor, in front of Talbot dwelling. in foundation; standard tablet stamped "652 Vrsis"
816. 350

1,056.642
816.350
718.232
671.438
650.330
2. FROM COLE CAMP QUADRANGLE AT SEC. 27, T. 42 N., R. 19 W., EAST TO SEC: 23, T. 42 N., R. 19 W., THENGE NORTH ALONG. ROAD (now State Highway 135) TO SEC. 11 , T. 42 N., R. 19 W., THENCE EAST TO SEC. 6, T. 42 N., R. 18 W., THENCE EAST ALONG STATE HiGHWAY 52 TO VERSAILLES' (by C. E. Reick in 1932)
(Continued from Cole camp quadrangle; see line 1.)
T. 42 N., R. 19 W., in $S W 1 / 4$ sec. 23 , 140 ft . SE. of rd. forks (now on State Highway 135), in front porch of Pleasant Grove School; standard tablet stamped "T T 228 B 1932"
T. 42 N., R. 19 W., near center sec. $14,70 \mathrm{ft}$. SW. of crossroads (now on State Highway 135), in root of 18-in. cherry tree; copper nail
T. 42 N., R. 19 W., in NE $1 / 4$ sec. $11,20 \mathrm{ft}$. E. of rd. forks (now on State Highway 135), in base of corner fence post; spike
T. 42 N., R. $18 \mathrm{~W}_{\text {. }}$, near center sec. 6 , about 6 ml . W. of Versaililes, in N. side of W. pier of Chicago, Rock Island \& Pacific Ry. bridge over Middle Richland Creek; standard tablet stamped "31 R 1932"
T. 42 N., R. 18 W., S. sixteenth cor. sec. 5 , 30 ft . NE. of crossroads, on head wall of culvert; chiseled square
T. 42 N., R. 18 W, , in $\mathrm{SW} 1 / 4 \mathrm{sec} .4$, N. of highray, on head wall of culvert; chiseled square
Versailles, 3.5 ml . W. of, 30 ft . NW. of crossroad, in head wall of concrete culvert; bolt
Versailles, 3 mi : W. of, 25 ft . NW. of junction of rd. N., in concrete retaining wall; standard tablet stamped "32 R 1932"
Versailles, 1.5 ml . W. of, on NW. corner of bridge over straight Fork of Moreau Creek; chiseled square

1,155.829
1,092.32
1,111.35
$1,003.194$
1,085.68
1,072.42
1,046.06
1,077.401
998.59

> 3. FROM SEC. 23, T. 42 N., R. $19 \mathrm{~W} .$, SOUTHEAST TO BOWERS TRIANGULATION STATION (singie-mun unchecked spur line by C. E. Reick in 1932)
T. 42 N., R. 19 W., in NE $1 / 4$ sec. $35,30 \mathrm{ft}$. W. of rd. (now State Highway 135), in root of 12-1n. oak tree; spike

Bowers triangulation sta.; U.S.C. \& G.S. standard disk designated "Bowers 1928" (not tied to line)

> 4. FROM ELDON QUADRANGLE AT SEC. 36, T. 42 N. R. 17 W., NORTHWEST AND WEST TO SEC. 26, T. 42 N., R. 18 W., THENCE SOUTHEAST TO SEC. 12, T. 41 N., R. 18 W., THENCE SOUTHWEST TO SEC. 32 , T. 41 N., R. 18 W. (bJ J. H. Vinyard in 1934 )
> (Continued from Eldon quadrangle; see ine 4.)
T. 42 N., R. 17 W., near center sec. 36, on Coal Bank Road at Junction of rd. N. and private rd. S., S. of rd., at gatepost, in root of 18-1n. tree; copper nail and washer
953.90
T. 42 N., R. 17 W., in $\mathrm{SW} 1 / 4$ NW $1 / 4$ sec. $25,62 \mathrm{ft}$. E. of junction of rd. N., 26 ft . N. of Coal Bank Road, in concrete post; standard tablet stamped "T T 535 C W A $1934^{\text {" }}$
Reference mark, 90 ft . W: of tablet, in root of $6-1 \mathrm{n}$. oak tree; copper nail and washer
Versailles, 5 mi . SE. of, along Coal Bank Road, in NW $1 / 4$ sec. 26 , T. 42 N., R. 17 W., opposite junction of rd. S., at gate to wooded pasture, in root of 15-1n. oak tree; copper nall and washer
Versailles, 4 ml . SE. of, along Coal Bank Road, near center of SE $1 / 4$ sec. 22, T. 42 N., R. 17 W. , near farmhouse, $N$. of $\mathrm{rd}$. ; on N . haad wall of culvert; ch1seled square
776.44

Versailles, 2.5 mi . S. and 1.5 ml . E. from, in NW $1 / 4 \mathrm{se} 1 / 4 \mathrm{sec} .21$; T. 42 N., R. 17 W., 27 ft . N. and 27 ft . E. from orossroads, in fence corner, in concrete post; standard tablet stamped "T T 536 C W A 1934"
Reference mark, 300 ft . E. of tablet, 15 ft . S. of fence, in root of 30-1n. white-oak tree; copper nail and washer
Versailles, 4 mi . S. of, near quarter cor. between secs. 20 and 29, T. 42 N., R. 17 W., NE: of T-rd. E., in root of 15-in. oak tree; copper nall and washer
893.19

Versailles, 4.5 mi. S. of, in $\mathrm{NW} 1 / 4$ sec. 29 , T. $42 \mathrm{N.}, \mathrm{R} .17 \mathrm{~W} ., 0.8 \mathrm{mi}$. E. of State Highwey 5, opposite T-rd. S., 10 ft . inside fence, in root of $24-1 n$. white-oak tree; copper nail and washer
Versailles, 4.5 mi . S. of, along State Highway 5, near center sec: 30, T. 42 N., R. 17 W., opposite junction of rd. E., in root of 12-in. oak tree; copper nail and washer

Versailles, $3 \mathrm{mi} . \mathrm{S}$. of, along State Highway 5, near S. aixteenth cor. sec. 19, T. $42 \mathrm{~N} ., \mathrm{R} .17 \mathrm{~W} ., 30 \mathrm{ft}$. N. of junction of rd. N., in fence corner, in concrete post; standard tablet stamped "T T 537 C W A 1934"
T. $4 \dot{2}$ N., R. 18 W., near center sec. $24,100 \mathrm{ft}$. E. of rd., at gate to orchard, in root of 18-1n. black-oak tree; copper nail and washer
T. 42 N., R. 18 W., in $\mathrm{SE} 1 / 4 \mathrm{SW} 1 / 4 \mathrm{sec}$. 24 , at bottom of hill, near farmhouse at ford across creek, E. of rd., in root of $24-1 n$. white-oak tree; copper nail and washer
T. $42 \mathrm{~N} ., \mathrm{R} .18 \mathrm{~W}$. , in $\mathrm{NE} 1 / 4 \mathrm{SE} 1 / 4 \mathrm{sec} .26,130 \mathrm{ft}$. S. of rd. forks, in concrete post; standard tabiet stamped "T T 538 C W A 1934"
Reference mark, 100 ft : SE. of tablet, in root of $24-1 n$. black-oak tree; copper nail and washer
T. 42 N., R. 18 W. , in $\mathrm{SW} 1 / 4$ sec. 35 , NW. of T-rd. N., in root of $42-\mathrm{in}$. white-oak tree; copper nall and washer
T. $41 \mathrm{~N} ., \mathrm{R}$. 18 W ., in $\mathrm{SE} 1 / 4 \mathrm{sec}$. 2, at rd. forks, in root of 36-in. elm tree; copper nail and washer
T. 41 N., R. 18 W., in $S W 1 / 4$ sec. 1 , in front of $\log$ farmhouse, in root of $30-1 n$. oak tree; copper nail and washer
T. 41 N., R. 18 W., in NE $1 / 4$ NE $1 / 4 \mathrm{sec} .12,40 \mathrm{ft}$. S. end 35 ft . W. (?) from ra. fork SW., in NW. corner of jard of L. O. Williams, in concrete post; standard tablet stamped "T T 539 C W A 1934"

Feet
965.692
978.56
848.70
968.027
970.78
775.84
716.38
719.72
689.869

Reference mark, 15 ft . N. of tablet, in root of $24-\mathrm{in}$. maple tree; copper nail and washer
T. 41 N., R. 18 W., in NW $1 / 4$ sec. $13,1.4 \mathrm{mi}$. S. of Meyers Store, on N. end of concrete porch of Hubbard School; chiseled square
T. 41 N., R. 18 W., in $S W 1 / 4 \mathrm{sec} .14,1 \mathrm{ml}$. W. of Hubbard School, near rd. corner SE.-SW., at farmhouse, in root of 10-1n. walnut tree; copper na1l and washer
T. 41 N., R. 18 W., in NW $1 / 4 \mathrm{NE} 1 / 4$ sec. $22,57 \mathrm{ft}$. NW. of dwelling of C. B. Wilson, 102 ft . S. of rd., in concrete post; standard tablet stamped "T T 540 C W A 1934 "
Reference mark, on top of NE. corner of step to porch; chiseled square
T. 41 N., R. 18 W., in NE $1 / 4$ sec. 21 , at rd. corner E.-S., in front of log farmhouse, in root of $30-$ in. black-oak tree; copper nail and washer
T. 41 N., R. 18 W., in $S W 1 / 4$ sec. 21 , at rd. corner, 200 ft . E. of County Route $H$, $S$. of rd. at gate to field, in root of 18-1n. black-oak tree; copper nail and washer
T. 41 N., R. 18 W., in NW $1 / 4 \mathrm{NE} 1 / 4 \mathrm{sec} .29,21 \mathrm{ft}$. W. of rd. at curve E.-SW., 12 ft . S. of blazed $2 \mathrm{~L}_{4}-1 \mathrm{n}$. white-oak tree, in concrete post; standard tablet stamped "T T 561 C W A 1934"
Reference mark, 12 ft . N. of tablet, in root of $24-1 \mathrm{n}$. oak tree; copper nail and washer
T. 41 N., R. 18 W., in $W 1 / 2$ sec. 29 , 150 ft . E. of T-rd. E., S. of rd., at gate near ford across creek, in root of $20-1 n$. elm tree; copper nail and washor
T. 41 N., R. $i 8$ W., in NW $1 / 4$ NW $1 / 4$ sec. 32 , near rd. corner W.-S., at ford across creek near farmhouse, in root of $24-1 n$. elm tree; staples
5. FROM SEC. 35, T. 42 N., R. 18 W., WEST TO SEC. 35, T. 42 N., R. 19 W. (by J. H. Vinyard in 1934)
T. 42 N., R. $18 \mathrm{~W} .$, in $\mathrm{S} 1 / 2$ sec. 27 , about 0.2 mi . SE. of Rickey Church, 15 ft . W. of triangular-blazed 18 -in. water-oak tree, in concrete post; standard tablet stamped ${ }^{\text {NT T }} 562 \mathrm{CW}$ A $1934^{11}$
786.279

Reference mark, 25 ft . E. of tablet, in crotch of triple oak tree; copper nail and washer
T. 42 N., R. 18 W., in N $1 / 2 \mathrm{sec} .28$, at E. side of schoolhouse, on N. end of bottom step to porch; chiseled square
T. 42 N., R. 18 W., near cor. secs. $20,21,28$, and $29,80 \mathrm{ft}$. NW. of crossroads, in root of $30-1 n$. black-oak tree; copper nail and washer
T. $42 \mathrm{~N} ., \mathrm{R} .18 \mathrm{~W}$. , near quarter cor between secs. 17 and 20 , 28 ft . NE., thence 18 ft . SE. from crossroads, 9 ft . N. of blazed 30-1n. black-oak tree, in concrete post; standard tablet stamped "T T $563 \mathrm{C} W \mathrm{~A} 1934^{\prime \prime}$
Reference mark, 10 ft . from tablet, in root of $30-\mathrm{in}$. black-oak tree; copper nail and washer
T. $42 \mathrm{~N} ., \mathrm{R} .18 \mathrm{~W}$. , near center of $\mathrm{sw} 1 / 4 \mathrm{sec} .20$, about $900 \mathrm{ft}, \mathrm{SE}$. of farmhouse, about 200 ft . W. of creek on old rd., at junction of ravines, in root of $30-1 n$. white-oak tree; copper nail and washer
957.00
989.295
989.32
T. 42 N., R. 19 W., in sec. 25 , in yard of farmhouse (burnt), in root of middie one of three maple trees; copper nail and washer
848.40

1,056.22
6. FROM ELDON QUADRANGLE AT SEC. 24, T. $41 \mathrm{~N}, \mathrm{R}^{2}$ R. 17 W. NORTHWEST TO SEC, $5, T .41 \mathrm{~N} ., \mathrm{R} .17 \mathrm{~W} .$, THENCE SOUTH ALONG STATE HIGHWAY 5 TO GRAVOIS MILLS (by J. H. Vinyard in 1934)
(Continued from Eldon quadrangle; see line 5.)
T. 41 N., $R_{*} 17$ W., near quarter cor between secs. 13 and 24 , W. of lake near high-water mark, in root of 18-in. black-oak tree; copper nail and washer
667.86
T. 41 N., R. 17 W., in $S W 1 / 4$ sec. $13,0.5 \mathrm{mi}$. from lake, on top of ridge, at cross trails, in root of blazed l0-1n. oak tree; copper nail and washer
826.90
T. 41 N., R. 17 W., in NW $1 / 4$ SW $1 / 4$ sec. $13,0.5 \mathrm{mi}$. S. of old farmhouse, along old trail, 90 ft . NE. of old T-rd. E., $18 \mathrm{ft} . \mathrm{N}$. of blazed blackoak tree, in conorete post; standard tablet stamped "T T 1159 W 1934 " 696.532

Reference mark, 100 ft . N. of tablet, in root of $24-1 \mathrm{n}$. black-oak tree; staples

| 1 N., R. 17 W., in NE $1 / 4$ sec. 14 , at top of steep hill, in root of azed 24 -in. black-oak tree; staples | $849.96$ |
| :---: | :---: |
| T. 41 N., R. 17 W., near quarter cor. between secs. 11 and 14 , at junction |  |
| of trails, in root of blazed 24 -in. black-oak tree; copper nail and washer | 898.88 |
| T. 41 N. , R. $17 \mathrm{~W} ., \mathrm{in} \mathrm{SW} 1 / 4 \mathrm{sec} .11$, at W. corner of triangle formed by |  |
| junction of trails, opposite blazed tree, in root of $10-1 n$. white-oak tree; copper nail and washer |  |
| 41 N., R. 17 W., in NW 1/4 sec. 10, at rd. forks near farmhouse, |  |
| ot of twin sycamore tree; copper nail |  |
| 41 N., R. 17 W., in NE 1/4.NE 1/4 sec. 9, at top of |  |
| in root of blazed 12-in. oak tree; copper nail and w | 81.95 |
| T. $41 \mathrm{N}$. , R. 17 W. , in $\mathrm{NW} 1 / 4 \mathrm{NE} 1 / 4 \mathrm{sec} .9$, about 1.3 mf . SE. of State |  |
| Highway 5, along rd. to Gravois Beach, 33 ft . N. and $28 \mathrm{ft}$. E. from |  |
| rd. fork NE., in concrete post; standard tablet stamped "T T 1160 W $1934^{\prime \prime}$ | 59 |
| eference mark, 100 ft . W. of tablet, on opposite side of rd., in root of 10-1n. tree; copper nail and washer | 882.06 |
| . 41 N., R. $17 \mathrm{~W} .$, in $\mathrm{NE} 1 / 4$ sec. 8, at T-rd. S., 200 ft . S. of rd., in |  |
| root of 12-1n. oak tree; copper nail and washer | 34 |
| 41 N., R. $17 \mathrm{~W} ., 1 \mathrm{ins} 1 / 2 \mathrm{sec} .5,100 \mathrm{ft}$. E. of |  |
| in root of 24-1n. oak tree; copper nail and washer | 00 |
| 41 N., R. $17 \mathrm{~W} .$, in NE $1 / 4$ SE $1 / 4$ sec. 7, at botto |  |
| farmhouse, on E. head wall of oulvert; chiseled squa | 51 |
| Gravois Mills, 0.8 mi . N. of, near store and filling sta., on W. head wall of culvert; chiseled square | 4 |
| Gravois Mills, 800 ft . S. of bridge over Spring Branch, 126 ft . S. of junction of rd. E., 30 ft . E. of highway, 20 ft . N. of $28-\mathrm{in}$. oak tree, |  |
| - FROM GRAVOIS MILLS SOUTH ALONG STATE HIGHWAY 5 INTO VERSAILLES NO. 3 QUADRANGGLE (by J. H. Vinyard in 1934-35) |  |
| Gravois M111s, $0.8 \mathrm{mi} . \mathrm{S}$. of, in $\mathrm{NE} 1 / 4 \mathrm{SE} 1 / 4 \mathrm{sec} .20, \mathrm{~T} .41 \mathrm{N}$. , |  |
| R. 17 W., at junction of rd. SE., on S. head wall of side rd. culvert; chiseled square | 823.82 |
| Gravois Mills, 1.6 ml . S. of, at junction of rd. W., on W. head wall of culvert; chiseled square$825.09$ |  |
| Gravois Mills, $2.1 \mathrm{mi} . S$. of, at junction of rd. SW., W. of rd., in root of 18-1n. black-oak tree; copper nail and washer |  |
| Gravois Mills, 2.8 mi . S. of, on NE. wing wall of bridge over Soap Creek; chiseled cross |  |
| Gravois Mills, 3.5 mi : S. of, in NW $1 / 4$ NE $1 / 4$ sec. 5, T. 40 N., R. 17 W., |  |
| Reference mark, $80 \mathrm{ft} . \mathrm{S}$. of tablet, in root of $10-1 \mathrm{n}$. oak tree; copper nail and washer | 875.56 |
| avois M111s, 4.5 mi . S. of, in SW $1 / 4$ sec. 5, T. 40 N., R. 17 W., at junction of rd. N., W. of highway, on right-of-way post; chiseled cross | 812.85 |

(Continued in Versailles No. 3 quadrangle; see line 9.)
8. FROM VERSAILLES NO. 3 QUADRANGLE AT SEC. 9, T. 40 N., R. 18 W., NORTHWEST INTO COLE CAMP QUADRANGLE AT SEC. 35 ,' T. 41 N., R. 19. W. (by C. P. Thompson in 1934)
(Continued from Versailles No. 3 quadrangle; see line 7.)
T. 40 N., R. 18 W., in NE $1 / 4$ sec. 8, on bank of Sweetwater Branch, near farmhouse of Albert Bellamy, 180 ft . NE. of rd. forks $N$. and E., 27 ft . N. of E. rd., in root on SE. side of 20-in. wainut tree; copper nail and washer
T. $40 \mathrm{~N} ., R_{\text {. }} 18 \mathrm{~W}$, in $\mathrm{NW} 1 / 4$ sec. 8 , on concrete step at sW. side of Proctor sohool; chiseled square
Lake of the Ozarks; surface of water at 9 a.m. Oct. 22, 1934
680.00

Proctor, in foundation at front of Talbot dwelling; standard tablet stamped ${ }^{6} 62$ Vrsls"
T. 40 N., R. 18 W. , in NW $1 / 4 \mathrm{NW} 1 / 4 \mathrm{sec} .5$, on E. bank of Proctor Creek at rd. crossing, 42 ft . W. of junction of rds. NW. and E., in root on N. side of 24-in. olm tree; copper nail and washer
650.330
T. 41 N., R. 18 W., near S. sixteenth cor. sec. 31 , about 2 mi . NW. of Proctor School, 15 ft . N. of rd., 10 ft . S . and 12 ft . W. from $24-1 \mathrm{n}$. black-oak tree used for corner gate post, in concrete post; standard tablet stamped "T T 548 CW A 1934"
Reference mark, 10 ft . N. of tablet, in root on S. side of 18-in. white-oak tree; copper nall and washer
698.10
T. $41 \mathrm{~N} .$, R. $19 \mathrm{~W} .$, in $\mathrm{SE} 1 / 4 \mathrm{SE} 1 / 4 \mathrm{sec}$. $36,21 \mathrm{ft}$. S. and 36 ft . W. from rd. forks, 16 ft . W. of rd. SW., in root on E. side of 10-in. black-oak tree; copper nail and washer
879.158
879.34
T. 40 N., R. 19 W., near center sec. 1, 2.2 mi . SE. of Little Buffalo Store, 15 ft . S. and 40 ft . Wi. from T-rd. NW., in root on N. side of 22-in. oak tree; copper nail and washer
920.66

Little Buffalo Store, 1 mi . S. of, in $\mathrm{NW} 1 / 4 \mathrm{NE} 1 / 4 \mathrm{sec} .2, \mathrm{~T} .40 \mathrm{~N}$. , R. 19 W., at top of ridge, 21 ft . W. of rd., in root on E. side of 10-1n. red-oak tree; copper na11 and washer

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9. FROM ELDON QUADRANGLE AT SEC. 13, T. L3 N., R. 17 W., WEST INTO COLE CAMP QUADRANGLE AT SEC. \(10, \mathrm{~T} .43 \mathrm{~N} ., \mathrm{R} .19 \mathrm{~W}\). (by C. P. Thompson in 1934)
(Continued from Eldon quadrangle; see line 7.)
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T. 43 N., R. 17 W., near center of NE $1 / 4 \mathrm{sec} .14,23 \mathrm{ft}$. N. and 60 ft W. from low-water bridge over Smith Fork Creek, 18 ft . N. of rd., in root on W. side of $24-1 n$. elm tree; copper nail and washer

Feet
928.35
952.14

1,002.49

1,021.35
1,056.642
1,049.44
996.13
(For balance in Tipton quadrangle, see line 4.)
T. $43 \mathrm{~N} .$, R. $18 \mathrm{~W} .$, in $\mathrm{SE} 1 / 4 \mathrm{sec} .12,125 \mathrm{ft}$. W. of Missouri Pacific R.R. trestle MP-22, 10 ft . W. of rd., in $N$. end of $W$. concrete head wall of bridge; standard tablet stamped " 35 C W A 1934 "
901.641
T. 43 N., R. 18 W., near cor. secs. $11,12,13$, and 14 , in front yard of C. G. Sanford, 36 ft . N. of rd., in root on SE. side of $30-\mathrm{in}$. blacklocust tree; copper nall and washer
T. 43 N., R. 18 W., near W. sixteenth cor. between secs. 11 and $14,45 \mathrm{ft}$. N. and 100 f't. E. from T-rd. N., in stable lot on property of Mary Lampkins, in root on SE. side of l4-in. walnut tree; copper nail and washor
T. 43 N., R. 18 W., near quarter cor. between secs. 10 and $15,92 \mathrm{ft}$. N. of dweling of Author Salter, 30 ft . $N$. of rd., in root on SW. side of $10-1 n$. post-oak tree; copper nail and washer
T. 43 N., R. 18 W., W. sixteenth cor. between secs. 10 and 15 , 55 ft. N. and 16 ft . W. from T-rd. N., in root on S. side of $2 \mathrm{l}_{4}-\mathrm{in}$. white-oak tree; copper nall and washer
T. 43 N., R. 18 W., near cor. secs. $9,10,15$, and $16,135 \mathrm{ft}$. W. of Richland Oreek, 10 ft . S. of rd., on S. head wall of concrete culvert; chiseled square
T. 43 N., R. 18 W., in NE $1 / 4$ sec. 17 , at top of hill, about 700 ft . W. of old crossroads, on wooded land, 28 ft . N. of rd., in root on SE . side of 22-in. white-oak tree; copper nall and washer
T. 43 N., R. 18 W. , in $\mathrm{NW} 1 / 4$ sec. 17 , on E. bank of Richland Creek, $30 \mathrm{ft} . \mathrm{S}$. of rd., in root on N. side of 24 -in. black-oak tree; copper nell and washer
T. 43 N., R. 18 W., near cor. secs. 7, 8,17 , and $18,600 \mathrm{ft}$. W. of T-rd. $\mathrm{N}_{\mathrm{H}}, 17 \mathrm{ft}$. S. of rd., in concrete post; U.S.C. \& G.S. and State Survey standard tablet stamped "36 C W A 1934"
Reference mark, 300 ft . W. of tablet, in root on N . side of $2 \mathrm{l}_{4}$-in. oak tree; copper nail and washer
968.54
986.80
979.26
902.03
851.76

1,000.98
850.66
888.957
891.84
T. 43 N., R. 18 W., in $S W 1 / 4$ sec. 7, on hill, 50 ft . N. and $\mathrm{l}_{4} 0 \mathrm{ft}$. W. from dwelling of H . H. Nolting, 21 ft . W. of rd., in root on E . side of 20-in. red-oak tree; copper nail and washer
T. $43 \mathrm{~N} ., \mathrm{R} .19 \mathrm{~W} ., \mathrm{E}$. corr. secs. 12 and 13 , 42 ft . N. and 15 ft . W. from rd. corner N.-W., in root on N. side of $20-1 n$. white-oak tree; copper nail and washer
T. $43 \mathrm{~N}, \mathrm{R}_{\mathrm{R}} 19 \mathrm{~W}, 660 \mathrm{ft}$. N. of center sec. $13,24 \mathrm{ft}$. E. of T-rd. E., 3 ft . E. of fence, in root on NW. side of 16-in. wild-cherry tree; copper nail and washer
T. 43 N., R. 19 W., near center of $N E 1 / 4 \mathrm{sec} .14,20 \mathrm{ft} . \mathrm{S}$. and 33 ft E. from crossroads and rd. fork NE., 75 ft . N. and 42 ft . W. from NW. corner of farmhouse, 10 ft . E. of corner of yard fence, in concrete post; J.S.C. \& G.S. and State Survey standard tablet stamped "37 OW A $1934^{\prime \prime}$

1,002.02
982.16

1,002.37

1,063.021
Reference mark, 50 ft . N. of tablet, in root on W. side of 12-in. post-oak tree; copper nail and washer

1,059.87
(Continued in Smithton quadrangle; see line 2.)
For additional level lines along Missouri Pacific R.R. and Chicago, Rock Island \& Pacific Ry., refer to United States Coast and Geodetic Survey first-order line, Tipton to Versailles; and second-order'lines, Versailles to Windsor and Mansfield to Versailles.

Cooper, Moniteau, and Morgan Counties


1. FROM SMITHTON QUADRANGLE EAST ALONG U.S. HIGHWAY 50 TO TIPTON (by F. C. Lentz in 1936)

Otterville, 1 mi . E. of, 45 ft . E. of junction of rd. S., at SW . corner
of bridge over Lamine River, on top of concrete abutment; chiseled square

Feet 690.96

Otterville, 2 mi . NE. of, $75 \mathrm{ft} . \mathrm{S}$. and 235 ft . W. from junction of rd. N. and dim ra. S., in root on NW. side of twin 26-in. white-oak tree; copper nail and washer
Otterville, 3 ml . NE. of, 70 ft . s . and 145 ft . E. from SE. corner of dwelling, 30 ft . N. of highway, 1 ft . E. of fence, in concrete post; standard tablet stamped "10 L 1936"
Otterville, 3.7 mi . E. of, 110 ft . S. and 200 ft . E. from junction of rd. E., 25 ft . SW. of highway, on head wall of concrete culvert; chiseled square
Crossroad, SE. of, on concrete head wall of culvert; chiseled square
Syracuse, 2.6 mi . NW. of, at Cooper-Morgan county line, 20 ft . N. and 35 ft . W. from crossroad, in concrete post; standard tablet stamped "11 L. 1936"
Syracuse, 1.5 ml . W. of, 135 ft . NW. of junction of rd. S., 20 ft . NE. of highway, on head wall of concrete culvert; chiseled aquare
Syracuse, 0.9 mi . W. of, 100 ft . E. of junction of rd. W., 30 ft . S. of highway, on head wall of concrete culvert; chiseled square
Syracuse, 40 ft . S. and 50 ft . E. from junction of County Route D , in concrete post; standard tablet stamped "12 L 1936"
Syracuse, 0.7 ml . E. of, 30 ft . S . and 10 ft . W. from function of rd. S., on head wall of concrete culvert; chiseled square

Syracuse, 1 ml . E. of, 90 ft . N. and 35 ft . E. from junction of State
Highway 5, 10 ft . S. of Missouri Pacific R.R., on concrete underpass abutment; chiseled square
Syracuse, 2 mi . E. of, 300 ft . E. of Moniteau-Morgan county ine, 60 ft .
S. of Missouri Pacific R.R., 25 ft . N. of highway, on concrete head wall of culvert; chiseled square
Tipton, 2.4 mi . W. of, $40 \mathrm{ft} . \mathrm{S}$, and 40 ft . E. from crossroad, $2 \mathrm{ft} . \mathrm{N}$.
of fence line, in concrete post; standard tablet stamped "13 工 1936"
Tipton, 1.9 mi . W. of, 150 ft . S. of Missouri Pacific R.R. opposite
milepole 164-30, at curve, 20 ft . N. of highway, on head wall of concrete culvert; chiseled square
Tipton, 1 mi . W. of, 20 ft . S. of Missouri Pacific R.R. at rd. crossing, at milepole 163.34, in concrete base of crossing marker; chiseled square U.S.C. \& G.S. B.M. XXXV

> 2. FROM SMITHTON QUADRANGLE SOUTH ALONG COUNTY ROUTE A (now State H1ghway 135) TO FLORENCE, THENCE EAST ALONG ROADS INTO CALIFORNIA QUADRANGLE AT SEC. 12, T. 44 N., R. 17 W. (by F.C. Lentz in 1936)
> (Continued from Smithton quadrangle; see line 9.)

Florence, 2 ml . H. of, about 350 ft . S. of junction of rd. W., 110 ft . SW. of highway at curve, in root on NW. side of $30-1 n$. wainut tree; copper nail and washer
Florence, 1 mi . NW. of, about 400 ft . S . of dwelling, 35 ft . E. of highway at curve, in root on W. side of 14 -in. white-oak tree; copper nail and washer
Florence, near NW. edge of, at junction of rd. W.; top of concrete right-of-way post

Florence, 120 ft . E. of SE. corner of St. John's Evangelical Church, 570 ft . E. of highway, 20 ft . N. of rd., in SW. corner of field, in concrete post; U.S.C. \& G.S. and State Survey standard tablet stamped "T T 44 C W A 1934 "
Reference mark, 15 ft . N. and 125 ft . W. from tablet, on SE. corner of first step to church; chiseled square
Junction of rd. W., on top of concrete right-of-way post; painted square
Florence, 1 mi .3. of, $35 \mathrm{ft} . \mathrm{N}$. and 40 ft . E. from junction of rd. E., in root of $14-1 n$. black-oak tree; copper nail and washer
Florence, 1 ml . S., thence 0.8 ml . E. from, 100 ft . W. of Gabriel Fork, 15 ft . N. of rd., in root on S. side of 16 -in. mulberry tree; copper nail and washer
T. 44 N ., $R$. 18 W ., near center sec. $18,15 \mathrm{ft}$. S. and 166 ft . W. from T-rd. E. ( $\mathrm{W} . \mathrm{P}$ ), in fence line, between white-oak trees, in concrete post; standard tablet stamped ${ }^{\text {NT T }} 43$ C W A 1934"
T. $L_{4}$ N., R. 18 W., near quarter cor. between secs. 7 and $18,10 \mathrm{ft}$. N. and 23 ft . W. from T-rd. E., in root on E. side of twin 12-in. oak tree; copper nail and washer
T. 44 N., R. 18 W., near quarter cor. between secs. 8 and $17,200 \mathrm{ft}$. NW. of Richland Creek, 25 ft . N. of ra., in root on S. side of 20-in. water-oak tree; copper nall and washer
Top of hill, at T-rd. N., on sandstone outcrop; chiseled square
T. 44 N., R. 18 W., in NW $1 / 4 \mathrm{sec}$. 16 , at top of hill, 75 ft . S. of dwelling, 25 ft . S. of rd., in root on N. side of lo-in. white-oak tree; copper nail and washer
T. 44 N., R. 18 W. , near center of $\mathrm{NE} 1 / 4 \mathrm{sec} .16,20 \mathrm{ft} . \mathrm{S}$. and 25 ft . W. from crossroads, in root on N. side of $30-1 n$. black-oak tree; copper na1l and washer
T. 44 N., R. $18 \mathrm{~W} .$, in NE $1 / 4$ sec. $15,25 \mathrm{ft}$. S. and 35 ft . W. from County Route D at rd. W., in root on N. side of twin 36-in. elm tree; copper nall and washer
T. $\psi_{4}$ N., R. 18 W., in $S W 1 / 4$ sec. $1 L_{4}, 25 \mathrm{ft}$. S. of rd. cormer N.-E., 5 ft . E. of gate, in root on N . side of $30-1 \mathrm{n}$. white-oak tree; copper nail and washer
T. $44 \mathrm{~N} ., \mathrm{R} .18 \mathrm{~W}$., in NE $1 / 4 \mathrm{SE} 1 / 4 \mathrm{sec}$. 14 , about 3.5 ml . W. of Fortuna, $38 \mathrm{ft} . \mathrm{N}$. and 379 ft . W. from T-rd. S., 20 ft . N. of rd., inconcrete post; standard tablet stamped " 42 C W A 1934"

Feot
942.484
945.44
923.96
895.66
769.69
931.352
914.31
752.42
886.60
951.24
932.20
936.04
932.17
925.985
T. 44 N., R. $18 \mathrm{~W} .$, in sec. $13,100 \mathrm{ft}$. S. of rd. forks, $50 \mathrm{ft} . \mathrm{S}$. of rd. E. at curve, 100 ft . S. and 200 ft . W. from farmhouse, in root on F . side of $10-1 n$. black-oak tree; copper nail and washer
945.98
938.30

T-rd. S., in root on W. side of $30-1 \mathrm{n}$. elm tree; nail
Fortuma, 0.5 mi . W. of, 125 ft . S. of Missouri Pacific R.R., 30 ft . N. of Moniteau-Morgan county inne marker, in concrete post; standard tablet stamped "60 c w A 1934"
961.432

Fortuna, $0.5 \mathrm{mi} . \mathrm{N} .0 \mathrm{f}$, near center sec. 16, T. $\psi_{4} \mathrm{~N} ., \mathrm{R} .17 \mathrm{~W} ., 40 \mathrm{ft}$. E. of Missouri Pacific R.R., 90 ft . S. and 50 ft . W. from State Highway 5 at crossroad, in telephone pole; spike
961.36

Fortuna, 0.5 mi . N., thence 1 ml . E. from, 0.2 ml . W. of $\mathrm{T}-\mathrm{rd} . \mathrm{N} ., 40 \mathrm{ft}$. E. of farmhouse, 25 ft . N. of rd., in root on $S$. side of $36-1 \mathrm{n}$. 'locust tree; copper nail and washer
868.65

Fortuna, $0.5 \mathrm{mi} . \mathrm{N} .$, thence 2 ml . E. from, near center sec. 14, T. $44 \mathrm{~N} .$, R. 17 W., 20 ft . E. of T-rd. W., in fence line, in concrete post; standard tablet stamped "41 C WA 1934"
845.144
T. 44 N., R. 17 W., near cor. secs. $11,12,13$, and $14,35 \mathrm{ft}$. S. and 100 ft . E. from T -fence E., 15 ft . S. of rd. at curve, in root of $12-\mathrm{in}$. walnut tree; copper nail and washer
873.30
3. FROM POINT I MJLE SOUTH OF FLORENCE SOUTHWEST ALONG COUNTY

ROUTE A (now State H1ghway 135) TO SEC. 34, T. W4 N.,
R. $19 \mathrm{~W} .$, THENCE SOUTH ALONG ROADS INTO GRAVOIS MILLS

QUADRANGLE (by F. C. Lentz in 1936)
Florence, 2 ml . S. of, 350 ft . SE. of junction of rd. W., 30 ft . SE. of highway, in root on W. side of $14-1 n$. black-oak tree; copper nail and washer
Florence, $2.5 \mathrm{mi} . \mathrm{S}$. of, 30 ft . S. and 110 ft . E. from crossroad, in root on S. side of 32-in. black-oak tree; copper nail and washer
T. $44 \mathrm{~N}, \mathrm{R}$. $19 \mathrm{~W} .$, in $\mathrm{SW} 1 / 4 \mathrm{NE} 1 / 4 \mathrm{sec} .27$, 4 ft . N. and 37 ft . W. from junction of rd. E., 6 ft . N. of fence corner, in concrete post; standard tablet stamped " 1402 C W A $1934^{\text {" }}$
956.741

Florence, $3.6 \mathrm{mi} . \mathrm{S}$. of, $45 \mathrm{ft} . \mathrm{S}$. and 35 ft . W. from junction of rd. E., 15 ft . N. of entrance to fam, in root of $12-1 \mathrm{n}$. black-oak tree; copper nail and washer
$1,010.30$
(For balance in Smithton quadrangle, see line 11.)
T. $43 \mathrm{~N} ., \mathrm{R} .19 \mathrm{~W} .$, in NE $1 / 4$ sec. $3,30 \mathrm{ft} . \mathrm{S}$. and 235 ft . E. from rd. corner N.-E., in root of 24 -in. White-oak tree; copper nail and washer
Stover Creek, on W. bank of, at ra. crossing, in root of twin $46-1 n$. maple tree; copper nail
848.42
T. 43 N., R. $19 \mathrm{~W} .$, in $W 1 / 2 \mathrm{sec} .11$, about $1 \mathrm{mi} . \mathrm{S}$. of ford across Stover Creek, 300 ft . NE. of $\log \mathrm{cabin}, 15 \mathrm{ft}$. W. of rd., in fence corner, in root on E. side of l6-in. water-oak trees copper nail and washer
917.57
T. 43 N., R. 19 W., in SE $1 / 4$ sec. 11, at rd. forks, in root on N. side
4. FROM GRAVOIS MILLS QUADRANGLE AT SEC. 7, T. 43 N., R. 17 W., WEST INTO QRAVOIS MILIS QUADRANGLE AT SEC. 12, T. 43 H. , R. 18 W. (by 0. P. Thompson in 1934)
(Continued from Gravois Mills quadrangle; see line 9.)
T. 43 N., R. 17 W., in $S E 1 / 4$ sec. $7,355 \mathrm{ft}$. S. and 18 ft . E. from T-rd. S., 18 ft . E. of rd., in root on $W$. side of $10-1 \mathrm{n}$. cedar tree; copper nail and washer

Peot 939.06
T. $43 \mathrm{~N} . \mathrm{A}_{\mathrm{R} .} 18 \mathrm{~W} .$, near center sec. $12,75 \mathrm{ft}$. E. of Missouri Pacific R.R., 18 ft . N. and 9 ft . E. from T-rd. S., in root on S. side of in-in. hackberry tree; copper nail and washer
(Continued in Gravois Mills quadrangle; see line 9.)
For additional level lines along Missouri Pacific R.R., refer to United States Coast and Geodetic Survey first-order lines, Jefferson City to Pleasant Hill and Tipton to Versailles.

PILOT QROVE QDADRANGLE
(Latitude $38^{\circ} 45^{\prime}-39^{\circ} 00^{\prime}$; longitude $92^{\circ} 45^{\prime}-93^{\circ} 00^{\prime}$ )
Cooper and Howard Counties


1. FROM NELSON QUADRANGLE AT SEC. 3 , T. 46 N., R. 19 W., EAST INTO BOONVILLE QUADRANGLE AT SEC. If, T. 46 N., R. 17 W. (by J. H. Vinyard and P. A. Castle in 1934)
T. 46 N., R. 19 W., in SE $1 / 4$ sec. 2, at rd. corner, in root of white-oak tree; na11
829.86
T. 46 N., R. 19 W., in SE $1 / 4$ sec. $2,0.2 \mathrm{mi}$. W. of crossroads, $40 \mathrm{ft} . \mathrm{sW}$. of fence cormer, in root of small red-oak tree; nail
T. $46 \mathrm{~N} ., \mathrm{R} .19 \mathrm{~W}$. , near center of $\mathrm{SW} 1 / 4 \mathrm{sec} .1,65 \mathrm{ft}$. SW. of crossroads, 17 ft . W. of rd., 2 ft . W. of fence, in concrete post; U.S.C. \& G.S. and State Survey standard tablet
861.873
T. $46 \mathrm{~N} ., \mathrm{R}$. 19 W., near quarter cor. between secs. 1 and $12,330 \mathrm{ft}$. W. of $24-1 \mathrm{n}$. oak tree at fence comer, 26 ft . S. of rd., 2 ft . S. of fence, in conorete post; U.S.C. \& G.S. and State Survey standard tablet 875.143
New Lebanon, 0.5 mi . N. of, 20 ft . S. and 30 ft . W. from T-rd. S., in concrete post; U.S.C. \& G.S. and State Survey standard tablet
864.779

Reference mark, 0.2 mi . S. of tablet, in NE. corner of Brubaker's yard, in root on E. side of maple tree; nail and washer
New Lebanon, 0.4 mi . S. of, at NE. corner of cemetery, in NE. cornerstone of fence; (mark not described)
818.34
T. 46 N., R. 18 W., in NW $1 / 4 \mathrm{sec} .17,300 \mathrm{ft}$. E. of gate to farm of O. L. Thomas on S. head wall of concrete culvert; chiseled square
T. 46 N., R. 18 W., quarter cor. between secs. 16 and $17,20 \mathrm{fc}$. N. and 20 ft . E. from T-rd. N., in fence corner, in concrete post; standard tablet stamped "15 C W A 1934"
Reference mark, 270 ft . E. of tablet, in fence line $N$. of rd., in stump; copper nail and washer
T. $46 \mathrm{~N} ., \mathrm{R} .18 \mathrm{~W}$., quarter cor. between secs. 15 and $16,10 \mathrm{ft}$. S. and 25 ft . E. from junction of rds., on S . head wail of stone culvert; chiseled square
858.164
$46 \mathrm{~N} ., \mathrm{R} .18 \mathrm{~W}$. near center sec. 15 , N . of rd., in root of large elm tree; copper nall and washer $46 \mathrm{~N} ., \mathrm{R}$. 18 W., near quarter cor. between secs. 14 and 25 , in fence
T. $46 \mathrm{~N}, \mathrm{R}$. 18 W. , near quarter cor. between secs. 14 and 15 , in fenc
852.43
893.44
line N. of rd., in root of 10-in. elm tree; copper nail and washer.
856.43
T. 46 N., R. 18 W. , near quarter cor. between seos. 13 and $24,20 \mathrm{ft}$. N. and 20 ft . E. from State Highway 5 at crossroad, in concrete post; standard tablet stamped "16 C W A 1934"
764.66

Reference mark, 350 ft . E. of tablet, S. of rd., near fence, in W. side of 24 -in. wainut tree; copper nail and washer
T. $46 \mathrm{~N} ., \mathrm{Rs} .17$ and 18 W. , near quarter cor between secs. 13 and 18 ,

Peet at top of hill, opposite dwelling of H. W. Hegemen, $20 \mathrm{ft} . \mathrm{N}$. of rd., in root of large cedar tree; copper nail and washer
T. 46 N., R. 17 W., near quarter cor. between secs. 17 and $18,600 \mathrm{ft}$. W. of farmhouse of W. P. Waller, on $S$. curb of concrete bridge; chiseled square
T. $46 \mathrm{~N} ., \mathrm{R}$. 17 W. , near W. sixteenth cor. sec. 16 , about 2.5 mi . S. of Bunceton, 100 ft . NW. of NW. corner of dwelling of Elon Gander, 25 ft . S. of rd., in concrete post; standard tablet stamped "I7 C W A 1934"

Reference mark, $10 \mathrm{ft} . \mathrm{N}$. of tablet, in root of $10-\mathrm{in}$. elm tree; copper nail and washer
T. $46 \mathrm{~N} ., \mathrm{R} .17 \mathrm{~W} ., 640 \mathrm{ft}$. W. of quarter cor. between secs. 15 and 16 , on S. curb of concrete bridge; chiseled square
T. 46 N., R. 17 W., 230 ft . W. of quarter cor. between secs. 14 and 15 , in root of $30-1 \mathrm{n}$. elm tree; copper nail and washer
864.28
846.70
874.125
873.48
848.41
841.99
(Continued in Boonville quadrangle; see line 7.)

