

OFFICE COPY HOLD

THIRD-ORDER LEVELS
NATIONAL GEODETIC VERTICAL DATUM OF 1929

Final Adjustment of 1974

Henderson and Warren Counties

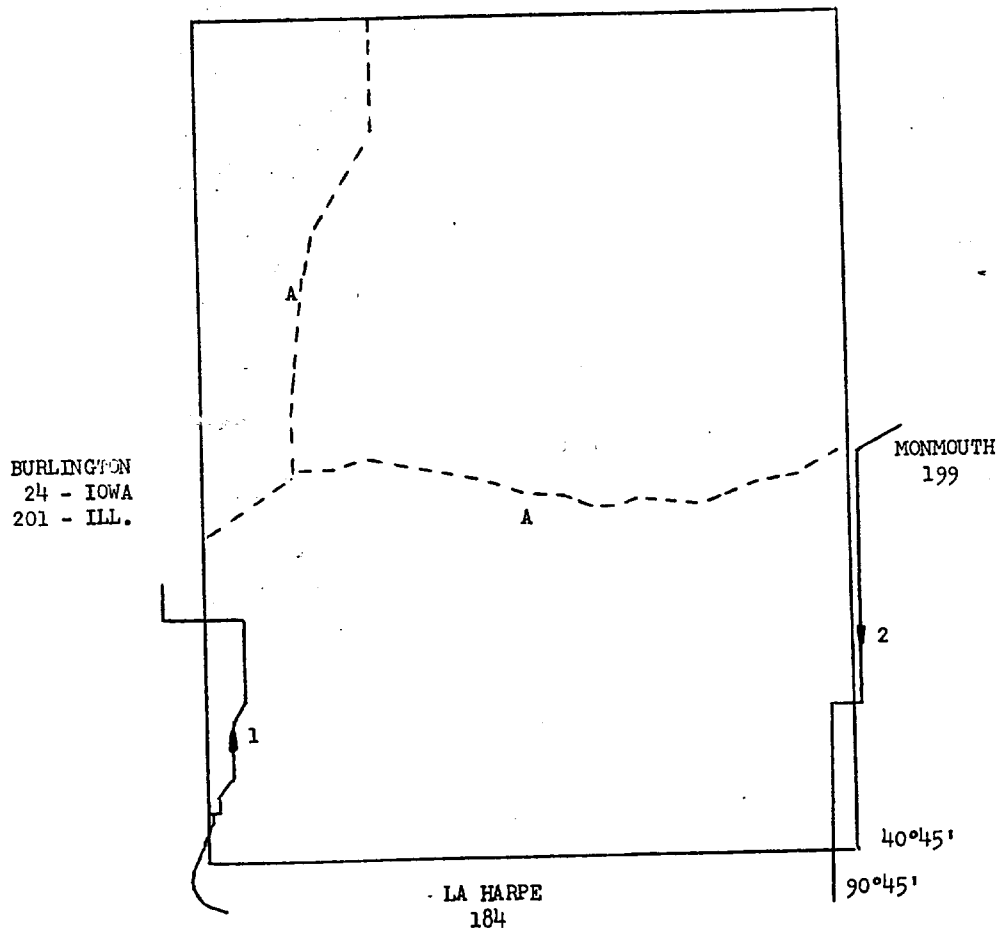
Edition of: 6-28-74

PR: ADP/ob

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

40-090-44
OQUAWKA QUADRANGLE
200 - ILLINOIS
23 - IOWA
N4045-W9045/15
DIAGRAM NK 15-12
BURLINGTON

KEITHSBURG
44 - IOWA
215 - ILL.



N.G.S. (USC&GS) VERTICAL CONTROL DATA

A. Quadrangle No. 400904

23-D

LINE 1

C.R. Nickerson, 1963; Book CV-1580

LA HARPE QUAD. - 184

- 10.9 UE, Lomax, 3.6 mi N. and 4.1 mi E. of junction of hwy. 96 and Carmen Road; near the SW. cor. of sec. 29, T. 9 N., R. 5 W., at intersection of T-rd. S. and center of E.-W. road; copper nail and washer 629.11

LOMAX QUAD. - 185

- 11.9 Lomax 4.2 mi N. and 3.3 mi E. of junction of Hwy. 96 and Carmen Road; 4.8 mi S. and 4.4 mi E. of E. end of Mississippi River Toll Bridge at Burlington; near the center of sec. 30, T. 9 N., R. 5 W.; 99 ft N. and 17 ft W. of T-rd. N.; in line with row of power poles; 2 ft E. of power pole; in concrete post projecting 4-in. above ground; standard tablet stamped "16 CRN 1963" 580.625
- 12.0 Reference mark, 22 ft N. and 145 ft E. of T-rd. N.; in W. end of N. headwall of concrete culvert; chiseled square 580.57
- 12.5 UE, Lomax, 4.7 mi N. and 3.3 mi E. of junction of hwy. 96 and Carmen Road; near N $\frac{1}{2}$ cor. sec. 30, T. 9 N., R. 5 W., 36 ft S. and 18 ft W. of right angle bend in road; in NW. side of telephone brace pole; rail spike 568.95

OQUAWKA QUAD. 200 ILL. 23 IA.