## 2. FROM BOONVILLE QUADRANGLE AT SEC. 11, T. 47 N., R. 17 W., WEST TO SEC. 9, T. 47 N., R. 19 W. (by B. A. Barnes in 1934) (Continued from Boonville quadrangle; see line 5.)

T. 47 N., R. 17 W., about 0.4 ml . W. of quarter cor. between s.ecs. 10 and 11 , 120 ft . W. of SW. corner of Lone Elm School, in 36-1n. locust tree; nail
Speed, 1.2 ml . E. of, near quarter cor between secs. 9 and $10, \mathrm{~T} .47 \mathrm{~N}$. R. $17 \mathrm{~W} ., 200 \mathrm{ft}$. S. of crossroads, 53 ft . E. of NE. comer of farmhouse, 25 ft . W. of rd., in concrete post; U.S.C. \& G.S. and State Survey standard tablet
Speed, about 1 mi. E. of, near E. sixteenth cor. sec. 9, T. 47 N., R. 17 W., $2 \mathrm{ft} . \mathrm{S}$. and 5 ft . E. from E. gatepost, 6 ft . W. of $30-\mathrm{in}$. elm tree, N. of rd., in concrete post; U.S.C. \& G.S. and State Survey standard tablet
782.79
819.675

Speed, in SE $1 / 4$ sec. 8, T. 47 N., R. 17 W., in front of drug store, on NE, corner of concrete walk; chiseled square
T. 47 N., R. 17 W., near center sec. 7 , about 1.2 mi . W. of Speed, 50 ft. S. and 35 ft . W. from SW. corner of dwelling of G. W. Chamberlain, 40 ft . N. of rd., 6 ft . S. and 8 ft . W. from $26-1 \mathrm{n}$. walnut tree, in concrete post; U.S.C. \& G.S. and State Survey standard tablet
T. 47 N., R. 17 W., near W. sixteenth cor. sec. 7, 400 ft . S. of brick dwelling, 10 ft . N. of rd., 2 ft . W. of gatepost, in concrete post; U.S.C. \& G.S. and State Survey standard tablet
T. $47 \mathrm{N.}, \mathrm{Rs}$.17 and $18 \mathrm{~W} .$, near cor. secs. $1,6,7$, and $12,300 \mathrm{ft} . \mathrm{S}$. of State Highway 5 at ra. W. to Pilot Grove, E. of highway, in root of 30-1n. elm tree; nail
T. 47 N., R. 18 W., near cor. secs. $1,2,11$, and $12,40 \mathrm{ft}$. S. of rd., in root of $18-1 \mathrm{n}$. white-oak tree; copper nail and washer
T. 47 N., R. 18 W., in $W 1 / 2 \mathrm{sec} .2$, on SW. corner of concrete pier of steel bridge over Petite Saline Creek; chiseled square
16.214
667.00
$797 \cdot 502$
813.968
808.92
769.90
657.66

Pilot Grove, about 2.2 mi . E. of, in NW $1 / 4 \mathrm{NW} 1 / 4$ sec. 2, T. 47 N. , R. 18 W., 75 ft . S. of SW. corner of Oakland School, in concrete post; U.S.C. \& G.S. and State Survey standard tablet
694.677

Pllot Grove, about 2.2 mi . E., and 0.2 mi . N. from, about 0.2 ml . N. of Oakland School, 20 ft . S. and 60 ft . E. from T-rd., in front yard of dwelling of Mike Meyer, in concrete post; U.S.C. \&G.S. and State Survey standard tablet
708.922

Pilot Grove, 1 mi . E. of, near cor. secs. 3, 4, 33, and 34, Tps. 47 and $48 \mathrm{~N} ., \mathrm{R} .18 \mathrm{~W} ., 20 \mathrm{ft}$. S. of rd., in root of $20-\mathrm{in}$. white-oak tree; spike
Pilot Grove, 88 ft . S. of intersection of Second and Row Streets, 11 ft . S. of flagpole, in SW. corner of concrete well curbing; standard tablet stamped "10 C W A 1934"
$787 \cdot 94$

Reference mark, 75 ft . SW. of tablet, at entrance to builiding, on base of iron column; chiseled square
Pilot Grove, 0.2 ml . S. of, in $\mathrm{SW} 1 / 4$ sec. 5 , T. $47 \mathrm{~N} ., \mathrm{R} .18 \mathrm{~W}$. , on S . end of E . wall of concrete culvert; chiseled square
842.89

Pilot Grove, 0.5 mi . S. of, in $\mathrm{SW} 1 / 4$ sec. 5, T. $47 \mathrm{~N} ., \mathrm{R} .18 \mathrm{~W}$, on W end of N. wall of small concrete bridge; chiseled square
808.24

Pilot Grove, 0.5 mi . S., thence 0.5 mi . W. from, in $\mathrm{SW} 1 / 4$ sec. 5 , T. 47 N., R. 18 W ., on bottom step of Wesley Chapel; chiseled cross
T. 47 N., R. 18 W., near cor. secs. $5,6,7$, and $8,120 \mathrm{ft}$. . of Missouri-Kansas-Texas R.R., 50 ft . N. of rd., in root of 48-in. elm tree; copper nail and washer
T. 47 N., R. 18 W ., near quarter cor. between secs. 6 and $7,0.5 \mathrm{ml}$. W. of Missouri-Kansas-Texas R.R., on W. end of S. wall of concrete culvert; chiseled square
T. 47 N., R. 19 W., near quarter cor. between secs. 1 and 12 , on W. end of $S$. wall of concrete culvert; chiseled square
822.43

R ${ }^{\circ}$ wall of concrete culvert; chiseled square 2 in corner of bottom step of St. Paul's Evangelical Church; standard tablet stamped "ll C W A 1934"
Reference mark, 50 ft . S. and 20 ft . E. from tablet, on concrete block; chiseled square
T. 47 N., R. 19 W ., in SW . cor. sec. 2 , on E . end of N . wall of concrete culvert; chiseled square
T. 47 N., R. $19 \mathrm{~W}_{.}$, near quarter cor. between secs. 9 and $10,2 \mathrm{ft}$. N. and 26 f.t. W. from NW. corner of farmhouse of Teresa Twenter, 45 ft . E. of rd., in concrete post; standard tablet stamped "253 C W A 1934"

Reference mark, 100 ft . W. of tablet, on NE. comer of concrete well block; chiseled square


Feet
(For balance in Nelson quadrangle, see line 3.)
T. 48 N., R. 19 W., in NW $1 / 4 \mathrm{sec} .27$, on E. end of top step of Buffalo Prairie School; chiseled square
T. $48 \mathrm{~N} ., \mathrm{R} .19 \mathrm{~W}$. , near center sec. $22,0.5 \mathrm{mi} . \mathrm{S}$. and 0.2 mi . W. from bridge over Lamine River, on $N$. end of E. head wall of concrete culvert; chiseled square
621.77
T. $48 \mathrm{~N} .$, R. 19 W., in $\mathrm{SE} 1 / 4 \mathrm{sec} .15$, about 1.5 ml . S. of U.S. Highway 40, in NE. wing wall of abutment of bridge (known as Arthur s Bluff Crossing) over Lamine River; standard tablet stamped "l3 C W A 1934"
T. 48 N., R. 19 W., in SE $1 / 4 \mathrm{sec}$. $10,0.2 \mathrm{mi}$. S. of U.s. Highway 40 , W. of rd., in root on E. side of $18-1 \mathrm{n}$. elm tree; copper nail and washer
ס.S.C. \& G.S. stendard disk stamped "N 97 1935"
4. FROM GLASGOW QUADRANGLE AT SEC. 23, T. 49 N., R. 19 W., SOUTH ALONG ROADS (now County Route K) TO SEC. $11, \mathrm{~T} .48$ N., R. 19 W. (by G. R. Hamiln in 1936) (Continued from Glasgow quadrangle; see line 4.)
T. 49 N., R. 19 W.; quarter cor. between secs. 26 and 27,32 ft. N. and 390 ft . W. from T-rd. N., on SE, corner of concrete step at gate to yard of brick farmhouse; chiseled square
Blackwater, 0.5 ml . N. of, 31 ft . S. and 60 ft . E. from T-rd. $\mathrm{S} ., 6 \mathrm{ft}$. S. and 12 ft . W. from telegraph pole, in concrete post; standard tablet stamped "1088 C W A 1934"
Blackwater, on NW. corner of first step at entrance to Missouri Pacific R.R. sta.; chiseled square

Blackwater, at SW. limits of, 20 ft . N. and 135 ft . E. from T-rd. E., 150 ft . W. of turn in gravel ra. NE.-S., in root on S. side of llýn. elm tree; copper nail and washer
Blackwater, 1 mi . S. of, in $\mathrm{SW} 1 / 4 \mathrm{NW} 1 / 4$ sec. 3, T. $48 \mathrm{~N} ., \mathrm{R} .19 \mathrm{~W} .$, 263 ft . N. and 57 ft . E. from rd. forks, 30 ft . E. of sravel rd. at curve, in concrete post; standard tablet stamped "TT T $1089 \mathrm{C} W \mathrm{~A} 1934$ "

[^5]GLASGOW QUADRANGLE
(Latitude $39^{\circ} 00^{\prime}-39^{\circ} 15^{\prime}$; longitude $92^{\circ} 45^{\prime}-93^{\circ} 00^{\prime}$ )
Chariton, Cooper, Howard, and Saline Counties


1. FROM GLASGOW EAST ALONG ALTON RAILROAD INTO FAYETTE QUADRANGLE
(by D. V. Vandiver in 1905)
J.S.C.E. B.M. designated " $159=47 / 3$ "

Copper bolt
Steinmetz, 95 ft . S. and 95 ft . E. from sta., 140 ft . S. of track, at
NW. corner of former post office building, set vertically in W. face
of stone foundation; aluminum tablet stamped " $1905800 \mathrm{Adj"}$
Feot 616.350
798.262
(Continued in Huntsville quadrangle; see line l.)
2. FROM STEINMETZ SOUTH INTO FAYETTE QUADRANGLE AT SEC. 5, T. 50 N., R. 16 W. (by B. D. Harsha in 1934)
T. 51 N., R. $16 \mathrm{~W} .$, about 300 ft . S. of quarter cor. between secs. 7 and 18, at bridge over branch; surface of floor
T. $51 \mathrm{~N} ., \mathrm{R}$. 16 W ., near center sec, $18,45 \mathrm{ft}$. s . and 75 ft . W. from bridge, 10 ft . N. of rd., at rad. corner N.-W., in root on S . side of io-in. hickory tree; copper nail and washor
T. $51 . \mathrm{N}_{\text {., }} \mathrm{R}_{\mathrm{p}} 16 \mathrm{~W}$., near W. sixteenth cor. sec. 18 , at bridge over branch; surface of floor
T. $51 \mathrm{~N} ., \mathrm{Rs}$.16 and $17 \mathrm{~W} .$, near cor. secs. 13,18 , 19 , and $24,80 \mathrm{ft}$. N. and 20 ft . E. from T-rd. N., in root on E . side of ione $30-1 \mathrm{n}$. box-elder tree; copper nail and washer
T. $51 \mathrm{~N} . \mathrm{p}$. 16 W. , near center of $\mathrm{NW} 1 / 4 \mathrm{sec}$. 19, at rd. forks, 12 ft . S. and 10 ft. W. from telephone pole; surface of rd.
T. 51 N., R. $16 \mathrm{~W} .$, in $S W 1 / 4 \mathrm{sec} .19,40 \mathrm{ft} . \mathrm{S}$. and 25 ft . W . from bridge over Hurricane Creek, in root on NE. side of 10-in. cedar tree; copper nail and washer
T. 51 N., R. 16 W., near quarter cor. between secs. 19 and 30 , at bridge over branch; surface of floor
(For balance in Fayette quadrangla, see line 3.)
T. 51 N., R. 16 W., about $1,000 \mathrm{ft}$. S. of center seo. 30 , 14 ft . W. of
T. 51 in., Rence line, in root on SE. side of lone 24 -in. elm tree; notch
890.6
and 31 , in front of farmhouse of J . W. Gibbs, 18 ft . W. of recs. in root on NE. side of $36-1 n$. locust tree; copper nail and washer
T. $51 \mathrm{N}$. . R. 16 W. , about 400 ft . S . of center sec. 31 , 15 ft . W . of
r. $5 i$ in root on NE, side of 10-1n. elm tree; notch

NW. No it ft. N. W., in SE $1 / 4 \mathrm{SW} 1 / 4 \mathrm{sec}$. 31 , about 600 ft . E . of rd . NW., 18 ft . N. of rd. at dip, in fence line, in root on NW. side of lone 36-1ni elm tree; copper nail and washer
T. 50 N., $R_{\text {. }} 16$ W., near $N$. sixteenth cor. between secs. 5 and 6 , opposite first post $N$. of comer post of fence N. of farmhouse of E. W. Besgrove; surface of rd.
(Continued in Fayette quadrangles see line 3.)

## 3. FROM STEINMETZ WEST ALONG ALTON RAILROAD TO GLASGOW (by B. D. Harsha in 1934)

Steinmetz, about 1 mi . W. of; S. of R.R., at NE. comer of foundation of semaphore 128; top of bolt

# Steinmetz, about 2.2 mi . W. of, 800 ft . W. of bridge of State Highway 20 over R.R., in center of $W$, end of $S$. head wall of underpass $D-378.7$; standard tablet stamped "8 H 1934" <br> Feet <br> Steinmetz, 3.1 mi . W. of, 1.9 ml . E. of Glasgow, 50 ft . S. of R.R., in right-of-way fence line, in root on SW. side of l0-in. elm tree; copper nail and washer <br> 705.551 <br> Glasgon, 1.2 ml . E. of sta., 300 ft . N. of rd. crossing, on SE. corner of semaphore 131; top of bolt <br> Glasgow, at sta.; top of N. rail <br> U.S.C. \& G.S. standard disk stamped "L 12 1930" <br> 657.44 <br> 618.171 

## 4. FROM MARSHALL -QUADRANGLE AT SEC. 5; T. 51 N., R. 19 W., SOUTH INTO PILOT GROVE QUADRANGLE AT SEC. $23, \mathrm{~T} .49 \mathrm{~N} ., \mathrm{R}$. 19 W. (by G. R. Hamlin 1936) <br> (Continued from Marshall quadrangle; see line 2.)

Gilliam, at S . 11 mits of, 25 ft . N. and 15 ft . E. from State Highway 240 at Main Street N., on N. end of E. concrete head wall of culvert; chiseled square
Gilliam, about 0.5 mi . E. of, along State Highway 20 (now State Highway 240 ), 30 ft . N. and 18 ft . W. from junction of rd. S., in concrete
T. 51 N., R. R. 19 W., W. sixteenth cor. sec. 9 , 35 ft . N. and 12 ft . E.
797.82 from T-rd. E., on $E$. end of concrete head wall of culvert; chiseled square
T. 51 N., R. 19 W., W. sixteenth cor. between secs. 9 and $16,45 \mathrm{ft}$. E. of T-rd. W., in root on W. side of 8-in. hedge tree; copper nail and washer
T. 51 N., R. 19 W., near W. sixteenth cor. between secs. 16 and 21 , 34 ft . S. and 10 ft . W. from rd. corner $\mathrm{N} .-\mathrm{E} ., 16 \mathrm{ft}$. S. and 2 ft . E. from twin 18-in. hawthorn tree in fence corner, in concrete post; standard tablet stamped "1082 C W A 1934"
T. $51 \mathrm{~N}, \mathrm{R}$. $19 \mathrm{~W} ., \mathrm{N} . \operatorname{sixteenth}$ cor. sec. $21,48 \mathrm{ft}$. N. and 15 ft . W. from T-rd. E., in root on S. side of $30-\mathrm{in}$. elm tree; copper nail and washer
T. $51 \mathrm{~N}_{.}, \mathrm{R}$. 19 W., near quarter cor. between secs. 21 and 28 , 15 ft . S . and 15 ft . W. from T-rd. N., in root on N. side of 8-1n. cedar treo; copper nail and washer
$674 \cdot 984$
693.83
T. $51 \mathrm{~N}_{0}, \mathrm{R}_{\mathrm{l}} 19 \mathrm{~W} .$, center of $\mathrm{NW} 1 / 4 \mathrm{sec} .28,15 \mathrm{ft} . \mathrm{S}$. and 10 ft . E. from T-rd. W., in root on W. side of $8-1 n$. cedar tree; nail and washer
794.76
T. 51 N., R. 19 W., W. sixteenth cor. between secs. 28 and 33, 19 ft. S. and 15 ft . W. from T-rd. N., 19 ft . S. and 55 ft . E. from small wooden bridge, in concrete post; standard tablet stamped "1083 CW A $1934^{\mathrm{F}}$
Reference mark, 85 ft . N. $45^{\circ} \mathrm{W}$. of tablet, in root on S. side of twin 6-1n. elm tree; copper nail and washer
T. 51 N., R. 19 W., cor. secs. $27,28,33$, and $34,12 \mathrm{ft} . \mathrm{N}$, and 132 ft .
W. from T-rd. N., on $\mathrm{N}_{\text {. end }}$ of iron pipe culvert; chiseled square
797.59
732.978
730.32
T. $51 \mathrm{~N} ., \mathrm{R}$. 19 W., W. sixteenth cor. between secs. 27 and $34,20 \mathrm{ft}$. N. and 15 ft . E. from T-rd. S., in root on W. side of 8-1ri. mulberry trees copper nail and washer
754.36
T. 50 N., R. 19 W., center sec. 3, 78 ft . N. and 45 ft . E. from crossroads, 13 ft . S. and 8 ft . W. from SW . corner of St. Paul's Lutheran Church, in concrete post; standard tablet stamped "1084 C W A 1934"
T. $50 \mathrm{~N} ., \mathrm{R} .19 \mathrm{~W}$, center sec. $10,27 \mathrm{ft}$. S . and 20 ft . E. from T-rd.
E., in root on W. side of triple hackberry tree; copper nail and washer
T. 50 N., R. 19 W., quarter cor. between secs. 10 and 15 , 35 ft . N. and 12 ft . W. from crossroads, on $N$. end of W. concrete head wall of culvert; chiseled square
T. $50 \mathrm{~N} ., \mathrm{R}$. 19 W., center sec: $15,20 \mathrm{ft}$. S. and 20 ft . E. from T-rd. E., 90 ft . S. of T-rd. W., in root on W. side of $30-1 \mathrm{n}$. white-oak tree; copper nail and washer
T. 50 N., R. 19 W., quarter cor. between secs. 15 and $22,22 \mathrm{ft}$. S. and 25 ft . E. from $T-\mathrm{rd}$. . E., in root on W. side of $8-\mathrm{in}$. walnut trees copper nail and washer
T. $50 \mathrm{~N} ., \mathrm{R}, 19 \mathrm{~W}$, , about 0.2 ml . S. of center sec. $22,0.7 \mathrm{ml}$. N. of State Highway $41,8 \mathrm{ft}$. N. and 38 ft . E. from farmhouse of K . Fritz, 26 ft . W. of rd., in concrete post; standard tablet stamped " 1085 . C W A 1934"
641.99
669.71
T. $50 \mathrm{~N}_{*}$, R. 19 W , near center sec. $27,28 \mathrm{ft}$. N . and 15 ft . E. from state Highway 41 at crossaroad, on $N$. end of concrete pipe culvert;
T. $50 \mathrm{~N} ., \mathrm{R}$. 19 W ., center sec. $34,100 \mathrm{ft}$. N. and 25 ft . W. from T-rd.
757.220 W., in root on E. side of $30-1 n$. elm tree; copper nail and washer
T. 50 N., R. $19 \mathrm{~W} .$, S. quarter cor. sec. 34 , about $1.5 \mathrm{ml} . \mathrm{S}$. of State Highway 41, 28 ft . S. and 8 ft . W. from T-rd. N., 2 ft . S. of fence, in concrete post; standard tablet atamped "1086 C W A 1934"
764.32
T. 50 N., R. $19 \mathrm{~W}_{.}$, S. cor. secs. 34 and $35,25 \mathrm{ft}$. S. and $12 \mathrm{ft}$. . from T-rd. S., on $S$. end of W. concrete head wall of culvert; chiseled square
692.11
719.392
666.46
. $49 \mathrm{~N}_{\mathrm{H}}, \mathrm{R}_{\mathrm{L}} 19 \mathrm{~W}_{.}$, cor. secs. $2,3,10$, and $11,15 \mathrm{ft} . \mathrm{S}$, and 15 ft . E. from T-rd. S., on E. end of S. concrete head wall of culvert; chiseled square
726.09
T. 49 N., R. 19 W., cor. secs. $10,11,14$, and $15,18 \mathrm{ft}$. N. and $l_{4} \mathrm{ft}$. E. from crossroads, on top of concrete base of corner fence post; chiseled square
742.20
T. $49 \mathrm{~N}_{0}, \mathrm{R}_{\text {. }} 19 \mathrm{~W}$., quarter cor. between secs. $1_{4}$ and $15,23 \mathrm{ft}$. S. and
 tablet stamped "1087 C W A 1934"
T. $49 \mathrm{~N}_{\text {. }}, \mathrm{R}_{\mathrm{l}} 19 \mathrm{~W} .$, cor. secs. $14,15,22$, and $23,15 \mathrm{ft} . \mathrm{N}$. and 22 ft . W. from crossroads, on concrete base of corner fence post; chiseled square
T. 49 N., R. 19 W., quarter cor. between secs. 22 and $23,12 \mathrm{ft}$. S. and 20 ft . E. from T-rd. W., on concrete base of corner fence post; chiseled square
(Continued in Pilot Grove quadrangle; see line 4.)
5. FROM GILLIAM EAST ALONG STATE HIGHWAY 240 TO SEC. 1, T. 51 N., R. 19 W. (by G. R. Hamlin in 1936)
T. 51 N., R. 19 W., quarter cor. between secs. 3 and $4,25 \mathrm{ft}$. N. and 30 ft . W. from junction of rd. S., on $S$. end of W. concrete head wall of culvert; chiseled square
T. 51 N., R. 19 W., near center sec. 3 , $18 \mathrm{ft.N}$. and $15 \mathrm{ft} . \mathrm{W} . \mathrm{from}$ crossroad, on W. end of N. concrete head wall of culvert; chiseled square
T. 51 N., R. 19 W., near center sec. 2, 150 ft . N. and 380 ft . W. from junction of rd. W., on $E$. end of S. concrete head wall of culvert; chiseled square
699.04
T. 51 N., R. 19 W., near quarter cor. between secs. 1 and 2, $25 \mathrm{ft} . \mathrm{N}$. and 30 ft . E. from crossroad, on $W$. end of $N$. concrete head wall of culvert; chiseled square
U.S.C.E. B.M. designated " 162 "

Copper bolt
Top of cap
For additional level lines along Wabash Ry, and west bank of Missouri River, refer to United States Coast and Geodetic Survey first-order lines; Minneapolis, Minn. to Glasgow, Mo. and Jefferson City to Kansas City.

SALISBURY QUADRANGLE<br>(Latitude $39^{\circ} 15^{\prime}-39^{\circ} 30^{\prime}$; longitude $92^{\circ} 45^{\prime}-93^{\circ} 00^{\prime}$ )<br>Chariton, Howard, and Saline Counties



1. FROM BRUNSWICK QUADRANGLE AT SEO. 20, T. 52 N., R. 19 W., NORTHWEST INTO BRUNSWICK QUADRANGLE AT SEC. 17, T. 52 N., R. 19 W. (by G. R. Hamlin in 1936)
(Continued from Brunswick quadrangle; see line 6.)
T. 52 N., R. 19 W., near cor. secs. $16,27,20$, and $21,40 \mathrm{ft}$. S. and 69 ft . W. from rd. forks NW., NE., and SW., in root on W. side of l5-in. hickory tree; copper nail and washer
(Continued in Brunswick quadrangle; see line 6.)
2. FROM MARCELINE QUADRANGLE AT SEC. 12, T. 54 N., R. 18 W., SOUTH TO POINT 2.8 MILES WEST OF SALISBURY (by W. V. Kennedy in 1937)
T. 54 N., R. 18 W., in $s 1 / 2$ sec. $12,45 \mathrm{ft}$. W. of rd. forks N., NE., and $S W$. , in concrete post; standard tablet stamped "Prim Trev Sta No 49 F 1924"
T. 54 N., R. 18 W., in $S 1 / 2$ sec. $12,80 \mathrm{ft}$. N. and 15 ft . W. from rd. forks S., W., and NE., in root on SW. side of l2-in. White-aak tree; crossed nalls
T. 54 N., R. 18 W., W. sixteenth cor. between secs. 13 and $24,75 \mathrm{ft}$. N. and 25 ft. W. from rd. comer N.-W. and private rd. E., in root on W. side of $8-1 n$. locust tree; copper nail and washer
T. 54 N., R. 18 W., quarter cor. between secs. 14 and $23,200 \mathrm{ft}$. NE. of $0^{\prime}$ Bryan School, 15 ft . S. and 35 ft . W. from crossroads, on SE. corner of $S$. end of large concrete culvert; chiseled square

Feet
689.22
686.27
660.88
666.13
661.88
647.478
640.14
$654 \cdot 33$

For additional level lines along Wabash Ry. and south bank of Missouri River, refer to United States Coast and Geodetic Survey first-order lines; Minneapolis, Minn. to Glasgow, Mo., Jefferson City to Kansas City; and second-order line, Hannibal, to Salisbury.

BRUNSWICK QUADRANGLE
(Latitude $39^{\circ} 15^{\prime}-39^{\circ} 30^{\prime}$; longitude $93^{\circ} 00^{\prime}-93^{\circ} 15^{\prime}$ )
Carroll, Chariton, and Saline Counties


1. FROM CARROLLTON QUADRANGLE NORTHEAST ALONG U.S. HIGHWAY 24 TO BRUNSWICK (by B. A. Earnes in 1936)
(Continued from Carrollton quadrangle; see line 2.)
De Witt, 1 mi . W. of, $32 \mathrm{ft} . \mathrm{S}$. and 36 ft . W. from crossroad, $2 \mathrm{ft} . \mathrm{S}$. and 19 ft . W. from fence cormer, in concrete post; standerd tablet stamped "1054 C W A 1934" (to be reset at same elevation)
De Witt, at W. limits of, on W. end of concrete base of gasoline pumps; chiseled square
De Witt, at N. limits of, 40 ft . N. of N . corner of filling sta., 42 ft . E. of highway, on center of top concrete step of drain pit; chiseled square
De Witt, 1.3 mi. E. of, opposite Wabash Ry. bridge 503-C, l ft. S. of N . end at NE. corner of concrete bridge, on inside curb; chiseled square
Crossroad; surface of highway

De Witt, 3.4 mi . NE. of, 3.6 mi . SE. of Brunswick, 305 ft . NE. of crossroad, on inside curb at NW. corner of concrete bridge; chiseled square Junction of rd. W.; surface of highway
Brunswick, 2.3 mi . SW. of, 120 ft . SW. of junction of rd. SW., on inside curb at NW. corner of concrete bridge; chiseled square
Wabash Ry, at rd. crossing; top of S. rail
Brunswick, 1 mi . W. of, about 800 ft . E. of junction of state Highway 12 , on center of N . head wall of concrete culvert; chiseled square U.S.C. \& G.S. standard disk stamped "T 11 1930"
2. FROM SEC. $23, T .53$ N., R. 21 W., NORTH INTO CARROLLTON QUADRANGLE AT SEC. 10, T. 53 N., R. 21 W. (by B. A. Barnes in 1936)

Junction of driveway, $15 \mathrm{ft} . \mathrm{N}$, and 30 ft . E. from, near farmhouse, in root on E. side of 28-in. wild-cherry tree; crossed nails
T. 53 N., R. 21 W., near cor. secs. $\mathcal{H}_{+;} ; 15,22$, and $23,15 \mathrm{ft}$. N. and 100 ft . E. from crossroads, in root on NW. side of 18 -in. elm trees copper nail and washer
T. 53 N., R. 21 W., quarter cor. between secs. $l_{4}$ and 15 , at Gwinn School, 35 ft . N. and 200 ft . E. from crossroads, 2 ft . W. of flagpole, on concrete walk; chiseled square
T. 43 N., R. 21 W., in SE $1 / 4$ NE $1 / 4$ sec. 10 , about 300 ft . NW. of rd. corner S.-NW., 30 ft . N. of rd., in root on NE. side of 24 -in. cottonwood tree; nail
Bridge over Big Creek, on W. pier at upstream side of bridge, on top of bolt; chiseled cross
(Continued in Carrollton quadrangle; see line 3.)
3. FROM De WITT SOUTH TO SEC. 26, T. 53 N., R. 21 W. (by
B. A. Barmes in 1936)

De Witt, about $0.7 \mathrm{mi} . \mathrm{SW}$. of, in $\mathrm{N} 1 / 2 \mathrm{sec} .26, \mathrm{~T} .53 \mathrm{~N} .$, R. 21 W., on highept ground in vicinity, U.S.C.E. iron post; top of cap
Reference mark; U.S.C. \& G.S. standard reference disk

> 4. FROM CARROLLTON QUADRANGLE AT SEC. 18, T. 52 N., R. 21 W., SOUTHEAST TO SEC, $20, T$ T $52 \mathrm{~N} ., \mathrm{R}$. 21 W., THENCE SOUTH
> ALONG STATE HIGHWAY 41 INTO MARSHALL QUADRANGLE (by G. R; Hamlin in 1936)
> (Continued from Carrollton quadrangle; see line 6.)
T. 52 N., R. $21 W_{*}$, near quarter cor. between secs. 17 and $18,26 \mathrm{ft} . \mathrm{N}$. and 89 ft . W. from rd. forks $\mathrm{N}_{\mathrm{c}}$, W., and SE., 2 ft . N. of fence, in concrete post; standard tablet stamped " 496 C W A 1934 "
T. $52 \mathrm{~N}_{-}, \mathrm{R}^{2} 21 \mathrm{~W}$., near center of $\mathrm{NW} 1 / 4 \mathrm{sec}, 20,20 \mathrm{ft}$. S. and 5 ft . E. from T-rd. N., in root on N. side of 12-in. black-oak tree; copper nail and washer
Rd. corner E.-S. at private rd. W., 10 ft. N. and 32 ft. E. from, on N. end of iron pipe culvert; chiseled square
Rd. corner E.-S., 70 ft . S. and 15 ft . W. from, in root on S . side of 6-in. locust tree; crossed nails
T. $5 \mathrm{~N}_{*}, \mathrm{R} .21$ W., quarter cor. between secs. 20 and $21,65 \mathrm{ft} . \mathrm{S}$. and 39 ft . E. from crossroad, 38 ft . S. and 2 ft . W. from fence comer, in conerete post; standard tablet stamped "1062 G W A 1934.
762.055
T. 52 N., R. $21 \mathrm{~W} .$, cor. secs. $20,21,28$, and $29 ; 15 \mathrm{ft} . \mathrm{S}$. and 22 ft . W. from junction of rd. E., on W. end of S. concrete head wall of culvert; chiseled square
T. 52 N., R. 21 W., near line between secs. 28 and 29, on E. end of S. concrete head wall of culvert; chiseled square
T. $52 \mathrm{~N}_{0}, \mathrm{R}_{\mathrm{C}} 21 \mathrm{~W}_{*}$, near quarter cor. between secs. 28 and $33,20 \mathrm{ft}$. S. and 20 ft . W. from crossroad, on $W$. end of $S$. concrete head wall of culverty chiseled square
T. $52 \mathrm{~N}_{-}$, R. 21 W ., in $\mathrm{N} 1 / 2 \mathrm{sec} .33$, on $S_{\text {. end }}$ of $W$. concrete head wall of culvert; chiseled square

Foet
643.44
640.3
643.00
645.74
649.80
646.642
(Continued in Marshall quadrangle; see line 3.)

> 5. FROM SEC, 21, T. 52 N., R, 21 W., NORTH TO SEC. 26, T. 53 N., R. 21 W. (by G. R. Hamlin in 1936)
T. 52 N., R. 21 W., quarter cor. between secs, 21 and $22,30 \mathrm{ft}$. S. and 285 ft . W. from junction of abandoned rd. S., in root on N . side of twin 24 -in. walnut tree; copper nail and washer
T. $52 \mathrm{~N} ., \mathrm{R}_{\text {. }} 21 \mathrm{~W}$., near W. sixteenth cor. sec. $23,96 \mathrm{ft}$. N. and 65 ft . E. from $N$. end of steel bridge, 65 ft . $N$, and 55 ft . E. from ra. forks, 2 ft . W. of fence in line with rd. N., in concrete post; standard tablet stamped "1074 C W A 1934"
T. $52 \mathrm{~N}_{*}, \mathrm{R}_{\mathrm{o}} 21 \mathrm{~W} ., \mathrm{W}_{*}$ sixteenth cor. sec. $1 \mathrm{H}_{4}, 15 \mathrm{ft} . \mathrm{S}$. and 520 ft . W. from rd. corner W. -N., on $S$. end of iron pipe culvert; chiseled square
T. $52 \mathrm{~N} ., \mathrm{R}, 21$ W., center of $\mathrm{SW} 1 / 4 \mathrm{sec}$. $1 \mathrm{l}, 30 \mathrm{ft}$. S . and 20 ft . E. from County Route $C$ at N.-S. crossroad, in root on S. side of triple hedge stump; copper nail and washer
T. 52 N., R. 21 W., near quarter cor. between secs. 10 and $11,18 \mathrm{ft} . \mathrm{S}$. and 15 ft . E. from T-rd. N., on E. end of iron pipe culvert; chiseled square
Miami, about 2 mi . E. of, near quarter cor between secs: 2 and 3, T. 52 N., R. 21 W., 20 ft. S. and 120 ft . W. from T-rd. S., 20 ft . S. and 12 ft . W. from T-rd. N., in concrete post; standard tablet stamped "1075 C W A 1934"
Rd. corner S.-E., 70 ft . S. and 12 ft . E. from, in root on W. side of 14-1n. elm tree; crossed nails
T. 53 N., R. 21 W., quarter cor. between secs. 34 and $35,22 \mathrm{ft}$. N. and 18 ft . W. from crossroads, in root on E. side of 6-1n. hedge tree; copper nail and washer
T. 53 N., R. 21 W., quarter cor. between secs. 26 and $27,12 \mathrm{ft}$. N. and 30 ft . W. from T-rd. S., in root on E. side of 8-in. walnut tree; copper nail and washer
Bridge over drainage ditch, in NW. corner of $N$. steel girder; painted rivet
Hawkins triangulation sta.; Missouri River Commission iron post designated "Hawkins"

Top of cap
6. FROM SEC. 23, T. 52 N., R. 21 W., EAST TO SEC. $30, \mathrm{~T} .52 \mathrm{~N}$. , R. 19 W., THENCE NORTHEAST TO NEW FRANKPORT, THENCE WEST TO SEC. 11, T. 52 N., R. 20 W. (by G. R: Hamlin in 1936)

Junction of private rd. W., $30 \mathrm{ft} . \mathrm{S}$, and 12 ft . W. from, on $S$. end of W. concrete head wall of culvert; chiseled square
713.20
 from T-rd. E., in root on W. side of 12-1n; wainut tree; copper nail and washer
758.20
T. 52 N., R. 21 W., quarter cor. between seas. 25 and $26, \mathrm{~J}_{4} 5 \mathrm{ft}$. N. and 27 ft . W. from crossroads, in root on W. side of 20-in. locust tree; copper nail and washer
T. $52 \mathrm{~N}_{0}, \mathrm{Rs} .20$ and 21 W ., near quarter cor. between secs. 25 and 30 , 20 ft . N. and 80 ft . W. from rd. at hedge fence N. , in root on S . side of triple wild-cherry tree; crossed naila from junction of private rd. N. to farmhouse of Phililp Ryan, $2 i \mathrm{ft}$. N. and 3 ft. E. from fence corner, in concrete post; standard tablet stamped "1076 C W A 1934"
748.745
T. 52 N., R. 20 W., W. sixteenth cor. sec. 29, $20 \mathrm{ft} . \mathrm{N}$. and 102 ft . E. from T-rd. N., in root on S. side of $12-1 n$. hedge tree; copper nail and washer
820.94
T. 52 N, , R. $20 \mathrm{~W} .$, quarter cor. between secs. 28 and $29,90 \mathrm{ft}$. E. of County Route $O$ at rd. W., in E.-W. fence line, in root on S. side of 12-1n. hedge tree; copper nail and washer
T. 52 N., R. 20 W., cor. secs. $28,29,32$, and $33,35 \mathrm{ft}$. S. and 30 ft . E. from County Route $C$ at rd. E., in root on N . side of $30-1 \mathrm{n}$. cottonwood tree; copper nail and washer
T. $52 \mathrm{~N}_{-}, \mathrm{R}_{\mathrm{t}} 20 \mathrm{~W}$, , about 750 ft . W. of cor. secs. $27,28,33$, and 34 , $36 \mathrm{ft} . \mathrm{S}$. and 72 ft . W. from SW. cormer of Garnett School, $26 \mathrm{ft}$. N. of rd., in concrete post; s.tandard tablet stamped "1077 C W A 1934"
T. 52 N., R. 20 W., on line between secs. 27 and 34, on E. end of S. concrete head wall of culvert; chiseled square
T. 52 N., R. 20 W., W. sixteenth cor. between secs. 26 and 35 ; 40 ft . S. of T-ra. N., in fence line; in root on N. side of 10-in. hedge tree; copper nall and washer
820.75
. 52 N., R. 20 W., cor. secs. $25,26,35$, and $36,45 \mathrm{ft}$. N. and 15 ft . E. from T-rd. N., in root on $S$. side of $12-1 n$. locust tree; copper nail and washer
T. $52 \mathrm{~N}_{*}$, R. 20 W., about 715 ft . E. of querter cor between secs. 25 and 36 ; 124 ft . N. and 62 (35 ?) ft. W. from NW, corner of Good Luck School, 34 ft . S. of rd. 16 ft . S. of rail fence, in concrete post; standard tablet stamped " 1078 C W A 1934 ${ }^{\text {R }}$.
812.380
T. 52 N., R. 19 W., center of $S W 1 / 4$ sec. $30,5 \mathrm{ft} . S_{\text {. and }} 20 \mathrm{ft}$. E. from rd. corner $W_{.}-N_{\text {. }}$ and abandoned rd. S., in root on $N$. side of 15-in. elm tree; copper nail and washer
T. $52 \mathrm{~N}_{.}$, R. $19 \mathrm{~W}_{*}$, center of NE $1 / 4$ sec. $30,15 \mathrm{ft} . \mathrm{s}$. and 270 ft . E. from T-rd. N., in root on N. side of 10-in. black-oak tree; copper nail and washer
Rd. cormer $\mathrm{SW} .-\mathrm{E}_{*}, 18 \mathrm{ft}$. S. and 18 ft . E. from, in root on N. side of $24-1 n$. elm tree; copper nail and washer
T. $52 \mathrm{~N}_{*}, \mathrm{R}_{\mathrm{o}} 19 \mathrm{~W}_{-}$, near quarter cor, between secs. 20 and $29,49 \mathrm{ft}$. N. and 35 ft . E. from rd. forks N., E*, and $\mathrm{SW}_{.}, 64 \mathrm{ft}$. N. and 18 ft . E. from 18-1n. black-oak tree, 2 ft. W. of fence, in concrete post; standard tablet stamped "1079 C W A 1934"
791.071
(For balance in Salisbury quadrangle, see line 1.)
Culvert, at E. end of $N$. head wall; top of bolt
T. $52 \mathrm{~N}_{*}, \mathrm{R}_{\mathrm{*}} 19 \mathrm{~W}_{.}, \mathrm{S}$. sixteenth cor. sec. $17,34 \mathrm{ft}. \mathrm{N} .\mathrm{and} 27 \mathrm{ft}$. .
from T-rd. N., on E. end of $N$. head wall of concrete culvert; chiseled square
675.17
T. square 52 N. , R. 19 W. , quarter cor. between secs. 8 and $17,45 \mathrm{ft}$. S. and 12 ft . E. from T-rd. W., on $N_{0}$, end of NE. wing wall of steel briage; chseled square

New Frankfort, 43 ft . S. and 21 ft . W. from crossroads, 8 ft . N. and 68 ft . W. from entrance to brick church, 3 ft . W. of fence, in concrete post; standard tablet stamped "1080 C WA 1934"
U.S.C.E. B.M. designated " $166=49 / 1$ "

Copper bolt
Top of cap
Feet
625.406
629.484
T. 52 N., R. $19 W_{.}$near N. sixteenth cor. between secs. 7 and $8,15 \mathrm{ft}$. S. and 204 ft . E. from T-rd. N., on $E$. end of S . concrete head wall of culvert; chiseled square
711.26
T. 52 N., R. 19 W., near W. sixteenth cor. sec. 7, 100 ft . N. and 15 ft . E. from T-rd. W., in root on W. side of 12-in. pecan tree; copper nail and washer
T. $52 \mathrm{~N}_{.}, \mathrm{R}_{\mathrm{o}} 20 \mathrm{~W} .$, center sec. $12,20 \mathrm{ft}$. S. and 22 ft . W. from T-rd. E. and private rd. W., in root on S. side of $24-1 n$. white-oak tree; copper nall and washer
T. 52 N., R. $20 \mathrm{~W} .$, quarter cor. between secs. 12 and $13,18 \mathrm{ft} . \mathrm{N}$. and 36 ft . E. from T-rd. N., in root on S. side of $15-1 \mathrm{n}$. elm tree; copper na11 and washer
T: $52 \mathrm{~N}_{\cdot}$, R. 20 W., near $E$. sixteenth cor. between secs. 11 and 14 , 180 ft . N. of T-rd. E., on $S$. end of W. concrete head wall of culvert; chiseled square
High Hill triangulation sta.; U.S.C. \& G.S. standard. disk designated "High Hill"

## 7. FROM SEC. 20, T. 52 N., R. 19 W., SOUTH INTO MARSHALL QUADRANGLE

 AT SEC. 32, T. 52 N., R. 19 W. (by G. R. Hamlin in 1936)T. 52 N., R. 19 W., in $S E 1 / 4 \mathrm{sec} .29$, on $S$. end of $E$. concrete floor railing of steel bridge; chiseled square
654.62
T. 52 N:, R. 19 W., E. sixteenth cor. between secs. 29 and 32, 105 ft. S. and 18 ft . W. from crossroads, in root on W. side of 12-in. hedge tree; copper nail and washer
737.56
(Continued in Marshall quadrangle; see line 2.)
8. FROM SEC. 26, T. 53 N., R. 21 W., SOUTHWEST TO MIAMI (by G. R. Hamlin in 1936)
T. 53 N., R. 21 W., center sec. $27,25 \mathrm{ft}$. N. and 10 ft . E. from T-rd. N., in root on E. side of $72-i n$. cottonwood tree; copper nail and washer
U.S.C.E. tablet stamped "U.S. Eng. Dept."
U.S.C.E. B.M. iron pipe

Copper bolt Top of cap
Miami, about 1.5 ml . E. of, 156 ft . N. and 12 ft . W. from T-rd. W., on
S. end of W. concrete head wall of culvert; chiseled square
U.S.C.E. B. M. designated " 275 "

Copper bolt
Top of cap
U.S.C.E. T.B.M. designated "358" (J.S.C. \& G.S. elevation)

For an additional level line along south bank of Missouri River and
Wabash Ry., refer to United States Coast and Geodetic Survey
first-order Iines; Jefferson City to Kansas City and Minneapolis,
Minn. to Glasgow, Mo.

CARROLLTON QUADRANGLE
(Latitude $39^{\circ} 15^{\prime}-39^{\circ} 30^{\circ}$; Iongitude $93^{\circ} 15^{\prime}-93^{\circ} 30^{\prime}$ )
Carroll, Chariton, Lafayette, and Saline Counties


1. FROM HIGGINSVILLE QUADRANGLE NORTH ALONG U.S. HIGHWAY 65 TO COURTHOUSE IN CARROLLTON, THENCE NORTH ALONG MAIN STREET 2 MILES, THENCE EAST TO U.S. HIGHWAY 65, THENCE NORTH ALONG U.S. HIGHWAY 65 INTO HALE QUADRANGLE, INCLUDING THAT PART OF THE LINE IN NORBORNE QUADRANGLE (by B. A. Barnes in 1936) (Continued from Malta Bend quadrangle; see line 5.)*
T. 51 N., R. 23 W., cor. secs. $5,6,7$, and $8,34 \mathrm{ft}, \mathrm{S}$. and 32 ft . W.

Feet
665.184

Carroliton, on South Main Street, 105 ft . N. and 27 ft . W. from Junction of N. fork of Main Street, 18 ft . N. of main track of Atchison, Topeka \& Santa Fe Ry., on W. side of concrete base of stop signal; chiseled square
Carrollton, 30 ft . S. and 37 ft . W. from SW. corner of courthouse, 50 ft . N. and $4<\mathrm{ft}$. E. from intersection of Folger and Washington Avenues, in concrete post; standard tablet stamped "1042 C W A 1934"
Carrollton, 2 mi . N. of, along Main Street, cor. secs. $20,21,28$, and 29, T. 53 N., R. 23 W., 285 ft . E. of T-rd. S., at NW. corner of bridge over small creek, on concrete wing wall; chiseled square
Carrollton, $2 \mathrm{mi} . \mathrm{N}$. and 0.5 mi . E. from, quarter cor. between secs. 21
and 28, T. 53 N., R. $23 \mathrm{~W} ., 20 \mathrm{ft}$. N. and 30 ft . W. from crossroad, on center of $N$. head wall of concrete culvert; chiseled square
Carrollton, 3.1 ml . N. of, 28 ft . S. and 30 ft . W. from junction of rd . E., 40 ft . S . and 2 ft . W. from fence corner, in concrete post; standard tablet stamped "1045 C W A 1934"
Crossroad; surface of highway
Carroliton, 4.1 mi . N. cf, at $N$. end of bridge, on inside curb of $W$. railing; chiseled square
Crossroad, 20 ft . W. of, on center of S . head wall of concrete culvert; chiseled square
Carrollton, $5 \mathrm{mi} . \mathrm{N}$. of, $51 \mathrm{ft} . \mathrm{S}$. and $21 \mathrm{ft} . \mathrm{W}$. from crossroad, on center of W. head wall of concrete culvert; chiseled square
Carroliton, 5.9 mi . N. of, 29 ft . S. and 36 ft . W. from junction of rd.
W., 3 ft . S. and 4 ft . W. from fence corner, in concrete post; standard tablet stamped "1046 C W A 1934"
Junction of rd. E.; surface of highway
Carrollton, 7.2 mi . N. of, 3 ft . S. of NW, corner of brigge H-606, on ins1de curb; ch1seled square
Carrollton, 8.5 mi . N. of, 15 ft . N. and 21 ft . W. from crossroad, on center of W. head wall of concrete culvert; chiseled square
. In Norborne quadrangle, line 2 (see Bull. 898-H, p. 1005-1006).

Carrollton, about 9.4 mi . N. of, 58 ft . S. and 24 ft . W. from E. W. crossroad, 84 ft . N. and 23 ft . E. from NE. corner of Van Horn Church, 18 ft . S . of entrance to cemetery, in concrete post; standard tablet stamped "1047 C W A 1934"

Feet

## 2. FROM CARROLLTON EAST ALONG U.S. HIGHWAY 24 INTO BRUNSWICK QUADRANGLE (by B. A. Barnes in 1936)

Carrollton, at junction of U.S. Highway 65 N.; surface of highway
Carrollton, 1.3 mi . E. of, on NE. wing wall of bridge J-30; chiseled square
Carroliton, 2 mi . E. of, on SE. wing wall of bridge J-684; chiseled square
Carrollton, 3 ml . E. of, 90 ft . S. and 121 ft . W. from SW. corner of farmhouse of Nathan D. Stein, 42 ft . N. of highway, 3 ft . N. and 14 ft . W. from fence corner, in concrete post; standard tablet stamped "1050 C W A 1934"
Carroliton, about 3.5 mi . E. of, at crossroad; surface of highway
Carroliton, 4.1 mi . E. of, 21 ft . N. and 48 ft . W. from junction of rd. N., on center of $N$. head wall of concrete culvert; chiseled square

Carrollton, 4.8 mi . E. of, 22 ft . S. and 15 ft . E. from function of rd. S., on center of E. head wall of concrete culvert; chiseled square

Carrollton, 6.2 mi . E. of, near cor. secs. $28,29,32$, and 33 , T. 53 N. , R. $22 \mathrm{~W} ., 46 \mathrm{ft}$. N. and 61 ft . E. from crossroad, 97 ft . S. of entrance to church, in concrete post; standard tablet stamped "1051 C W A 1934"
Carrollton, 6.7 mi . E. of, 20 ft . N. and 20 ft . E. from junction of County Route $B$, on center of $W$. head wall of concrete culvert; chiseled square
Carrollton, 7.4 mi . E. of, center of NW $1 / 4$ sec. $34, \mathrm{~T} .53 \mathrm{~N} ., \mathrm{R} .22 \mathrm{~W}$., 20 ft . N. and 130 ft . W. from crossroads, on center of N. head wall of concrete culvert; chiseled square
668.5
670.43
674.86
arroliton, 8 mi . E. of, in SE $1 / 4 \mathrm{NE} 1 / 4 \mathrm{sec} .34$, T. $53 \mathrm{~N} ., \mathrm{R} .22 \mathrm{~W}$. , 20 ft . S . and 12 ft . W. from junction of rd. S., on center of W. head wall of concrete culvert; chiseled square
Leta, 34 ft . S. and 17 ft . E. from Junction of County Route H, 37 ft . N. and 52 ft. E. from NE. corner of general merchandise store, in concrete post; standard tablet stamped "1052 0 W A 1934"
702.934

De Witt, 5.1 mi . W. of, 20 ft . N. and 90 ft . E. from junction of rd. N., on W. end of concrete culvert; chiseled square
De Witt, 4.3 mi . W. of, 2 ft . E. of NW. comer of concrete bridge, on inside curb;-chiseled square
De Witt, 3.6 mi . W. of, $20 \mathrm{ft} . \mathrm{N}$. and 10 ft . W. from function of rd. N., on center of W. head wall of concrete culvert; chiseled square
704.46

De Witt, about 3 mi . W. of, 29 ft . S. and 108 ft . E. from U.S. Highway 24 iat rd. S. to Miami Station, 91 ft . E. of $15-1 \mathrm{n}$. elm tree in fence corner, in concrete post; standard tablet stamped "1053 C W A 1934"
De Witt, 2.3 ml . W. of, $12 \mathrm{ft} . \mathrm{N}$. and 46 ft . E. from junction of rd. E., in root on W. side of 18-in. wainut tree; copper nail and washer
De Witt, 1.7 mi . W. of, $18 \mathrm{ft} . \mathrm{N}$. and 30 ft . W. from crossroad, on center of $N$. head wall of concrete culvert; chiseled square
(Continued in Brunswick quadrangle; see line 1.)

> 3. FROM BRUNSWICK QUADRANGLE AT SEC. 10, T. 53 N., R. 21 W., NORTHWEST INTO HALE QUADRANGLE AT SEC. $13, \mathrm{~T} .54 \mathrm{~N} ., \mathrm{R} .22 \mathrm{~W}$. (by B. A. Barnes in 1936)
> (Continued from Brunswick quadrangle; see line 2.)
T. $53 \mathrm{~N} ., \mathrm{R} .21 \mathrm{~W}$, cor. secs. $3,4,9$, and $10,58 \mathrm{ft}$. N. and 26 ft . W. from T-rd. N., $41 \mathrm{ft.N}$. and 5 ft . W. from fence corner, in concrete post; standard tablet stamped "1055 C W A 1934"
661.339
T. $53 \mathrm{~N} ., \mathrm{R}$. 21 W., quarter cor. between secs. 3 and $4,40 \mathrm{ft}$. S , and 12 ft . E. from T-rd. E., on center of SE. concrete wing wall of small bridge; chiseled square
T. 53 N., R. 21 W., N. cor. secs. 3 and $4,40 \mathrm{ft}$. S. and 260 ft . W. from T-rd. S., on NE. corner of concrete sidewalk leading to farmhouse of Mrs. Pratt; chiseled square
T. 54 N., R. $21 \mathrm{~W}_{0}$, quarter cor. between secs. 33 and $34,9 \mathrm{ft}$. N. and 27 ft . W. from T-rd. W., in root on NW. side of 14 -in. elm tree; copper nall and washer
700.24
T. 54 N., R. 21 W., center sec. $32,16 \mathrm{ft}$. S. and 56 ft . E. from T-rd. E., 6 ft . E. of transmission-l ine pole, in concrete post; standard tablet stamped "1056 C W A 1934"
724.436
T. $54 \mathrm{~N}_{*}, \mathrm{R}_{\mathrm{o}} 21 \mathrm{~W}$, , center seo. 29 , 18 ft . N. and 25 ft . W. from crossroads, in root on $E$. side of $18-1 n$, ash tree; copper nail and washer
T. $54 \mathrm{~N} ., \mathrm{R}, 21 \mathrm{~W}$, center sec. $20,125 \mathrm{ft}$. S . and 15 ft . E. from T-rd. S., in root on SW. side of twin 8-in. white-oak tree; copper nail and washer
T. $54 \mathrm{~N}_{.}, \mathrm{R}_{\mathrm{o}} 21 \mathrm{~W}_{*}$, quarter cor. between secs. 19 and $20,22 \mathrm{ft}$. N. and 26 ft . E. from T-rd. E., $4 \mathrm{ft} . \mathrm{N}$. and 4 ft . E. from fence corner, in concrete post; standard tablet stamped "1057 C W A 1934"
699.60
T. 54 N., R. 21 W., near cor. secs. 17, 18,19 , and 20,24 ft. N. and $10 \mathrm{ft}$. . . from T-rd. W., on center of concrete wing wail on SE. corner of bridges chiseled square
714.142
T. $54 \mathrm{~N}_{\mathrm{c}}, \mathrm{R}_{\mathrm{i}} 22$ W., E. cor. secs. 13 and $24,60 \mathrm{ft}$. S. and 10 ft . E. from T-rd. W., on N. side of Atchison, Topeka \& Santa Fe Ry., on head wall of concrete retaining wall; chiseled square

## 4. FROM SEC. 12, T. 54 N., R. 22 W., WEST INTO NORBORNE QUADRANGLE AT SEC. 17, T. 54 N., R. 23 W., INCLUDING THAT PART OF THE LINE IN HALE QUADRANGLE (by B. A. Barnes in 1936)*

T. 54 N., R. 22 W., E. cor. secs. 12 and $13,18 \mathrm{ft} . \mathrm{S}$. and 19 ft . W. from

Feet
762.972
693.42
716.21
$724 \cdot 75$
767.500
788.62
T. 52 N., R. $22 W_{\text {. }}$, quarter cor. between secs. 27 and $28,43 \mathrm{ft}$. S. and 23 ft . W. from T-rd. W., $22 \mathrm{ft.N}$. and 54 ft . E. from NE. corner of Little School, 3 ft . S. and 3 ft . W. from fence corner, in concrete post; standard tablet stamped "498 C W A 1934"
T. 52 N., R. 22 W., cor. secs. $21,22,27$, and $28,12 \mathrm{ft}$. N. and 20 ft . W. from crossroads, in root on $S$. side of 24 -in. locust tree; copper nail and washer
U.S.C.E. B.M. designated " 178 "

Copper bolt
Top of cap
Ra. corner S.-E., 40 ft . W. of, in root on $S$. side of 20-1n. walnut tree; crossed nalls
T. $52 \mathrm{~N} .$, R. 22 W. , about 0.3 mi . W. of center sec. $24,0.5 \mathrm{mi}$. S. of floodgates, 11 ft . S. and 65 ft . E. from bridge over Van Meter drainage ditch, $11 \mathrm{ft} . \mathrm{S}$. and 6 ft . W. from rd. corner N. W. . in concrete post; standard tablet stamped "497 C W A 1934"
T. 52 N., R. 22 W., near W. sixteenth cor. between secs. 13 and 24 , 30 ft . N. and 200 ft . W. from ra. corner S.-E., on E. end of floodgate across Van Meter drainage ditch; chiseled square
T. 52 N., R. 22 W., near S. sixteenth cor. sec. $13,80 \mathrm{ft} . \mathrm{N}$. and 80 ft . E. from T-rd. E., on top of concrete well curb at Van Meter School; chiseled square
T. $52 \mathrm{~N} ., \mathrm{Rs}, 21$ and $22 \mathrm{~W} .$, cor. secs. $7,12,13$, and $18,60 \mathrm{ft}$. S. from T-rd. N., in root on N. side of $24-1 n$. elm tree; copper nail and washer Utz triangulation sta.; U.S.C. \& G.S. standard disk designated "Utz"
${ }^{*}$ Published also as line 10 of Hale quadrangle (see Buall. 898-D; p. 468).
(Continued in Brunswick quadrangle; see line 4.)
For an additional level line along south bank of Missouri River, refer to United States Coast and Geodetic Survey first-order line, Jefferson City to Kansas City.

MALTA BEND QUADRANGLE<br>(Latitude $39^{\circ} 0^{\prime}-39^{\circ} 15^{\prime}$; long1tude $93^{\circ} 15^{\prime}-93^{\circ} 30^{\prime}$ )<br>Carroll, Lafayette, and Saline Counties



1. FROM MARSHALL QUADRANGLE AT SEC. 29, T. 49 N., R. 21 W., WEST BY WAY OF HERNDON INTO KNOBNOSTER QUADRANGLE AT SEC. 36, , T. 49 N., R. 24 W., INCLUDING THAT PART OF THE LINE IN HIGGINSVILLE QUADRANGLE (by C. P. Thompson in 1934)*
(Continued from Marshall quadrangle; see line 1.)
T. 49 N., R. 21. W., N. sixteenth cor. sec. $30,39 \mathrm{ft} . \mathrm{s}$. and $18 \mathrm{ft} . \mathrm{W}$. from T-rd. S., in fence line, in root on NW. side of 22-in. wild-cherry tree; copper nall and washer
740.04

Herndon, at SE. corner of store of Herbert Aulgur, on SW. corner of top concrete step; chiseled square
Herndon, 0.8 mi . W. of, $30 \mathrm{ft} . \mathrm{S}$. and 90 ft . W. from T-rd. S., at NE. corner af yard of Herndon School, in root on N. side of 24 -in. oak tree; copper nail and washer
Herndon, 1.3 ml . W. of, 17 ft . S. and 4 ft . W. from T-rd. N., $2 \mathrm{ft} . \mathrm{S}$. and 2 ft . W. from fence corner, in concrete post; standard tablet stamped "1016 C W A 1934"
Reference mark, 190 ft . N. and 18 ft . W. from tablet, in root on E. side of 8-in. cedar tree; copper nail and washer
760.67

Herndon, 2 mi . W. of, 42 ft . S. and 17 ft . E. from crossroads, in root on NE. side of $20-1 n$. oak tree; copper nail and washer
Herndon, 2.7 mi . W. of, 33 ft . N. and 126 ft . E. from T-rd. E., on SW. corner of bottom concrete step to Antioch Church; chiseled square
785.21
T. 49 N., R. 22 W., 18 ft . E. of W. sixteenth cor. between secs. 15 and 22, 18 ft . E. of rd. corner S.-W., in fence corner, in root on W. side of 30-in. oak tree; copper nail and washer
T. 49 N., R. 22 W., quarter cor. between secs. 16 and $21,45 \mathrm{ft}$. S. and 28 ft . E. from T-rd. S., 4 ft . E. of fence, in concrete post; standard tablet stamped "1015 C W A 1934 "
Reference mark, $162 \mathrm{ft} . \mathrm{S}$. and 6 ft . W. from tablet, in fence line, in root on W. side of 12-1n. elm tree; copper nail and washer
737.50
762.660
T. 49 N., R. 22 W., quarter cor. between secs. 17 and 20 , 18 ft . N. and 50 ft . W. from, $N$. of rd., in root on $N$. side of twin 20-in. elm tree; copper nail and washer
T. 49 N., R. $22 \mathrm{~W} .$, cor: secs. $17,18,19$, and $20,30 \mathrm{ft}$. N. and 18 ft . E. from crossroads, in root on S. side of 14-in. hackberry tree;
T. 49 N., R. 22 W., W. cor. secs. 18 and $19,25 \mathrm{ft}$. N. and 63 ft . E. from Trrd. E., 36 ft . S. of SW . corner of farmhouse of J. B. Waltons, in root on SW. side of 8-in. cedar tree; copper nail and washer
T. 49 N., Rs. 22 and 23 W., S. sixteenth cor. between secs. 19 and 24 , $20 \mathrm{ft} . \mathrm{S}$. and 5 ft . W. from rd. corner W. $-\mathrm{N} ., 2 \mathrm{ft} . \mathrm{S}$. and 2 ft . W. from fence corner, in concrete post; standard tablet stamped "1014 C W A 1934"
Reference mark, 9 ft . E. of tablet, in root on W. side of 18-in. elm tree; copper nall and washer

[^6]T. 49. N., R. 23 W., quarter cor. between secs. 24 and $25,162 \mathrm{ft}$. N., and 36 ft . W. from T-rd. W., 27 ft . E. of NE. corner of farmhouse of Harry Allen, in root on E. side of $20-1 n$. oak tree; copper nail and

Feet
washer
T. 49 N., R. 23 W., E. sixteenth cor. between secs. 23 and $26,50 \mathrm{ft}$. N. and 282 ft . W. from Trd. N., 24 ft . S. and 3 ft . W. from SW. corner of farmhouse of Homer Allen, in root on S. side of 26-in. post-oak tree; copper nail and washer
727.67
690.86

Sweet Springs, 3 mi . N. of, cor. secs. 22, 23, 26, and 27, T. 49 N., R. $23 \mathrm{~W} ., 10 \mathrm{ft}$. S. and 180 ft . E. from rd. corner N.-E. (now State Highway 127), on $W$. end of $S$. head wall of concrete culvert; chiseled square
Sweet Springs, 3.7 mi . N. of, N. sixteenth cor. between secs. 22 and 23 , T. 49 N., R. 23 W., 9 ft. N. and 9 ft. W. from T-rd. W. (N.-S. rd. now State Highway 127), 150 ft . N. of school, on S . end of w . head wall of concrete culvert; chiseled square
T. $49 \mathrm{N.}, \mathrm{R}$.23 W ., in $N W 1 / 4$ E., in root on E. side of 8-in. wild-cherry tree; copper nail and washer
T. 49 N., R. 23 W., W. sixteenth cor. between secs. 22 and 27,27 ft. S. and 28 ft . W. from T-rd. W., 7 ft . S. and 3 ft . W. from fence cormer, In concrete post; standard tablet stamped "1013 C W A 1934"
Reference mark, 39 ft . N. of tablet, in root on S. side of 10-in. elm tree; copper nail and washer
$674 \cdot 42$
705.53
717.10
685.963
686.10
T. 49 N., R. $23 \mathrm{~W} ., 660 \mathrm{ft}$. E. of cor. secs. $20,21,28$, and $29,15 \mathrm{ft}$. S. and 120 ft . E. from rd. corner N.-E., in root on S. side of 8-1n. elm tree; copper nail and washer
T. 49 N., R. 23 W., N. sixteenth cor. between secs. 20 and $21,10 \mathrm{ft} . \mathrm{N}$. and $1+2 \mathrm{ft}$. W. from T-rd. S., in root on S. side of 18-1n. box-elder tree; copper nall and washer
T. 49 N., R. 23 W., quarter cor. between secs. 17 and $20,7 \mathrm{ft}$. S. and 36 ft . E. from T-rd. W., 7 ft . S. and 15 ft . E. from fence corner, in concrete post; standard tablet stamped "1012 C W A 1934"
Reference mark, $4 \mathrm{ft} \cdot \mathrm{N}$. and 15 ft . W. from tablet, in root on N. side of 18-1n. elm tree; copper nail and washer
T. 49 N., R. 23 W., in SE 1/4 sec. 18, 24 ft. E. of T-rd. N., on W. end of N. head wall of concrete culvert; chiseled square
T. 49 N., R. 23 W. , near S. sixteenth cor. on W. Iine sec. 18 , $105 \mathrm{ft} . \mathrm{N}$. and 70 ft . W. from NW. corner of farmhouse of August Krichhoffs, 18 ft . S. and 275 ft . E. from rd. corner E.-S., in root on NW. side of $10-1 \mathrm{n}$. black-locust tree; copper nail and washer
T. 49 N., R. 24 W., center sec. 24 , 56 ft . S. and 19 ft . E. from crossroads, in concrete post; standard tablet stamped "484 C W A 1934"
Reference mark, 438 ft . N. of tablet, in root on $W$. side of 18-1n. hackberry tree; copper nail and washer
T. 49 N., R. 24 W., near center sec. 25, at NW. corner of bridge over Davis Creek, in SW. corner of N. cross beam, on rivet; chiseled cross
667.02
(Continued in Sweet Springs quadrangle; see line 1.)

## 2. FROM WAVERLY SOUTH BY WAY OF BLACKBURN TO SEC. 24, T. 49 N., R. 24 W., INCLUDING THAT PART OF THE LINE IN HIGGINSVILLE' QUADRANGLE (by G. R. Hamlin in 1936)*

U.S.C.E. B.M. designated " $185=58 / 1$ "

Copper bolt
Top of cap
683.686
687.781

Waverly, on bridge over Missouri River, in top of upstream end of second pier from S. end of bridge; standard tablet (set by water-resources branch of U.S.Geol. Survey)
Waverly, in SE. part of, 20 ft . S. and 50 ft . E. from junction of s . cut-off to U.S. Highway 65 and State Highway 24 , on S. concrete head vall of culvert; chiseled square
716.723
802.36

Waverly, 0.5 ml . SE. of, 30 ft . S. and 100 ft . E. from crossroads, on SW. corner of $S$. concrete head wall of culvert; chiseled square
814.64
T. 51 N., R. 24 W., E. sixteenth cor. between secs. 23 and $26,25 \mathrm{ft} . \mathrm{S}$. and 60 ft . W. from crossroads, in root on S . side of 14 -in. hedge tree; copper nail and washer
T. 51 N., R. 24 W ., near E. sixteenth cor. sec. $26,20 \mathrm{ft} . \mathrm{S}$. and 50 ft . E. from T-rd. E., in root on W. side of $36-i n$. walnut tree; copper nall and washer
T: 51 N., R. 24 W., E. sixteenth cor. between secs. 26 and $35,21 \mathrm{ft} . \mathrm{S}$. and 29 ft. W. from T-rd. W., 2 ft. S. and 9 ft . W. from fence corner, in concrete post; standard tablet stamped " $480 \mathrm{CW} \mathrm{A} \mathrm{1934"}$
Tps. 50 and 51 N., R. 24 W., E. sixteenth cor. between secs. 2 and 35 , 45 ft . N. and 55 ft . W. from crossroads, in root on S . side of $24-1 \mathrm{n}$. maple tree; copper nail and washer
741.66

Tps. 50 and $51 \mathrm{~N} .$, Rs. 23 and $2 l_{4}$ W., cor. of, $15 \mathrm{ft} . \mathrm{N}$. and 80 ft . E. from T-rd. S. on Lafayette-Saline county line, in root on W. side of 18-in. wild-cherry tree; copper nail and washer
 on Lafayette-Saline county line, 20 ft . S. and 102 ft . W. from NW. corner of farmhouse of A. H. Meyer, in concrete post; standard tablet stamped "481 C W A 1934"
Culvert, on $N$. end of $E$. concrete head wall; chiseled square
T-rd. W., 15 ft . N. and 12 ft . W. from, on N . end of iron pipe culvert; painted square
${ }^{\#}$ Line 7 of H1gginsville quadrangle (see Bull. 898-H, pp. 1012-1013).
T. 50 N., R. 23 W., W. cor. secs. 18 and $19,25 \mathrm{ft}$. S. and 25 ft . E. from

Feet
763.82 rd. corner N.-E., in root on S. side of 6-in. wild-cherry tree; copper nail and washer
Blackburn, 520 ft . E. of Lafayette-Saline county line, 35 ft . S. and 270 ft . W. from State Highway 20 at rd. N., 55 ft . N. and 3 ft . E. from NE. corner of barm, in concrete post; standard tablet stamped " 482 C W A 1934"
State Highway 20 at rd. S., 30 ft . S. of, on W. end of iron pipe culvert; painted square
T. 50 N., R. 24 W., quarter cor. between secs. 25 and $36,65 \mathrm{ft}$. S. and 22 ft . E. from T-rd. W., on NW. corner of concrete base of fence post; chiseled square
T. 49 N., R. 24 W., N. sixteenth cor. sec. $1,28 \mathrm{ft}$. S. and 5 ft . W. from rd. forks, 71 ft . E. of rd. S., $2 \mathrm{ft} . \mathrm{S}$. of fence, in concrete post; standard tablet stamped 4483 CW A 1934"
T. 49 N., R. 24 W., E. sixteenth cor. sec. $1,55 \mathrm{ft}$. S. and 35 ft . W. from T-rd. E., on SE. corner of concrete walk in front of farmhouse of George Bodenstab; chiseled square
T. 49 N., R. 24 W., E. sixteenth cor. between secs. 1 and 12,35 ft. S. and 20 ft . W. from T-rd. W., in root on E. side of $10-1 \mathrm{n}$. hedge tree; copper nail and washer
Culvert, on NW. corner of E . concrete head wall; chiseled square
T. 49 N., R. 24 W., 500 ft. W. of E. sixteenth cor. between secs. 13 and 24 , 110 ft . S. and 30 ft . W. from rd. comer, in root on E. side of 12-1n. elm tree; copper nail and washer

804.548

839.34
841.82
826.297
790.48
774.47
730.21
749.25

> 3. FROM HIGGINSVILLE QUADRANQLE EAST ALONG U.S. HIGHWAY 65 AND STATE HIGHWAY 40 TO MALTA BEND, THENCE NORTH ALONG ROADS INTO CARROLLTON QUADRANGLE AT SEC. 33 , T. 52 N., R. 22 W. (by G. R. Hamlin in 1936)

Weverly, 2 mi . E. of, 25 ft . N. and 15 ft . E. from junction of rd. N., on E. end of concrete pipe culvert; chiseled square
Waverly, 2.5 mi . E. of, 20 ft . N. and 12 ft . W. from crossroad, on NW. corner of W. concrete head wall of culvert; chiseled square
T. $51 \mathrm{~N} ., \mathrm{R} .23 \mathrm{~W}$. , in NE $1 / 4 \mathrm{sec} .18,30 \mathrm{ft}$. N. and 10 ft . E. from rd. forks, in root on E. side of $30-1 \mathrm{n}$. black-oak tree; copper nail and washer
Gilham triangulation sta.; Missouri River Comission iron post designated "G11ham" (Top of cap elevation 836.863)
Grand Pass, 1 mi. W. of, 34 ft . S. and 177 r't. W. from junction of private ra. S. to farmhouse of J. C. Croswhite, on top of high bank, between telegraph pole and fence; in concrete post; standard tablet stamped "1001 C W A 1934"
Grand Pass, $30 \mathrm{ft} . \mathrm{S}$. and 12 ft . E. from junction of rd. S. to Blackburn, on NE. corner of E. concrete head wall of culvert; chiseled square
Grand Pass, 1.2 mi . E. of, 35 ft . S. and 12 ft . E. from junction of rd. $S$., on $E$. end of concrete plpe culvert; chiseled square
Culvert, on $S W$. comer of $S$. concrete head wall; chiseled square
Malta Bend, 2.2 ms . W. of, 42 ft . S. and 19 ft . E. from SE. corner of farmhouse of F. E. Green, 28 ft . N. of highway, 2 ft . S. of fence, in concrete post; standard tablet stamped ${ }^{\prime} 500 \mathrm{C}$ W A $1934^{n}$
Malta Bend, 1.5 mf . W. of, 25 ft . N. and 20 ft . E. from crossroad, on SW. corner of N. concrete head wall of culvert; chiseled square
Malta Bend, 40 ft . N. and 30 ft . E. from crossroad, on NW. corner of bottom doorstep to I.O.O.F. Building; chiseled square
Malta Bend, Missouri Pacific R.R. at rd. crossing; top of S. rail
Malta Bend, 1 ml . N. of, 258 ft . S. of SE. corner of Malta Bend Cemetery, 23 ft . W. of T-rd. E., 2 ft . W. of fence, in concrete post; standard tablet stamped "499 C W A 1934"
810.69
790.21
803.46
833.696
791.983
763.85
698.84
698.84
698.84

### 698.892

697.51
698.68 692.9
706.437

Malta Bend, 1.5 ms . N. and 0.5 ml . E. from, cor. secs. 7, 8, 17, and 18, T. 51 N., R. 22 W., 18 ft . N. and 30 ft . E. from rd. corner S.-E., in root on $S$. side of 8-in. maple tree; copper nail and washer
Malta Bend, 1.5 mf . N. and 1 ml . E. from, quarter cor. between secs. 8 and 17, T. 51 N., R. 22 W., at private rd. N., on E. end of iron pipe culvert; chiseled square
Malta. Bend, $1.5 \mathrm{mi} . \mathrm{N}$. and 1.5 mi . E. from, cor. secs. 8, 9, 16, and 17, T. $51 N_{*}, R_{0} 22 \mathrm{~W}_{*}$, at T-rd. N., on W. concrete head wall of culvert; chiseled square
Malta Bend, 4 mi. NE. of, cor. secs. 4, 5, 8, and 9, T. 51 N., R. 22 W., 13 ft . W. of private ra. W., on N. end of iron pipe culvert; chiseled square
Malta triangulation sta.; Missouri River Commission iron post designated "Malta"
Copper bolt
Top of osp
T. 52 N., R. 22 W., S. quarter cor: sec. 33, 15 ft . E. of W. end of hedgerow, 22 ft . N. of rd., in root on S . side of $12-1 \mathrm{n}$. hedge tree; copper nail and washer
T. 51 N., R. 22 W., N. cor. secs. 3 and 4 , 100 ft . SW. of rd. forks, 15 ft . W. of rd., on NW. end of W. Wing wall of concrete culvert over drainage ditch; chiseled square
T. 52 N., R. 22 W., quarter cor. between secs. 33 and 34 , W. of rd. opposite private rd. E., in root on E. side of 18-in. hedge tree; crossed nalls
706.49
700.68
701.07
$664 \cdot 58$
724.304
727.470
656.23
(Continued in Carroliton quadrangle; see ine 6.)
4. FROM MARSHALL QUADRANGLE WEST ALONG STATE HIGHWAY 20 TO BLACKBURN
(by G. R. Hamlin in 1936)
(Contlnued from Marshall quadrangle; see line 4.)

| Marshall, 3.5 ml . W. of, 152 ft . N. and 37 ft . E. from NE. corner of farmhouse of Ed Finnegan, $29 \mathrm{ft} . \mathrm{S}$. of highway, in concrete post; standard tablet stamped "1070 C W A 1934" | $\frac{\text { Feet }}{781.538}$ |
| :---: | :---: |
| Junction of rd. W., 15 ft . N. and 35 ft . W. from, $15 \mathrm{ft} . \mathrm{N}$. and 70 ft . E. |  |
| from Alton R.R. at rd. crossing, on $W$. end of stone head wall of culvert; ch1seled square | 792.47 |
| 50 N., R. 22 W., near quarter cor. between secs. 13 and $24,165 \mathrm{ft}$, S. |  |
| and 20 ft . W. from crossroad, in root on E. side of $30-1 \mathrm{n}$. cottonwood tree; copper nail and washer | 800.69 |
| Shackleford, 300 ft . SW . of post office, 70 ft . N. of highway, at service sta., on $S$. end of concrete base of gasoline pumps; chiseled square |  |
| U.S.C. \& G.S. standard reference disk stamped "Shackle No 1 " |  |
| U.S.C. \& G.S. standard reference disk stamped "Shackle No 2" |  |
| T. 50 N., R. 22 W., cor. secs. $21,22,27$, and $28,28 \mathrm{ft}$. N. and 50 ft . W. from crossroad, 3 ft . S . and 20 ft . W. from fence corner, in concrete post; standard tablet stamped "1071 C W A 1934" |  |
| Culvert, on W. end of S. concrete head wall; chiseled square | 706.41 |
| T. $50 \mathrm{~N} ., \mathrm{R} .22 \mathrm{~W}$, cor. secs. $20,21,28$, and $29,35 \mathrm{ft}$. N. of junction |  |
| of rd. S., in root on S. side of $4-1 n$. hedge tree; copper nail and washer | 736.47 |
| 50 N., R. 22 W., quarter cor. between secs. 20 and 29, $20 \mathrm{ft}$.N . and |  |
| 15 ft . E. from function of rd. N., on E. end of iron pipe culvert; chiseled square | 716.88 |
| T. 50 N., R. 22 W. , cor. secs. 19, 20,29 , and $30,28 \mathrm{ft}$. S. and 45 ft . |  |
| W. from junction of rd. S., on W. end of S. concrete head wall of |  |
| culvert; chiseled square | 702.58 |
| Junction of private ra. N., $18 \mathrm{ft} . \mathrm{N}$. and 12 ft . W. from, on W . end of iron pipe culvert; chiseled square | 746.58 |
| Blackburn, 5.5 mi . E. of, 29 ft . S. and 58 ft . E. from crossroad, 2 ft . N . and 33 ft . E. from fence corner, in concrete post; standard tablet stamped "1072 C W A 1934" |  |
| Blackburn, 5 mi . E. of, 15 ft . S. and 420 ft . W. from junction of State |  |
| Highway 127 N., on E. end of S. concrete head wall of culvert; chiseled square | 773.82 |
| lackburn, 4 mi . E. of, 15 ft . N. and 35 ft . W. from junction of State |  |
| Highway 127 S. , on N . end of iron pipe culvert; chiseled square | 800.97 |
| Blackburn, 3.5 mi . E. of, 35 ft . S. and 5 ft . W. from junction of rd. N., on top of concrete right-of-way post; (mark not described) | 832.04 |
| Blackburn, 2.5 mi . E. of, 167 ft . S. and 31 ft . E. from SE. corner of |  |
| farmhouse of August Pape, 36 ft . N. and 154 ft . E. from highway at |  |
| fences N.-S., in concrete post; standard tablet stamped "1073 C $\mathbb{N} \mathrm{A}$ 1934" | 784.556 |
| Blackburn, 2 ml . E. of, 15 ft . S. and 15 ft . E. from crossroad, on E. end of iron pipe culvert; chiseled square | 792.56 |
| Blackburn, 1.5 mi . E. of, $15 \mathrm{ft} . \mathrm{S}$. and 35 ft . E. from Junction of rd. |  |
| S., on W. end of iron pipe culvert; chiseled square | 831.61 |
| Blackburn, 0.5 ml . E. of, $20 \mathrm{ft} . \mathrm{S}$. and 20 ft . W. from junction of rd. S., on W. head wall of culvert; chiseled square | 796.69 |

## 5. FROM WAVERLY NORTH ALONG U.S. HIGHWAYS 24 AND 65 INTO NORBORNB QJADRANGLE (by B. A. Barnes in 1936)*

D.S.C.E. B.M. designated "189=59/1"

Copper bolt
696.639
700.707

Carrolition, 8.3 mi . S. of, in SE $1 / 4 \mathrm{sec} .18$, T. $51 \mathrm{~N} ., \mathrm{R} .23 \mathrm{~W} ., 21 \mathrm{ft}$. S. and 70 ft . W. from Junction of rd. SW., in root on NE. gide of 40-in. elm tree; spike
665.05

Carrollton, 7 ml . S. of, on line between secs. 7 and 8, T. 51 N.,
R. 23 W., N. of small bridge, 135 ft . S. of junction of rd. sw., on W. head wall of concrete culvert; chiseled square
(Continued in Carrollton quadrangle; see line 1.)
For an additional level line along south bank of Missouri River, refer to United States Coast and Geodetic Survey first-order
line, Jefferson City to Kansas City.