- 13.8 UE Lomax, 5.6 mi N. and 4.1 mi E. of junction of Hwy. 96 and Carmen Road; near SW. cor. sec. 17, T. 9 N., R. 5 W., 12 ft N. and 14 ft E. of T-rd. S.; in S. side of power pole; a Rail spike 573.44
- 1.8 Reference mark, 64 ft S. of tablet; in SW. root of 10-in. elm tree; copper nail and washer 571.45
- 14.8 Burlington, 2.8 mi S. and 5.4 mi E. of E. end of Mississippi River Toll Bridge; 6.1 mi N. and 4.4 mi E. of junction of Ill. Hwy. 96 and Carmen Road; at Lomax; near the center of sec. 17, T. 9 N., R. 5 W.; 32 ft N. and 20 ft E. of right angle bend in road; 1 ft W. of fence; in concrete post; projecting 4-in. above ground; standard tablet stamped "17 CRN 1963" 571.819
- 15.8 UE, Burlington, 1.8 mi S. and 5.4 mi E. of E. end of Mississippi River Toll Bridge near the center of sec. 8, T. 9 N., R. 5 W., 17 ft N. and 100 ft W. of T-rd. S.; in S. side of power pole; a rail spike 574.97
- 16.5 UE, Burlington, 1.3 mi S. and 5.5 mi E. of E. end of Mississippi River toll bridge; near the E $\frac{1}{2}$ cor. sec. 5, T. 9 N., R. 5 W.; in pile for bridge over Ellison Creek; in top of pile nearest pile to NW. cor. of bridge; copper nail and washer 560.95
- 17.1 Burlington, 0.8 mi S. and 5.7 mi E. of E. end of Mississippi River toll bridge; 8.1 mi N. and 4.7 mi E. of junction of Ill., Hwy. 96 and Carmen Road; near the E $\frac{1}{2}$ cor. sec. 5, T. 9 N., R. 5 W.; 21 ft N. and 103 ft E. of T-rd. N.; at offset crossroads; 2 ft W. of telephone pole; in concrete post; projecting 4-in. above ground; standard tablet stamped "18 CRN 1963" 570.797
- 18.0 UE, Burlington, 0.2 mi N. and 5.7 mi E. of E. end of Mississippi River toll bridge; near the SE. cor. sec. 32, T. 10 N., R. 5 W.; 12 ft N. and 28 ft E. of driveway E.; in NW. side of power pole; a rail spike 558.25
- 18.6 UE, Burlington, 0.7 mi N. and 5.6 mi E. of E. end of Mississippi River Toll bridge; near the SE. cor. of sec. 29, T. 10 N., R. 5 W.; 18 ft N. of T-rd. S.; 6-in. S. of fence; top of metal fence post; 2-in. above ground 567.56
- 19.4 Burlington, 0.7 mi N. and 4.9 mi E. of E. end of Mississippi River toll bridge; 1.7 mi S. and 2.0 mi W. of junction of U.S. Hwy. 34 and State Hwy. 164 S. of Gladstone; near the NW. cor. of sec. 32, T. 10 N., R. 5 W.; 23 ft S. of T-rd. N.; in fence row; in concrete post; projecting 6-in. above ground; standard tablet stamped "19 CRN 1963" 543.429

LINE 1 (Cont'd)

OQUAWKA QUAD. 200 ILL. 23 IA.

FEET

- 19.4 Reference mark, 86 ft W. of tablet; 18 ft N. and 86 ft W. of T-rd. N.; in root on SW. side of 20-in. elm tree; copper nail and washer 543.88

BURLINGTON QUAD. 201 ILL. 24 IA.

- 20.4 UE, Burlington, 0.7 mi N. and 4.0 mi E. of E. end of Mississippi River Toll Bridge; near the NW. cor. sec. 31, T. 10 N., R. 5 W., 18 ft S. and 25 ft E. of crossroads; on S. end of metal culvert; painted square 522.4
- 21.3 UE, Burlington, 1.7 mi N. and 4.0 mi E. of end of Mississippi River toll bridge; near NE. cor. sec. 25, T. 10 N., R. 5 W.; in top of pole nearest SW. cor. of bridge over drainage ditch; copper nail and washer 521.86

LINE 2

L.L. Allison, 1974; Book CV-3090

MONMOUTH QUAD. - 199 ILL.

- 8 13 2.9 Kirkwood, 0.75 mi N. and 1.5 mi E. of; T. 10 N., R. 3 W., near the quarter cor. between secs. 3 and 10, 92 ft N. and 47 ft E. of centerline of road at drive S. and 42 ft S. and 29 ft E. of centerline grade crossing of S. track, by a power pole, a standard cap support- ed on top of a copper coated steel rod and driven 10 ft in ground, stamped "24 LA 1974" 776.286
- 14 3.0 Reference mark, 148 ft SW. of tablet, 42 ft S. and 15 ft W. of centerline of road at drive S., in the W. end of a metal culvert under drive S., a punched hole 773.85
- 16 4.0 UE 24 A, T. 10 N., R. 3 W. near the center of the $W\frac{1}{2}$ of sec. 9, on the E. end of the S. concrete headwall of a culvert under E.-W. road, a 0.5-in. steel reinforcement rod 760.03
- 19 4.6 Reference mark, 59 ft N. of tablet, 27 ft N. and 26 ft W. of centerline of crossroads, of S. Harding and Locust on the first step of N.-S. sidewalk, a chiseled square 738.72
- 20 4.6 AT Kirkwood; T. 10 N., R. 3 W. near the corner between secs. 8, 9, 16 and 17, 31 ft S. and 19 ft W. of centerline of crossroad of S. Harding & E. Locust Streets, in the N. end of the W. concrete headwall of a culvert under N.-S. road, a standard tablet stamped "25 LA 1974" 737.075
- 21 5.7 Reference mark, 292 ft NE. of tablet, 167 ft N. and 23 ft E. of crossroad in the S. end of a metal culvert under drive E., a punched hole 728.38
- 23 5.8 Kirkwood, 1.0 mi S. of, T. 10 N., R. 3 W., near the cor. between secs. 16, 17, 20 and 21, 125 ft S. and 34 ft W. centerline crossroad, by fence corner, a standard cap supported on top of a copper coated steel rod, driven 10 ft in ground, stamped "26 LA 1974" 727.899
- 25 6.4 UE 26 A, T. 10 N., R. 3 W. near the S. sixteenth corner between secs. 20 and 21, on the SW. wingwall of bridge; chiseled square 686.71
- 27 6.8 UE 26 B, T. 10 N., R. 3 W. near the cor. between secs. 20, 21, 28 and 29, 21 ft S. and 26 ft E. of centerline of T-rd. E., in the S. end of a 18-in. metal culvert under E.-W. rd., a punched hole 704.78
- 29 7.8 UE 26 C, T. 10 N., R. 3 W. near the cor. between secs. 28, 29, 32 and 33, 21 ft S. and 25 ft W. of centerline of crossroad, in the S. end of a 12-in. metal culvert under E.-W. road, a punched hole 708.30

4
40-090-44
OQUAWKA QUADRANGLE
200 - ILLINOIS
23 - IOWA

LINE 2 (Cont'd)

MONMOUTH QUAD. - 199 ILL.

FEET

8	31	8.9	Reference mark, 43 ft NE. of tablet on the N. end of the E. concrete headwall, a chiseled square	688.37
32		8.9	Kirkwood, 4.25 mi S. of; Ts. 9 and 10, R. 3 W. near the cor. between secs. 4, 5, 32 and 33, in the SW. corner of bridge 8+23, a standard tablet stamped "27 LA 1974"	687.751
35		9.6	UE 27 A, T. 9 N., R. 3 W. near the S. sixteenth cor. between secs. 4 and 5, 1070 ft N. of T-rd. E. on the center of the W. concrete headwall of a culvert under N.-S. road, a chiseled square	719.25
<u>OQUAWKA QUAD. - 200</u>				
37		10.3	UE 27 B, T. 9 N., R. 3 W. near the quarter cor. between secs. 5, 8, 30 ft S. and 20 ft W. of centerline of T-rd. S. in the W. end of a 30-in. metal culvert under N.-S. road, a punched hole	729.22
40		11.3	UE 27 C, T. 9 N., R. 3 W. near the quarter cor. between secs. 8, 17, 16 ft N. and 40 ft E. of centerline of T-rd. E. in the N. end of a 24-in. metal culvert under E.-W. road; a punched hole	733.45
43		12.3	Reference mark, 66 ft W. of tablet, 10 ft N. and 92 ft W. of centerline of crossroads, on the center of the N. concrete headwall of a culvert under E.-W. road, a chiseled square	717.29
44		12.3	Roseville, 2.0 mi N. and 5.0 mi W. of, T. 9 N., R. 3 W. near quarter cor. between secs. 17, 20, 28 ft S. and 37 ft E. of centerline of crossroads, and iron pipe with a bronze cap stamped "PTS NO 4 1914 ILL"	720.696
46		13.1	UE 4 A, T. 9 N., R. 3 W. near the center of S $\frac{1}{2}$ of sec. 20, on the NW. wingwall of a bridge, a chiseled square	686.14