[^7]SWEET SPRINGS QJADRANGLE
(Latitude $38^{\circ} 45^{\prime}-39^{\circ} 00^{\prime}$; longitude $93^{\circ} 15^{\prime}-93^{\circ} 30^{\prime}$ ) $)$
Johnson, Lafayette, Pettis, and Saline Counties

I. FROM HIGGINSVILLLE QUADRANGLE AT SEC. 36, T. 49 N., R. 24 W., SOUTH INTO KNOBNOSTER QUADRANGLE AT SEC. 18, T. 46 N., R. 23 W., INGLUDING THAT PART OF THE LINE IN KNOBNOSTER QUADRANGLE (by C. P. Thompson in 1934)
(Continued from Malta Bend quadrangle; see line 1.)
T. 49 N., R. 24 W., center sec. $36,15 \mathrm{ft}$. N. and 18 ft . E. from junction

Feet
720.91
711.71
730.276
755.26
692.50
686.69
654.50
657.082
657.39
661.96
746.25
744.54
768.534
767.70
762.68
790.48
856.15
791.50
from T-rd. W., on $N$. end of head wall of concrete culvert; chiseled
square square

Tps. 46 and $47 \mathrm{~N} .$, Rs. 23 and 24 W. , cor. of, 10 ft . W. of crossroads, on W. head wall of concrete culvert; chiseled square
T. 46 N., R. 24 W., 390 ft. N. and 12 ft . W. from N. sixteenth cor. on E. line sec. 12, on W. head wall of concrete culvert; chiseled square
Knobnoster, $1.2 \mathrm{mi} . \mathrm{N}$. and 3 mi . E. from, cor. secs. 7, 12, 13, and 18, T. 46 N ., Rs. 23 and $24 \mathrm{~W} ., 270 \mathrm{ft}$. S. and 62 ft . E. from crossroads,

15 ft . S. and 15 ft . W. from NW. corner of farmhouse of Harry Baton, in root on W. side of 50-in. elm tree; copper nail and washer
802.12
833.94
2. FROM KNOBNOSTER QUADRANGLE AT SEC. 19, T. 46 N., R. 23 W., EAST AND SOUTH INTO GREEN RIDGE QUADRANGLE AT SEC. 28, T. 46 N., R. 23 W. (by R. B. Kuebler in 1934)

Knobnoster, 3 mi . E. and 0.8 mi . S. from, 25 ft . S. and 60 ft . E. from crossroads, on Johnson- Гettis county line, in concrete post; standard tablet (in line 10 of Knobnoster quadrangle; see Bull. 898-H, p. 1015). Knobnoster, 3.2 mi . E. and 0.8 mi . S. from, about 0.3 ml . E. of JohnsonPettis county line, near stock scales, N. of rd., 3 ft . S . of fence, in concrete post; standard tablet stamped "T T 3601936 "
Telephone pole, S. of rd.; nail
(Continued in Green Ridge quadrangle; see line 1.)
3. FROM KNOBNOSTER QUADRANGLE EAST AND SOUTHEAST ALONG MISSOURI PACIFIC RAILROAD INTO GREEN RIDGE QUADRANGLE (by S. B. Scott in 1934)
LaMonte, 1 mi . W. of, $25 \mathrm{ft} . \mathrm{S}$. and 35 ft . W. from rd. crossing, 12 ft . N. of fence corner, on right-of-way, in concrete post; U.S.C. \& G.S. and State Survey standard tablet stamped "T T 35 C 1936 "
846.315

Lamonte, 2.8 ml . E. of, in $\mathrm{SW} 1 / 4$ sec. 18 , T. $46 \mathrm{~N} .$, R. 23 W. , about
0.2 mi . N. of U.S. Highway $50,25 \mathrm{ft}$. S . and 22 ft . W. from rd. cross-
ing, in concrete post; U.S.C. \& G.S. and State Survey standard tablet stamped "T T 34 C 1936"
Dresden, 55 ft . N. of main track, 2 ft . E. of SE. corner of grain elevator, in concrete post; U.S.C. \& G.S. and State Survey standard tablet stamped "T T 33 C 1936"
(Continued in Green Ridge quadrangle; see line 4.)
4. FROM NELSON QUADRANGLE AT SEC. $17, \cdot \mathrm{~T} .46$ N., R. 21 W., NORTH AND WEST TO HUGHESVILLE, THENCE WEST TO SEC. $20, \mathrm{~T} .47$ N., R. 22 W., THENGE NORTH TO HOUSTONIA, THENCE EAST AND NORTHEAST TO SEC. 20, T. 48 N., R. 21 W. (by T. G. Drummond in 1934 and F. C. Lentz in 1936)
(Continued from Nelson quadrangle; see line 7.)
T. 46 N., R. 21 W., near cor. secs. $17,18,19$, and $20,400 \mathrm{ft}$. W. of Missouri Pacific R.R. at rd. crossing, on $N$. head wall of concrete culvert; chiseled square
815.58
T. 46 N., R. 21 W., N. sixteenth cor. between secs. 17 and 18 , about 1 ml . NW. of Georgetown, along rd. to Hughesvilie, 38 ft . S , and 28 ft . W. from SW. corner of dwelling of C. C. Crain, N. of rd., 31 ft . N. and 40 ft . W. from $16-1 \mathrm{n}$. elm tree, in concrete post; U.S.C. \& G.S. and State Survey standard tablet
T. 46 N., $R$, 21 W., near cor. secs. 7, 8,17 , and 18 , on $N$. end of
T. retaining wall of bridge over Muddy Creek; chiseled square 46 . R. 21 W., near $S$. quarter cor. sec. 7, about 2 mi. NW. of
743.614 Georgetown, on rd. to Hughesville, in farmyard of Dr. Bishop, 50 ft . NE. of well, in concrete post; U.S.C. \& G.S. and State Survey standard tablet
T. $46 \mathrm{~N} ., \mathrm{R}$ : $21 \mathrm{~W} .$, in $\mathrm{NW} 1 / 4 \mathrm{sec} .7,0.2 \mathrm{mi}$. N. of rd . to Hughesville, on W. head wall of concrete culvert; chiseled square
771.00
T. 46 N., R. 21 W., in $\mathrm{W} 1 / 2$ sec. 6, 0.4 mi . E. of Missouri Pacific R.R. sta. at Craft, near T-rd. S., on N. end of bottom step at front of church; chiseled square
T. 46 N, , R. 21 W , in NE $1 / 4$ sec. 6 , on $S$. end of $W$. head wail of concrete culvert over Smelzer Creek; chiseled square
840.57
T. $47 \mathrm{~N} .$, R. 21 W., S. cor. secs. 31 and 32 , $328 \mathrm{ft} . \mathrm{N}$. of stone, 24 ft . E. of rd., in concrete post; U.S.C. \& G.S. and State Survey standard tablet
T. 47 N., R. 21 W., near quarter cor between secs. 31 and $32,10 \mathrm{ft}$. E. of rd., on N. end of $E$. head wall of concrete culvert on Lover's Leap Road; chiseled square
T. 47 N., R. 21 W., near N. sixteenth cor. sec. $30,0.4 \mathrm{mi}$. E. of T-rd. E., on W. end of SW. wing wall of concrete bridge; chiseled square
T. 47 N., Rs. 21 and 22 W., near N. sixteenth cor. between secs. 25 and 30, 400 ft . N. of T-rd. E., on W. wing wall of concrete culvert; chiseled square
T. 47 N., Rs. 21 and 22 W., S. sixteenth cor. between secs. 19 and 24 , 18 ft . E. of T-rd. W., in concrete post; U.S.C. \& G.S. and State Survey standard tablet stamped "C W A 1934"
804.87
807.68

Hughesville, 0.5 mi . E. of, 340 ft . W. of S . sixteenth cor. sec. 2l, $\mathrm{T}_{\text {, }}$, T. 47 N., R. 22 W., on W. end of N. head wall of concrete culvert; chiseled square
817.041
T. 47 N., R. 22 W., on line between secs. 23 and $26,450 \mathrm{ft}$. W. of Missouri Pacific R.R., on W. end of N. head wall of concrete culvert; chiseled square
T. 47 N., R. 22 W., cor. secs. $22,23,26$, and $27,450 \mathrm{ft}$. W. of T-rd. $N_{0}$ ( $S$. ?), on $S$. end of $E$. wing wall of bridge chiseled square

Feet 786.20 T. 47 N., R. $22 \mathrm{~W} .$, cor. secs. $21,22,27$, and $28,25 \mathrm{ft}$. S. and 47 ft . E. from crossroads, in yard of Mitchell School, in concrete post; U.S.C. \& G.S. and State Survey standard tablet
T. 47 N., R. 22 W., cor. secs. $20,21,28$, and 29, NW. of crossroads, on double-wing head wall of concrete culvert; chiseled square
T. 47 N., R. 22 W., cor. secs. $16,17,20$, and 21 , E. of rd., in concrete fence post; top of pipe
T. 47 N., R. $22 \mathrm{~W} .$, in SW $1 / 4$ s.9c. $9,25 \mathrm{ft} . \mathrm{S}$. and 175 ft . E. from rd. corner's.-E., 25 ft. S. of rd. corner N.-W., in concrete post; U.S.C. \& G.S. and State Survey standard tablet
T. 47 N., R. 22 W., cor. secs. 4, 5, 8, and 9, $25 \mathrm{ft}$. . of T-rd. N., 100 ft . W. of T-rd. S., in E.-W. fence line at fence S., in top of stump of $2 l_{1}-1 n$. hedge tree; copper nail and washer
T. 48 N., R. 22 W., in $\mathrm{SW} 1 / 4$ sec. 33 , 31 ft. N. of T-rd. s. at N. cor. secs. 4 and 5, T. 47 N., R. 22 W., in concrete post; U.S.C. \& G.S. and State Survey standard tablet
T. 48 N., R. 22 W., near S. cor. secs. 33 and $34,0.2 \mathrm{mi}$. W. of T~rd.
$S_{i}$, on $W_{0}$ end of $S$. head wall of concrete culvert; chiseled square
T. 47 N., R. 22 W., near W. sixteenth cor. on N. line sec. 2 , on SW. wing wall of concrete culvert; chiseled square
T. 48 N., R. 22 W., S. quarter cor. sec. $36,26 \mathrm{ft}$. N. and 339 ft . E. from T-rd. S., in concrete post; U.S.C. \& G.S. and State Survey standard tablet
T. 48 N., R. 21 W., W. cor. secs. 30 and $31,150 \mathrm{ft}$. N. of T-ra. E., E. of rd., on head wall of concrete culvert; chiseled square
Tedieville, near E. cor. secs. 24 and 25, T. 48 N., R. 22 W., at general store, on concrete base of gasoline pump; chiseled square
T. 48 N., R. 21 W., near S. sixteenth cor. between secs. 19 and 20 , 25 ft . S. of T-rd., in fence line, in stump of black-oak tree; nail and washer
Reid triangulation sta; U.S.C. \& G.S. standard disk stamped "Reid"
5. FROM HOUSTONTA WEST TO SEC. 12, T. $47 \mathrm{~N} ., \mathrm{R} .24 \mathrm{~W}$ W. (by
T. G. Drummond in 1934 and F. C. Lentz in 1936)
T. 48 N., R. 22 W., near S. cor. secs. 32 and $33,0.5 \mathrm{mi}$. E. of Houstonia, 550 ft . E. of Missouri Pacific R.R., on E. ond of S. head wall of concrete culvert; chiseled square
Houstonia, in SE $1 / 4$ sec. $32, \mathrm{~T} .48 \mathrm{~N} ., \mathrm{R} .22 \mathrm{~W} ., \mathrm{N}$. of intersection of Line and Walnut Streets, on $E$. head wall of concrete culvert; chiseled square
Houstonia, $0.5 \mathrm{mi} . \mathrm{S}_{\text {. }}$ and 0.5 mi . W. from, N. sixteenth cor. between
seos. 5 and $6, T .47$ N., R. 22 W., NW. of T-rd. W., in root of $30-1 n$. walnut tree; copper nail and washer
T. 47 N., Rs. 22 and 23 W., near N. sixteenth cor. between secs. 1 and 6 , on E.-W. rd., on wing wall of concrete culvert; chiseled square
T. 47 N., R. 23 W., in NE $1 / 4 \mathrm{sec} . \mathrm{l}, 30 \mathrm{ft}$. N. and 200 ft . W. from rd.
at private drive N., in yard of dweliing of W. H. Witcher, in concrete post; U.S.C. \& O.S. and State Survey standard tablet
T. $47 \mathrm{~N} ., \mathrm{R} .23 \mathrm{~W} .0 .2 \mathrm{ml}$. E. of center sec. 2 , $\mathrm{L}_{4} \mathrm{f} \mathrm{ft}$. W. of rd. corner, on $E$. end of $S$. head wall of concrete culvert; chiseled square
T. 47 N., R. 23 W., in $\mathrm{E} 1 / 2$ sec. 3 , on SE. wing wall of bridge over South Fork; chiseled square
. 47 N., R. $23 \mathrm{~W}_{\text {. }}$, quarter cor. between secs. 3 and $4,25 \mathrm{ft}$. N. and 87 ft . W. from T-rd. N., in concrete post; standard tablet
T. 47 N., R. 23 W ., in $\mathrm{SE} 1 / 4$ sec. $5,0.2 \mathrm{mi}$. W. of T-rd. S., on S. head wall of concrete culvert; chiseled square
T. 47 N., R. 23 W., quarter cor. between secs. 5 and 6, SW. of crossroads, on head wall of concrete culvert; chiseled square
T. $47 \mathrm{~N} ., \mathrm{R}$. 23 W., in $\mathrm{SW} 1 / 4$ sec. 6 , on SW. wing wall of iron bridge; chiseled square

## 6. FROM NELSON QUADRANGLE AT SEC. 20, T. 47 N., R. 21 W., WEST TO SEC. 19, T. 47 N., R. 21 W. (by F. C. Lentz in 1936) <br> (Continued from Nelson quadrangle; see line 5.)

T. 47 N., R. 21 W., quarter cor. between secs. 19 and $20,350 \mathrm{ft}$. N. and 15 ft . W. from rd. corner N.-W., on head wall of concrete culvert; chiseled square

# TIE BETWEEN UNITED STATES COAST AND GEODETIC SURVEY SECOND-ORDER LINE AND UNITED STATES GEOLOGICAL SURVEY THIRD-ORDER LINE AT EMMA (by C. W. Williams in 1936) 

Enma, on NE. corner of bottom step to St. John The Evangelist Church; chiseled square
U.S.C. \& G.S. standard disk stamped "R 96 1935"

GREEN RIDGE QUADRANGLE
(Latitude $38^{\circ} 30^{\prime}-38^{\circ} 45^{\prime}$; longitude $93^{\circ} 15^{\prime}-93^{\circ} 30^{\prime}$ )
Benton and Pettis Counties


1. FROM SWEET SPRINGS QUADRANGLE AT SEC. 28, T. 46 N., R. 23 W., SOUTH INTO LINCOLN QUADRANGLE AT SEC. 18, T. 43 N., R. 23 W ., INCLUDING THAT PART OF THE LINE IN WINDSOR QUADRANGLE (by R. B. Kuebler and C. P. Thompson in 1934)* (Continued from Sweet Springs quadrangle; se日 inn 2.)

Knobnoster, 5 mi . E. and $1.2 \mathrm{mi} . \mathrm{S}$. from, N. sixteenth cor. between secs. 28 and 29, T. 46 N., R. 23 W., 50 ft . N. of N. line of dweling

Feet of T. H. Bradshaw, W. of rd., i4 ft. S. and 2 ft . E. from end of hedge fence, in concrete post; standard tablet
Knobnoster, 5 ml . E. and about 2.5 ml . S. from, 300 ft . S. of quarter cor. between secs. 32 and 33, T. 46 N., R. 23 W., at bridge over Long Branch Creak, on NE. corner of N. concrete abutment; (mark not described)
791.01

Knobnoster, 5 mi. E. and 3 mi . S. from, near cor. secs. 4, 5, 32, and 33, Tps. 45 and 46 N., R. 23 W., in concrete post; standard tablet
803.358

Knobnoster, 5 mi . E. and 3.3 mi . S. from, about 0.3 mi . S. of cor. secs. $4,5,32$, and 33 , Tps. 45 and 46 N. , R. $23 \mathrm{~W} ., 20 \mathrm{ft}$. W. of rd., in concrete post; standard tablet
831.931
T. 45 N., R. 23 W., quarter cor. between secs. 4 and 5 , on SW. corner of W. concrete head wall of culvert; (mark not described)
T. 45 N., R. 23 W., 150 ft . E. of center of $\mathrm{SW} 1 / 4 \mathrm{sec}$. 5, on SE. corner of $N$. concrete head wall of culvert; (mark not described)
823.26
T. 45 N., R. 23 W., near quarter cor. between secs. 6 and 7, N. of rd., on concrete head wall of culvert; chiseled square
813.99
T. 45 N., R. 23 W., quarter cor. between secs. 7 and $18,37 \mathrm{ft}$. S. and 25 ft . E. from rd. Junction, in concrete post; standard tablet
Reference mark, 136 ft . N. of tablet, W. of rd., in root of 20-1n. stump; lead-headed nail
812.96
869.751
T. 45 N., R. $23 \mathrm{~W} ., 1,020 \mathrm{ft}$. N. of quarter cor. between secs. 18 and 19 , on $S$. end of W. head wall of concrete culvert; chiseled square
T. 45 N., R. 23 W., 475 ft . N. of center sec. 19, W. of rd., in root of

36-in. maple tree; copper nail and washer
T. 45 N., R. 23 W., E. sixteenth cor. sec. $20,9 \mathrm{ft} . \mathrm{S}$. and $26 \mathrm{ft} . \mathrm{E}$. from T-rd. W., in concrete post; standard tablet stamped "T T 1562 CW A 1934"
Reference mark, 175 ft . S. of tablet, on N . end of concrete head wall of culvert; chiseled square
T. 45 N., R. 23 W., E. sixteenth cor. sec. 29 , 45 ft . S. and 39 ft . E. from T-rd. E., in NW. corner of yard of Hickory Point School, in concrete post; standard tablet stamped "T T 1561 C W A 1934"
T. $45 \mathrm{N},. \mathrm{R} .23 \mathrm{~W} .$, center of $\mathrm{SW} 1 / 4 \mathrm{sec} .29$ top of corner stone
T. $45 \mathrm{~N} ., \mathrm{R} .23 \mathrm{~W} .$, about $0.2 \mathrm{ml} . \mathrm{E}$. of S . cor. secs. 31 and $32,25 \mathrm{ft}$. N. and 40 ft . W. from T-rd. N., in concrete post; standard tablet stamped "T T 1560 C W A 1934 "
Reference mark, 16 ft . N. and 16 ft . E. from tablet, in root of $18-1 \mathrm{n}$. maple tree; copper nail and washer
T. 44 N., R. 23 W., quarter cor. between secs. 5 and $6,310 \mathrm{ft}$. N. and 9 ft . W. from T-rd. E., on $N$. end of $W$. head wall of concrete culvert; chiselied square
T. $44 \mathrm{~N} ., \mathrm{R}, 23 \mathrm{~W}$. , in NE $1 / 4 \mathrm{sec} .7$, in yard of Hope Dale School, 10 ft . E . of well, in concrete post; standard tablet stamped "T T $1559^{\circ} \mathrm{C} \mathrm{W} \mathrm{A}$ 1934"
Reference mark, 3 ft . N. and 6 ft . W. from tablet, on NE. corner of concrete well platform; chiseled square
T. $44 \mathrm{~N} ., \mathrm{R} .23 \mathrm{~W} ., 0.2 \mathrm{mi}$. N. of approximate quarter cor between secs. 17 and 18, on S. end of $E$. head wall of concrete culvert; chiseled square

[^8]T. $W_{4}$ N., R. 23 W., cor. secs. 19, 20,29 , and $30,100 \mathrm{ft} . \mathrm{S}$. and 25 ft . W. from rd. intersection, W. of rd., at S. right-of-way fence of Missouri-Kansas-Texas R.R., in concrete post; standard tablet stamped "T T 1558 C W A 1934"
Reference mark, 105 ft . N. and 41 ft . E. from tablet, on bell end of concrete drain pipe; chiseled square
T. 44 N., R. 23 W., cor. secs. 29, 30,31 , and $32,9 \mathrm{ft}$. N. and 14 ft . W. from crossroads, on E. end of N. head wall of concrete culvert; chiseled square
T. 44 N., R. 23 W., near line between secs. 30 and 31 , about $0.2 \mathrm{mf}$. . . of Johnson-Pettis county line, E. of Missouri-Kansas-Texas R.R.,
40 ft . S . of rd., in concrete post; standard tablet stamped "T T 1557 C W A 1934"

Feet
935.382
936.05
927.11
919.854

Windsor, at NE. Ifmits of, 63 ft . S . and 25 ft . E. from State Highway 52 at Henry-Pettis county line, on S. line of right-of-way, in concrete post; standard tablet stamped "T T 1556 C W A 1934"
Windsor, 38 ft . S. and 28 ft . E. from intersection of Florence and Main Streets in concrete post; standard tablet stamped "T T 1555 C W A 1934"
Reference mark, 274 ft . S. of tablet, in NW. corner of NE. concrete pedestal of city-water tower; (mark not described)
T. 43 N., R. 23 W., near N. sixteenth cor. sec. 7, in front of dwelling of Alton Hurst, in root of $30-1 n$. hickory tree; copper nail and washer
T. 43 N., R. 23 W., E. sixteenth cor. between secs. 7 and 18 , 37 ft . S. and 47 ft. W. from T-rd. S., in concrete post; standard tablet stamped "T T 256 C W A 1934"
Reference mark, 20 ft . N. and 61 ft . E. from tablet, on $N$. end of $E$. head wall of concrete culvert; chiseled square
(Continued in Lincoln quadrangle; see line 4.)
2. FROM SEC. 29, T. 45 N., R. 23 W., EAST TO SEC. 26 , T. 45 N.,
R. 23 W. (by R. B. Kuebier and C. P. Thompson in 1934 )
T. 45 N., R. 23 W., in E $1 / 2$ sec. 28 , on $S$. end of W. concrete abutment of bridge over Elk Fork Creek; chiseled square
831.89
851.36
T. 45 N., R. 23 W., in $E 1 / 2$ sec. 27 , on $W$. end of $S$. concrete head wall of culvert; chiseled square
Kendrick triangulation sta.; U.S.C. \& G.S. standard disk
916.677

## 3. FROM SEC. 32, T. 45 N., R. 23 W., EAST INTO SMITHTON QUADRANGLE AT SEC. 33, T. 45 N., R. 21 W. (by R. B. Kuebler in 1934)

T. 44 N., R. 23 W., N. cor. secs. 4 and 5 , 843 ft . W. of T-rd. S., on W. end of concrete head wall of culvert; chiseled square
T. 44 N., R. 23 W., 315 ft . W. of N. cor. secs. 3 and 4 , on W. end of S. concrete abutment of bridge; chiseled square
896.64
 from T-rd., in root of 20-1n. elm tree; copper nail and washer
869.16
T. 44 N., R. 23 W., in $S 1 / 2$ sec. 3 , 36 ft . N. and 30 ft . W. from T-rd. N., in concrete post; standard tablet

Reference mark, $12 \mathrm{ft} . \mathrm{S}$. and 22 ft . F. from tablet, on N . end of W. concrete head wall of culvert; chiseled square
T. 44 N., R. 23 W., near center sec. 2, 660 ft . W. of T-rd. S., on E. end of $S$. head wall of concrete culvert; chiseled square
897.64

Green Ridge, at W. limits of, 25 ft . S. and 41 ft . E. from crossroads, in concrete post; standard tablet stamped "T T 257 C W A 1934"
Reference mark, 16 ft . $s$. and 63 ft . W. from tablet, in root of $30-\mathrm{in}$. maple tree; copper nail and washer
T. Lif N., R. $23 \mathrm{~W} .$, in $\mathrm{N} 1 / 2 \mathrm{sec} .1,660 \mathrm{ft}$. S. of T-rd. S., on S. end of $E$. head wall of concrete culvert; chiseled square
904.517
904.84
897.41
909.180
908.40
884.54

Green Ridge, about 0.8 ml . N. and 0.8 mi . E. from, $28 \mathrm{ft} . \mathrm{S}$. and 28 ft . W. from Turd. S., in concrete post; standard tablet stamped "T T 260 C W A 1934. ${ }^{\circ}$
Reference mark, 8 ft . N. and 36 ft . E. from tablet, on E. hoad wall of concrete culvert; chiseled square
T. L4. N., R. 22 W., N. cor. secs. 5 and 6, SW. of T-rd. S., on S. end of W. head wall of concrete culvert; chiseled square
886.278
T. 45 N., R. 22 W., S. cor. secs. 32 and 33 , NE. of T-rd. N., on S. end of $E$. head wall of concrete culvert; chiseled square
Green Ridge, about 0.8 mf . N. and 3 mi . E. from, on line between secs. 4 and $33, \mathrm{Tps}$.44 and $45 \mathrm{~N} ., \mathrm{R} .22 \mathrm{~W} ., 30 \mathrm{ft} . \mathrm{S}$. and 54 ft . W. from T-rd. N., 15 ft. S. and 503 ft . W. from T-rd. S., in concrete post; standard tablet stamped "T T 259 C W A 1934"
Reference mark, 10 ft . N. and 64 ft . E. from tablet, in root of $14-\mathrm{in}$. oak tree; copper nail and washer
Tps. $\mu_{4}$ and 45 N., R. 22 W., on line between secs. 3 and 34 , on W. bank of Basin Fork Creek, 70 ft . S. of rd., 12 ft . E. of N.-S. fence, in root of $12-1 n$. white-oak tree; nail and washer
T. $\psi_{4}$ N., R. $22 \mathrm{~W} .$, in $\mathrm{N} 1 / 2 \mathrm{sec} .2,150 \mathrm{ft}$. S . of rd., 4 ft . E. of $\mathrm{N}_{\mathrm{L}}-\mathrm{S}$. fence, in root of $26-1 \mathrm{n}$. hackberry tree; copper nail and washer
T. 44 N., R. 22 W., N. quarter cor. sec. 1, 200 ft . E. of stone, 1.5 mi . W. of U.S. Highway 65, N. of rd. corner E.-S., in concrete post; standard tablet stamped "T T 258 C W A 1934"
821.538
T. 45 N., R. 21 W., 540 ft. E. of W. sixteenth cor. on S. 1ine sec. 31, on E. end of N. concrete head wall of culvert; chiseled square
T. 44 N., R. 21 W., in NE. cor. sec. $6,33 \mathrm{ft} . \mathrm{S}$, and 39 ft . W. from U.S. Highway 65 at crossroad, 129 ft . N. and 50 ft . E. from NE. corner of Anderson School, in concrete post; U.S.C. \& G.S. and State Survey standard tablet
892.956
(Continued in Smithton quadrangle; see Ine 3.)
4. FROM SWEET SPRINGS QUADRANGLE SOUTHEAST ALONG MISSOURI PACIFIC RAILROAD INTO SMITHTON QUADRANGLE (by S. B. Scott in 1934)
(Continued from Sweet Springs quadrangle; see line j.)
Dresden, about 3 mi . SE. of, 0.3 mi . S. of cor. secs. $25,30,31$, and 36 , T. 46 N., Rs. 21 and $22 \mathrm{~W} ., 65 \mathrm{ft}$. S. and 28 ft . W. from Missouri Pacific R.R. at rd. crossing, in concrete post; J.S.C. \& G.S. and State Survey standard tablet stamped "T T 32 C 1936"
788.712
(Continued in Smithton quadrangle; see line 4.)

> 5. FROM WINDSOR QUADRANGLE AT SEC. $31, \mathrm{~T} .45 \mathrm{~N} ., \mathrm{R}, 23$ W., EAST TO SEC. $32, \mathrm{~T} .45 \mathrm{~N} .3 \mathrm{R} .23$ W., INCLUDING THAT PART OF THE LINE IN WIMDSOR QUADRANGLE (by T. G. Drummond in 1934 and R. W. Mattox in 1936) *
T. 45 N., R. 23 W., near center sec. $31,210 \mathrm{ft}$. E. of T-rd. S., on N. concrete head wail of culvert; chiseled square
T-rd. W., 15 ft . N. and 20 ft . E. from, at base of telephone pole; surface of ground

> 6. FROM SMITHTON QUADRANGLE AT WEST EDGE OF SEDALIA SOUTH ALONG U.S. HIGHWAY 65 INTO LINCOLN QUADRANGLE (by P. C. Lentz in 1936 )
> (Continued from Smithton quadrangle; see line 8.)

Sedalla, at $W$. edge of, 20 ft . S. and 300 ft . E. from junction of U.S. Highway 50, on head wall of concrete culvert; chiseled square
Junction of U.S. Highway 50; surface of highway
837.60

Sedalia, 20 ft . S. and 20 ft . E. from Junction of West Twentieth Street, on concrete head wall of culvert; chiseled square
Underpass of Missouri-Kansas-Texas R.R., on concrete head wall of culvert; chiseled square
Sedalia, 1.5 mi . S. of junction of $\mathrm{U} . \mathrm{S}$. Highway $50,236 \mathrm{ft}$. S. and 40 ft . E. from crossroad, 8 ft . N. and 85 ft . W. from NW. corner of Hi Point School, 2 ft . W. of rail fence, in concrete post; standard tablet stamped "1096 C W A 1934"
Junction of rd. E., at base of telephone pole; surface of ground
T. 45 N., R. 21 W., in SE $1 / 4$. sec. 17, 25 ft . N. and 20 ft . E. from junction of rd. W., on concrete head wall of culvert; chiseled square
T. 45 N., R. 21 W., in SE $1 / 4$ sec. 20 , on top of concrete abutment at NW. corner of bridge over Flat Creek; chiseled square
T. 45 N., R. 21 W., in NW $1 / 4 \mathrm{sec} .29,88 \mathrm{ft}$. S. and 37 ft . E. from junction of private rd. W., $16 \mathrm{ft} . \mathrm{S}$, and 108 ft . W. from NW. corner of barn, 3 ft . inside right-of-way fence, in concrete post; standard tablet stamped "1097 C W A 1934"
Crossroad, on concrete head wall of culvert; chiseled square
T. 45 N., R. 21 W., in NW $2 / 4$ sec. $32,20 \mathrm{ft}$. E. of junction of old highway N., on concrete head wall of culvert; chiseled square
T. 44 N., R. 21 W., in NE. cor. sec. 6, 129 ft . N. and 50 ft . E. from NE. corner of Anderson School, 33 ft . S. and 39 ft . W. from crossroad, in concrete post; U.S.C. \& G.S. and State Survey standard tablet
Reference mark, 12 ft . N. and 10 ft . E. from tablet, on concrete head wall of culvert; chiseled square
T. 44 N., R. 21 W., in $S W 1 / 4$ sec. 5, 20 ft : E. of highway, on head wall of concrete culvert; chiseled square
Junction of rd. W., on head wall of concretè culvert; chiseled square
T. 44 N., R. 21 W. , cor. secs. $7,8,17$; and $18,15 \mathrm{ft}$. S . and 30 ft . E.
from crossroad, on head wall of concrete culvert; chiseled square
T. 44 N., R. 21 W., cor. secs. $17,18,19$, and $20,48 \mathrm{ft} . \mathrm{s}$, and 40 ft .
W. from crossroad, 103 ft . W. of NW. corner of Midway Garage, 2 ft .
inside right-of-way fence, in concrete post; standard tablet stamped "1098 C W A 1934"
Reference mark, 75 ft . N. of tablet, on head wall of concrete culvert; chiseled square
T. 44 N., R. 21 W., cor. secs. 19, 20, 29, and $30,35 \mathrm{ft}$. S. and 20 ft .
E. from crossroad, on head wall of concrete culvert; chiseled square
T. 44 N., R. $21 \mathrm{~W} .$, cor. secs. $29,30,31$, and $32,15 \mathrm{ft}$. N. and 25 ft . E. from junction of rd. E., on concrete head wall of culvert; chiseled square
854.506
878.8
867.50
792.78
854.927
873.30
897.08
892.956
893.62
937.49
926.20
915.57
927.255
927.32
968.43

1,017.22
Tps. 43 and 44 N., R. 21 W., cor. secs. $5,6,31$, and 32 , on BentonPettis county line, 46 ft . N. and 40 ft . E. from junction of state Highway 52 W. and rd. E., 9 ft. N. and 2 ft. E. from tranamissionline pole, on right-of-way, in concrete post; standard tablet stamped "1099 CW A 1934"
999.158

Reference mark, 35 ft . SW. of tablet, on head wall of concrete culvert; chiseled square
998.79
T. 43 N., R. 21 W., cor. secs. $5,6,7$, and $8,10 \mathrm{ft}$. S. and 20 ft . E. from junction of private rd. E., on concrete pipe culvert; chiseled square
T. 4.3 N., R. 21 W., cor. secs. 7, 8, 17 , and $18,20 \mathrm{ft}$. S. and 20 ft . E. from junction of rd. E., on head wall of concrete culvert; chiseled square

Feet
1,012.56
For additional level lines along Missouri Pacific R.R., Missouri-Kansas-Texas R.R., and Chicago, Rock Island \& Pacific Ry., refer to United States Coast and Geodetic Survey first-order ine, Jefferson City to Pleasant Hill; and second-order lines, Sedalia to Springfield and Versailles to Windsor.

LINCOLN QUADRANGLE
(Latitude $38^{\circ} 15^{\prime}-38^{\circ} 30^{\prime}$; longitude $93^{\circ} 15^{\prime}-93^{\circ} 30^{\prime}$ )
Benton County


1. FROM FRISTOE QUADRANGLE NORTH ALONG U.S. HIGHWAY 65 TO SEC. 10 , T. 41 N., R. 22 W., THENCE EAST ALONG ROADS INTO COLE CAMP QUADRANGLE AT SEC. 9, T. 41 N., R. 21 W. (by C. E. Reick in 1932)
(Continued from Fristoe quadnangle; see line 2.)
Warsaw, 1 mi. NE. of, at junction of rd. W., E. of highway, in base of post; spike
T. 40 N., R. 22 W., in NW $1 / 4$ sec. 9, 50 ft. NE. of junction of rd. E., on head wall of culvert; chiseled square
740.58
683.04
721.4

Missouri Pacific R.R. at highway crossing; center of
T. 41 N., R. 22 W., in NE $1 / 4 \mathrm{NE} 1 / 4$ sec. 33 , about 1.1 mi . NE. of Missouri Pacific R.R. crossing, 40 ft . S. and 25 ft . E. from junction of private rd. SE, to farmhouse, in concrete post; standard tablet stamped "T T 217 B 1932"
Reference mark, 820 ft . N. of tablet, on E. head wall of culvert; chiseled square
732.207
739.81
T. 41 N., R. 22 W., 300 ft . SE. of quarter cor. between secs. 22 and 27, 20 ft . NE. of junction of rd. NE., on head wall of culvert; chiseled square
T. 41 N., R. 22 W., center seo. 22, at crossroad; surface of highway 799.28 877.5
887.77
885.765
882.77
923.13
935.12
877.233
899.22
977.04
973.54
907.909
912.36
940.91
T. 41 N., R. 21 W., near center of $S W 1 / 4 \mathrm{sec} .9$, in triangie at rd. fork

Feet E., in root of $24-1$. oak tree; copper nail
902.53
(Continued in Cole Camp quadrangle; see line 1.)
2. FROM FRISTOE QUADRANGLE AT SEC. 17, T. 40 N., R. 21 W.; WEST INTO FRISTOE QUADRANGLE AT SEC. 13, T. 40 N., R. 22 W . (by C. P. Thompson in 1934)
(Continued from Fristoe quadrangle; see line 4.)
Warsaw, 8 mi . E. of, along old Duroc-Warsaw rd., in $\mathrm{SW} 1 / 4 \mathrm{SW} 1 / 4$ sec. 8 , T. 40 N., R. 21 W., 15 ft . N. and 18 ft . W. from rd. forks, in root on N. side of 16-1n. elm tree; copper nail and washer

Warsaw, 6.8 ml . E. of, along old Duroc-Warsaw rd., in NW $1 / 4 \mathrm{NW} 1 / 4$ sec. 18, T. 40 N., R. 21 W., 315 ft . E. of range line, 21 ft . S. and 69 ft . E. from private rd. NW., in root on N. side of 18-in. oak tree; copper nail and washer
(Continued in Fristoe quadrangle; see line 4.)
3. FROM COLE CAMP QUADRANGLE AT SEC. 16, T. 43 N., R. 22 W., WEST TO SEC. 18, T. 43 N., R. 21 W. (by C. P. Thompson in 1934)
(Continued from Cole Camp quadrangle; see line 5.)
T. 43 N., R. 21 W., quarter cor. between secs. 16 and $17,650 \mathrm{ft}$. W. of St. Johnls Lutheran Church, 9 ft . S. and 895 ft . E. from crossroads, on E. end of S. head wall of culvert; chiseled square
4. FROM GREEN RIDGE QUADRANGLE AT SEC. 18, T. 43 N., R. 23 W., EAST TO SEC. 18, T. 43 N., R. 21 W. (by R. B. Kuebler and C. P. Thompson in 1934)*
(Continued from Green Ridge quadrangle; see line 1.)
T. 43 N., R. $23 \mathrm{~W} .$, center of $\mathrm{SE} 1 / 4$ sec. $18,159 \mathrm{ft}$. N. and 12 ft . W. from, 650 ft . N. of T-rd. W., on N. end of $W$. head wall of concrete culvert; ch1seled square
$865 \cdot 74$
T. 43 N., R. 23 W., E. sixteenth cor. sec. $19,60 \mathrm{ft}$. S. and 57 ft . E. from T-rd. N., in yard of Harry Birchum, 2 ft . W. of fence, in root on NE. side of 28-1n. maple tree; copper nail and washer
T. 43 N., R. 23 W., quarter cor. between secs. 20 and $21,12 \mathrm{ft}$. N. and 13 ft . W. from T-rd. W., on E. end of N . head wall of culvert; chiseled square
T. 43 N., R. 23 W., cor. secs. 20, 21,28 , and $29,22 \mathrm{ft}$. S. and 25 ft . W. from T-rd. E., in concrete post; standard tablet stamped " 255 C W A 1934"
879.55

Reference mark, $22 \mathrm{ft} . \mathrm{N}$. and 12 ft . E. from tablet, on E. end of S . head wall of concrete culvert; chiseled square
T. 43 N., R. 23 W., cor. secs. $21,22,27$, and $28,39 \mathrm{ft}$. N. and 50 ft . E. from, 50 ft . E. of hedge fence, in farmyard of virgil Walls, in root on S. side of 16-1n. ash tree; copper nail and washer
T. 43 N., R. $23 \mathrm{~W} .$, cor. secs. $22,23,26$, and 27 , $11 \mathrm{ft} . \mathrm{S}$. and 17 ft . W. from crossroads, on $E$. end of $S$. head wall of concrete culvert; chiseled square
T. $43 \mathrm{~N} ., \mathrm{R}$. 23 W. , cor. secs. $23,24,25$, and $26,18 \mathrm{ft}$. S. and 58 ft . W. from crossroads, in concrete post; standard tablet stamped " 277 C W A 1934"
925.76
eference mark, 3 ft . N. and 69 ft . E. from tablet, on N. end of W. head wall of concrete culvert; chiseled square
T. 43 N., R. 22 W., 7 ft . S. and 16 ft . E. from NW. cor. sec. 30 , 28 ft . S. and 16 ft . E. from crossroads, 16 ft . E. of range line, on E. end of $S$. head wall of concrete culvert; chiseled square
T. 43 N., R. 22 W., $8 \mathrm{ft} . \mathrm{S}$. and 150 ft . E. from cor. secs. 19, 20, 29, and $30,8 \mathrm{ft}$. S . of rd., on E. end of S . head wall of concrete culvert; chiseled square
T. 43 N., R. 22 W., cor. secs. $20,21,28$, and $29,24 \mathrm{ft}$. N. and 25 ft . E. from crossroads, in concrete post; standard tablet stamped "278 C W A $1934^{\prime \prime}$
Reference mark, 10 ft . S. and 13 ft . W. from tablet, on S. end of $E$. head wall of concrete culvert; chiseled square
T. 43 N., R. 22 W., in SE $1 / 4$ sec. 21 , S. of rd., on W. head wall of concrete culvert; chiseled square
T. 43 N., R. 22 W., quarter cor. between secs. 22 and $27,20 \mathrm{ft} . \mathrm{N}$. and 13 ft . W. from crossroads, on $S$. end of W. head wall of concrete culvert; chiseled square
T. 43 N., R. 22 W., 15 ft . N. and 45 ft . W. from quarter cor. between secs. 23 and $26,15 \mathrm{ft} . \mathrm{N}$. and 21 ft . W. from T-rd. S., in root on S . side of 8-1n. hedge tree; copper nail and washer E. from C W A $1934^{\prime \prime}$
Reference mark, $31 \mathrm{ft} . \mathrm{S}$. and 13 ft . W. from tablet, on $E$. end of $W$. head wall of concrete culvert; chiseled square
T. $43 \mathrm{~N} ., \mathrm{Rs}$, 21 and $22 \mathrm{~W} ., \mathrm{N}$. cor. secs. 25 and $30,17 \mathrm{ft} . \mathrm{S}$. and 10 ft . E. from T-rd. N., 10 ft . E. of rd., on center of E. head wall of concrete culvert; chiseled square
Fine 2 of Calhoun quadrangle includes a portion of this line (see Buil. 898-H,
p. 1021).
T. 43 N., R. 21 W., cor secs. $19,20,29$, and $30,89 \mathrm{ft}$. N . and 43 ft . W. from U.S. Highway 65 at rd. W., in concrete post; standard tablet stamped "279 C W A 1934"

Reference mark, 63 ft . S. and 27 ft . E. from tablet, on S . end of W. head
wall of concrete culvert; chiseled square

T. 43 N., R. 21 W., near quarter cor. between secs. 17 and 18 , 58 ft . W.

935.21 of U.S. Highway 65 , 30 ft . S. of E.-W. rd., in concrete post; standard tablet stamped "1554 C W A 1934"
Reference mark, 17 ft . N. and 13 ft . E. from tablet, on w. end of S . head wall of concrete culvert; chiseled square
1,005.252
1,004.65
5. FROM COLE CAMP QUADRANGLE AT SEC. $28, T .42$ N., R. 21 W.,
WEST BY WAY OF LINCOLN TO SEC. $30, T \cdot 42 \mathrm{~N}$. . R. $22 \mathrm{~W} .$, THENCE
SOUTH AND EAST TO SEC. 15, T. 41 N. R. 22 W. (by
C. P. Thompson and Cornish Beck in 1934)
(Continued from Cole Camp quadrangle; see line 6.)
T. 42 N., R. 21 W., in E $1 / 2$ sec. $29,110 \mathrm{ft}$. N. and 90 ft . W. from rd. forks, 40 ft . W. of rd., in root on SE. side of $16-1 \mathrm{n}$. elm tree; copper nail and washer
751.60
T. 42 N., R. 21 W., cor. secs. 19, 20,29 , and $30,10 \mathrm{ft}$. S. and 15 ft . E. from T-rd. N., 75 ft . E. of transmission-line, on center of head wall of concrete culvert; chiseled square
771.62

Lincoln, 2.5 ml . E. and 0.2 mi . N. from, near $W$. sixteenth cor. between secs. 19 and 30, T. 42 N., R. 21 W., 50 ft. N. and 21 ft . E. from T-rd. E., on land of Hugh D. Morris, 2 ft . W. of fence, in concrete post; standard tablet stamped "T T 568 C W A 1934"
785.015

Lincoln, 1.4 mi . E. of, 7 ft . W. of lane S . to dwelling of John Kriessler, 18 ft . S. of rd., in root on N. side of $20-1 \mathrm{n}$. post-oak tree; copper nail and washer
Lincoln, at E. edge of, 10 ft . S. and 57 ft . E. from U.S. Highway 65 at Main Street and rd. E., on center of head wall of concrete culvert;
chiseled. square $\quad$. missouri Pacific R.R. sta., 16 ft . W. of mainline
719.00 track, 20 ft . N. of Main Street, in concrete post; standard tablet stamped "T T 569.C W A 1934"
949.50

Lincoln, 1 mi . W. of, along County Route $\mathrm{C}, 25 \mathrm{ft}$. S. of highway, 12 ft . E. of junction of private rd. S., on $E$. end of iron pipe culvert; painted square
Lincoln, 2 mi. W. of, along County Route $C, 15 \mathrm{ft}$. N. of highway, in SW . corner of yard of August Kasemann, in root on SW. side of $40-1 n$. postoak tree; copper nail and washer
962.603
incoln, 2.2 mi . W. of, in E $1 / 2$ sec. $30, \mathrm{~T} .42 \mathrm{~N} ., \mathrm{R} .22 \mathrm{~W} ., 27 \mathrm{ft} . \mathrm{N}$. and 20 ft . E. from rd. Junction, 65 ft . SW . of SW . corner of Bethel Baptist Church, in concrete post; standard tablet stamped "T T 570 C W A 1934"
T. 42 N., R. 22 W., in $S E 1 / 4$ sec. $31,15 \mathrm{ft} . \mathrm{S}$. and 35 ft . W. from ra. corner, 4 ft . S. of fence W., in root on SE. side of 28-in. black-oak tree; copper nail and washer
905.38

Tps. 41 and $42 \mathrm{~N} ., \mathrm{R} .22 \mathrm{~W}$. , near W . sixteenth cor. between secs. 6 and $31,35 \mathrm{ft}$. N. and 110 ft . W. from T-rd. S., in yard of C. E. Armstrong, in root on SE. side of l6-in. post-oak tree; copper nail and washer
T. 41 N., R. 23 W., in HE $1 / 4$ sec. $1,70 \mathrm{ft}$. W. of Cherrydale School, $20 \mathrm{ft} . \mathrm{E}$. of rd., 8 ft . NW. of triangular-blazed 20-1n. tree, in
yard, in concrete post; standard tablet stamped "T T 571 C WA $1934^{n}$
T. 41 N., R. 23 W., near E. sixteenth cor. between secs. 1 and 12 ,

40 ft . N. of Flemming Branch, 7 ft . E. of rd., in root on W. side of 20-in. water-oak tree; copper nail and washer
T. 41 N., R. 23 W., in NW $1 / 4$ NW $1 / 4$ sec. $12,15 \mathrm{ft}$. N. and 18 ft . E. from rd. corner W. -S . and dim rd. E., about 300 ft . E. of new graded rd., in root on $S$. side of $34-1 \mathrm{n}$. black-oak tree; copper nail and washer
Passo, about- 0.6 ml : NW. of, center of NW $1 / 4$ sec. 13, T. 41 N., R. 23 W., 27 ft . W. of rd., 12 ft . N. of triangular-blazed $24-1 \mathrm{n}$. black-oak tree, In concrete post; standard tablet stamped "T T 572 C W A 1934"
Passo, at filling sta., on SW. corner of gasoline pump; chiseled square
Passo, $1.2 \mathrm{mi} . S$. of, 35 ft . S. and 25 ft . W. from T-rd. E., in root on N. side of $36-1 n$. white-oak tree; copper nail and washer

Passo, 1 mi. S. and 1.2 mi . E. from, near center of $\mathrm{SE} 1 / 4 \mathrm{sec}$. 19, T. 41 N., R. $22 \mathrm{~W} ., 48 \mathrm{ft}$. E. of rd. corner W. W SE: ; 6 ft . NE. of $16-\mathrm{in}$. cedar tree, in concrete post; standard tablet stamped "T T 573 C W A 1934"
. 41 N., R. 22 W., in $S W 1 / 4$ SW $1 / 4$ sec. $20,18 \mathrm{ft}$ : $N$. of rd. fork, in root on S. side of $30-i n$. post-oak tree; copper nail and washer
chuyler, 95 ft . W. of M1ssourl Pacific R.R., 10 ft . N. of rd., on SW. corner of bottom concrete step; painted square
6. FROM SEC. 20, T. 43 N., R. 22 W., SOUTH TO SEC. 30, T. 42 N.,,$~$
R. 22 W. (by Cornish Beck in 2934 )
T. 43 N., R. 22 W., near N. sixteenth cor. between secs. 29 and 30, opposite driveway to dwelling of Edward Keuper, 20 ft . W. of rd., in root on NE. side of l8-in. cherry tree; copper nail and washer
T. $43 \mathrm{~N} ., \mathrm{R} .22 \mathrm{~W} .$, in $\mathrm{SE} 1 / 4 \mathrm{sec} .30,20 \mathrm{ft}$. N. of E. $-\mathrm{W} . \mathrm{rd},. 10 \mathrm{ft}$. W. of rd. N., on N. end of head wall of concrete culvert; chiseled square
T. 42 N., R. $22 \mathrm{~W} .$, in $\mathrm{SE} 1 / 4$ sec. 6 , 18 ft . E. of rd., $7 \mathrm{ft} . \mathrm{N}$. of private rd. E., on center of concrete head wall of culvert; painted square
T. 42 N., R. 22 W., S. sixteenth cor. between secs. 7 and $8,17 \mathrm{ft}$. N. and 55 ft . E. from $\mathrm{T}-\mathrm{rd}$. N., in concrete post; standard tablet stamped "T T 655 C W A 1934"
T. 42 N., R. 22 W., E. sixteenth cor. between secs. 7 and $18,15 \mathrm{ft}$. N. of rd., 8 ft . N. of private rd. E., on center of head wall of concrete culvert; chiseled square
T. 42 N., R. 22 W., quarter cor. between secs. 19 and $20,25 \mathrm{ft}$. N. and 35 ft . E. from T-rd. E., in root on N. side of $16-1 \mathrm{n}$. white-oak tree; copper nall and washer
7. FROM SEC. 29, T. 42 N., R. 21 W., SOUTH TO SEC. 5, T. 41 N., R. 21 W. (by Cornish Beck in 1934)
T. 42 N., R. 21 W., quarter cor. between secs. 29 and $30,110 \mathrm{ft}$. N. and 90 ft . W. from rd. forks, 40 ft . W. of rd, in root on SE. side of $16-1 \mathrm{n}$. elm tree; copper nail and washer
T. 42 N., R. 21 W., in NW $1 / 4 \mathrm{sec} .32$, on top of hill, $30 \mathrm{ft} . \mathrm{N}$. and

30 ft . E. from junction of private rd. W., in gatepost, in root on SW. side of 24 -in. hickory tree; copper nall and washer
T. 42 N., R. 21 W., in SE $1 / 4 \mathrm{SE} 1 / 4 \mathrm{sec} .31$, about 600 ft . N. of T-rd. E., 65 ft . E. of corner of barn near residence of S. A. Laine, in root on E. side of 40-in. locust tree; copper nail and washer

## 8. FROM CALHOUN QUADRANGLE AT SEC. 6, T. 41 N., R. 23 W., NORTH TO SEC. 29, T. 42 N., R. 23 W., THENCE EAST ALONG COUNTY ROUTE C TO SEC. 30 , T. 42 N., R. 22 W. (by G. T. Shepherd in 2935)

T. 42 N., R. 23 W., S. quarter cor. sec. $32,25 \mathrm{ft}$. N. and 9 ft . W. from T-rd. N., on top of W. head wall of concrete culvert; chiseled square
Lincoln, 8.5 ml . W. of, quarter cor. between secs. 29 and 32 , T. 42 N ., R. 23 W., 30 ft . S. and 40 ft . E. from crossroad, in concrete post; standard tablet stamped "T T 651 C W A 1934"
Lincoln, 7.5 mi . W. of, quarter cor. between secs. 28 and 33, T. 42 N., R. $23 \mathrm{~W} ., 20 \mathrm{ft}$. S. and 60 ft . W. from junction of private rds. N. and S., in front of dwelling of Arnos Fristo, in root on N. side of wildcherry tree; copper nall and washer
Lincoln, 7 mi . W. of, W. sixteenth cor. between secs. 27 and 34 , T. $42 \mathrm{~N} ., \mathrm{R} .23 \mathrm{~W}$. , on W . end of S . head wall of concrete bridge; chiseled square
Lincoln, 6 mi. W. of, cor. secs. $26,27,34$, and 35, T. 42 N., R. 23 W., on W. end of $N$. head wall of concrete culvert; chiseled square
Lincoln, 5 mi . W. of, 140 ft . S. and 40 ft . W. from SW . corner of Fairview School, $28 \mathrm{ft} . \mathrm{S}$. and 7 ft . E. from highway at fences N. and W., in concrete post; standard tablet stamped "1263 E R A 1935"
Lincoln, 4.5 mi . W. of, 100 ft . W. of junction of abandoned rd. N., on center of N . head wail of culvert; chiseled square
Lincoln, 3.5 mi . W. of, on center of N . head wall of concrete culvert; chiseled square
9. FROM CALHOUN QUADRANGLE AT SEC. 32, T. 41 N., R. 23 W., NORTHEAST BY WAY OF RACKET AND PASSO TO SEC. $24, \mathrm{~T} .41 \mathrm{~N} ., \mathrm{R} .23 \mathrm{~W}$. (by C. T. Shepherd in 1935)

Racket, 450 ft . E. of, 38 ft . N. and 24 ft . W. from junction of rd. N., in concrete post; standard tablet stamped " 1260 E R A $1935^{\prime \prime}$
Racket, 0.8 mi . NE. of, near cor. secs. $28,29,32$, and 33, T. 41 N. , R. 23 W., 30 ft . S. and 18 ft . W. from rd. corner produced, 18 ft . W. of rd., in root on E. side of $24-1 n$. oak tree; copper nail and washer
Racket, about 1.7 mi . NE. of, in NW $1 / 4$ sec. 28 , T. 41 N., R. 23 W., on E. end of $S$. wall of $E$. abutment of suspension bridge over Tebo Branch of Lake of the Ozarks; chiseled square
. 41 N., R. 23 W., in NW $1 / 4 \mathrm{sec} .27,10 \mathrm{ft}$. S. and 50 ft . W. from T-rd. W., on W. end of S. head wall of concrete culvert; chiseled square
T. 41 N., R. 23 W., near cor. secs. $22,23,26$, and $27,54 \mathrm{ft}$. S. and 2 ft . W. from SE. corner of dwelling of F. S. Esala, 36 ft . NW. of rd., in concrete post; standard tablet stamped "l261 ER A 1935"
T. 41 N., R. $23 \mathrm{~W} .$, in NE $1 / 4 \mathrm{sec} .26,30 \mathrm{ft}$. N. and 15 ft . W. from crossroads, in root on $N$. side of $12-i n$. oak tree; copper nail and washer
S. ., R. $23 \mathrm{~W} .$, in $\mathrm{S} 1 / 2 \mathrm{sec} .25,20 \mathrm{ft}$. S . and 10 ft . E. from T-rd. S., on NE. wing wall of concrete culvert; chiseled square post; standard tablet stamped "1262 E R A 1935"
Passo, 2 ms . S. and 0.5 ml . E. from, in $\mathrm{W} 1 / 2 \mathrm{sec} .30$, T. 41 N. , R. 22 W., on top of NW. wing wall of bridge; chiseled square
10. FROM SEC. 26, T. $41 \mathrm{~N} .$, R. 23 W, , SOUTH INTO FRISTOE QUADRANGLE AT SEC. 15, T. 40 N., R. 23 W. (by C. T. Shepherd in 1935)
T. 42 N., R. 23 W., on line between secs. 26 and $35,660 \mathrm{ft}$. W. of T-rd.
W., on center of $N$. head wall of concrete arch bridge; chiseled square T. 41 N., R. 23 W., in $S W 1 / 4 \mathrm{SW} 1 / 4$ sec. 26, at base of bridge shoe on S. end of E. abutment of bridge over Grand River Arm Lake of the Ozarks; chisqled square
950.02
840.92
845.095
858.45
805.06

Feet
917.251
911.08
909.50
T. 41 N., R. 23 W., near N. sixteenth cor. sec. 34 , 10 ft . N. of rd.
Feet corner S.-E., in root on E. side of 48-in. elm tree; copper nail and washer
691.70
Tps. 40 and $41 \mathrm{~N} ., R_{\text {. }} 23 \mathrm{~W}$., on line between secs. 3 and $34,388 \mathrm{ft}$. E. of cross fences, 44 ft . W. of old rd. at wire gap, 3 ft . S . of fence, in concrete post; standard tablet stamped "1269ERA 1935"
T. 40 N., R. 23 W., cor. secs. 2, 3, 10 , and $11,0.5 \mathrm{mi}$. S. of Corn Hill School, $30 \mathrm{ft} . \mathrm{S}$. and 30 ft . W. from fence corner, NW. of T-rd. N., in root on S. side of 10-1n. white-oak tree; copper nail and washer
T. 40 N., R. $23 \mathrm{~W} .$, in $\mathrm{SE} 1 / 4 \mathrm{sec} .10,1.5 \mathrm{mi}$. N. of State Highway 35 , on top of high hill, 100 ft . E. of fence corner, $10 \mathrm{ft} . \mathrm{N}$. of rd., in root on N. side of $36-1 \mathrm{n}$. oak tree; copper nail and washer
(Continued in Fristoe quadrangle; see line 8.)
11. FROM SEC. 15, T. 41 N., R. 22 W. EAST BY WAY OF POPLAR INTO COLS CAMP QUADRANGLE AT SEC. 28, T. 41 N., R. 21 W. (by C. T. Shepherd in 1935)
Poplar, 0.5 ml . W. of, near center sec. 22, T. $41 \mathrm{~N} ., \mathrm{R} .22 \mathrm{~W} ., 40 \mathrm{ft}$. S. and 40 ft. W. from U.S. H1ghway 65 at crossroad, 25 ft . E. of front of filling sta., on $N$. end of concrete retaining wall; chiseled square
Poplar, 0.5 ml . E. of, 45 ft . N. and 300 ft . E. from center sec. 23 , T. 41 N., R. $22 W_{\text {. }} 30 \mathrm{ft}$. N, of fence, in root on S . side of 18 min .

S. and i8 ft. W. from T-rd. S., in root on N. side of 8-in. oak tree; copper nail and washer
898.02
. 41 N., R. 22 W., quarter cor. between secs. 24 and $25,10 \mathrm{ft}$. S. and 27 ft . W. from rd. at fence $\mathrm{S} ., 10 \mathrm{ft}$. S . and 15 ft . W. from curve in rd. E. -N., in concrete post; standard tablet stamped "T T 1264 ER A 1935"
T. 41 N., R. 21 W., 36 ft . N. and 300 ft . E. from quarter cor. between secs. 19 and $30,4 \mathrm{ft}$. N. of fence in front of dweliling, in root on S. side of cedar tree; copper nail and washer
818.599
T. $41 \mathrm{~N} .$, R. 21 W ., on Iine between secs: 20 and $29,36 \mathrm{ft}$. N . of ra.,

10 ft . N. of front yard fence of S . O. Duncan, in root on E. side of 24-1n. oak tree; copper nail and washer
. 41 N., R. 21 W., in $S W 1 / 4 \mathrm{NW} 1 / 4$ sec. $28,15 \mathrm{ft}$. S. and 15 ft . E.
from T-rd. N., in root on N. side of 12-in. oak tree; copper nail. and washer
(Oontinued in Cole Camp quadrangle; see line 8.)

> 12. FROM CALHOUN QUADRANGLE AT SEC. 6, T. $41 \mathrm{~N} ., \mathrm{R} .23 \mathrm{~W} .$, NORTH TO SEC. 20, T. $43 \mathrm{~N} .$, R. $23 \mathrm{~W} .(\mathrm{by} \mathrm{S}. \mathrm{T} .\mathrm{Tudor} \mathrm{in} \mathrm{1936)}$
T. 42 N., R. 23 W., center sec. 29, 12 ft . S. and 25 ft . E. from T-rd. W., in W. side of telephone pole; spike
835.44
T. 42 N., R. 23 W., S. sixteenth cor. sec. $20,270 \mathrm{ft}$.N . and 20 ft . W. from T-rd. E., in root on E. side of 18-in. hackberry tree; copper nail and washer
Ford across creek, 150 ft . N. and 20 ft . E. from, in root on W. side of
oak tree; crossed nails
840.04
from T-rd. W., on top of concrete iow-water bridge; chiseled square
T. 42 N., R. 23 W., in SE $1 / 4$ sec. $17,40 \mathrm{ft}$. N. and 20 ft . E. from T-rd. W., in root on W. side of $24-1 n$. oak tree; copper nail and washer
T. 42 N., R. $23 \mathrm{~W} ., 19 \mathrm{ft}$. N. and 27 ft . W. from crossroads, in concrete post; standard tablet stamped "T T 652 C W A 1934"
819.76
T. $42 \mathrm{~N} ., \mathrm{R}$. 23 W ., near quarter cor. between secs. 4 and $5,30 \mathrm{ft} . \mathrm{N}$. and 18 ft. W. from T-rd. W., in root on SE. side of 18-in. locust tree; copper nail and washer
Bridge over creek, on top of $S$. end of W. girder; painted square
Barker Creek, on top of $W$. end of $N$. abutment of bridge; chiseled square
T. 43 N., R. 23 W., near E. sixteenth cor. between secs. 29 and 32 , 15 ft . S. and 40 ft . E. from T-rd. S., in N. side of fence post; spike
T. 43 N., R. $23 \mathrm{~W} .$, near cor. secs. $28,29,32$, and $33,20 \mathrm{ft} . \mathrm{S}$. and 45 ft . E. from T-rd. N., in root on N. side of 12-in. hedge tree; copper nail and washer

814.875

874.53
835.41
835.63
863.94

For additional level lines along Chicago, Rock Island \& Pacific Ry.
and Missouri Pacific R.R., refer to Oníted States Coast and
Geodetic Survey second-order Ilnes, Versailles to Windsor and
Waraaw to Nay.

[^9]FRISTOE QUADRANGLE
(Latitude $38^{\circ} 00^{\prime}-38^{\circ} 15^{\prime}$; longitude $93^{\circ} 15^{\prime}-93^{\circ} 30^{\prime}$ )
Benton, Hickory, and St. Clair Counties


1. FROM HUMANSVILLE QUADRANGLE AT SEC. 13, T. 37 N., R. 23 W., EAST AND NORTH TO QUINCY, THENCE EAST TO WHITE CLOUD, THENCE SOUTHEAST TO HERMITAGE, THENCE EAST ALONG U.S. HIGHWAY 54 INTO URBANA QUADRANGLE, INCLUDING THAT PART OF THE LINE IN HERMITAGE QUADRANGLE (second-order line by H. P. Jones in 1934)*

Fairview Church, S. sixteenth cor. between secs. 17 and 18, T. 37 N.,
R. $23 \mathrm{~W} ., 25 \mathrm{ft}$. N. and 192 ft . W. from T-rd. N., 32 ft . S. and 135 ft . W. from church, $32 \mathrm{ft} . \mathrm{S}$. and 107 ft . E. from Fairview School, in concrete post; standard tablet stamped "T T 91 B 1933 1009"
T. 37 N., R. 23 W ., near cor. seas. $16,17,20$, and $21,400 \mathrm{ft}$. S. of State Highway 83 at crossroad, on $E$. end of N. abutment of bridge; chiseled square

Feet 1,008.030
969.98
991.25
949.207
E. from State Highway 83 at rd. E., on S. head wall of concrete culvert; chiseled square
T. 37 N., R. 23 W., approximate N. sixteenth cor. between secs. 8 and 9 , 895 ft . S. of concrete bridge over Nogles Creek, 22 ft . S. and 30 ft . W. from State Highway 83 at private rd. W. through gate, in concrete post; standard tablet stamped "T T 92 B 1933 950"
Quincy, 1.2 mi . S. of, along State Highway $83,10 \mathrm{ft} . \mathrm{S}$. and 25 ft . E. from junction of rd. E., on S. head wall of concrete culvert; chiseled square
Quincy, about 0.2 mi . S. of post office, along State Highway $83,20 \mathrm{ft}$. $N$. and 20 ft . E. from junction of rd . E., on N . head wall of culvert; chiseled square
Quincy, 0.3 mi . N. of, along State Highway $83,20 \mathrm{ft}$. N. and 31 ft . W. from Junction of ra. E., 175 ft . W. of T-fence N., in concrete post; standard tablet stamped "T T 93 B 1933 962"

Tps. 37 and $38 \mathrm{~N} ., \mathrm{R}$. 22 W ., cor. secs. $5,6,31$, and $32,800 \mathrm{ft}$. W. of rd. at fence N.-S., 32 ft . S. and 35 ft . W. from crossroads, in concrete post; standard tablet stamped "T T 95 B 1933 1014"
T. 37 N., R. 22 W., in SW $1 / 4$ sec. 5 , about 0.2 mi . W. of T-rd. S., near center of NE. wing well of smell bridge; chiseled square
T. 37 N., R. 22 W., about $2 l_{4} 0 \mathrm{ft}$. W. of S . sixteenth cor. sec. 4, 28 ft . S. and $5 \mathrm{ft}_{\mathrm{T}} \mathrm{W}$. from rd. fork $W$., in concrete post; standard tablet stamped "T T 96 B $19331034^{\text {" }}$
Hopewell School, 0.7 ml . W. of, along Hermitage-Quincy-White Cloud rd., 8 ft . N. of rd., in root on W. side of $24-i n$. black-oak tree; copper nail and washer
Hopewell School, on old Hermitage-Quincy-White cloud rd., 9 ft. S. and 30 ft . W. from crossroad, 130 ft . NE. of NE. corner of schoolhouse, in root on $S$. side of $24-1 n$. black-oak tree; copper nail and washer
Hopewell School, 0.9 mi . E. of, along old Hermitage-Quincy-White Cloud rd., 0.6 mi . N. of bridge over Pomme de Terre River, 30 ft . S. and 15 ft. E. from crossroad, in root on NW. side of 20-in. black-oak tree; copper nail and washer
Hopewell School, 1.5 mi . SE. of, along old Hermitage-Quincy-White Cloud rd., 125 ft . N. of N . end of bridge over Pomme de Terre River, 4 ft. W. of rd., in root on $W$. side of $20-1 n$. walnut tree; copper nail and washer
$1,012 \cdot \frac{\text { Feet }}{2 \cdot 77}$
955.22
$1,032.589$
908.71
851.55
836.51

Hermitage, 3.7 mi . NE. of, along old Cross Timbers-Hermitage rd., 0.8 mi . E. of bridge over Pome de Terre River, 18 ft . N. of $w$. Junction of rd. to Quincy, in large sandstone outcrop; standard tablet stamped "T T 97 B 1933924 "
Hermitage, 2.9 mi . NE. of, along old Cross Timbers-Hermitage rd., on SE. wing wall of concrete bridge over M1ll Creek; chiseled square
922.755

Hermitage, 2.4 mi . NE. of, along old Cross Timbers-Hermitage rd., 0.5 mi . N. of Claric School, 45 ft . N. and 50 ft . W. from rd. junction, 20 ft . W. of rd. to Cross Timbers, in root on E. side of 18 -in. hickory tree; copper nail and washer
895.67

Hermitage, 1.9 mi . E. of, along U.S. Highway $54,65 \mathrm{ft}$. N. and 75 ft . E. from Junction of old Cross Timbers-Hermitage rd., in root on S. side of 15-1n. black-oak tree; copper nail and washer
944.98

Hermitage, about 0.5 mi . E. of, along J.S. Highway 54, at bridge over Pomme de Terre River, in E. ond of steel truss ol bridge on top of upstream end of pier; standard tablet (set by water-resources branch of U.S. Geol. Survey)
Hermitage, 25 ft . N. and 78 ft . E. from NE. corner of courthouse, 100 ft . S. and 45 ft . W. from U.S. Highway 54 at crossroad, in concrete post; standard tablet stamped "T T 98 B 1933823 "
755.672
821.910

Hermitage, 2.2 mi . E. of, 1 mi . W. of Victory School, 160 ft . W. of junction of lane N. , on N . head wall of culvert; chiseled square
Hermitage, 3.2 mi . E. of, 3 mi . W. of Preston, 75 ft . N. and 85 ft . E. from junction of rd. N., 75 ft . S. of S. gable of Victory School,
in concrete post; standard tablet stamped "T T 99 B 1933974 "
Preston triangulation sta.; D.S.C. \& G.S. standard disk
U.S.C. \& G.S. standard reference disk
2. FROM CROSS TIMBERS QUADRANGLE AT SEC. 5, T. 39 N., R. 21 W., NORTHWEST TO MAJORVILLIE, THENCE WEST TO SEC. 3, T. 39 N., R. 22 W., THENGE NORTH ALONG U.S. HIGHWAY 65 INTO LINCOLN QUADRANGLE (by O. E. Reick in 1932)
(Continued from Cross Timbers quadrangle; see line 2.)
Majorville, 1.5 ml . SE. of, in $\mathrm{S} 1 / 2$ of $\mathrm{NW} 1 / 4$ sec. $5, \mathrm{~T} .39 \mathrm{~N} .$,
R. 21 W., on NW. abutment of bridge over Turkey Creek; chiseled square

Majorville, 0.9 mi . S. and 0.4 mi . E. from NW. cor. sec. 6, T. 39 N. , R. 21 W., 28 ft . S. of T-rd. N., in concrete post; standard tablet stamped "T T 207 B 1932"
Reference mark, 750 ft . SE. of tablet, 90 ft . NW. of rd. fork, in root of 24 -in. oak tree; copper nail
T. 39 N., R. 22 W., in NE $1 / 4$ sec. $1,2 \mathrm{mi}$. NE. of Dell, 60 ft . W. of rd. corner S.-E., in root of $30-1 n$. locust tree; copper nail
T. $39 \mathrm{~N} ., \mathrm{R}$. $22 \mathrm{~W} .$, in NE $1 / 4$ sec. $2,1 \mathrm{mi}$. NE. of Deil, S. of rd., in root of 24-1n. walnut tree; copper nail
T. 39 N., R. 22 W., 1.25 ml . N. of S. cor. secs. 2 and 3 , about 0.3 mi . W. of Webster and Guy General Store at Dell, $32 \mathrm{ft.N}$. and 26 ft . W. from T-rd. S., in concrete post; standard tablet stamped "T T 214 B 1932"
Reference mark, 300 ft . E. of tablet, on head wall of culvert; chiseled square
Dell, 0.6 mi . NW. of, at junction of rd. E. to Climax Springs, on E. head wall of culvert; chiseled square
T. 39 N., R. 22 W., in $N 1 / 2$ of $N W 1 / 4 \mathrm{sec}$. 3, E. of highway, in base of telephone pole; spike
T. 40 N., R. 22 W., in $E 1 / 2$ sec. $35,2 \mathrm{ml}$. NW. of Dell, at function of rd. W., W. of highway, on S. end of culvert; chiseled square
T. 40 N., R. $22 \mathrm{~W} .$, in NE $1 / 4 \mathrm{NE} 1 / 4 \mathrm{sec} .35,20 \mathrm{ft}$. S. and 60 ft . E. from function of rd. NE, to Duroc, in concrete post; standard tablet stamped "T T 215 B 1932"
T. 40 N., R. 22 W., in SW $1 / 4$ sec. 26 , W. of highway, on boulder; chiseled square
T. 40 N., R. 22 W., in NW $1 / 4$ NE $1 / 4 \mathrm{sec} .27$, 100 ft . SE. of junction of rd. W. to Fairfield, E. of highway, in root of $24-1 n$. oak tree; copper nail
Warsaw, on W. coping at $S$. end of bridge over Osage River; chiseled square
748.67
964.15
972.637
$1,120.261$
$1,106.125$
T. 40 N., R. 22 W., in SE $1 / 4 \mathrm{sec} .16$, about 0.3 mi . N. of N. end of bridge over Lake of the Ozarks, 35 ft . S. snd 35 ft . E. from Missouri Pacific R.R. at highway crossing, in concrete post; standard tablet stamped "T T 216 B 1932"
Warsaw, 5 in. N. of SE. corner of courthouse, leaded vertically in water table; brass rod (U.S.C.E. B.M.)
(Continued in Lincoln quadrangle; see line l.)

## 3. FROM MAJORVILLE NORTH AND EAST INTO CROSS TIMEERS QUADFANGLE AT <br> SEC. 28, T. 40 N., R. 21 W. (by C. E. Reick in 1932)

T. 40 N., R. 21 W., in $N E 1 / 4 \mathrm{SW} 1 / 4 \mathrm{sec} .33,50 \mathrm{ft}$. E. of crossroads, in root of $2 L_{4}-1 n$. oak tree; copper nail
(Continued in Cross Timbers quadrangle; see line 3.)
4. FROM CROSS TIMBERS QUADRANGLE AT SEC. $16, T .40$ N., R. 21 W., WEST TO WARSAW (by C. P. Thompson in 1934)
(Continued from Cross Timbers quadrangle; see line 7.)
T. 40 N., R. 21 W., about 700 ft . W. of quarter cor. between secs. 16 and $17,50 \mathrm{ft}$. N. and 80 ft . E. from NE. corner of old log building at site of Old Fredonia, 25 ft . S . of Old Warsaw-Duroc Road, in concrete post; standard tablet stamped "T T $553 \mathrm{CW} \mathrm{A} \mathrm{1934"}$
Reference mark, 21 ft . S. and 51 ft . W. from tablet, in root on NE. side of 16-1n. cedar tree; copper nail and washer
(For balance in Lincoln quadrangle, see line 2.)
T. 40 N., R. 22 W., near center sec. 13 , 29 ft . S. of rd., in fence line, in root on N. side of 20-1n. oak tree; copper nail and washer
T. 40 N., R. 22 W., in SW. cor. sec. 13, on W. end of concrete step of Lookout School; chiseled square
T. 40 N., R. $22 \mathrm{~W} .$, about 700 ft . W. of cor. secs. $13,14,23$, and 24 , 35 ft . W. of 0ld Warsaw-Duroc Road at junction of rd. SE. (new Duroc-Warsaw rd.), in concrete post; standard tablet stamped "T T 554 C W A 1934"
Reference mark, 30 ft . W. of tablet, in root on E. side of $2 L_{4}-i n$. black-oak tree; copper nail and washer
T. 40 N., R. 22 W., in NE $1 / 4 \mathrm{sec} .22$, 27 ft . S. of rd. fork NE., in root on $W$. side of $12-1 n$. post-oak tree; copper nail and washer
T. 40 N., R. 22 W., in $\mathrm{NW} 1 / 4 \mathrm{SE} 1 / 4$ sec. $22,230 \mathrm{ft}$. S. of T-rd. E., near dwelling, on N. end of W. head wall of concrete bridge over White Branch; chiseled square
Warsaw, at U.S. Highway 65 bridge over Osage River, on E. end of N. abutment; U.S.C. \& G.S. standard disk stamped "M 35 1934"
Reference mark, 10 ft . N. and 17 ft . E. from tablet, in root on $W$. side of 18-1n. elm tree; copper nail and washer (R.M. for T.T. 216B 1932)
5. FROM VIARSAW WEST ALONG COUNTY ROUTE A (now State Highway 35) TO SEC. 22, T. 40 N., R. 23 W., THENCE WEST INTO LOWRY CITY QUADRANGLE AT SEC. ig, T. 40 N., R. 23 W . (by C. T. Shepherd in 1935)
U.S.C. \& G.S. standard disk stamped "Warsaw 1934"
T. 40 N., R. 22 W., in SW 1/4 sec. 17 , at $W$. end of bridge over Osage River, on top of $W$. end of $S$. handrail; chiseled square
U.S.C. \& G.S. standard disk stamped "P 35 1934"

Warsaw, 2.2 mi . W. of, on S. end of E. abutment of bridge over Osage River; chiseled square
Warsaw, 3 mi . W. of, on line between secs. 23 and 24, T. 40 N., R. 23 W., 50 ft . N. and 20 ft . W. from crossroad, in root on s. side of black-oak tree; copper nail and washer
U.S.C. \& G.S. standard disk stamped "Q 35 1934"
U.S.C. \& G.S. standard disk stamped "R 35 1934"

Finey, $4 \mathrm{mi} . E$. of, 20 ft . S. of rd., in root on E. aide of $24-\mathrm{in}$. white-oak tree; copper nall and washer
U.S.C. \& G.S. standard disk stamped "S 35 1934"
6. FROM WARSAW SOUTH TO SEC. 28, T. 40 N., R. 22 W., THENCE SOUTH ALONG COUNTY ROUTE E TO FAIRFIELD, THENCE EAST ALONG ROADS TO DELL (by C. T. Shepherd in 1935)

Warsaw, 0.7 mi . S. of, near quarter cor between secs. 20 and 21 , T. 40 N., R. 22 W., at suspension bridge over Osage River, on W. concrete handrail at N . approach; chiseled square
Warsaw, 1.8 ml . S . of, in NW $1 / 4$ sec. 28 , T. $40 \mathrm{~N} ., \mathrm{R} .22 \mathrm{~W} ., 200 \mathrm{ft} . \mathrm{N}$. of dwelling of M. A. Price, 25 ft . E. of rd., in root on w. side of 12-in. hackberry tree; copper nall and washer
Warsaw, $2.5 \mathrm{mi} . \mathrm{S}$. of, in $\mathrm{NW} 1 / 4 \mathrm{sec} .33$, T. $40 \mathrm{~N} ., \mathrm{R} .22 \mathrm{~W}$., on E. head wall of concrete culvert; chiseled square
873.95
861.44
850.925
849.31
792.72
677.68
673.234
708.227

Feet

[^10]850.89
880.67
832.985
711.63
730.22
8. FROM LINCOLN QUADRANGLE AT SEC. 15, T. 40 N., R. $23 \mathrm{W.}$,
SOUTH TO SEC. 22, T. 40 N., R. 23 w. (by C. T. Shepherd in
1935)
(Continued from Lincoln quadrangle; see line 10.)
T. 40 N., R. $23 \mathrm{~W} .$, in $\mathrm{SE} 1 / 4$ sec. $15,0.7 \mathrm{mi}$. E. of State Highway 35 , along wood trail on top of hill, i8 ft . S . of rd., in root on N . side of 14-1n. oak tree; copper nail and washer
832.04

## 9. FROM LOWRY CITY QUADRANGLE AT SEC. $1, T .39$ N., R. 24 W., EAST TO SEC. 12, T. 39 N., R. 23 W. (by F. C. Lentz in 1936)

Wisdom, l mi. W. of, 35 ft . N. and 20 ft . W. from ford across Hogles Creek, in root on E. side of twin 36-in. sycamore tree; copper nail and washer
724.89

Wisdom, 20 ft . N. and 66 ft . E. from W. sixteenth cor. sec. 5, T. 39 N. , R. 23 W. , on property of Martin Harvey, 20 ft . N. of rd., 4 ft . N. of fence, in concrete post; standard tablet stamped "2l4 C W A 1934"
Wisdom, 0.3 mi . E. of, at ford across Little Hogles Creek, in root of 14-1n. walnut tree; nail
763.114
712.28

Wisdom, 1.4 mi . E. of, 25 ft . S. and 55 ft . W. from crossroads, in root of 30-in. elm tree; copper nail and washer 740.96
T. 39 N., R. 23 W., in NW $1 / 4$ sec. 10, about 0.2 mi . E. of dwelling of Zenas E. Jones, 30 ft. S. of Fairfield-Wisdom rd., in concrete post; standard tablet stamped " $2 l_{4} 7$ C W A 1934"
T. 39 N., R. 23 W., in NE $1 / 4$ sec. 10, at top of hill at dim rd. NE., in root of $8-1 n$. wild-cherry tree; nail
T. 39 N., R. 23 W., in NW $1 / 4 \mathrm{sec}$. 11, on Fairfield-Wisdom rd., 800 ft . E. of farmhouse, 30 ft . N. of rd., in root of $24-1 \mathrm{n}$. elm tree; copper nail and washer
T. 39 N., R. 23 W., on line between secs. 11 and 12 , on NW. corner of concrete bridge over Little Pomme de Terre River; chiseled square
Fairfleld, 1.4 mi . SW. of, 60 ft . N. of rd. forks NE., SW., and NW., in root of $30-1 n$. pin-oak tree; copper nail and washer
Fairfield, 0.5 ml . SW . of, at SW . corner of bridge over Pome de Terre River, on concrete curb rail; chiseled square
718.34
684.33

## 10. FROM WISDOM SOUTH TO SEC. 29, T. 39 N., R. 23 W., THENCE EAST TO FRISTOE (by F. C. Lentz in 1936)

T. 39 N., R. 23 W., in NE $1 / 4$ sec. 8, at bridge over small branch, in root of $26-1 n$. pin-oak tree; copper nail and washer
T. 39 N., R. 23 W., in NE $1 / 4$ sec. 8, at rd. forks N., NW., and S., in root of twin 12-in. walnut tree; copper nail and washer

Feet
756.23
750.90
T. 39 N., R. 23 W., near S. sixteenth cor. between secs. 8 and $9,44 \mathrm{ft}$. N. and 60 ft . E. from Freedom School, 26 ft . W. of rd., in concrete post; standard tablet stamped "T T $\mathrm{l}_{4} \mathrm{C}$ 1936"
T. 39 N., R. 23 W., on line between secs. 16 and l7, at top of hill,

20 ft . E. of rai, in root of $13-1 \mathrm{n}$. hickory tree; copper nail and washer
T. 39 N., R. 23 W., quarter cor. between secs. 17 and $20,50 \mathrm{ft}$. S. and 25 ft . E. from T-rd. W., in root of $14-1 \mathrm{n}$. walnut tree; copper nail and washer
Bentonville, 2.3 mi . NW. of, N. sixteenth cor. sec. 29, T. 39 N., R. $23 \mathrm{~W} ., 15 \mathrm{ft}$. N. and 32 ft . W. from rd. corner E.-N., $1 \mathrm{ft} . \mathrm{S}$. and 18 ft . W. from fence corner, in concrete post; standard tablet stamped "T T 13 C 1936"
T. 39 N., R. 23 W., in NE $1 / 4$ sec. 29, at T-rd. S., on top of boulder at foot of 14 -in. hickory tree; painted square
T. 39 N., R. 23 W. , on line between secs. 28 and $29,20 \mathrm{ft}$. S . and 30 ft . E. from rd. corner S.-E., in root of $28-1$. black-oak tree; copper nail and washer
820.181
897.32
880.94
916.213
905.03
911.82

Fairfield, 3 mi . SW. of, in NE $1 / 4$ NE $1 / 4$ sec. $27, T .39$ N., R. 23 W., $42 \mathrm{ft} . \mathrm{S}$. and 76 ft . W. from rd. forks, 20 ft . S. of rd., in concrete post; standard tablet stamped "T T 12 C 1936"
Weaver School, 0.9 mi . NW. of., 15 ft . W. of rd. corner NE.-SE., in root of $48-1 \mathrm{n}$. elm tree; copper nail and washer
742.504

Weaver School, 50 ft . N. and 100 ft . E. from, 25 ft . N. of rd., in Union Cemetery, in root of 14 -in. pin-oak tree; copper nail and washer
Weaver School, 0.8 ml . SE. of, 100 ft . S . and 45 ft . W. from T-rd. E., in root of íli-in. elm tree; copper nail and washer
T. 39 N., R. 22 W., near W. quarter cor. sec: 3l, on ridge, $57 \mathrm{ft}$. . and 8 ft . W. from crossroads, 90 ft . S. and 5 ft . E. from forked, 18-in. post-oak tree, in limestone outcrop; standard tablet stamped "T T 11 C 1936"
914.453
783.02
in root of twin 16-in. white-oak tree; copper nail and washer
rd., ift. S. and 2 ft . W. from SW. corner of fence around farmyard of Mrs. Missouri Means, in concrete post; standard tablet stamped "T T 10 C 1936"
Farmhouse of James A. Lay, 275 ft . NE. of, 5 ft . S. of rd., in root of 13-1n. white-oak tree; copper nail and washer
T. 39 N., R. 22 W., in $S E 1 / 4$ sec: $20,75 \mathrm{ft}$. S. and 70 ft . W. from rd. corner N.-E., in root of 10-in. white-oak tree; copper nail and washer
T. 39 N., R. 22 W. , in NE $1 / 4$ sec. 21 , about 0.8 mi : W. of farmhouse of E. Gentry, 25 ft . N. of rd., in fence line, in root of $14-1 n$. water-oak tree; copper nail and washer
T. 39 N., R. 22 W., N. sixteenth cor. sec. $22,18 \mathrm{ft} . \mathrm{N}$. of iron pin in fence corner, 20 ft . E. of rd. corner N. -W. , in concrete post; standard tablet stamped "T T 9 C 1936"
T. 39 N., R. 22 W., near quarter cor. between secs. 14 and 23 , about 250 ft . SE. of dwelling of J. H. Boyer, in root of 14-in. white-oak tree; copper nail and washer
Fristoe, 1.2 mi . W. of, 30 ft . S. and 40 ft . E. from rd. forks, in root of $10-1 n$. white-oak tree; copper nall and washer
Sory triangulation sta.; U.S.C. \& G.S. standard disk stamped "Sory 1928"
Reference mark 2; U.S.C. \& G.S. standard reference disk stamped "Sory No $2^{\prime \prime}$
Fristoe, at S. edge of, on U.S. Highway 65, 144 ft . SW. of SW. corner of schoolhouse, 39 ft . E. of highway, in concrete post; U.S.C. \& G.S. standard disk stamped "F 351934 "
Reference:mark, 144 ft. NE. of tablet, on SW. corner of first step; chiseled square

949.05

11. FROM HARPER EAST TO SEC. 17, T. 38 N, , R. $23 \mathrm{~W} .$, THENCE SOUTH ALONG STATE HIGHWAY 83 TO QUINCY, THENCE WEST ALONG ROADS TO SEC. 26 , T. 38 N., R. 24 W., THENCE SOUTH INTO HUMANSVILLE QUADRANGLE AT SEC. 2, T. 37 N., R. 24 W., INCLUDING THAT PART OF THE LINE IN LOWRY CITY QUADRANGLE (by F. C. Lentz in 1936)*

Harper, 110 ft . NW. of NW. corner of school, 20 ft . E. of rd., in concrete post; standard tablet stamped "2 L 1936"
940.571

Reference mark, 60 ft . SE. of tablet, on NW. corner of concrete base of pump; chiseled square
Top of hill, $50 \mathrm{ft} . \mathrm{N}$. of rd., 250 ft . E. of barn; in root on E. side of 38-in. White-oak tree; boit
940.13
T. 38 N., R. 23 W., in sec. 7, at NE. corner of Harper's Cemetery, 30 ft . W. of rd., in root on E. side of 18-1n. white-oak tree; copper nail and washer
932.92
T. $38 \mathrm{~N} ., \mathrm{R}_{\cdot} \cdot 23 \mathrm{~W} .$, in $N W 1 / 4$ sec. 17 , 125 ft . SE. of SE. corner of farmhouse of R. Burton, 80 ft . NE. of rd. at curve, in root of $28-1 \mathrm{n}$. locust tree; copper nail and washer
T. $38 \mathrm{~N} ., \mathrm{R}$. $23 \mathrm{~W} .$, in SW I/ $4 \mathrm{sec} .17,20 \mathrm{ft}$. S. and 20 ft . W. from T-rd. N., in root of $8-1 \mathrm{n}$. white-oak tree; copper nail and washer

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T. 38 N., R. 23 W., near E. sixteenth cor. between secs. 17 and 20 ,
        16 ft . N. and 28 ft . E. from crossroad, in concrete post; standard
        tablet stamped "3 L 1936"
Feet
941.462
941.70
941.06
967.58
883.91
986.9
971.57
988.540
925.52
846.68
821.133
839.20
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688.86
709.34
874.93
850.97
722.40
928.70
925.302
918.12
953.45
949.15
15. FROM ICONIUM NORTH TO POINT 2 MILES EAST OF FINEY
(by F. C. Lentz in 1936) ${ }^{\text {i** }}$
Iconium, 0.8 mi . N. of, 15 ft . S. and 15 ft . E. from T-rd. E., on top of concrete head wall; chiseled square
T. 39 N., R. $2 L_{4}$ W., in NE $1 / 4$ sec. 22,20 ft. W. of T-rd. E., in root on E. side of $12-1 n$. white-oak tree; copper nail and washer
930.15
967.604 tablet stamped "10 L 1936"
T. 39 N., R. 24 W., in NE $1 / 4 \mathrm{sec} .14$, about 200 ft . SE. of farmhouse of A. M. Smith, 5 ft . W. of ra., in root on E. side of 24 -in. white-oak tree; copper nail and washer
995.94

T-rd. S., about 0.5 ml . S. of, in saddle of ridge, 250 ft . S. of S. end of double-line rd., 15 ft . W. of ra., in root on S . side of $10-1 \mathrm{n}$. hickory tree; copper nail and washer
960.19
T. 39 N., R. 24 W., S. sixteenth cor. between secs. 1 and $2,15 \mathrm{ft} . \mathrm{S}$. and 20 ft. W. from T-rd. S., in root on E. side of $10-1 \mathrm{n}$. black-oak tree; copper nail and washer

| Intersection of ridge trails, about 0.5 mi . S. of Osage River, in root on E. side of triangular-blazed 14-in. hickory tree; copper nail and washer | $\frac{\text { Feet }}{905.35}$ |
| :---: | :---: |
| Osage River, 0.4 mi . E. (W. ?) of, 350 ft . S. of farmhouse of B. M. Smith, |  |
| 24 ft . SE. of ra., in root on N . side of $14-1 \mathrm{n}$. elm tree; copper nall and washer | 84.05 |
| White Sulphur Springs, 0.3 mi . SW. of, on top of ridge, 28 ft . N . of rd., |  |
| in root on E. side of 18-in. white-oak tree; copper nail and washer | 765.77 |
| White Sulphur Springs Camp, 582 ft . N. and 76 ft . W. from entrance to, |  |
| N. quarter cor. sec. $1, \mathrm{~T} .39 \mathrm{N.}, \mathrm{R}$.24 W., $219 \mathrm{ft}$. E. of stake, 283 ft . |  |
| E. of T-fence N . at S. cor. secs. 31 and $32, \mathrm{~T} .40 \mathrm{~N} ., \mathrm{R} .23 \mathrm{~W} ., 2 \mathrm{ft}$. |  |
| S. and 78 ft . W. from rd. at fence W., on Benton-St. Clair county line, |  |
| in concrete post; standard tablet stamped "1270 E R A 1935" | 682.686 |
| White Sulphur Springs Camp, 1.2 mi . N. of, 65 ft . SW. of SW. corner of |  |
| Mountain Home School, 50 ft . NW. of rd., in root on S. side of $18-\mathrm{in}$. white-oak tree; copper nail and washer | 863.89 |
| Rd. forks NE., NW., and S., in root of 10-in. hickory tree; copper nail | 885.98 |
| Finey, 2 mi . E. and 0.3 ml . S. from, 25 ft . E. of rd. at fence corner, |  |
| in root of 30-in. black-oak tree; copper nail and washer | 937.85 |
| Finey, 2 mi . E. of, 120 ft . S. and 15 ft . W. from T-rd. S. to White |  |
| Sulphur Springs Camp, in root of 8-1n. white-cak tree; copper nail |  |
| and washer | 927.11 |

For additional level lines along U.S. Highway 65, State Highway 35, and roads, refer to United States Coast and Geodetic Survey second-order line, Linn Creek to Brownington.

CROSS TIMBERS QUADRANGLE
(Latitude $3^{\circ} 00^{\prime}-38^{\circ} 15^{\prime}$; longitude $93^{\circ} 00^{\prime}-93^{\circ} 15^{\prime}$ )
Benton, Camden, Hickory, and Morgan Counties


1. FROM VERSAILLES NO. 3 QUADRANGLE AT SEC. $15, \mathrm{~T} .38 \mathrm{~N} ., \mathrm{R} .19 \mathrm{~W} .$, NORTHWEST TO CLIMAX SPRINGS, THENCE EAST ALONG BARNUMION ROAD INTO VERSAILLES NO. 3 QUADRANGLE AT SEC. 22, T. 39 N., R. 19 W. (by George W. Moore in 1931)
(Continued from Versailles No. 3 quadrangle; see line 1.)

Banister, 1 mi . NW. of, 50 ft . E. of ford across Little Niangua River, in root on W. side of 15-in. ash tree; copper nail and washer

Feet 718.81 728.55 900.08 $1,004.565$
998.77
992.52

1,028.22
1,078.677
1,060.815
1,074.286
1,061.15
1,065.25
965.963
965.85
966.69

1,052.18
rd. SE., in root on NE. side of 16-in. oak tree; copper nail and washer
Climax Springs, about 1.5 mi . E. of, along Barnumton Road, in $\mathrm{NE} 1 / 4$ sec. 29, T. 39 N., R. 19 W., $71 \mathrm{ft} . \mathrm{N} .47^{\circ}$ E. of triangular-blazed 20-1n. oak tree on E. side of rd., 54 ft . N. $9^{\circ} 30^{\circ} \mathrm{W}$. of triangularblazed 20-in. osk tree on W. side of rd., 10 ft . N. of E.-W. fence on S. side of rd., 3 ft . W. of fence NE., in concrete post; standard tablet stamped "T T Sta 13 W 1931"
Reference mark, 71 ft . NE. of tablet, in root on NW. side of triangularblazed 25-1n. oak tree; copper nail and washer
Climax Springs, 2.4 mi . E. of, 35 ft . N. of rd., in root on S. side of 23-in. oak tree; copper nail and washer
Climax Springs, 3.2 mi . E. of, 130 ft . E. of rd. junction, 35 ft . S. of rd., in root on $N$. side of twin oak tree; copper nail and washer
$1,050.25$
1,022. 23
999.85
(Continued in Versailles No. 3 quadrangle; see line 2.)
2. FROM CLIMAX SPRINGS NORTHWEST ALONG EDWARDS-CLIMAX SPRINGS ROAD TO EDWARDS, THENCE NORTHWEST INTO FRISTOE QUADRANGLE AT SEC. 5, T. 39 N., R. 21 W. (by C. E. Reick in 1932)

Climax Springs, 1 mi. NW. of, near center sec. 25 , T. 39 N., R. 20 W.,
Foet
977.15

1,022.286
1,012.02
867.48
962.802
956.74

1,032.20
952.81
882.18
749.2
796.935
799.69
771.26
926.50
947.543
949.77
940.654
932.14
917.24
(Continued in Fristoe quadrangle; see line 2.)
3. FROM FRISTOE QUADRANGLE AT SEC. 28, T. 40 N., R. 21 W., NORTHEAST INTO COLE CAMP QUADRANGLE AT SEC. 12, T. 40 N., R. 21 W. (by C. E. Reick in 1932)
(Continued from Fristoe quadrangle; see line 3.)
T. 40 N., R. 21 W., in SE $1 / 4$ sec. 27, NE. of junction of lane N., in root of $24-1 \mathrm{n}$. oak tree; copper nali
T. 40 N., R. 21 W., in $S 1 / 2$ sec. $26,130 \mathrm{ft}$. NE. of crossroads, in root of 20-1n. oak tree; copper nail
T. 40 N., R. 21 W., 240 ft . E. of N. sixteenth cor. sec. $26,43 \mathrm{ft}$. E. of SE. corner of Pleasant Green School, 35 ft . W. of rd., in concrete post; standard tablet stamped "T T 210 B 1932"
T. $40 \mathrm{~N} ., \mathrm{R}_{\mathrm{l}} 21 \mathrm{~W}$. , on line between secs. $1_{4}$ and $23,40 \mathrm{ft}$. SE. of rd . fork E., in root of $20-1 n$. oak tree; copper nail
T. $40 \mathrm{N}$. , R. $21 \mathrm{~W} ., 0.3 \mathrm{mf}$. SE. of center sec. $14,30 \mathrm{ft}$. NE. of rd. fork E., in root of $30-\mathrm{in}$. oak tree; copper nail
(Continued in Cole Camp quadrangle; see line 2.)

> 4. FROM COLE CAMP QUADRANGLE AT SEC. 7, T. 40 N., R. 20 W., EAST BY WAY OF DUROC INTO COLE CAMP QUADRANGLEAT SEC. 9, T. 40 N., R. 20 W. (by C. E. Reick in 1932)
> (Continued in Cole Camp quadrangie; see line 2.)

Duroc, $24 \mathrm{ft}$.S . and 34 ft . E. from rd. corner, 110 ft . NE. of store of H. R. Roberts, 8 ft . E. of fence corner, in concrete post; standard tablet stamped "T T 212 B 1932"
Reference mark, 210 ft . N. of tablet, in root of 20-in. oak tree; spike
T. 40 N., R. $20 \mathrm{~W} .$, in SE $1 / 4 \mathrm{SW} 1 / 4 \mathrm{sec} .9$, on NE. bank of Lake of The Ozarks, about 400 ft . W. of ferry landing across lake from Duroc, 30 ft . above water level, in smail projecting ledge on bluff; standard tablet stamped "T T 213 B $1932^{n}$
Reference mark, 120 ft . E. of tablet, on ledge; chiseled square
5. FROM VERSAILIES NO. 3 QUADRANGLE AT SEC. 15, T. 39 N., R. 19 W., NORTH TO LAKE OF THE OZARKS AT ELKINS HOLLON (by C. P. Thompson in 2934)
(Continued from Versailles No. 3 quadrangle; see line 8.)
Climax Springs, 4 mi . E. and 2.2 mi . N. from, in $\mathrm{SW} 1 / 4 \mathrm{SW} 1 / 4 \mathrm{sec} .10$, T. 39 N., R. 19 W., 15 ft . N. and 85 ft . E. from dwelling of Jim Crenshaw, $20 \mathrm{ft} . \mathrm{E}$. of N.-S. rd., in root on E. sicie of 16-in. post-oak tree; copper nail and washer
T. 39 N., R. 19 W., in NW $1 / \Lambda_{4}$ NW $1 / 4$ sec. $10,75 \mathrm{ft}$. N. of rd. fork NE., 15 ft . W. of rd. NE., 18 ft. E. of rd. N., in root on E. side of 22-1n. red-oak tree; copper nail and washer

Feet
940.98
T. 39 N., R. $19 \mathrm{~W}_{.}$, in NE $1 / 4 \mathrm{sec} .4$, on side or ricige, about $350 \mathrm{ft} . \mathrm{s}$. of dwolling of John Hodge, 27 ft . W. of rd., in root of $26-1 \mathrm{n}$. redi-oak tree; copper nas.l and washer
893.89
T. 39 N., R. 19 W., in NE $1 / 4 \mathrm{sec} .4$, about 0.6 ml . SW. of Pearson Branch School, $10 \mathrm{ft} . \mathrm{N}$. and 15 ft . E. from rd. forks, in root on SW . side of 24-in. red-oak tree; copper nail and washer
$924 \cdot 93$
T. 39 N.. R. 19 W., in NE $1 / 4$ sec. 4, in Elkins Hollow, on land of Union Electric Light and Power Company, 20 ft . E. of shore line (elevation 660 ft. ) of Lake of the Ozarks, in root on $W$. side of $12-1 \mathrm{n}$. white-oak tree; copper nail and washer
Lake of the Ozarks; surface of water at 7:30 a.m. July 11, 1934
$667 \cdot 54$
6. FROM CLIMAX SPRINGS, NORTH INTO COLE CAMP QUADRANGLE AT
SEC. 7, T. 40 N., R. 19 W. (by C. P. Thompson in 1934)

Climax Springs, 0.4 mi . W. of, 54 ft . N. and 21 ft . W. from rd. corner, in base of $9-1 n$. elm tree; nail and washer
879.37

Climax Springs, 1 mi . NW. of, on W . head wall of concrete culvert; chisoled square
Climax Springs, 1.7 mi . NW. of, 25 ft . E. of rd., in base of 10-in. oak trea; najl and washer
848.86

Climax Springs, 2 mi. N. of, 60 ft . N. of T-rd. W., 15 ft . E. of rd., on top of flint boulder; chiseled square
841.51

Climax Springs, 2.3 mi . N. of, on W. bank of Rainy Creek, 21 ft . N. of rd., in base of $15-1 n$. ash tree; nall and washer
797.52

Climax Springs, 2.5 mi . N. of, 130 ft . S. and 18 ft . E. from E. sixteenth cor. between secs. 12 and 13 , T. $39 \mathrm{~N} ., \mathrm{R}$. $20 \mathrm{~W} ., 70 \mathrm{ft} . \mathrm{S}$. of rd. fork to Edwards, 18 ft . E. of rd., 34 ft . S . ond 43 ft . W. from dwelling of $T$. W. Hale, in concrete post; U.S.C. \& G.S. and state Survey standard tablet stamped "T T 391 C W A 1934"
Climax Springs, 3.3 mi . N. of, 18 ft . W. of T-rd. S., 42 ft . S. of E. $-W$. rd., in base of 20-in. elm tree; copper nail and washer
Climax Springs, 3.8 ml . N. of, 15 ft . W. of rd., in fence line, in $12-\mathrm{in}$. walnut tree; copper nall and washer
814.788
740.12

Climax Springs, 4.5 mi . N. of, 175 ft . N. of dwelling of J. I. Waisner, 12 ft . W. of rd., in fence line, in base of $30-1 \mathrm{n}$. oak tree; copper nail and washer
724.30
nail and washer , w 150 ft w of dwoiling of
20 ft . S. of ra., in base of l2-1n. oak trea; nail and washer
climax Springs, 5.3 mi . N. of, 18 ft . N. of rd. corner $\mathrm{W} .-\mathrm{N}$. and dim rd. SE., in l2-in. oak tree; nail and washer
Climax Springs, 5.4 mi . N. of, in NW $1 / 4 \mathrm{sec} .5$, T. $39 \mathrm{~N} ., \mathrm{R}$. 19 W., at top of hill, 15 ft . E. of rd. fork NW., 98 ft . S. of SE. corner of dwelling on land of J. I. Waisner, 40 ft . SE. of red-oak tree in fence corner, in concrete post; U.S.C. \& G.S. and State Survey stendard tablet stamped "T T 392 C W A 1934"
Climax Springs, 6.3 mi . N. of, 18 ft . W. of rd., in base of $12-1 \mathrm{n}$. sycamore tree; nail and washer
Climax Springs, 7.4 mi. N. of, 150 ft . S. of dwelling of Roy Rice, 15 ft . N. of rd., in root on S. side of 10-1n. oak tree; copper nail and washer

Climax Springs, 7.7 mi . N. of, 30 ft . W. of rd. corner E. $-\mathrm{N} ., 72 \mathrm{ft} . \mathrm{N}$. of dwelling, in root of $10-1 n$. white-oak tree; copper nail and washer
Climax Springs, 8.5 mi . N. of, at SE. corner of Cable Ridge Cemetery, 18 ft . N. of rd., in 18-1n. persimmon tree; copper nail and washer
Climax Springs, 8.7 mi . N. of, 170 ft . S , of E . sixteenth cor. sec. 31 , T. 40 N., R. 19 W., $15 \mathrm{ft} . \mathrm{S}$. of junction of rd . N. to Big Bend Acres, 89 ft . NW. of dwelling of Monroe Waisner, 10 ft . NE. of fence corner, in concrete post; U.S.C. \& G.S. and State Survey standard tablet stamped "T T 393 C W A 1934"
936.289

Reference mark, 69 ft . NE. of tablet, in root of $30-1 \mathrm{n}$. oak tree; copper nail and washer
938.84

Climax Springs, 9.7 mi . N. of 15 ft . E. of rd., 6 ft . S. of fence, in root of $10-1 n$. oak tree; copper nail and washer
927.05

Climax Springs, 10.5 ml . N. of, 55 ft . W. of ra., at gate in fence ine, in root of $18-1 \mathrm{n}$. hickory tree; copper nail and washer
887.96

Sagrada, 11.6 mi . N. of Climax Springs, 49 ft . SE. of SE. corner of Sagrada Store, $10 \mathrm{ft} . \mathrm{N}$. and 20 ft . W. from group of mail boxes, 45 ft . W. of rd., at NE. comer of orchard, in concrete post; U.S.c. \& G.S. and State Survey standard tablet stamped "T T 394 C W A 1934"
887.660

Reference mark, 60 ft . E. of tablet, in root on W. side of $20-1 \mathrm{n}$. blackoak tree; copper nail and washer
882.91

Sagrada, 0.8 mi . NE. of store, 30 ft . S. of Lick Creek, 25 ft . E. of rd., in root of 14-in. sycamore tree; copper nail and washer
706.59

Sagrada, 1.6 ml . NW. of store, 15 ft . S. of rd., 33 ft . W. of fence, in root of 8-1n. elm tree; copper nail and washer
743.47

Sagrada, 2.4 ml . NW. of store, on top of hill, near rd. forks, 35 ft . SW. of rd., in root of $24-1 n$. oak tree; copper nail and washer.

Sagreda, 2.7 mi. NW. of, quarter cor. between secs. 7 and 18, T. 40 N., R. 19 W., 7 ft . S. and 7 ft . W. from stone, 470 ft . SW. of SE. corner
of dwolling of J. M. Roark, 21 ft . E. of rd., 15 ft . N. of 24 -in. redoak tree used as fence corner, in concrete post; standard tablet stamped "T T 395 C W A 1934."
Reference mark, 50 ft . N. of tablet, in fence line, in root on w. side of 8-1n. post-oak tree; copper nail and washer
(Continued in Cole Camp quadrangle; see line 3.)

## 7. FROM SEC. 31, T. 40 N., R. 19 W., NORTHWESI BY WAY OF LIVELY AND HASTAIN INTO FRISTOE QUADRANGLE AT SEC. 16, T. 40 N., R. 21 W. (by C. P. Thompson in 1934)

T. 40 N., R. 20 W., in $S E 1 / 4$ NE $1 / 4$ sec. $36,72 \mathrm{ft}$. E. of dwelling of W. R. Duncan, 72 ft. S. of rd., in root on W. side of $28-1 n$. post-cak tree; copper nail and washer
T. 40 N., R. 20 W ., in $\mathrm{SW} 1 / 4$ SE $1 / 4$ sec. $26,72 \mathrm{ft}$. E. of T-rd. S., 21 ft . N . of rd., in fence line, in root on N. side of $10-1 \mathrm{n}$. post-oak tree; copper nail and washer
Lively, in SE $1 / 4 \mathrm{NW} 1 / 4 \mathrm{sec} .26, \mathrm{~T} .40 \mathrm{~N} ., \mathrm{R} .20 \mathrm{~W} ., 20 \mathrm{ft} . \mathrm{N} . \operatorname{of}$ rd., 58 ft . S. of door on $S$ side of store, in concrete post; standard tablet stamped "T T 550 CW A 1934"
Reference mark, 40 ft . S. and 225 ft . W. from tablet, 18 ft . N. of rd., at gate in fence line, in root on $N$. side of $10-1 \mathrm{n}$. elm tree; copper nail and washer
Lively, 1 ml . W. of store, in $\mathrm{N} 1 / 2 \mathrm{sec} .27, \mathrm{~T} .40 \mathrm{~N} ., \mathrm{R} .20 \mathrm{~W} .$, on side of high, cleared hill, 21 ft . N. of rd., at gatepost, in root on N. side of 16 -in. burr-oak tree; copper nail and washer
Lively, 1.9 mi . W. of , in $\mathrm{SW} 1 / 4 \mathrm{NE} 1 / 4 \mathrm{sec} .28, \mathrm{~T} .40 \mathrm{~N} .$, R. $20 \mathrm{~W} .$, on W. end of N. guard wall of concrete bridge; chiseled square

Walnut Grove School, 0.6 mi . E. of, on line between secs. 28 and 29, T. $40 \mathrm{~N} .$, R. $20 \mathrm{~W} ., 20 \mathrm{ft}$. S. of rd., 3 ft . W. of fence corner, in root on S. side of 16-in. post-oak tree; copper nail and washer
Hastain, 0.9 ml . NE. of, 0.2 mi . S. of center sec. 29, T. 40 N., R. $20 \mathrm{~W} .$, 48 ft . S. and 36 ft . E. from SE. corner of Walnut Grove School, 16 ft . W. of rd., in concrete post; standard tablet stamped "T T 551 C W A 1934"
Reference mark, 24 ft . S. and 6 ft . W. from tablet, in root on N . side of 8-in. black-cak tree; copper nail and washer
Hastain, 192 ft . E. of T-rd. NW., 110 ft . W. of farmhouse, on W. end of N. head wall of concrete culvert; chiseled square

Hastain, 1.1 mi . W. of, in NE $1 / 4 \mathrm{NE} 1 / 4 \mathrm{sec} .36, \mathrm{~T} .40 \mathrm{~N} ., \mathrm{R} .21 \mathrm{~W}$, , 330 ft . SW. of dwelling of E . D. Place, 24 ft . S. of rd., in fence ilne, in root on $N$. side of 20-in. oak tree; copper nail and washer
Hastain, 2.2 mi . W. of, in SE $1 / 4 \mathrm{SE} 1 / 4 \mathrm{sec} .26$, T. $40 \mathrm{~N} .$, R. 21 W. , on top of hill, 20 ft . S. of rd., in root on N. side of 26-in. post-oak tree; copper nail and washer
Hastain, 2.7 mf . W. of, 410 ft . N. of quarter cor. between secs. 26 and $35, \mathrm{~T} .40 \mathrm{~N} ., \mathrm{R} .21 \mathrm{~W} ., 37 \mathrm{ft}$. E. of crossroads, in concrete post; standard tablet stamped "T T 552 C W A 1934"
Reference mark, 65 ft . N. and 20 ft . E. from tablet, in root on NW. side of $6-1 \mathrm{n}$. post-oak tree; copper nail and washer
T. 40 N., R. $21 \mathrm{~W} ., 240 \mathrm{ft}$. E. of N. sixteenth cor. sec. $26,43 \mathrm{ft}$. E. of SE. comer of Pleasant Green School, 35 ft . W. of rd., in concrete post; standard tablet stamped "T T 210 B 1932"
Reference mark, 36 ft . W. of tablet, on SE. corner of concrete porch of school; chiseled square
T. 40 N., R. 21 W., in NE $1 / 4$ SE $1 / 4$ sec. 15 , 150 ft . W. of old DurocWarsaw rd. at crossing of Spring Creek, 18 ft . N. of rd., in root on W. side of 18-1h. elm tree; copper nail and washer
822.70
710.39
671.080
647.02
878.37
696.23
896.77
848.740
847.44
695.96
878.14
980.46
877.976
882.56
948.938
949.21
684.72
T. 40 N., R. 21 W., in NE $1 / 4 \mathrm{SE} 1 / 4 \mathrm{sec} .16,10 \mathrm{ft}$. N. of old DurocWarsaw rd., at small bridge, in root on SW. side of $16-1 \mathrm{n}$. chinquapin tree; copper nail and washer
707.93
(Continued in Fristoe quadrangle; see line 4.)
8. FROM MACKS CREEK QUADRANGLE AT SEC. 10, T. 37 N., R. 19 W., WEST ALONG HICKORY GROVE ROAD TO SEC. 7, T. 37 N., R. 19 W., THENCE NORTH TO TURNERS FORD, THENCE WEST ALONG JORDAN ROAD TO CROSS TIMBERS, INCLUDING THAT PART OF THE LINE. IN URBANA QUADRANGLE (by C. P. Thompson in 1934) *

Macks Creel, 3.6 mi . W. of, near quarter cor. between secs. and 10 , T. $37 \mathrm{~N} ., \mathrm{R}$. $19 \mathrm{~W}_{\text {. }}, 15 \mathrm{ft}$. E. of rd., in fence line, in roót on S. side of ill-in. walnut tree; copper nail and washer
Macks Creek, 4 mi. W. of, E. sixteenth cor. sec. 9, T. 37 N., R. 19 W., 130 ft . S. of dwelling of J. B. Rash, 35 ft . S. of rd., 20 ft . E. of garage, in root on NE. side of 16-1n. oak tree; copper nail and washer
Macks Creek, 5 mf . W. of, near quarter cor. between secs. 8 and 9 , T. 37 N., R. 19 W., 70 ft . SW. of SW. corner of Hickory Grove School, in root on NW. side of $20-1 n$. white-oak tree; copper nail and washer
Macks Creek, 6 mi . W. of, 340 ft . N. and 30 ft . E. from S. sixteenth cor. between secs. 7 and 8, T. 37 N., R. 19 W., 60 ft . NW. of crossroads, 33 ft . N. of rd. W., 460 ft . NW. of dwelling of James Andrews, 3 ft . S. and 13 ft . W. from fence corner on land owned by heirs of Frank pope, in concrete post; U.S.C. \& G.S. and State Survey standard tablet stamped "512 C W A 1934"
Reference mark, 90 ft . NE. of tablet, in root on $W$. side of 22-in. white-oak tree; copper nail and washer

Hine 5 of Urbana quadrangle includes a portion of this line (see Bull. 898-E, pp. 732-733).

Macks Creek, 6.7 mi . W. of, in NE $1 / 4 \mathrm{sec}, 7, \mathrm{~T} .37 \mathrm{~N} ., \mathrm{R} .19 \mathrm{~W} ., 84 \mathrm{ft}$. N. of rd. forks, 21 ft . W. of rd. NE., 15 ft . E. of rd. NW., in root on E. side of l2-in. white-oak tree; copper nail and washer

Feet 1,043.87 acks Creek, 7.6 mi . W. of, in $\mathrm{SW} 1 / 4 \mathrm{sec} .6, \mathrm{~T} .37 \mathrm{~N} ., \mathrm{R} .19 \mathrm{~W} ., 24 \mathrm{ft}$ E. of crossroads, in root on SW. side of 16-in. hickory tree; copper nail and washer
999.34

Macks Creek, 8.4 mi . W. of, 10 ft . N. and 10 ft . E. from W. sixteenth cor. on S. line sec. $31, \mathrm{~T} .38 \mathrm{~N} ., \mathrm{R} .19 \mathrm{~W} ., 10 \mathrm{ft}$. E. of rd. N., 10 ft . N. of rd. E., in root on E. side of $24-1 \mathrm{n}$. oak tree; copper nail and washer
$957 \cdot 34$
Macks Creek, 8.9 mi . W. of, about 750 ft . S. of quarter cor. between secs. 31 and 36, T. 38 N. , Rs. 19 and $20 \mathrm{~W} ., 2.5 \mathrm{mi}$. SE. of Turners ford, on Camden-Hickory county line, 12 ft . S. of rd.' near 3 mall boxes, in root on $N$. side of $24-1 n$. white-oak tree; copper nail and washer
$975 \cdot 73$
Macks Creek, 9.7 mi. W. of, near W. sixteenth cor. sec. 36, T. 38 N., R. 20 W., 1.8 mi . SE. of Turners ford, 10 ft . NE. of crossroads, on limestone ledge; ohiseled square
822.30

Cross Timbers, 10.2 mi . E. of, 1.2 mi . SE. of Turners ford, $104 \mathrm{ft} . \mathrm{N}$. and 13 ft . E. from stone at center of $\mathrm{NW} 1 / 4 \mathrm{sec} .36, \mathrm{~T} .38 \mathrm{~N}$. ,
R. 20 W ., on top of hill, on land owned by D. F. Phillips, 15 ft . E. of rd., $i$ ft. W. of N.-S. fence, in concrete post; J.S.C. \& G.S. and State Survey standard tablet stamped "513 C W A 1934"
Reference mark, 25 ft . NE. of tablet, in root on W. side of 6-in. white-oak tree; copper nall and washer
Cross Timbers, 9.6 mi . E. of, 40 ft . W. of cor. secs. $25,26,35$, and 36 , T. $38 \mathrm{~N} ., \mathrm{R} .20 \mathrm{~W} ., 0.6 \mathrm{mi}$. SE. of Turners ford, at top of hili, on land owned by D. E'. Phillips, 45 ft . SW. of rd. corner, in root on $N$. side of 24 -in. white-oak tree; copper nail and washer
26.160
926.83

Cross Timbers, 9 mi . E. of, in NW 1/4 sec. 25 , T. $38 \mathrm{~N} ., \mathrm{R} .20 \mathrm{~W} ., 290 \mathrm{ft}$. SE. of Turners ford, on land owned by G. W. Pennell, 21 ft . N. of rd., 3 ft . N. and 3 ft . W. from fence corner, in concrete post; standard tablet stamped "19 J 1934"
Reference mark, 35 ft . W. of tablet, in fence line, in trunk of 10-1n. sycamore tree; copper nail and washer
Cross Timbers, 7.4 ml . E. of, 10 ft . W. of N . sixteenth cor. between secs. 26 and $27, T .38 \mathrm{~N} ., \mathrm{R}$. $20 \mathrm{~W} ., 20 \mathrm{ft}$. S . of $\mathrm{rd}, 30 \mathrm{ft}$. S . and 10 ft . W. from fence corner, in root on N . side of 20-1n. white-oak tree; copper nail and washer
Cross Timbers, 6.9 mi . E. of, in NW 1/4 sec. 27, T. 38 N., R. 20 W., 90 ft . E. of rd. junction, 12 ft . S. of rd., in root on N . side of 2l-in. black-oak tree; copper nail and washer
Cross Timbers, 6.8 ml . E. of, near center of $\mathrm{NW} 1 / 4 \mathrm{sec} .27, \mathrm{~T} .38 \mathrm{~N}$. , R. 20 W ., on land owned by john 01son, 21 ft . S. of rd., i8 ft. N. of fence corner, 4 ft . NW. of blazed 10-1n. post-oak tree, in concrete post; U.S.C. \& G.S. and State Survey standard tablet stamped "514 C W A 1934"
Reference mark, 6 ft . SE. of tablet, in root on S. side of i2-in. oak tree; copper nail and washer
Cross Timbers, 6.4 mi . E. of, in NE $1 / 4$ sec. 28, T. 38 N., R. 20 W., on land owned by John 01son, 45 ft . SE. of junction of rd. N., $15 \mathrm{ft} . \mathrm{S}$. of rd., in hollow, in root on N. side of twin 8-in. elm tree; copper nail and washer
Cross Timbers, 5.6 mi . E. of, 0.3 mi . E. of Jordan, 35 ft . N. of w. sixteenth cor. between secs. 21 and 28, T. 38 N., R. 20 W., 25 ft. S. of E. -W. rd., 8 ft . W. of N.-S. private rd., in root on N. side of 14 -in. oak tree; copper nail and washer
Cross Timbers, about 5.1 mi . E. of, 0.2 mi . NW. of Jordan, in $\mathrm{SE} 1 / 4$ sec. 20, T. $38 \mathrm{~N} .$, R. $20 \mathrm{~W} ., 56 \mathrm{ft}$. NW. of NW. corner of Jordan School, 36 ft . NW. of rd. at spring, in natural limestone boulder; standard tablet stamped "18 J 1934"
Reference mark, 80 ft . SW. of tablet, at fence corner, in root on S. side of 20-1n. elm tree; copper nail and washer
851.996

Cross Timbers, 4.2 mi. E. of, in sec. 20 , T. 38 N., R. 20 W., 12 ft . S. and 10 ft . W. from junction of rd. N., in fence corner, in root on E . side of l2-in. oak tree; copper nail and washer
Cross Timbers, 3.5 ml . E. of, about $1,000 \mathrm{ft}$. N. of quarter cor. between secs. 19 and 30, T. $38 \mathrm{~N} .$, R. $20 \mathrm{~W} ., 350 \mathrm{ft}$. E. of dwelling of Louis Miller, 15 ft . S. of rd., in root on S. side of 22-1n. red-oak tree; copper nail and washer
Cross Timbers, 3 mi . E. of, about l, 000 ft . N. of SW. cor. sec. 19, T. $38 \mathrm{~N} ., \mathrm{R} .20 \mathrm{~W}, 20 \mathrm{ft} . \mathrm{N}_{\text {. }}$ of $\mathrm{rd} .$, in root on S . side of $10-\mathrm{in}$. post-cak tree; copper nail and washer
Cross Timbers, 1.8 mi . E. of, near S. sixteenth cor. between secs. 23 and $24_{4}$, T. 38 N., R. 21 W., 20 ft . N. of rd., 22 ft . E. of hedge fence, 3 ft . N. of fence, in concrete post; standard tablet stamped "17 J 1934" Cross Timbers, 0.8 mi. E. of, S. sixteenth cor. between secs. 22 and 23 , T. 38 N., R. $21 W_{\text {. }}, 20 \mathrm{ft}$. N. of crossroads, 10 ft . E. of N. -S . rd., on head wall of concrete culvert; chiseled square
Cross Timbers, 30 ft . S. of E. $-\mathrm{W} . \mathrm{rd.}$,30 ft . E. of street, 12 ft . W. of NW. corner of Methodist Church, on concrete porch; chiseled square
Cross Timbers, in front of school gymnasium, 70 ft . S. and 170 ft . E. from street intersection, 15 ft . S. of small barn, in $36-1 \mathrm{n}$. silvermaple tree; nail and washer
U.S.C. \& G.S. standard disk stamped "J 15 1934"

Cross Timbers, 0.2 mi . S. of, in NW $1 / \Lambda_{4}$ sec. $27, \mathrm{~T} .38 \mathrm{~N} ., \mathrm{R} .21 \mathrm{~W} .$, between old and new U.S. Highway 65, on side of small ravine, in 10-1n. cedar tree; nail
$1,016.67$
842.26
981.78

1,044.99
$1,003.38$
$1,039.814$

1,012.94
1,032.99

1,017.10

For an additional level line along U.S. Highway 65, refer to United States Coast and Geodetic Survey second-order line, Linn Creek to Brownington.

COLE CAMP QUADRANGLE
(Latitude $38^{\circ} 15^{\prime}-38^{\circ} 30^{\prime}$; longitude $93^{\circ} 00^{\prime}-93^{\circ} 15^{\prime}$ )
Benton, Camden, and Morgan Counties


1. FROM LINCOLN QUADRANGLE AT SEC. 9, T. 41 N., R. 21 W. . EAST THROUGH BOYIERS MILL INTO GRAVOIS MILIS QUADRANGLE AT SEC. 27, T. 42 N., R. 19 W. (by C. E. Reick in 1932)
(continued from Lincoln quadrangle; see line 1.)

| 41 N., R. 21 W., in $S W 1 / 4$ SW $1 / 4$ sec. $10,22 \mathrm{ft} . \mathrm{s}$. and 35 ft . W. from T-rd. N., 0.2 ml . W. of Cole Camp Creek, in concrete post; standard tablet stamped "T T 221 B 1932" | 18 |
| :---: | :---: |
| over Cole Camp Creek; sur |  |
| of 20-1n. oak tree; copper nail | 859.64 |
| 41 N., R. 21 W., near center sec |  |
| 11 | 93.20 |
| N., R. 21 W., in NE $1 / 4 \mathrm{NW} 1 / 4 \mathrm{sec} .12,1.5 \mathrm{mi}$. SW. of Mount Hinlda, |  |
| 30 ft . SE. of rd. fork S., in root of l8-in. oak tree; spike | 952.94 |
| 41 N., R. 21 W., in SE $1 / 4 \mathrm{NW} 1 / 4 \mathrm{sec} .13,220 \mathrm{ft}$. N. of crossing of |  |
| Ross Creek, 17 ft . E. of rd., 17 ft . N. of fence corner, in concrete post; standard tablet stamped "T T 222 B 1932" |  |
| eference mark, 590 ft . NE. of tablet, in root of $30-1 \mathrm{n}$. oak tree; copper nail | 57.77 |
| 41 N., R. 20 W., in $S W 1 / 4 \mathrm{NE} 1 / 4 \mathrm{sec} .18,30 \mathrm{ft}$. SW. of junction of trail SE., in root of $24-1 n$. oak tree; copper nail | $50$ |
| Ross School, 0.2 mi . SW. of, in $\mathrm{SW} 1 / 4 \mathrm{sec} .8$, T. 41 N., R. 20 W., N. of rd., in root of 18-1n. oak tree; spike |  |
| . 41 N., R. 20 W., in NW $1 / 4$ SE $1 / 4$ sec. 8, 510 ft . E. of Ross School, |  |
| 22 ft . S. and 15 ft . W. from crossroads, in concrete post; standard tablet stamped "T T 223 B 1932" |  |
| 41 N., R. 20 W., in $S W 1 / 4$ sec. 4 , N. of rd., in root of $24-1$ n. oak tree; spike |  |
| 41 N., R. 20 W. , on line between secs. 3 and 4, 50 ft . NE. of rd. fork |  |
| , in root of 18-1n. oak tree; copper nail | 1,045.15 |
| T. 41 N., R. 20 W., in NE $1 / 4 \mathrm{NE} 1 / 4 \mathrm{sec} .3,27 \mathrm{ft}. \mathrm{N}$.and 15 ft . W. from |  |
| NW. corner of dwelling of Henry J. Metsher, 15 ft . S. of rd., in |  |
| $42 \mathrm{N.}, \mathrm{R} .20 \cdot \mathrm{~W} ., \mathrm{in} \mathrm{SW} 1 / 4 \mathrm{sec} .35,2.5 \mathrm{mi}$. NW. of Boylers Mill, 30 ft . |  |
| NW. of rd. fork NE., in root of $24-1 n$. oak tree; copper nail | 1,079.29 |
| . $41 \mathrm{~N} ., \mathrm{R} .20 \mathrm{~W} .$, in $\mathrm{NW} 1 / 4 \mathrm{sec} .1,1 \mathrm{ml}$. NW. of Boylers Mill, N. of | 1 |
| rd., in root of $24-1$. hickory tree; copper nail | 1,009.76 |
| 41 N., R. 19 W., in NE $1 / 4$ NW $1 / 4$ sec. 7, near Boylers Mill, $18 \mathrm{ft} . \mathrm{S}$. and 45 ft . E. from crossroads, 25 ft . E. of fence corner, in concrete post; standard tablet stamped "T T 226 B 1932" | 759.684 |
| eference mark, 210 ft . E . of tablet, in root of 20-1n. oak tree; copper nail | 769.63 |
| T. 41 N., R. $19 \mathrm{~W} ., \mathrm{in}$ NW $1 / 4 \mathrm{SW} 1 / 4 \mathrm{sec} .5,1.5 \mathrm{ml}$. NE, of Eoylers M111, |  |
| S, of rd., in root of $30-1 \mathrm{n}$. sycamore tree; copper nail | 808.90 |
| T. 42 N., R. 19 W., in $\mathrm{SW} 1 / 4 \mathrm{NE} 1 / 4$ sec. $33,33 \mathrm{ft}$. S. of rd. at junction |  |
| of lane to farmhouse of Charles B. Rapp, in concrete post; standard tablet stamped "T T 227 B 1932" |  |
| 42 N., R. 19 W., in $N W 1 / 4 \mathrm{NW} 1 / 4 \mathrm{sec}$. 34 , s. of rd., on head wall of |  |
| Center of bridge |  |
| . 42 N., R. 19 W., near center sec. 27, in triangle at rd. forks, in root |  |
| of 20-1n. oak tree; copper nail | 1,145.63 |

(Continued in Gravois Mills quadrangle; see ilne 2.)

## 2. FROM CROSS TIMBERS QUADRANGLE AT SEC. 12, T. 40 N., R. 21 W., EAST AND NORTH TO SEC. ( , T. 41 N., R. 20 W. (by'c. E. Reick in 1932) <br> (Continued from Cross Timbers quadrangle; see line 3.)

T. 40 N., R. 21 W., in SW 1/4 SW $1 / 4$ sec. 12, about 4 m1. W. of Duroc, 15 ft . N. of lane E. to dwelling of F. F. Allen, 25 ft . E. of rd., in concrete post; standard tablet stamped "T T 211 B 1932"

Feet 833.196

Reference mark, 90 ft NW. of tablet, in root of $24-\mathrm{in}$. oak tree; copper nail
832.94

Lake of the Ozarks; surface of water at 12 noon Aug. 16, 1932
(For balance in Cross timbers quadrangle, see line 4.)
T. 40 N., R. 20 W., in NE $1 / 4$ sec. 9, 70 ft . SW. of rd. forks, in root of l8-in. oak tree; copper nail
857.67
T. 41 N., R. 20 .W., in NW $1 / 4$ sec. 3, E. of rd., in root of 24-1n. oak tree: copper nail
T. $41 \mathrm{~N} ., \mathrm{R} .20 \mathrm{~W} .$, in $\mathrm{NE} 1 / 4 \mathrm{NW} 1 / 4 \mathrm{sec} .34$, 135 ft . S. of dwelling of C. C. Birch (formerly known as Kansas City Church), 20 ft . E. of rd., in concrete post; standard tablet stamped "T T 224 B 1932"
T. 41 N., R. 20 W., in NW $1 / 4 \mathrm{sec} .27,80 \mathrm{ft}$. SE. of rd. fork E., in root of 24 -in. oak tree; copper nail
21. NE of rd. in root of 18 in oak tree; spike

## 3. FROM CROSS TIMEEKS QUADRANGLE AT SEC. 7, T. 40 N., R. 19 W., NORTH TO SEC. 7, T. 41 N., R. 19 W. (by C. P. Thompson in 1934) <br> (Continued from Cross Timbers quadrangle; see line 6.)

Big Bend Acres Store, $1.2 \mathrm{mi} . \mathrm{S}$. of, near E. sixteenth cor. sec. 7,
T. 40 N., R. 19 W., 20 ft . E. of rd., in root of ľ-1n. hickory tree; copper nail and washer
Big Bend Acres Store, 0.6 mi . S. of, 18 ft . N. of line between secs. 6 and 7, T. 40 N., R. 19 W., in Thompson's Happy Hill Subdivision, 45 ft. W. of rd., in root of $20-1 n$. red-oak tree; copper nail and washer
T. 40 N., R. 19 W., in $S E 1 / 4 \mathrm{NE} 1 / 4 \mathrm{sec} .6$, about 0.4 ms . SW. of S . landing of Sagrada Ferry, at top of hili, 420 ft . NE. of Bush and Knickerbocker store in Big Bend Acres, is ft. SE. of rd., 33 ft . NW. of NW. corner of dwelling of C. M. Edmonds, in concrete post; standard tablet stamped "T T 396 C W A 1934"
798.846

Reference mark, $55 \mathrm{ft} . \mathrm{N} .70^{\circ} \mathrm{E}$. of tablet, in root of 20-1n. black-oak tree; copper nall and washer
T. 40 N., R. 19 W., in NW $1 / 4$ sec. 5 , near ferry landing, 60 ft. S. of shore line of lake, 16 ft . S. of rd., in root of $20-1 \mathrm{n}$. red-oak tree; copper nail and washer
T. 41 N., R. 19 W., in SE $1 / 4 \mathrm{sec} .31$, near ferry landing, $60 \mathrm{ft} . \mathrm{N}$. of shore line of lake, 50 ft . S. of rd. , in root of lone $16-1 \mathrm{n}$. walnut tree; copper nall and washer
680.93
T. 41 N., R. 19 W., in $S W 1 / 4$ NW $1 / 4 \mathrm{sec}$. 32 , about 0.8 mi . NW. of N. landing of Sagrada Ferry, 283 ft . E. of dwelling of George R. Bates, 22 ft . E. of rd., 80 ft . N. of fence, in concrete post; standard tablet stamped "T T 397 C W A 1934"
944.016

Reference mark, 40 ft . $N$. of tablet, in root on $W$. side of twin 8-in. white-oak tree; copper nail and washer
$942: 86$
T. 41. N., R. 19 W., in SW $1 / 4$ sec. $29,106 \mathrm{ft}$. NE. of Riverview School, 30 ft . W. of rd., in root of $10-1 \mathrm{n}$. white-oak tree; copper nail and washer
936.14
T. 41 N., R. 19 W., near line between secs. 20 and $29,-36 \mathrm{ft}$. S. (?) of sec. Inne, 20 ft . W. of rd., in root of $12-1 \mathrm{n}$. red-oak tree; copper nail and washer
990.24
T. 41 N., R. 19 W., 675 ft . E. of quarter cor. between secs. 20 and 21 , 36 ft . SE. of crossroads, 21 ft . S. of E. W. rd., in root of $6-\mathrm{in}$. elm tree; copper nail and washer

1,013.19
T. 41 N., R. 19 W., 333 ft . N. and 2 ft . W. from quarter cor. between secs. 17 and $20,0.2 \mathrm{ml}$. SE. of Minnow Branch, $1,000 \mathrm{ft}$. SE. of dwelling of J. A. Cowell, $78 \mathrm{ft} . \mathrm{S}$. of rd., 33 ft . S . of fence corner, 2 ft . W. of fence, 25 ft . SW. of $24-\mathrm{in}$. red-oak tree, in concrete post; standard tablet stamped "T T 398 C W A 1934"
920.138

Reference mark, 72 ft . N. of tablet, in root on W. side of 20-in. red-oak tree; copper nail and washer
T. 41 N., R. 19 W., in SW $1 / 4$ sec. $17,150 \mathrm{ft}$. N. of Minnow Branch, 50 ft. $N$. and 20 ft . E. from crossroads, in root of $20-1 n$. white-oak tree; copper nall and washer
T. 41 N., R. 19 W., in NW $1 / 4$ NW $1 / 4$ sec. 17, about 0.3 mi . SE. of Minnow Branch School, at top of high hill, on land of Lee Braden, 20 ft . W. of rd., in concrete post; standard tablet stamped "T T 399 C W A 1934"
Reference mark, 250 ft . NW. of tablet, in fence line, in root on w. side of l2-in. walnut tree; copper nail and washer

1,021.79
T. 41 N., R. 19 W., in SW $1 / 4$ sec. $\delta, 10 \mathrm{ft}$. S. and 36 ft . E. from SE. corner of Minnow Branch School, 78 ft . N. of rd., in root of 22-in. white-oak tree; copper nail and washer
975.25
4. FROM GRAVOIS MILLS GUADRANGLE AT SEC. 35, T. 41 N., R. 19 W., NORTHWEST TO SEC. 21, T. 41 N., R. 19 W. (by C. P. Thompson in 1934)
(Continued from Gravois Mills quadrangle; see line 8.)
T. 41 N., R. 19 W., 445 ft. W. of stone at center of NW $1 / 4$ sec. 35 , 25 ft . S. and 25 ft . W. from T-rd. S. at Little Buffalo Store, in concrete post; standerd tablet stamped "T T 549 C W A 1934"
Reference mark, 10 ft . S. and 51 ft . E. from tablet, in root on SW. side of $8-1 \mathrm{n}$. walnut tree; copper nail and washer

Feet
696.971
697.38
T. $41 \mathrm{~N} ., \mathrm{R} .19 \mathrm{~W}$. , near center of $\mathrm{NW} 1 / 4 \mathrm{sec} .34,1 \mathrm{mi}$. W. of Little

Buffalo store, 36 ft . S. and 12 ft . E. from ra. corner E.-S., in NW. corner of barnlot of Athel Taylor, in root on N. side of 22-in. walnut tree; copper nail and washer
675.20
T. 41 N., R. 19 W., quarter cor. between secs. 28 and 33,22 ft. W. of $\mathrm{N} .-\mathrm{S}$. rd., 18 ft . S . and 10 ft . E. from fence corner, in fence line, in root on SW. side of 22-in. white-oak tree; copper nall and washer
T. 41 N., R. 19 W., near quarter cor. between secs. 21 and 28 , about 70 ft . N. of sec. line, 24 ft . E. of N. -S . rd., in root on NW. side of $22-1 n$. red-oak tree; copper nail and washer
867.95
998.54
5. FROM SIIITHTON QUADRANGLE AT SEC. $13, T .43$ N., R. 21 W., WEST INTO LINCOLN QUADRANGLE AT SEC. 16, T. 43 N., R. 21 W. (by C. P. Thompson in 1934)
(Continued from Smithton quadrangle; see line 1.)
Schnackonburg triangulation sta.; U.S.C. \& G.S. standard disk stamped "Schnackenburg 1882"

1,088.406
Reference mark 2 ; U.S.C. \& G.S. standard reference disk
T. 4.3 N., R. 21 W., near E. sixteenth cor. sec. $14,17 \mathrm{ft}$. S. and 20 ft . E. from Missouri Pacific R.R. at rd. crossing, in concrete post; standard tablet stamped "1553 C W A 1934"
Reference mark, 32 ft . N. and 255 ft . W. from tablet, $9 \mathrm{ft} . \mathrm{N}$. and 180 ft . E. from T-rd., on E. end of N. head wall of concrete culvert; chiseled square
T. 43 N., R. 21 W., near quarter cor, between secs. 14 and 15 , $12 \mathrm{ft} . \mathrm{S}$. and 18 ft . W. from crossroads, on E . end of concrete culvert; chiseled square
T. 43 N., R. 21 W., 9 ft . N. and 16 ft . E. from E. sixteenth cor. sec. 16, 0.4 ml . E. of St. John's Lutheran Church, on E . end of N . head wall of concrete culvert; chiseled square
(Continued in Lincoln quadrangle; see line 3.)
6. FROM SEC. 3, T. 41 N., R. 20 W., NORTH AND WEST INTO LINCOLN QUADRANGLE AT SEC. 28, T. 42 N., R. 21 W. (by Cornish Beck and C. P. Thompson in 1934)
T. 42 N., R. 20 W., quarter cor. between secs. 33 and $34,18 \mathrm{ft}$. E. of N.-S. rd., at gatepost, in root on W. side of 18-1n. post-oak tree; copper nail and washer
T. 42 N., R. 20 W., quarter cor. between secs. 28 and $33,35 \mathrm{ft}$. W. of rd. corner, 12 ft . W. of fence, in field, in concrete post; standard tablet stamped "T T 564 C W A 1934"
996.64

Reference mark, 9 ft . S. and 9 ft . W. from tablet, in root on NW. side of 10-in. post-oak tree; copper nail and washer
972.408
T. 42 N., R. 20 W., 230 ft . S. and 10 ft . E. from approximate quarter cor. between secs. 21 and 28 , on center of $E$. head wall of concrete culvert; chiseled square
972.50
956.38
T. 42 N., R. 20 W., W. sixteenth cor. between secs. 16 and $21,36 \mathrm{ft} . \mathrm{S}$. and 24 ft . E. from T-rd. W., in fence corner, in root on NW. side of 18-in. black-oak tree; copper nail and washer

1,026.18
T. 42 N., R. 20 W., near quarter cor. between secs. 17 and 20 , $30 \mathrm{ft} . \mathrm{N}$. and 50 ft . E. from crossroads, 30 ft . S. of school, in concrete post; standard tablet stamped "T T 565 C W A $1934^{\prime \prime}$
Reference mark, 3 ft . N. and 10 ft . E. from tablet, in root on S . side of 24 -in. oak tree; copper nail and washer

1,027.879
1,027.17
le camp, 3.5 mi . S. and 2 ml . E. from, near quarter cor. between secs. 19 and 20, T. 42 N., R. 20 W., 39 ft . N. and 13 ft . E. from rd. forks, at mail box of C. C. Waters, in root on W. side of 16-in. black-oak tree; copper nall and washer
Cole Camp, 4.2 mi . S. and 1 ml . E. from, in NW $1 / 4$ sec. 30 , T. 42 N. , R. 20 W., 45 ft . E. of rd. forks, 10 ft . S. of rd., in root on N . side of 20-1n. post-oak tree; copper nail and washer

1,041.10
T. $42 \mathrm{~N} ., \mathrm{R} .21 \mathrm{~W} .$, in $\mathrm{NW} 1 / 4 \mathrm{SW} 1 / 4 \mathrm{sec} .25$, about 4.8 mi . S. of Cole Camp, $40 \mathrm{ft} . \mathrm{E}$. of Cole Camp-Edmonson rd., 12 ft . W. of private rd. NE. -SW., 115 ft . N. of private rd. E., on land owned by George Kreisel, in concrete post; standard tablet stamped "T T 566 C W A $1934^{\circ}$ "
Reference mark, 8 ft . W. of tablet, in root on E. side of $8-1 \mathrm{n}$. post-oak tree; copper nail and washer
T. 42 N., R. 21 W., near center of NE $1 / 4$ sec. 35 , on land owned by E. J. Kreisel, 40 ft . N. and 35 ft . E. from Trra. SE., in root on S. side of 14-in. white-oak tree; copper nail and washer
972.29
T. 42 N., R. 21 W., in SW. cor. sec. 26 , about 0.2 mi. SE. of farmhouse of Herman Schumaker, 12 ft . S. of NW. -SE. rd., in root on N. side of 30-1n. elm tree; copper nail and washer
937.644
937.31
819.54
T. $42 \mathrm{~N} ., \mathrm{R}$. 21 W. , near center of $\mathrm{SE} 1 / 4 \mathrm{sec}$. $27,21 \mathrm{ft}$. W. of rd. corner NE. -SE. and private rd. NW.-SW., on SE. corner of N. head wall of concrete bridge; chiseled square
749.07
766.01
T. 42 N., R. 21 W., in NE $1 / 4 \mathrm{SW} 1 / 4$ sec. $28,0.2 \mathrm{ml}$. SW. of dwelling of Moritz' Schumaker', 18 ft . W. of private rd. at curve, 6 ft . E. of fence, in concrete post; standard tablet stamped "T T 567 C W A 1934"
Reference mark, $300 \mathrm{ft} . \mathrm{N}$. and 60 ft . W. from tablet, in root on sw. side of $30-1 \mathrm{n}$. elm tree; copper nail and washer

Feet<br>743.851<br>745.90

(Continued in Lincoln quadrangle; see line 5.)
7. FROM SEC. 4 , T. 43 N., R. 21 W., SOUTH TO SEC. 25, T. 42 N., R. 21 W. (by Cornish Beck in 1934)

Cole Camp, 2 mi. N. of, quarter cor. between secs. 23 and 24, T. 43 N.,
R. 21 W., about 135 ft . N. and 25 ft . W. from rd. corner, at driveway
to farmhouse, on center of W. head wall of culvert; chiseled square
Cole Camp, about 0.7 mi . N. of, N. sixteenth cor, between secs. 25 and 26, T. 43 N., R. 21 W., $185 \mathrm{ft} . \mathrm{S}$. and 25 ft . W. from T-rd. W., 1 ft . E. of cemetery fence, in concrete post; standard tablet stamped "T T 656 C W A 1934"

1,053.561
Cole Camp, 45 ft . S. and 40 ft . W. from $S W$. corner of Missouri Pacific R.R. sta., on center of head wall of concrete culvert; chiseled square

Cole Camp, at S. edge of, in NE $1 / 4 \mathrm{sec} .2, \mathrm{~T} .42 \mathrm{N.}, \mathrm{R} 21 W.$. , at foot of first hill on rd. S., 12 ft . S. of rd., on head wall of concrete culvert; chiseled square

1,017.48
964.96

Cole Camp, $1.6 \mathrm{mi} . \mathrm{S} .0 \mathrm{f}$, near line between secs. 1 and 2 (?), T. 42 N. R. 21 W ., 30 ft . E. of junction of dim rd. E., at gatepost, in root on W. side of $16-1 n$. post-oak tree; copper nail and washer
T. 42 N., R. 21 W., quarter cor. between secs. 11 and 12,44 ft. S. and 24 ft . W. from crossroads, in concrete post; standard tablet stamped "T T 657 C W A 1934"
Cole Camp, 3.7 mi . S. of, in SE $1 / 4 \mathrm{sec} .14, \mathrm{~T} .42 \mathrm{~N} ., \mathrm{R} .21 \mathrm{~W} .$, at top of hill, 6 ft . S. and 30 ft . E. from crossroads, in root on w. side of $24-i n$. white-oak tree; copper nail and washer
Cole Camp, 4.8 mi . S. of, in SE $1 / 4 \mathrm{sec} .23, \mathrm{~T} .42 \mathrm{~N} ., \mathrm{R} .21 \mathrm{w} ., 75 \mathrm{ft}$. SE. of T-rd. NE. to dwelling of Alonzo Downs, 25 ft . E. of rd., in root on W. side of twin 16-1n. white-oak tree; copper nail and washer
8. FROM LINCOLN QUADRANGLE AT SEC. 28, T. 41 N., R. 21 W., EAST TO SEC. 17, T: 41 N., R. 19 W. (by C. T. Shepherd in 1935)

## (Continued in Lincoln quadrangle; see line ll.)

Edmonson, about 0.7 ml . W. of, along Edmonson-Warsaw rd., in NE $1 / 4 \mathrm{NW} 1 / 4$ sec. 27, T. 41 N., R. 21 W., 20 ft. S. of S. bank of Cole Camp Creek, 12 ft . S. of rd., 5 ft . SE. of fence corner, in concrete post; standard tablet stamped "T T 556 C W A 1934"
700.853

Edmonson, in SE 1/4 sec. 22, T. 41 N., R. 21 W., 120 ft. N. of crossroads, 18 ft . W. of NW. corner of store, on center of $E$. head wall of concrete culvert; chiseled square
762.26

Edmonson, 0.8 mi. SE. of, near N. sixteenth cor. sec. 26, T. 41 N., R. 21 W., 25 ft . N. of T-rd. S., in root on S. side of l2-in. oak tree; copper nall and washer
761.04

Edmonson, 1.2 mi . SE. of, near E. sixteenth cor. sec. 26, T. 41 N., R. 21 W., 10 ft . N. of rd. forks, in root on N. side of $24-1 \mathrm{n}$. oak tree; copper nall and washer
906.16

Edmonson, 2 mi . SE. of, near N . sixteenth cor. between secs. 35 and 36 , T. 41 N., R. 21 W., at low-water bridge, on NW. angle of concrete floor; chiseled square
T. 41 N., R. 21 W., in NW $1 / 4$ SE $1 / 4 \mathrm{sec}$. 36 ; at top of hill, 20 ft . S. of rd., 11 ft . NW. of triangular-blazed $10-1 \mathrm{n}$. post-oak tree, in concrete post; standard tablet stamped "1265 E R A 1935"
912.794
T. 41 N., R. 20 W., in NW $1 / 4 \mathrm{SW} 1 / 4 \mathrm{sec} .31,21 \mathrm{ft}$. NW. of rd. forks, in root on S. side of $24-1 n$. oak tree; copper nall and washer
T. 40 N., R. 20 W., in NW $1 / 4$ NE $1 / 4$ sec. 6 , 75 ft . S. of rd. forks, in root on E. side of 24-in. oak tree; copper nail and washer
T. 40 N., R. 20 W., in SE $1 / 4$ NE $1 / 4$ sec. $5,285 \mathrm{ft} . \mathrm{N}$. of bridge over Flat Rock Creek, 40 ft . W. of rd. fork W., 345 ft . N. of rd. fork SE., 63 ft . N. and 63 ft . W. from NW. corner of log dwelling of W. T. Hagstod, in concrete post; standard tablet stamped "1267 E R A 1935"
707.838
T. 41 N., R. 20 W., near center sec. $33,100 \mathrm{ft}$. S. of entrance to sawmill, 20 ft . E. of rd., in root on W. side of $12-1 n$. oak tree; copper na1l and washer
848.99
T. 41 N., R. 20 W., in SE $1 / 4$ NW $1 / 4 \mathrm{sec} .28$, 15 ft . W. of rd., in root on E. side of triangular-blazed $24_{4}$-in. oak tree; copper nail and washer
T. 4 l N., R. 20 W., in $S \overline{1 / 4} \mathrm{SE} 1 / 4 \mathrm{sec} .21,60 \mathrm{ft}$. W. of rd. forks, at fence corner, in root on $N$. side of $18-1 n$. oak tree; copper nail and washer
T. 41 N., R. 20 W., in NE $1 / 4$ SE $1 / 4$ sec. 22, on E. head wall of concrete culvert; chiseled square
T. 41 N., R. 20 W., in NE $1 / 4 \mathrm{NW} 1 / 4$ sec. $23,200 \mathrm{ft}$. E. of ford across Archer Creek, 100 ft . W. of T-rd. W., S. of rd., in root on N. side of 10-in. hickory tree; copper nall and washer
T. 41 N., R. 20 W., about 0.1 ml . W. of cor. secs. $13,24,23$, and 24 , 15 ft . E. of T-rd. W., in root on W. side of $36-1 \mathrm{n}$. oak tree; copper nail and washer bridge over Big Buffalo Creek, 5 ft . S. of triangular-blazed $10-1 \mathrm{n}$. sycamore tree, in concrete post; standard tablet stamped "T T 1268 ERA 1935"
T. 41 N., R. $20 \mathrm{~W} ., 1 \mathrm{n} \mathrm{SE} 1 / 4 \mathrm{SE} 1 / 4 \mathrm{sec}$. 24 , at Benton-Morgan county line, 300 ft . E. of crossing of small creek, $15 \mathrm{ft} . \mathrm{N}$. of rd., in root on S. side of $24-1 \mathrm{n}$. oak tree; copper nail and washer
T. 41 N., R. 19 W., in $S W 1 / 4$ NE $1 / 4 \mathrm{sec} .19,50 \mathrm{ft} . \mathrm{S}$. of rd. on N. bank of Minnow Branch, 250 ft . W. of dwelling of J. M. Hames, in root on $N$. side of $24-1 n$. box-elder tree; copper nail and washer

## Feet

741.94
740.90

For additional level lines along Chicago, Rock Island \& Pacific Ry. and Missouri Pacific R.R., refer to United States Coast and Geodetic Survey second-order lines, Versailles to Windsor and Warsaw to Nay.

MITHTON QUADRANGLE
(Latitude $38^{\circ} 30^{\prime}-38^{\circ} 45^{\prime}$; longitude $93^{\circ} 00^{\prime}-93^{\circ} 15^{\prime}$ )
Benton, Cooper, Morgan, and Pettis Counties


1. FROM SEDALIA SOUTH INTO COLE CAMP QUADRANGLE AT SEC. 13, T. 43 N., R. 21 W. (by C. P. Thompson in 1934)

Sedalia, about 2 mi . E. of, about $1,000 \mathrm{ft}$. SE. of SE. corner of Missouri Pacific R.R. shops, 44 ft . N. of main track, 21 ft . W. of Beaman rd., in concrete post; U.S.C. \& G.S. and State Survey standard tablet stamped "1541 C W A 1934"
Reference mark, 84 ft . S. of tablet, on top of rim or manhole; chiseled cross
894.721
894.44

Sedalia, about 2 mi . E. of, 70 ft . E. of line between secs. 1 and 2 T. 45 N., R. 21 W., 55 ft . S. of U.S. Highway $50,26 \mathrm{ft}$. N. and 28 ft . W. from NW. corner of school, in concrete post; U.S.C. \& G.S. and State Survey standard tablet stamped "1542 C W A 1934"
878.784

Sedalia, about 2 ms . E., thence $0.6 \mathrm{mi} . \mathrm{S}$. from, about 400 ft . S. of center of NE $1 / 4 \mathrm{sec}$. 11, T. $45 \mathrm{N.}, \mathrm{R} 21 \mathrm{~W} .,$. about 0.6 mi . S. of U.S. Highway 50, on W. side of Marshall Avenue, on N. end of head wall of culvert; chiseled square
869.74

Sedalia, about 2 mi . E., thence 1.4 ml . S. from, about 370 ft . N. of center of NE $1 / 4$ sec. 14, T. 45 N., R. 21 W., 15 ft. E. of Marshall Avenue rd., on $S$. end of head wall of concrete culvert; chiseled square
Sedalia, about 2 ml . E., thence 1.8 ml . S. from, 24 ft . N. and 5 ft . W. from quarter cor. between secs. 13 and 14, T. 45 N., R. 21 W., N. of T-rd. S., in fence corner, in concrete post; U.S.C. \& G.S. and State Survey standard tablet stamped "1543 C W A 1934"
Reference mark, 9 ft . SW. of tablet, in fence line, in root on w. side of 10-1n. hedge tree; copper nall and washer
Sedalia, about 2 ml . E., thence 2 mi . S. fron, $328 \mathrm{ft} . \mathrm{N}$. and $17 \mathrm{ft} . \mathrm{W}$. from S. sixteenth cor. between secs. 13 and $14, \mathrm{~T} .45$ N., R. 21 W., on knoll in woods, 17 ft . W. of rd., in concrete post; U.S.C. \& G.S. and State Survey standard tablet stamped "1544 C W A 1934"
T. 45 N., R. 21 W., N. sixteenth cor. between secs. 23 and 24, 500 ft . E. of crossroads, on W. side of S. head wall of culvert; chiseled square
T. 45 N., R. 21 W., N. sixteenth cor. sec. 24 , about 500 ft . E. of T-rd. N., at Abel Bridge over Flat Creek, at NW. corner of NW. pier, on top of westernmost rivet on bracket plate; chiseled cross
T. 45 N., Rs. 20 and 21 W., cor. secs. $19,24,25$, and $30,406 \mathrm{ft}$. N. and 48 ft . W. from rd. corner W.-S., in concrete post; U.S.C. \& G.S. and State Survey standard tablet stamped " 1545 C W A 1934"
Reference mark, $25 \mathrm{ft} . \mathrm{S}$. and 69 ft . W. from tablet, in root on NW. side of $30-1 \mathrm{n}$. elm tree; copper nail and washer
T. 45 N., Rs. 20 and 21 W., cor. secs. 19, 24,25 , and $30,630 \mathrm{ft}$. S. and 22 ft . E. from, 30 ft . W'. of entrance to Farmer's Grange Hall, in
concrete post; U.S.C. \& G.S. and State Survey standard tablet stamped
"1546 C W A 1934 "
T. 45 N., R. 21 W., E. cor. secs. 25 and $36,10 \mathrm{ft}$. S. and 600 ft . W. from T-rd., on $E$. end of $S$. head wall of concrete bridge; chdseled square
T. 45 N., R. 21 W., near E. sixteenth cor. sec. 36 , 10 ft . W. of rd., on center of head wall of concrete culvert; chiseled square

Feet
770.61
850.90
896.023
895.26
887.364
887.39
895.67
976.821
976.45
984.989
985.78

1,016.913
1,020.17

1,041.10
998.99
(Continued in Cole Camp quadrangle; see line 5.)
2. FROM COLE CAMP QUADRANGLE AT SEG. 10, T. 43 N., R. 19 W., WEST TO SEC. 7, T. 43 N., R. 20 W. (by C. P..Thompson in 1934)
(Continued from Gravois M1lls quadrangle; see line 9.)
T. 43 N., R. 19 W., near center of $\mathrm{SE} 1 / 4 \mathrm{sec} .10$, at old site of Pyrmont, $45 \mathrm{ft} . \mathrm{N}$. of rd., in pasture of Will Gardner, in root on S . side of 36-in. red-oak tree; copper nail and washer
$977 \cdot 20$
T. 43 N., R. 19 W., near center of SE $1 / 4$ sec. 9 , on top of hill, 125 ft . S. of SW. corner of Lutheran Church, 18 ft . S. of winding E.-W. rd., in root on N. side of l8-in. oak tree; copper nail and washer
975.76
T. 43 N., R. 79 W., W. sixteenth cor. between secs. 4 and 9, about 240 ft . S. and 165 ft . E. from, 30 ft . N. and 38 ft . W. from State Highway 135 at rd. E., in root on E. side of $10-1 n$. white-oak tree; copper nail and washer
T. 43 N., R. 19 W., near N. sixteenth cor. between secs. 8 and 9, 306 ft . SW . of rd. junction, 27 ft . NW. of State Highway $135,66 \mathrm{ft}$. S. of rd., in concrete post; U.S.C. \& G.S. and State Survey standard tablet stamped "38 C W A 1934"
T. 43 N., R. 19 W., about 500 ft. S. of quarter cor. between secs. 5 and $8,80 \mathrm{ft}$. W. of rd . forks, 12 ft . N. of rd. NW., in root on S. side of twin 30-in. white-oak tree; copper nail and washer
$1,031.16$

1,031.536
T. 43 N., R. 19 W., quarter cor. between secs. 7 and 8 , about 65 ft . N. and 75 ft . E. from, 20 ft . S . of rd. SW., in triangle formed by junction of private rd., in root on NW. side of 26-in. post-oak tree; copper nail and washer
988.68
T. 43 N., R. 19 W., near W. quarter cor. sec. 7, 35 ft . N. and 125 ft . W. from T-rd. S., at crossing on E. bank of How Creek, 25 ft . N. of winding rd., in fence corner, in root on W. side of l2-in. hackberry tree; copper nail and washer
T. 43 N., R. 20 W., near S. sixteenth cor. between secs. 11 and 12 , on side of ridge, 20 ft . N. of E. W. rd. at curve, on wooded land, in root on S. side of 10-1n. white-oak tree; copper nail and washer

Feet
965.96

1,061.54 E.-W. rd. at rd. forks, at SE. corner of cemetery, on center of $E$. head wall of concrete culvert; chiseled square
T. 43 N., R. 20 W., near center of $S W 1 / 4 \mathrm{sec} .10,21 \mathrm{ft}$. N. and 96 ft . E. from T-rd. S., 63 ft . S. of Lake Creek School, in concrete post; U.S.C. \& G.S. and State Survey standard tablet stamped "39 C WA 1934"

Reference mark, 60 ft . S. and 60 ft . W. from tablet, in root on N . side of $18-1 n$. white-oak tree; copper nail and washer

1,017.664
T. 43 N., R. 20 W., in NW $1 / 4$ sec. $9,110 \mathrm{ft}$. N. and 108 ft . W. from crossroads, on SE. corner of bottom step to Lutheran Church; chiseled square

1,014.50
T. 43 N., R. 20 W., near center of NW $1 / 4$ sec. 9 , on NE. wing wall of concrete bridge over Lake Creek; chiseled square
977.62
T. 43 N., R. 20 W., approximate quarter cor. between secs. 7 and 8, 50 ft . S. and 10 ft . W. from T-rd. E., on W. head wall of concrete culvert; chiseled square
908.04
978.97
3. FROM GREEN RIDGE QUADRANGLE AT SEC. 33, T. $45 \mathrm{~N} ., \mathrm{R} .21$ W., EAST
(Continued from Green Ridge quadrangle; see line 3.)
T. 44 N., R. 21 W., near W. sixteenth cor. on N. Iine sec. 4, at Valda, 90 ft . E. of E. face of church, on E. end of N. concrete head wall of culvert; chiseled square
815.14
T. 44 N., R. 21 W., in NE $1 / 4$ sec. 4 , 92 ft. N. and 33 ft . W. from NW. corner of farmhouse of R. D. Wood, 27 ft . S. of rd., in concrete post; U.S.C. \& G.S. and State Survey standard tablet
898.283
T. 44 N., R. 21 W., near W. sixteenth cor. on N. line sec. 3, 230 ft . W. of T-rd. N., 300 ft . W. of fence S., on E. end of N. head wall of concrete culvert; chiseled square
920.50
T. 44 N., R. 21 W., N. cor. secs. 2 and $3,560 \mathrm{ft}$. E. of T-rd. N., on N. end of $W$. concrete abutment of bridge over creek; chiseled square
T. 14 N., R. 21 W., 700 ft . W. of N. cor. secs. 1 and $2,680 \mathrm{ft}$. E. of T-rd. S., on S. head wall of concrete culvert; chiseled square
4. FROM GREEN RIDGE QUADRANGLE EAST ALONG MISSOURI PACIFIC RAILROAD TO OTTERVILLE (by S. B. Scott in 1934)
(Continued from Green Ridge quadrangle; see line 4.)
Sedalia, near W. limits of, 40 ft . E. of Park Avenue, 90 ft . N. of main track, in concrete post; U.S.C. \& G.S. and State Survey standard tablet stamped "T T 31 C 1936"
Sedalia, on N. side of courthouse, in stone sill of easternmost window; top of monel rivet
T. 45 N., R. 20 W., near NW. cor. sec. 8 , 35 ft. S. of track, 25 ft. E. of N.-S. rd., in concrete post; U.S.C. \& G.S. and State Survey standard tablet
Smithton, 1 mi . E. of, 40 ft . S. of track, near T-rd. W., 36 ft . E. of N.-S. rd., in concrete post; U.S.C. \& G.S. and State Survey standard tablet
Otterville, $1 \mathrm{mi} . \mathrm{SW}$. of, 30 ft . N. of track, 40 ft . E. of N. -S. rd., in concrete post; U.S.C. \& G.S. and State Survey standard tablet
U.S.C. \& G.S. B.M. designated "XXXVII"

Reference mark, 95 ft . S. of B.M., on NE. corner of concrete porch of Otterville Hotel; chiseled square
5. FROM OTTERVILLE NORTHWEST INTO NELSON QUADRANGLE AT SEC. 18, T. 46 N., R. 19 W. (by F. C. Lentz in 1936)

Otterville, in SW. corner of farm lot of L. E. Smith, 174 ft . NW. of dwelling, 20 ft . N. of rd., in concrete post; U.S.C. \& G.S. and State Survey standard tablet
Otterville, 0.5 mi . W. of, 93 ft . W. of rd. to Clifton City, 57 ft . SW. of SW. corner of dwelling of H. D. Case, 6 ft . N. of fence, in concrete post; U.S.C. \&G.S. and State Survey standard tablet
826.875
T. 46 N., R. 19 W., near W. quarter cor. sec. 33 , 85 ft . W. of rd. to Clifton City, 60 ft . N. of E.-W. fence, in root on NE. side of $30-1 \mathrm{n}$. locust tree; lead-headed nail
860.825
913.335
902.026
870.076
799.894
732.338
727.56
811.534
T. 46 N., R. 19 W., near SW. cor. sec. 28 , at turn in rd. to Clifton city

100 ft . SW. of farmhouse, in root on SW. side of 24 -in. elm tree; screw
T. $46 \mathrm{~N} ., \mathrm{R}$. 19 W. . in $\mathrm{SW} 1 / 4 \mathrm{sec} .29$, 1 ms . N. and 1.5 ml . W. from Otterville, 526 ft . S. and 559 ft . W. from SE. corner of concrete porch of school, in concrete post; U.S.C. \& G.S. and State Survey standard tablet
T. 46 N., R. 19 W., in SW $1 / 4 \mathrm{sec}, 29,1 \mathrm{mi}: \mathrm{N}$. and 1.8 mi . W. from otterville, at top of ridge, 692 ft . N. and 100 ft . W. from small farmhouse, in E.-W. fence line, in concrete post; U.S.C. \& G.S. and State Survey standard tablet
T. 46 N., R. 19 W., in NW $1 / 4 \mathrm{sec} .29$, N. of rd. to Clifton city at rd. fork NE., 100 ft . NW. of mail box of Alfred A. Hogan, 10 ft . NW. of blazed li-in. hickory tree, in stump; monel rivet
T. 46 N., R. 19 W., near NE. cor. sec. 30 , W. of rd. to Clifton City, in front yard of dwelling of H . H. Brooks, in root on E. side of 30-1n. oak tree; monel rivet
(Continued in Nelson quadrangle; see line 3.)
6. FROM SEDALIA NORTHEAST INTC NELSON QUADRANGLE AT SEC. 19,
T. 46 N., R. 20 W. (by F. C. Lentz in 1936)
U.S.C. \& G.S. standard disk stamped "Sedalia 1934"
908.765
U.S.C. \& G.S. standard disk stamped "B 961935 "
904.073

Sedalia, 0.5 mi . W. of Missouri Pacific R.R. shops, 200 ft . E. of mile-
pole 187.30, on right-of-way, on SW. corner of concrete base of semaphore; chiseled square
912.80

Sedalia, $1 \mathrm{mi} . \mathrm{N}$. and 0.2 mi . E. from U.S. Highway 50 at Marshall Avenue, near NW. cor. sec. 1, T. 45 N., R. 21 W., et intersection of Boonvilile Street and Beaman rd. (now Harding Avenve), on N. end of W. head wall of concrete culvert; chiseled square
885.81

Sedalia, 1.8 mi . N. and 0.5 mi . E. from U.S. H1ghway 50 at Marshall Avenue, near W. sixteenth cor. sec. 36, T. 46 N., R. $21 \mathrm{~W} ., 50 \mathrm{ft}$. N. of Missouri-Kansas-Texas R.R., 34 ft . E. of rd., on right-of-way, in concrete post; U.S.C. \& G.S. and State Survey standard tablet stamped "1563 C W A 1934"
874.254

Sedatia, about 1.9 mi . N. and 0.5 mi . E. from U.S. Highway 50 at Marshall Avenue, in NW $1 / 4$ sec. 36 , T. $46 \mathrm{~N} ., \mathrm{R}$. $21 \mathrm{~W} ., 38 \mathrm{ft}$. N. and 35 ft . E. from crossroads, in concrete post; U.S.C. \& G.S. and State Survey standard tablet stamped "1564 C W A 1934"
874.950

Sedalia, 2.8 mi . N. and 0.5 mil . E. from U.S. Highway 50 at Marshall
Avenue, about 390 ft . N . and 660 ft . W. from center sec. $25, \mathrm{~T} .46 \mathrm{~N}$., R. 21 W., on $S$. end of $E$. bead wall of concrete culvert; chiseled square

Sedalia, 3.2 mi . N. and 0.5 mi . E. from U.S. Highway 50 at Marshall Avenue, 660 ft . W. of quarter cor. between secs. 24 and 25, T. $46 \mathrm{~N} .$, R. 21 W., 15 ft . N. and 20 ft . W. from T-rd. W., on W. end of N. head wall of concrete culvert; chiseled square
T. $4.6 \mathrm{~N} ., \mathrm{R}$. $21 \mathrm{~W} ., 10 \mathrm{ft}$. N. of rd., on E. end of N. head wail of concrete culvert; chiseled square
Beaman, 1 ml . S. and 2 mi . W. from, near S. sixteenth cor. between
secs. 19 and 24, T. 46 N., Rs. 20 and 21 W., 27 ft. S. of rd., 8 ft.
E. of fence, on land of John Rector, in concrete post; U.S.C. \&: G.S. and State Survey standard tablet stamped "1565 C W A 1934"
859.705
(Continued in Nelson quadrangle; see line 4.)

> 7. FROM SEC. 36, T. 46 N., R. 21 W., NORTHWEST INTO NELSON QUADRANGLE AT SEC. 21 , T. 46 N., R. 21 W. (by F. C. Lentz in 1936)
T. 4.6 N., R. 21 W., cor. secs. $25,26,35$, and 36 , on N. side of Griessen rd., 500 ft . E. of farmhouse, on W . end of N . head wall of concrete culvert; chiseled square
856.20

T-rd. S., on top of head wall of concrete culvert; painted square 873.90
. 46 ., R. 21 ., cor. secs. $26,27,34$, and $35,340 \mathrm{ft} . \mathrm{N}$. of intersection of Griessen rd. snd Longwood rd., E. of rd., on N. end of E. head wall of concrete culvert; chiseled square
882.48

Sunny Side School, at entrance, on concrete walk; chiseled square
862.84
T. 46 N., R. 21 W., near NW. cor. sec. 26 , about 1 mi . N. of NE. limits of Sedalia, inside property line E. of Longwood rd., 42 ft . S. and 11 ft . E. from corner of $E$. head wall of double wing culvert, 32 ft . S. and 42 ft . E. from S . end of W . head wall, in concrete post; U.S.C. \& G.S. and State Survey standard tablet
851.516
779.71
on W. end of $N$. handrail of concrete bridge; chiseled square
(Continued in Nelson quadrangle; see line 7.)

## 8. FROM SEDALIA WEST ALONG U.S. HIGHWAY 65 INTO GREEN RIDGE QUADRANGLE (by F. C. Lentz in 1936)

Sedalia, at SW. corner of West Broadway (also U.S. Highway 65) and Park Streets, on top of concrete curb; chiseled square
(Continued in Green Ridge quadrangle; see line 6.)
9. FROM SEC. 36, T. 45 N., R. 21 W., EAST INTO TIPTON QUADRANGLE
T. 44 N., R. 20 W., in NW $1 / 4$ (NE $1 / 4$ ?) sec. 6, 100 ft. s. and 15 ft . E. from T-rd. S., in root of $13-1 \mathrm{n}$. elm tree; copper nasil and washer
880.44
T. 44 N., R. 20 W., in NE $1 / 4$ sec. $5,20 \mathrm{ft} . \mathrm{S}$. and 60 ft . E. from rd. corner, in root on S. side of 14 -in. white-oak tree; copper nail and washer
Tps. 44 and 45 N., R. 20 W., W. sixteenth cor. between secs. 4 and 33 , $21 \mathrm{ft} . \mathrm{N}$, and 404 ft . E. from T-rd. N., 18 ft . S. and 15 ft . E. from SE. corner of dwelling of C. W. Jackson, in concrete post; standard tablet stamped "C W A 1934"

Tps. 44 and 45 N, R. $20 \mathrm{~W} .$, quarter cor. between secs. 3 and $34,30 \mathrm{ft}$. S. and 10 ft . E. from crossroads, on top of head wall of concrete culvert; chiseled square
T. 44 N., R. 20 W., in $E 1 / 2 \mathrm{sec} .2,0.5 \mathrm{mi}$. N. of Lutman, 45 ft . S. and 10 ft . E. from T-rd. E., on head wall of concrete culvert; chiseled
T. ${ }^{\text {square }} \mathrm{N} . \mathrm{R}$. 20 W ., on In ine between secs. 1 and 2 , about 0.5 mi . N. and
0.2 mi . E. from Lutman, 88 ft . N. of Lake Creek Methodist Church,

65 ft . S. of rd., 26 ft . E. of black-oak tree, in concrete post; standard tablet stamped "C W A 1934"
Reference mark, 88 ft . S . of tablet, on NE. corner of first concrete step to church; painted square
T. 44 N., R. 20 W., in $\mathrm{NW} 1 \mathrm{~h}_{4}$ sec. $1,55 \mathrm{ft}$. N. and 100 ft . W. from T-rd. N., at rd. corner from S.-E., in root on S. side of ly-in. white-oak tree; copper nail and washer
Lutman, about 2.2 mi . NE. of, on NW. corner of concrete bridge over Lake Creek; chiseled square
T-rd. W., SW. of, in root of 12-1n. white-oak tree; bent nail
917.290
921.32
T. $4.5 \mathrm{~N} ., \mathrm{R}$. $19 \mathrm{~W} ., \mathrm{E}_{\mathrm{o}}$ sixteenth cor. on S . 1 ine sec. $31,1.5 \mathrm{ft}$. N. and

140 ft . E. from T-rd. S., in root on S. side of 15-in. wainut tree; copper nail and washer
T. 45 N., R. $19 \mathrm{~W} .$, in $\mathrm{SE} 1 / 4$ sec. $31,65 \mathrm{ft}$. N . of rd, 12 ft . W. of rd.
N., l ft. W. of fence, in concrete post; standard tablet stamped "C WA 1934"

Reference mark, 35 ft . S. and 35 ft . F. from tablet, in root on N. side of 14-1n. pin-oak tree; copper nail and washer
Tps. 44 and 45 N., R. 19 W., E. sixteenth cor. between secs. 5 and 32 , 27 ft . S. and 100 ft . E. from crossroads, in root on NW. side of 6-in. hawthorn tree; copper nail and washer
haw 30 ft 20 form 20 from
T-rd. N., on W. end of concrete pipe culvert; chiseled square . Wrom
T. 44 N., R. 19 W., in NW $1 / 4$ sec. 3, on N. pier of concrete bridge over

Haw Creek; chiseled square
797.64
818.95
720.83
(Continued in Tipton quadrangle; see line 2.)
10. FROM MIPTON QUADRANGLE AT SEC. 34, T. 45 N., R. 19 W., NORTH ALONG COUNTY ROUTE A (now State Hi ghway ijs) AND OT'HER ROADS TO OTTERVILLE (by F. C. Lentz in 1936)
Florence, about 3 ml . NW. of, in NW $1 / 4$ sec. 34, T. 45 N., R. $19 \mathrm{~W} .$, 32 ft . N. and 75 ft . E. from junction of rd. N., I ft. S. and 47 ft . E. from telegraph pole in fence corner, in concrete post; standard tablet stamped "I401 C WA 1934"
866.420

Florence, 4.2 ml . NW. of, at SW. corner of steel bridge over Flat Creek, in $S$. end of concrete abutment; top of iron rod
T. $45 \mathrm{~N} ., \mathrm{R}$. 19 W. , near center of $\mathrm{NE} 1 / \Lambda_{+} \mathrm{sec} .29$, 300 ft . N. and 35 ft . E. from crossroad, 35 ft . SW. of highway at curve, in root on E. side of $30-\mathrm{in}$. elm tree; copper nail and washer
T. 45 N., R. 19 W. , near E. sixteenth cor. sec. $20,23 \mathrm{ft}$. S. and 25 ft .
E. from junction of ra. E., 13 ft . S. and 35 ft . E. from function of rd. W., 8 ft . S. end 3 ft . E. from fence corner, in concrete post; standard tablet stamped "1100 C W A 1934"
819.762
T. 45 N., R. 19 W., E. sixteenth cor. between secs. 17 and $20,35 \mathrm{ft} . \mathrm{N}$. of highway, 150 ft . S. and 100 ft . W. from farmhouse, in root on S . side of $28-1 n$. wild-cherry tree; copper nail and washer
884.05
T. 45 N., R. 19 W., quarter cor. between secs. 8 and $17,20 \mathrm{ft}$. N. and 35 ft . E. from E.-W, crossroad, in root on W. side of 12-in. ash tree; copper nail and washer
T. 45 N., R. 19 W., cor. secs. $8,9,16$, and $17,22 \mathrm{ft}$. N. and 85 ft . W. from crossroads, in root on W. side of l4-in. ceder tree; copper nail and washer
829.24
T. $45 \mathrm{~N} ., \mathrm{R}$. $19 \mathrm{~W} .$, cor. secs. $9,10,15$, and 16 , $59 \mathrm{ft} . \mathrm{S} .(\mathrm{N}$. ?) and 27 ft . W. from crossroads, 3 ft . S. and 86 ft . E. from SE. corner of brick School, in concrete post; U.S.C. \& G.S. and State Survey standard tablet
Reference mark, 20 ft . S. and 30 ft . W. from tablet, in root on N. side of $24-1 \mathrm{n}$. elm tree; copper nail and washer
Otterville, near SW. edge of, 120 ft . S. of Missouri Paciffc R.R., 150 ft . SE. of rd, crossing, 50 ft . S. and 40 ft . E. from rd. corner, in root on N. side of 30-1n. walnut tree; copper nail and washer
11. FROM TIPTON QUADRANGLE AT SEC. 34 , T. 44 N., R. 19 W., SOUTH INTO TIPTON QUADRANGLE AT SEC. $3, \mathrm{~T} .43 \mathrm{~N} ., \mathrm{R} .19 \mathrm{~W} .(\mathrm{by}$ F. C. Lentz in 1936)
(Continued from Tipton quadrangle; see line 3.)
T. 44 N., R. 19 w., in NW $1 / 4$ sec. 34 , 35 ft . E. of State Highway 135 at crossroad, in root of $12-1 n$. black-oak tree; copper nail and washer
(Continued in Tipton quadrangle; see line 3.)
For additional level lines along Missouri Pacific R.R., Missouri. Kansas-Texas R.R., and U.S. Highway 65, refer to United States Coast and Geodetic Survey first-order line, Jefferson City to Pleasant Hill; and second-order lines, Sedalia to Springfield and Sedalia to Sweet Springs.

Cooper, Pettis, and Saline Counties


1. FROM PILOT GROVE QUADRANGLE AT SEC. 4, T. 48 N., R. 19 W., NORTH INTO MARSHALL QUADRANGLE AT SEC. 29, T. 49 N., R. 19 W. (by
C. P. Thompson in 1934)

Feet
814.811 812.352
705.85
(Continued in Marshall quadrangle; see line l.)
2. FROM MARSHALL QUADRANGLE AT SEC. 29, T. 49 N., R. 21 W., SOUTH INTO SWEET SPRIJGS QUADRANGLE AT SEC. 20, T. 48 N., R. 21 W. (by C. P. Thompson in 1934)
T. 49 N., R. 21 W., near N. sixteenth cor. sec. $32,330 \mathrm{ft}$. N. and 7 ft . E. from T-rd. E., 200 ft . N. and 90 ft . E. from Pleasant Valley School, on E. end of $S$. head wall of concrete abutment of bridge over Buck Branch; chiseled square
T. 49 N., R. 21 W., quarter cor. between secs. 32 and $33,51 \mathrm{ft}$. N. and 84 ft . E. from, on top of hill, 4 ft . S. of SW . corner of farmhouse of Western Odways, in root on W. side of 18-in. persimmon tree; copper na1l and washer
T. 48 N., R. 21 W., near quarter cor. between secs. 4 and 5 , on U.S. Highway $40,20 \mathrm{ft}$. . and 375 ft . W. from crossroad, on E. end of N. head wall of concrete culvert; chiseled square
T. 48 N., R. 21 W., in $S 1 / 2$ sec. 8 , at rd. corner. N. -SW. , about 250 ft . NW. of farmhouse, 20 ft . W. of rd. N., at gate, in fence corner, in root on E. side of $36-1 \mathrm{n}$. burr-oak tree; copper nail and washer
T. 48 N., R. 21 W., quarter cor. between secs. 8 and $17,57 \mathrm{ft}$. N. and 33 ft . E. from, 33 ft . E. of N.-S. rd., in front yard of Fitzgerald farmhouse, in root on W. side of twin 20-in. white-oak tree; copper na11 and washer
T. 48 N., R. 21 W., quarter cor. between secs. 17 and 20 , 54 ft . N. and 24 ft . W. from, 39 ft . N. and 24 ft. W. from T-rd. E., 12 ft . S. and 34 ft . E. from SE. corner of farmhouse of Tracey Haggard, in root on E. side of $10-1 n$. ceaiar tree; copper nail and washer

## 3. FROM SMIIHTON QUADRANGLE AT SEC. 18, T. 46 N., R. 19 W., NORTH INTO FILOT GROVE QUADRANGLE AT SEC. $33, \mathrm{~T} .48 \mathrm{~N} ., \mathrm{R}$. 19 W. (by F. C. Lentz in 2936) <br> (Continued from Smithton quadrangle; see line 5.)

T. 46 N., R. 19 W., near S. sixteenth cor. between secs. 17 and 18 , 15 ft . W. of Clifton City rd., 900 ft . S. of SE. corner of farmhouse on Meadow Feet Gold Farm, 750 ft . N. of NW. corner of farmhouse of John Dove, in concrete post; U.S.C. \& G.S. and State Survey standard tablet
Clifton City, in central part of, 585 ft . N. of main line of Missouri-Kansas-Texas R.R., 162 ft . NE. of crossroads, 32 ft . E. of rd., 79 ft .
NE. of NE. corner of store bullding, in concrete post; U.S.C. \& G.S. and State Survey standard tablet
762.863
T. 46 N., R. 19 W., near center sec. 17, on Missouri-Kansas-Texas R.R., in W. end of N. obutment of culvert; small brass plug
710.19
T. 46 N., R. 19 W., in sec. 17, 1 mi. E. of Clifton City, N. of Missouri-Kansas-Texas R.R., on NW. corner of concrete base of S. post; (mark not described)
669.85
T. 46 N., R. 19 W., near line between secs. 16 and $17,170 \mathrm{ft}$. SW. of W. corner of Missourl-Kansas-Texas R.R. bridge 214.2 over Lamine River, 20 ft . N. of rd. at top of hill, in concrete post; U.S.C. \& G.S. and State Survey standard tablet
687.872
T. 4.6 N., R. 19 W., in sec. $9,1.5 \mathrm{mi}$. NE. of Clifton City, on S. side of Mssouri-Kansas-Texas R.R. signal tower 2137; top of W. bolt
656.79
T. 46 N., R. $29 \mathrm{~W} .$, in SE I/ 4 sec. 9, 24 ft . NW. of rd., 108 ft . SE. of NE. corner of dwelling of G. V. Streit, 96 ft . E. of N. corner of barnlot, 76 ft . NE. of windmili, in concrete post; U.S.C. \& G.S. and State Survey standard tablet
768.441
T. 46 N., R. 19 W., cor. secs. 3, 4, 9, and $10,108 \mathrm{ft}$. SE. of T-rd., 30 ft . W. of SW . corner of Oak H11l. School, 120 ft . NW. of NE. corner of porch of church, in concrete post; U.S.C. \& G.S. and State Survey standard tablet
816.644
T. 46 N., R. 19 W., near quarter cor, betwean secs. 3 and $4,0.3 \mathrm{mi}$. S. of Missouri-Kansas-Texas R.R., 0.2 ml . S. of dwelling, 15 ft . W. of raj., in root of $10-1 n$. walnut tree; copper nail and washer
T. 46 N., R. 19 W., near NW. cor. sec. 3, on rd. to Oak Hill School, 600 ft . NE. of Decker farmhouse, 120 ft. S. of Spririg Branch, in root of $30-1 \mathrm{n}$. white-oak tree; copper nail and washer
747.21
T. 47 N., R. 19 W., N. sixteenth cor. between secs. 33 and 34, at T-rd., on N. end of W. wall of concrete culvert; chiseled square
690.17 $47 \mathrm{~N} ., \mathrm{R} .19 \mathrm{~W} ., 50 \mathrm{ft}$. S. of line between secs. 28 and $33,0.2 \mathrm{mi}$
SE. of dwelljng of John Schibi, on N. end of E. wall of concrete culvert; chiseled square
666.56
T. 47 N., R. 19 W., in $N W 1 / 4$ sec. 33 , about 0.3 ml . E. of farmhouse of John Schibi, 10 ft . W. of rd., in root of $10-1 \mathrm{n}$. hickory tree; copper nail and washer
T. 47 N., R. 19 W., near center sec. 28 , on NW. corner of concrete step to Rheinhart School; chiseled square
T. 47 N., R. 19 W., cor. secs. $21,22,27$, and $28,15 \mathrm{ft} . \mathrm{N}$. and 15 ft . E. from crossroads, 6 ft . N. of $E$. end of concrete culvert, in concrete post; standard tablet stamped "270 C W A 1934"
779.640
T. 47 N., R. 19 W., in sec. $21,350 \mathrm{ft}$. SE. of farmiouse of John Schupp, 250 ft . E. of rd. corner, N. of rd., in root of $10-1 \mathrm{n}$. sycamore tree; copper nall and washer
T. 47 N., R. 19 W., 300 ft . S. of line between secs. 16 and 21 , on NW. end of concrete culvert; chiseled square
T. 47 N., R. 19 W., near center sec. $16,6.4 \mathrm{mi}$. SW. of Pilot Grove, on rd. to Pleasant Green, 15 ft . S. and 15 ft . E. from T-rd. E., 200 ft . N . of rd. corner, in root on E. side of 20-in. white-oak tree; copper nail and washer
809.37
(For balance in Pllot Grove quadrangle, see line 3.)
T. 48 N., R. 19 W., in NE $1 / 4$ sec. 33 , 510 ft . E. of T-rd. at curve, 25 ft . S. and 125 ft . E. from rock posts at entrance to yard of dwelling of J. P. Mueller, in concrete post; standard tablet stamped "12 C W A 1934"
809.323
(Continued in Pilot Grove quadrangle; see line 3.)
4. FROM SMITHTON QUADRANGLE AT SEC. 19, T. 46 N., R. 20 w., NORTH TO SEC. 9, T. 47 N., R. 20 W., THENCE EAST TO SEC. 16, T. 47 N., R. 19 W. (by C. P. Thompson in 1934 and F. C. Lentz in 1936)
(Continued from Smithton quadrangle; see line 6.)
Beaman, 0.2 mi. S. and 1.5 mi . W. from, 25 ft . S. and 10 ft . W. from quarter cor. between secs. 18 and 19, T. $46 \mathrm{~N} ., \mathrm{R} .20 \mathrm{~W}$., on S. end of W. head wall of concrete culvert; chiseled square
Beaman, 1.5 ml . W. of, near center of $\mathrm{S} 1 / 2$ sec. $18, \mathrm{~T} .46 \mathrm{~N} ., \mathrm{R} .20 \mathrm{~W}$. , 21 ft . S. and 10 ft . E. from crossroads, on N . end of E. head wall of concrete culvert; chiseled square
Beaman, 0.5 mi . W. of, 580 ft . W. of S. sixteenth cor. sec. 17, T. 46 N. , R. $20 \mathrm{~W} ., 22 \mathrm{ft}$. N. of rd., 2 ft . N. and 4 ft . E. from fence corner, in concrete post; U.S.C. \& G.S. and State Survey standard tablet stamped "T T 1566 C W A 1934"
827.201

Beaman, 67 ft . N. of N. edge of porch of dwelling of P. A. Carry, 31 ft .
S. of iron pin in T-rd. N., in concrete post; U.S.C. \& G.S. and State Survey standard tablet stamped "1567 C W A 1934"
T. 46 N., R. $20 \mathrm{~W} ., \mathrm{S}$, sixteenth cor. between secs. 8 and $9,120 \mathrm{ft}$. S . and 27 ft . E. from T-rd. E., 800 ft . S. of Olive Branch Baptist Church, in concrete post; U.S.C. \&G.S. and State Survey standard tablet stamped "T T 1568 C W A 1934"
T. 46 N., R. 20 W., quarter cor. between secs. 8 and 9, $21 \mathrm{ft}$. . and $2 L_{4} \mathrm{ft}$. E. from T-rd. E., 700 ft . N. of Olive Eranch Baptist Church, in concrete post; U.S.C. \& G.S. and State Survey standard tablet stamped "T T 1569 C W A 1934"
T. 46 N., R. 20 W., near SE. cor. sec. $5,0.8 \mathrm{mi}$. N. of Olive Branch Baptist Church, on top of hill, near dwelling of A. Roger, 15 ft . W. of rd., in root on E. side of 30 -in. oak tree; copper nail and washer
T. $46 \mathrm{~N} ., \mathrm{R}_{\cdot} 20 \mathrm{~W} .$, in $\mathrm{NW} 1 / 4 \mathrm{sec} .4,1.8 \mathrm{mi}$. N. of Olive Branch Baptist Church, 25 ft . W. of rd., on land of J. G. Thomes, in root on E. side of 30-1n. elm tree; copper nail and washer
T. 47 N., R. 20 W. , in $\mathrm{NE} 1 / 4 \mathrm{SW} 1 / 4 \mathrm{sec} .33$, about 2.4 mi . N. of olive Branch Baptist Church, 190 ft . N. of dweliing of Grant Thomas, 46 ft . E. of rd., 35 ft . S. of blazed $\mathrm{l}_{4}-1 \mathrm{n}$. elm tree, 5 ft . N. of fence, in concrete post; U.S.C. \& G.S. and State Survey standard tablet stamped "T T 1570 C W A 1934 "
T. $47 \mathrm{~N} ., \mathrm{R} .20 \mathrm{~W} .$, near center sec. 33 , about 2.6 ml . N. of Oilve Branch Baptist. Church, 69 ft . NE. of rd. fork E., 18 ft . E. of rd., $47 \mathrm{ft} . \mathrm{N}$. of blazed 14-1n. post-oak tree, in concrete post; U.S.C. \& G.S. and State Survey standard tablet stamped "T T 1571 C W A 1934"
Lookout, 2 ml . S , of, 10 ft . S , and 10 ft . W. from W . sixteenth cor. between secs. 27 and $34, \mathrm{~T} .47 \mathrm{~N} ., \mathrm{R}$. $20 \mathrm{~W} ., 10 \mathrm{ft}$. W. of N. -S. rd., on $N$. end of W. head wail of concrete culvert; chiseled square
Lookout, 0.8 mi . S. of, in NE $1 / 4$ NW $1 / 4 \mathrm{sec} .27$, T. $47 \mathrm{~N} ., \mathrm{R} .20 \mathrm{~W}$. , at top of hill: 500 ft . S. and 500 ft . W. from school, 21 ft . E. of rd., in concrete post; U.S.C. \& G.S. and State Survey standard tablet ra., in concrete post; stamped T 1572 C F . 1934 "
Lookout, 0.4 mi . S. of, near S. sixteenth cor. sec. 22, T. 47 N. ,
R. 20 . W., 26 ft . W. of rd., 12 ft . N. of large gatepost, 6 ft . W.
of fence, in concrete post; U.S.C. \& G.S. and State Survey standard tablet stamped "T T 1573 C W A 1934"
Lookout, 0.5 mi . N. of, quarter cor. between secs. 15 and 22, T. 47 N., R. 20 W., 35 ft . N. and 15 ft . W. from crossroads, in root on E. side of $24-1 n$. post-oak tree; copper nail and washer
Lookout, 0.6 mi . N. of, quarter cor. between secs. 15 and 22, T. 47 N. , R. 20 W., 645 ft . N. and 27 ft . E. from crossroads, 20 ft . N. and 60 ft . W. from NW. corner of farmhouse, in root on W. side of 20-in. blacklocust tree; copper nail and washer
836.56

Lookout, 1.1 mi. N. of, in $\mathrm{SE} 1 / 4 \mathrm{NW} 1 / 4 \mathrm{sec} .15, \mathrm{~T} .47 \mathrm{~N} ., \mathrm{R} .20 \mathrm{~W}$. , 15 ft . S . and 42 ft . E. from crossroads, in old fence row, in concrete post; U.S.C. \& G.S. and State Survey standard tablet stamped "T $T$ 1574 C W A 1934"

Feet
729.346
742.952
843.98
746.61
735.581
692.727
770.93
817.645
805.543
815.70

Cartwright School, 0.5 mi . E., thence 0.9 mi . S. from, 0.4 mi . S. of quarter cor. between secs. 9 and 16, T. 47 N., R. $20 \mathrm{~W} ., 20 \mathrm{ft}$. S. and 40 ft . E. from T-rd. E., in fence corner, in root on SW. side of $24-1$. oak tree; copper nail and washer
709.837

Cartwright School, 0.5 mi . E., thence 0.2 ml . S. from, 510 ft . N. and 10 ft . E. from S. sixteenth cor. sec. 9, T. 47 N., R. 20 W., 12 ft. E. of rd., in root on W. side of $30-1 \mathrm{n}$. elm tree; copper nail and washer
Cartwright $S c h o o l, 15 \mathrm{ft} . \mathrm{S}$, and 60 ft . W. from Sw . corner of, quarter cor. between secs. 8 and 9, T. $47 \mathrm{N}$. , R. $20 \mathrm{~W} ., 70 \mathrm{ft} . \mathrm{N}_{\text {. }}$ and 325 ft . W. from County Route $J$ at rd. N., in root on S. side of $36-1 \mathrm{n}$. elm tree; copper nail and washer
$861 \cdot 52$
Cartwright School, 0.5 mi . N. of, cor. secs. 4, 5, 8, and 9, T. $47 \mathrm{~N} .$, R. 20 W., 60 ft . S. and 31 ft . E. from County Route J at rd. E., in concrete post; U.S.C. \& G.S. and State Survey standard tablet stamped "T T 1575 C W A 1934"
T-rd. S., N. of, on head wall of concrete culvert; chiseled square
T. $47 \mathrm{~N} ., \mathrm{R} .20 \mathrm{~W}$, about 0.1 mi . E. of cor. secs. 2,3 , 10 , and 11 , 75 ft . S. and 162 ft . E. from crossroads, on E. side of concrete step to Memorial Baptist Church; chiseled square
843.518
796.26
796.26
816.81
T. 47 N., R. 20 W., near center sec. $11,300 \mathrm{ft}$. N. and 125 ft . E. from farmhouse of Mrs. Beulah Durfee, 23 ft . E. of rd., 90 ft . S. of fence, in concrete post; U.S.C. \& G.S. and State Survey standard tablet stamped " 1576 C W A 1934"
806.435
T. 47 N., R. 20 W., in SE $1 / 4$ SE $1 / 4$ sec. 11,60 ft. W. of T-rd. S., N. of rd., on SW. corner of concrete walk to Union Church; chiseled square
T. $47 \mathrm{~N} ., \mathrm{R}$. 20 W ., in $\mathrm{SE} 1 / 4 \mathrm{sec}, 12,0.5 \mathrm{mi}$. W. of farmhouse of
E. Dilthey, on W. end of $S$. wall of concrete culvert; chiseled square
T. 47 N., R. 19 W., in $S W 1 / 4$ sec. 7 , at turn in rd., in 12-in. blackwainut tree; copper nail and washer
T. 47 N., R. 19 W., in NW $1 / 4 \mathrm{sec} .17$, at SE . corner of steel bridge over Lamine River, on E. end of $S$. abutment; chiseled square
T. 47 N., R. 19 W., in NW $1 / 4$ sec. $17,49 \mathrm{ft}$. E. of T-rd. W., in center of abandoned rd. E., in concrete post; U.S.C. \& G.S. and State Survey standard tablet
Rd. corner E.-S., on head wall of concrete culvert; chiseled square
Concrete culvert, on W. end of; (mark not described)
T. 47 N., R. 19 W., near center sec. $16,10 \mathrm{ft}$. S. of rd., on center of S. head wall of concrete culvert; chiseled square
5. FROM SWEET SPRINGS QUADRANGLE AT SEC. 20, T. 48 N., R. 21 W., SOUTH INTO SWEET SPRINGS QUADRANGLE AT SEC. 20, T. 47 N., R. 21 W. (by F. C. Lentz in 1936)
T. 48 N., R. 21 W., E. sixteenth cor. between secs. 29 and 32, 400 ft . S. and 15 ft . W. from T-rd. S., in root on $N$. side of twin 6-in. elm tree; copper nail and washer
Wooden bridge over creek, at SW. corner of, on W. end of concrete abutment; chiseled square
T. 47 N., R. 21 W., W. sixteenth cor. on N. line sec. 5, 30 ft . S. of T-rd. N., in concrete post; U.S.C. \& G.S. and State Survey standard tablet
Bridge over small creek; surface of floor
T. 47 N., R. 21 W., center sec. 5, 15 ft . N. and 15 ft . E. from T-rd. E., on head wall of concrete culvert; chiseled square
Bridge over small creek, on W. side of, at bottom of beam; top of angle

Bridge over small creek, on W. side of, at bottom of beam; top of angle
T. 47 N., R. 21 W., S. sixteenth cor. sec. B, 150 ft . N. and 250 ft . W. from NW. corner of school, 25 ft . E. of rd., in l2-in. hedge tree; copper nail and washer
T. 47 N., R. 21 W., N. sixteenth cor. sec. $17,198 \mathrm{ft}$. S. and 28 ft . W. from crossroads, 21 ft . N. and 2 ft . E. from E. entrance to High Hill Cemetery, in concrete post; standard tablet stamped "1094 C W A 1934"
Reference mark, $210 \mathrm{ft} . \mathrm{N}$. and 25 ft . E. from tablet, on iron pipe culvert; painted square
T. 47 N., R. 21 W., N. sixteenth cor. sec. $20,20 \mathrm{ft}$. N. and 15 ft . W. from T-rd. N., on head wall of concrete culvert; chiseled square

Feet
(Continued in Sweet Springs quadrangle; see line 6.)

> 6. FROM SEC. 17, T. 47 N., R. 21 W., EAST TO SEC. 15, T. 47 N., R. 21 W., THENCE EAST ALONG COUNTY ROUTE J TO SEC. 9, T. 47 N., R. 20 W. (by F. C. Lentz in 1936)
T. 47 N., R. 21 W., N. sixteenth cor. sec. $16,40 \mathrm{ft}$. S. and 200 ft . W. from rd. corner W.-N., in root on N. side of 40-in. elm tree; copper nail and washer
T. 47 N., R. 21 W., near W. sixteenth cor. between secs. 10 and 15 , $46 \mathrm{ft} . \mathrm{S}$. and 35 ft . E. from U.S. H1ghway 65 at County Route D. to W. and County Route $J$ to E., 2 ft . N. and 5 ft . E. from fence corner, in concrete post; standard tablet stamped $\mathrm{T}_{\mathrm{T}} \mathrm{T} 37 \mathrm{C} 1936^{\prime \prime}$
T. $47 \mathrm{~N} ., \mathrm{R} .21 \mathrm{~W} .$, in NE $1 / 4$ sec. $15,0.7 \mathrm{mi}$. E. of U.S. Highway 65, at SW. corner of concrete bridge over small creek, on concrete abutment; chiseled square
845.818
T. $47 \mathrm{~N} ., \mathrm{R}$. 21 W ., on line between secs. 11 and $24,30 \mathrm{ft}$. S. of school, 25 ft . N. of highway, on SE. corner of coricrete block; chiseled square
Junction of rd. S., on E. end of iron pipe culvert; painted square
T. 47 N., R. 21 W., E. sixteenth cor. between secs. 12 and 13 , $3^{\prime} 0 \mathrm{ft}$. s . and 180 ft. . from junction of rd. N., in $48-i n$. maple tree; copper najl and washer
T. $47 \mathrm{~N} ., \mathrm{R}$. 21 W., E. cor. secs. 12 and $13,23 \mathrm{ft}$. N. and 36 ft . E. from Junction of rd. S., 145 ft . N. and 36 ft . E. from T-rd. E. at W. cor. secs. 7 and $18, \mathrm{~T} .47 \mathrm{~N} ., \mathrm{R} .20 \mathrm{~W} ., 2 \mathrm{ft}$. S. and 6 ft . E. from telephone pole, in concrete post; standard tablet stamped "T T 38 C 1936"
Cartwright School, 1.2 mi . W. of, at SE. corner of concrete bridge, on top of concrete abutment; chiseled square
794.939
759.84
7. FROM SMITHTON QUADRANGLE AT SEC. $21, T .46$ N., R. 21 W., NORTHWEST INTO SWEET SPRINGS QUADRANGLE AT SEC. 17, T. 46 N., R. 21 W. (by F. C. Lentz in 1936)
(Continued from Smithton quadrangle; see line 7.)
Georgetown, 0.5 mi . S. of, in SE $1 / 4 \mathrm{NW} 1 / 4 \mathrm{sec} .21, \mathrm{~T} .46 \mathrm{~N} ., \mathrm{R} .21 \mathrm{~W} .$, at top of hill, in yard of dwelling of William Sands, 7 ft . S. and 3 ft . E. from concrete gatepost, S. of driveway, 20 ft . S. and 77 ft . W. from 12-1n. black-locust tree, in concrete post; U.S.C. \& G.S. and State Survey standard tablet
827.578

Georgetown, at E. limits of, in field NE. of rd. corner, 48 ft . S. and 63 ft . E. from SE. corner of old church, 7 ft . S. and 48 ft . W. from 20-in. walmit tree; in concrete post; U.S.C. \& G.S. and State Survey standard tablet
827.830
(Continued in Sweet Springs quadrangle; see line 4.)
8. FROM PILOT GROVE QUADRANGLE AT SEC. 9, T. 48 N., R. 19 W., WEST TO SEC. 5, T. 48 N., R. 19 W. (by G. R. Hamlin in 1936)
T. 48 N., R. 19 W., quarter cor. between secs. 4 and $9,12 \mathrm{ft}$. S. and 60 ft . W. from T-rd. N., on E. end of S. concrete head wall of culvert; chiseled square
U.S.C. \& G.S. standard disk stamped "M 97 1935"

Reference mark 1; U.S.C. \& G.S. standerd reference disk designated
"Ridge triangulation sta. reference mark 1 "

TIE BETWEEN UNITED STATES COAST AND GEODETIC SURVEY SECOND-ORDER
LINE AND UNITED STATES GEOLOGICAL SURVEY THIRD-ORDER LINE IN
SEC. 5,T. $48 \mathrm{~N} ., \mathrm{R}$. 21 W. (by G. R. Hamlin in 1936)
T. 48 N., R. 21 W., near quarter cor. between secs. 4 and 5 , on U.S.

Feet 633.77
636.091

For additional level lines along U.S. Highways 40 and 65 , refer to United States Coast and Geodetic Survey second-order lines, Lexington to Boonville and Sedalia to Sweet Springs.

MARSHALL QUADRANGLE
(Latitude $39^{\circ} 00^{\prime}-39^{\circ} 15^{\prime}$; Iongitude $93^{\circ} 00^{\prime}-93^{\circ} 15^{\prime}$ )
Cooper and Saline Counties


1. FROM NELSON QUADRANGLE AT SEC. 29, T. 49 N., R. 19 W., WEST ALONG COUNTY ROUTE H TO SEC. 11, T. 49 N., R. 21 W., THENCE SOUTHWEST ALONG ROADS INTO MALTA BEND QUADRANGLE AT SEC. 29, T. 49 N., R. 21 W. (by C. P. Thompson in 1934)
(Continued from Nelson quadrangle; see line 1.)
Nelson, 0.6 mi . N. of, 75 ft . N. and 32 ft . W. from junction of rd. N., 3 ft . N. and 6 ft . W. from fence corner, in concrete post; standard tablet stamped "1022 C W A $1934^{\text {" }}$
673.845

Reference mark, 107 ft . E. of tablet, in root on N. side of 8-in. elm tree; copper nail and washer
677.08

Nelson, 1 ml . N., thence 1.5 mi . W. from, $48 \mathrm{ft} . \mathrm{s}$. of highway, in wooded pasture of Belle Lindsy, 18 ft . S. and 9 ft . E. from fence corner, in root on N. side of $30-1 \mathrm{n}$. oak tree; copper nall and washer
Nelson, 1 mi . N., thence 2.2 mi . W. from, 30 ft . N. and 663 ft . W. from quarter cor. between secs. 23 and 24, T. 49 N., R. $20 \mathrm{~W} ., 30 \mathrm{ft}$. N. of highway, in root on S. side of triple 60-1n. elm tree; copper nail and washer
Nelson, 1 ml . N., thence 2.5 mi . W. from, 125 ft . N. and 87 ft . E. from intersection of tangents of highway E.-N. and ra. S., 57 ft . N. of highway at curve, in concrete post; standard tablet stamped "1021 C W A 1934"
T. 49 N., R. 20 W., cor. secs. $14,15,22$, and $23,152 \mathrm{ft}$. S. and 18 ft . W. from junction of rd. W., on W. head wall of concrete culvert; chiseled square
Napton, $1.2 \mathrm{mi} . \mathrm{S}$. of, cor. sécs. $10,11,14$, and $15, \mathrm{~T} .49 \mathrm{~N} ., \mathrm{R} .20 \mathrm{~W} .$, $27 \mathrm{ft} . \mathrm{S}$. and 300 ft . W. from highway S . -W. at County Route $E$ to $\dot{\mathrm{N}}$. and rd. E., in front of dwelling of Albert Wells, in root on SW. side of 18-in. cedar tree; copper nail and washer
704.30

Napton, 1.2 mi . S., thence 1 mi . W. from, 13 ft . S. and 307 ft . E. from junction of rd. S., on $E$. end of $S$. head wall of concrete culvert; chiseled square
T. 49 N., R. 20 W., in $S W 1 / 4 \mathrm{SW} 1 / 4 \mathrm{sec} .9$, 2 Ql ft . S. and 45 ft . E. from. SE. corner of Smith Chapel of Methodist Episcopal Church, 30 ft. N. of highway, 1 ft . S. and 4 ft . W. from fence corner, in concrete post; standard tablet stamped "1020 C W A 1934"
Reference mark, 65 ft . N. of tablet, in root on SW. side of 26-in. oak tree; copper nail and washer
T. 49 N., R. 20 W., near W. sixteenth cor. between secs. 7 and $18,15 \mathrm{ft}$. S. of highway, on $E$. end of $S$. head wall of concrete culvert; chiseled square
T. 49 N., R. 21 W., W. sixteenth cor. between secs. 12 and $13,32 \mathrm{ft} . \mathrm{S}$. and 22 ft . W. from junction of rd. S., $1 \mathrm{ft} . \mathrm{N}$. and 2 ft . W. from fence corner, in concrete post; standard tablet stamped "1019 C W A $1934^{\prime \prime}$
Reference mark, 225 ft . S . and 42 ft . E. from tablet, in root on W . side of 14-in. locust tree; copper nail and washer

Feet

790.616
T. 49 N., R. 21 W., near S. sixteenth cor. between secs. 11 and $12,31 \mathrm{ft}$. N. and 300 ft . W. from T-rd. W., in SW. corner of yard of Mt. Airy School, in root on NW. side of $36-1 \mathrm{n}$. box-elder tree; copper nail and washer
T. 49 N., R. 21 W., S. sixteenth cor. between secs. 10 and $11,13 \mathrm{ft} . \mathrm{s}$. and 890 ft . E. from junction of U.S. Highway 65 , on E. end of S. head wall of concrete culvert; chiseled square
T. 49 N., R. 21 W., 385 ft . S. of cor. secs. $14,15,22$, and 23 , on U.S. Highway $65,1.3 \mathrm{ml}$. S. of County Route $\mathrm{H}, 43 \mathrm{ft}$. S. and 34 ft . W. from junction of rd. W., 15 ft . S. and 3 ft . W. from fence corner, in concrete post; standard tablet stamped "1018 C W A 1934"
Reference mark, 21 ft . N. and $1 l_{4} \mathrm{ft}$. E. from tablet, on S . end of W. head wall of concrete culvert; chiseled square
T. 49 N., R. 21 W., cor. secs. $15,16,21$, antl $22,78 \mathrm{ft}$. N. and 45 ft . W. from stone, on top of hill, about 800 ft . W. of dwelling of W. P. Luse, 96 ft . (?) from E. W. rd. at cemetery, in root on SE. side of $30-1 n$. white-oak tree; copper nail and washer
782.50
$775 \cdot 77$
. 49 N., R. 21 W., in NW $1 / 4$ sec. 21,65 ft. S. and 24 ft. E. from rd. fork NW., in fence line, in root on NW. side of l6-in. oak tree; copper nail and washer
T. 49 N., R. 21 W., near center of $S E 1 / 4 \mathrm{sec} .20$, on top of hill, 27 ft . N. of rd., in yard of destroyed farmhouse, in root on SW. side of 20-1n. maple tree; copper nail and washer
T. 49 N., R. 21 W., near W. sixteenth cor. between secs. 20 and $29,8 \mathrm{ft}$. N. and 126 ft . E. from NE. corner of Buck Snort School, 15 ft . S. and 38 ft. W. from rd. corner S.-E., 117 ft . N. and 38 ft . W. from T-rd. W., in concrete post; standard tablet stamped "1017 C W A 1934" of $16-1 n$. post-oak tree; copper nail and washer
(Continued in Malta Bend quadrangle; see line 1.)
2. FROM BRUNSWICK QUADRANGLE AT SEC. 32, T. 52 N., R. $19 \mathrm{~W} .$, SOUTHEAST INTO GLASGOW QUADRANGLE AT SEC. 5, T. 51 N. , R. 19 W. (by G. R. Hamlin in 1936)
(Continued from Brunswick quadrangle; see line 7.)
Gilliam, 0.2 mi . N. of, 36 ft . N. and 75 ft . W. from T-rd. W., in SE . corner of farmyard, in root on E. side of $30-1 n$. locust tree; copper nail and washer
803.00
(Continued in Glasgow quadrangle; see line 4.)
3. FROM BRUNSWICK QUADRANGLE SOUTH ALONG STATE HIGHWAY 41 TO
MARSHALL, THENCE SOUTHWEST ALONG ROADS TO SEC. 21, T. 49 N.,
R. 21 W. (by G. R. Hamlin in 1936)
(Continued from Brunswick quadrengle; see line 4.)

Fairville, center sec. 4, T. 51 N., R. $21 \mathrm{~W} ., 5 \mathrm{ft}$. S. and 36 ft . E. from Baptist Church, 37 ft . W. of highway, 6 ft . N. of concrete walk, in concrete post; standard tablet stamped "l063 C W A 1934"
786.275
T. 51 N., R. 21 W., quarter cor. between secs. 4 and $9,175 \mathrm{ft} . \mathrm{S}$. and 20 ft . E. from junction of rd. E., on S. end of E. concrete head wall of culvert; chiseled square
729.29
T. 51 N., R. 21 W., quarter cor. between secs. 9 and 16,15 ft. S. and 25 ft . E. from junction of rd. E., on E. end of S. concrete head wall of culvert; chiseled square
762.45
T. $51 N_{\text {. }}$ R. $21 W_{\text {. , center sec. }} 21,1.38 \mathrm{ft}$. N. and 39 ft . E. from junction of rd . W., 116 ft . N. and 39 ft . E. from junction of rd. E., 2 ft . W. of fence, in concrete post; standard tablet stamped "1064 C W A 1934"
692.610
T. 51 N., R. 21 W., near center sec. 28, in top of $S$. upstream pier of steel bridge over Salt Fork Creek; top of anchorbolt
T. 51 N., R. 21 W., E. sixteenth cor. between secs. 28 and $33,60 \mathrm{ft} . \mathrm{s}$. and 20 ft . E. from junction of rd . W., on N. end of E. concrete head wall of culvert; chiseled square
Marshall, 2.8 mi . N. of, 71 ft . N. and 39 ft . E. from junction of rd. E., 1 ft . W. of fence, in concrete post; standard tablet stamped ii 1065 C W A 1934"
Culvert, on $N$. end of $W$. concrete head wall; chiseled square
Marshall, 0.2 mi . N. of, at E. end of cut-off at junction of U.S. Highway 65 , on W. end of $S$. concrete head wall of culvert; chiseled square
Marshall, 116 ft . S. and 19 ft . W. from SW . corner of courthouse, 43 ft . N. and 121 ft . E. from intersection of Lafayette and Arrow Streets,
9 ft . N. of sidewalk, in concrete post; standard tablet stamped "lo66

Marshall, in SW: part of, 20 ft . S . and 25 ft . E. from State Highway 20 at South Lyon Street; top of fire hydrant
T. 50 N., R. 21 W., quarter cor. between secs. 15 and $16,130 \mathrm{ft}$. N. and 30 ft . W. from State Highway 20 at rd. S., in root on W. side of 12-in. hackberry tree; copper nall and washer
T. 50 N., R. 21 W., cor. secs. $15,16,21$, and $22,30 \mathrm{ft}$. N . and 28 ft . E. from T-rd. E., in root on W. side of $15-1 n$. iocust tree; copper nail and washer
T. $50 \mathrm{~N} ., \mathrm{R} .21 \mathrm{~W}$. , near center of $\mathrm{SE} 1 / 4 \mathrm{sec} .21,18 \mathrm{ft} . \mathrm{N}$. and 22 ft . E. from T-rd. W., in root on N. side of $15-1 n$. elm tree; copper nail and washer
T-rd. E., 25 ft . E. of, on S . end of iron plpe culvert; chiseled square
T. $50 \mathrm{~N} ., \mathrm{R} .21 \mathrm{~W}$., in $\mathrm{NE} 1 / 4 \mathrm{SW} 1 / 4 \mathrm{sec} .28$, 26 ft . S. and 41 ft . W. from junction of private rd. S. to farmhouse of C. C. Clark, 2 ft . N. of fence, in concrete post; standard tablet stamped "1067 C WA 1934"
T. 50 N., R. 21 W., cor. secs. $28,29,32$, and $33,75 \mathrm{ft}$. N. and 20 ft . E. from T-rd. W., in root on W. side of $4-1 \mathrm{n}$. Wild-cherry tree; copper nail and washer
T. 50 N., R. 21 W., near E. sixteenth cor. between secs. 29 and 32 , 15 ft . N. and 30 ft . W. from T-rd. W., in root on S . side of $30-1 \mathrm{n}$. cottonwood tree; copper nail and washer

Feet 762.40 703.84 716.29
759.711
759.83
777.21
T. 50 N., R. 21 W., in sec. $32,50 \mathrm{ft}$. S. and 90 ft . W. from rd. corner N.-W., in root on N. side of 15-in. hickory tree; crossed nails

Tps. 49 and 50 N., R. 21 W., W. sixteenth cor. between secs. 5 and 32 , 135 ft . N. and 55 ft . E. from T-rd. W., in root on W. side of 24 -in. white-oak tree; copper nail and washer
T. 49 N., R. 21 W., W. sixteenth cor. sec. 5 , about 0.2 mil . E. of Stone Wall School, 45 ft . S. and 13 ft . E. from T-rd. N., 3 ft . S. and 20 ft. E. from twin $2 \mathrm{~L}_{4}$-in. locust tree, 2 ft . S . and 4 ft . W. from fence comer, in concrete post; standard tablet stamped "1068 C W A 1934."
T. 49 N., R. 21 W., E. sixteenth cor. sec. 5, 10 ft . S. and 200 ft . W. from T-rd. S., on E. end of S. concrete head wall of culvert; chiseled square
T. 49 N., R. 21 W., near E. sixteenth cor. sec. 8, $30 \mathrm{ft} . \mathrm{S}$. and 30 ft . W. from center of wooden culvert, in root on $N$. side of i2-in. elm tree; copper nall and washer
T. 49 N., R. 21 W., near E. sixteenth cor. sec. $17,240 \mathrm{ft}$. S. and 20 ft . E. from junction of private rd. E., in root on W. side of 12-in. elm tree; copper nail and washer
T. 49 N., R. 21 W., in $S E 1 / 4$ sec. $17,45 \mathrm{ft} . \mathrm{S}$. and 5 ft . E. from rd. forks E., W., and NW., 16 ft. S. of fence, in concrete post; standard tablet stamped "1069 G W A 1934."

## 4. FROM MARSHALL WEST ALONG STATE HIGHWAY 20 INTO MALTA BEND QUADRANGLE (by G. R. Hamlin in 1936)

Marshall, 2 mi . W. of, 20 ft . S. of highway, on W. end of S . concrete head wall of culvert; chiseled square
Marshall, 2.8 mi . W. of, 65 ft . S. and 400 ft . W. from junction of rd. S., in root on N. side of 15-in. black-oak tree; copper nail and washer
Narshall, 3.2 ml . W. of, 20 ft . N. and 55 ft . E. from crossroad, at farm entrance, on W. end of iron pipe culvert; chiseled square
(Continued in Malta Bend quacirangle; see line 4.)

> 5. FROM GLASGOW QUADRANGLE AT SEC. 33, T. $51 \mathrm{~N} ., \mathrm{R} .19 \mathrm{~W} .$, WEST TO SEC. $35, \mathrm{~T} .51 \mathrm{~N} ., \mathrm{R} .20 \mathrm{~W} ., \mathrm{THENCE}$ SOUTH ALONG STATE HIGGWAY 240 TOSEC. 9, T. 50 N., R. 20 W., THENCE WEST ALONG STATE HIGHWAY 41 TO MAKSHALL (by G. R. Hamlin in 1936)
T. 51 N., R. 19 W., W. sixteenth cor. between secs. 29 and 32, 20 ft. N. and 30 ft . E. from T-rd. S., 150 ft . NE. of NE. corner of school, in root on S. side of 24-in. wild-cherry tree; copper nail and washer
T. 51 N., R. 19 W., quarter cor. between secs. 30 and $31,48 \mathrm{ft}$. N. and 80 ft . W. from 'T-rd. S., 12 ft . S. of SE. corner of church, in root on S. side of $30-1 \mathrm{n}$. elm tree; copper nail and washer
T. 51 N., R. 20 W., quarter cor. between secs. 25 and $36,190 \mathrm{ft}$. S. and 18 ft . W. from crossroads, in root on E. side of 30-in. maple tree; copper nail and washer
Slater triangulation sta.; U.S.C. \& G.S. standard disk designated "Slater" Reference mark 1; U.S.C. \& G.S. standard reference disk
Reference mark 2; U.S.C. \& G.S. standard reference disk
T. 51 N., R. 20 W ., near cor. secs. $26,27,34$, and $35,12 \mathrm{ft}$. S. and 25 ft . E. from State Highway 240 at E. W. crossroad, on E. end of S . concrete head wall of culvert; chiseled square
T. 50 N., R. 20 W. , near center of NE $1 / 4 \mathrm{sec} .3$, 15 ft . N. and 22 ft . F . from junction of rd. E., on E. end of N. concrete head wall of culvert; chiseled square
T. 50 N., R. 20 W., quarter cor. between secs. 3 and $10,112 \mathrm{ft}$. S. and 143 ft . W. from crossroad, 70 ft . W. of highway at curve, I ft. E. of fence, in concrete post; standard tablet stamped "1090 CW A 1934"
T. 50 N., R. 20 W., S. sixteenth cor. between secs. 8 and 9, 25 ft . N. and 130 ft . E. from Junction of State Highway 41, at cut-off on Highway 41, on $N$. end of W. concrete head wall of culvert; chiseled square
Marshall, about 3.5 mi . E. of, 33 ft . N. and 33 ft . W. from highway at crossrosd, 3 ft . N. and 12 ft . W. from steel post in fence corner, in concrete post; standard tablet stamped "1091 C W A 1934"
Marshall, about 2.8 ml . E. of, 45 ft . \#. and 20 ft . W. from junction of rd. N., on $S$. end of $W_{\text {. }}$ concrete head wall of culvert; chiseled square
Marshall, 2 mi . E. of, at bridge F-69 over Salt Fork Creek, on base of E. end of $N$. railing; chiseled square
823.81
801.70
805.01
835.242
819.029
824.345
762.56
813.55
788.544
752.74
724.451
755.81

Marshall, in E. part of, NW. of intersection of Eastwood Avenue and rd. N. to Missouri State School; top of fire hydrant


[^0]:    *For the resuits of spirit leveling in Missouri previously published see Triangulation and spirit leveling-Missour1: J. S. Geol. Survey 18 th Ann. Rept., pt. 1 , pp. 333-337, 1897; Triangulation and spirit leveling-Missuuri-Illinois: ए. S. Geol. Survey 20th Ann. Rept., pt. 1, pp. 412-413, 1899; Triangulation, primary traverse, and spirit leveling-Missouri: 0 . S. Geol. Survey 2lst Ann. Rept., pt. 1, pp. 474-475, 1900; Results of spirit leveling, fiscal year 1900-1901-Missouri, Missouri-Kansas: ס. S. Geol. Survey Bull. 185, pp. 107-113, 1901; Results of spirit leveling in Missouri, 1896 to 1919, inclusive: $0 . \mathrm{s}$. Geol. Survey Buil. 459 , $48 \mathrm{pp.}, \mathrm{1911;} \mathrm{Results} \mathrm{of} \mathrm{spirit}$ leveling in Missouri, 1896 to 1914, inclusive: U. S. Geol. Survey Buil. 568, $219 \mathrm{pp}$. , 1915.
    ${ }^{\text {tht }}$ See Avers, H. G., Manual of first-order leveling; U. S. Cosst and Geodetic Survey Special Pub. $140,1929$.

[^1]:    ${ }^{*}$ See Jones, E. L., Hypsometry-Jse of mean sea level as the datum for elevations: U.S. Coast and Geodetic Survey Special Pub. 41, 1917. Manual of tide observations: U.S. Coast and Geodetic Surver Special Pub. 196, $1935^{\circ}$.

[^2]:    Publishet also as line 6 of the Florida quadrangle (see Bull. 898-F, pp. 769-770).
    *Published also as line 7 of the shelbina quadrangle (see Bull. 898-F, pp. 801-802).

[^3]:    Fublished also as line 6 of the Waynesville quadrangle (see Bull. 898-B, pp. 275-276).

[^4]:    T. 45 N., R. 14 W., near center sec. 19, on old Marion rd., at rd. junction, near SW. corner of cemetery, in 12-in. stump of cedar tree; lead-headed nail

[^5]:    For additional level lines along south bank of Missouri River and O.S. Highway 40, refer to United States Coast and Geodetic Survey first-order line, Jefferson City to Kansas City; and second-order
    line, Lexington to Boonville.

[^6]:    ${ }^{*}$ Line 1 of Higginsville quadrangle includes a portion of this line (see Sull. 898-R, p. 1009).

[^7]:    "Line 8 of Higginsville quadrangle (see Bull. 898-H, p. 1013).

[^8]:    \#Iine 1 of Windsor quadrangle (see Bull. 898-H, pp. 1016-1017).

[^9]:    *n line 7 of Calhoun quadrangle (see Bull. 898-H; pp. 1022-1023).

[^10]:    T. 40 N., R. 22 W., in SE $1 / 4 \mathrm{SE} 1 / 4$ sec. $32,170 \mathrm{ft}$. N. and 27 ft . E. from junction of rd. N., 8 ft . NE. of fence corner, in concrete post; standard tablet stamped "1259 C W A 1935"
    T. 39 N., R. 22 W., in NE $1 / 4 \sec .6,0.2 \mathrm{ml}$. S. of farmhouse of Joe Crawford, 300 ft . S. of fonce corner, on $E$. head wall of concrete culvert; (mark not described)
    T. 39 N., R. 22 W., in SE $1 / 4$ sec. 6, 400 ft. S. of junction of rd. E., on $N$. end of concrete triple-box culvert; chiseled square

    Feet 745.759
    720.69
    699.71

    Fairfield, $1.2 \mathrm{mi} . \mathrm{N}_{\mathrm{o}}$ of, in $\mathrm{SW} 1 / 4 \mathrm{sec} .6, \mathrm{~T} .39 \mathrm{~N}$, , R. $22 \mathrm{~W} ., 75 \mathrm{ft}$. S. and 35 ft . E. from junction of rd. E., in root on E . side of $24_{-1 n}$. walnut tree; copper nail and washer
    Fairfield, 0.2 mi . NE. of, 170 ft . SW. of Baptist Church, 35 ft . SE. of highway, 5 ft . SE. of right-of-way fence, in concrete post; standard tablet stamped "203 C W A 1934"
    T. 39 N., R. 22 W., in $S E 1 / 4$ sec. 6, $15 \mathrm{ft} . \mathrm{S}$. and 20 ft . E. from T-rd. E., in root on NW. side of 18 -in. oak tree; copper nail and washer
    in front yard of cabin, 20 ft . N . of rd., in root on NW. side of $12-1 \mathrm{n}$. hickory tree; copper nail and washer
    T. 39 N., R. 22 W., in $S W 1 / 4$ sec. $4,30 \mathrm{ft}$. SE. of rd., in concrete post; standard tablet stamped "206 O W A 1934"
    884.275
    945.05

[^11]:    In line 6 of the Lowry City quadrangle (see Bull. 898 H , pp. 1025-1026).