LA HARPE QUAD. - 184

48		13.9	UE 4 B, T. 9 N., R. 3 W. near the center of sec. 29, 12 ft S. and 15 ft W. of centerline of road at field entrance W., in the S. end of 12-in. metal culvert under field entrance W., a punched hole	740.73
49		14.4	UE 4 C, T. 9 N., R. 3 W. near the quarter cor. between secs. 29 and 32, 240 ft N. and 12 ft E. of centerline of T-rd. N. of offset crossroad, on the center of E. concrete headwall, a chiseled square	730.82

ISOLATED BENCH MARKS

T. 12 N., R. 4 W., 0.1 mi S. of center of sec. 35, 60 ft S. of S. entrance to Old No. 1 School, in concrete post; standard tablet stamped "31 S 1923" (Reported not found 6-54 USC&GS)	694.344
T. 12 N., R. 4 W., near W $\frac{1}{4}$ cor. sec. 32, in NE. angle of junction of road N., 12 ft NW. of fence cor., in concrete post; standard tablet stamped "32 S 1923" (Reported recovered in 1931)	565.561
Oquawka, at NW. cor. of Schuyler and Second Streets, at SW. cor. of brick store building of Robert Moir, 2 ft above water table, in stone pillar, center of hole in copper bolt (USCE EM 17; recovered by USC&GS in 1935)	535.829

ISOLATED BENCH MARKS (Cont'd)

FEET

Oquawka, at SE. cor. of Schuyler and Third Streets, at NW. cor. of brick building, on W. side, 2.5 ft above ground; center of hole in copper bolt (USCE BM 18; recovered by USC&GS in 1935)	547.614
Oquawka, in yard of Henderson County courthouse, in concrete post; standard tablet stamped "PRIM TRAV STA NO 36 W 1923"	561.826
Oquawka, at NE. cor. of Schuyler and Eighth Streets, at drain under street N., on top of E. concrete headwall; chiseled square	554.35
T. 11 N., R. 5 W., near center of sec. 2, 200 ft N. and 30 ft E. from crossing of Chicago, Burlington & Quincy RR., in concrete post; standard tablet stamped "PRIM TRAV STA NO 35 W. 1923"	572.578
Oquawka, 0.5 mi along State Hwy. 164 S. of intersection of Schuyler and Eighth Streets, near quarter cor. between secs. 22 and 27, T. 11 N., R. 5 W., 1 ft E. of center of concrete pavement, in line with concrete right-of-way markers on each side of hwy.; chiseled square	544.49
Oquawka, 2.5 mi along Hwy. S., thence 0.7 mi along road SE. from, 1.8 mi along road, NE. of Gladstone, 0.25 mi E. of center of sec. 3, T. 10 N., R. 5 W., 35 ft N. and 25 ft W. from crossroads, in concrete post; standard tablet stamped "PRIM TRAV STA NO 37 W 1923"	538.734
Gladstone, 0.5 mi along road NE. of, in SW $\frac{1}{4}$ sec. 10, T. 10 N., R. 5 W., at S. stone abutment of bridge over South Henderson Creek, on E. end of bridge seat; chiseled square	541.14
adstone, 1.8 mi E. of, at W. abutment of RR. bridge over South Henderson Creek, on S. parapet wall; chiseled square	579.50
Gladstone, 2.7 mi E. of, 3.0 mi NW. of Biggsville, near N $\frac{1}{4}$ cor. sec. 13, T. 10 N., R. 5 W., 250 ft S. of road crossing, on SW. side of road, in NE. cor. of yard of dwelling of W. Hedges, in concrete post; standard tablet stamped "PRIM TRAV STA NO 40 W 1923" (Reported destroyed 3-65, JAW)	593.027
Biggsville, 2.2 mi NW. of, at bridge over Branch of South Henderson Creek, on top of W. end of S. headwall; chiseled square	604.16
Biggsville, 1.3 mi NW. of, 150 ft S. of road crossing at N. abutment at road bridge over South Henderson Creek, on top of E. parapet; chiseled square	611.26
Biggsville, 0.5 mi NW. of station, at E. abutment of RR. bridge over South Henderson Creek, on top of S. parapet; chiseled square	642.13
Biggsville, 20 ft S. and 120 ft W. from point on track directly in front of station, at W. side of triangular lawn, in concrete post; standard tablet stamped "PRIM TRAV STA NO 41 W 1923" (Recovered by USC&GS in 1935) (Reported destroyed 7-46, B.L.)	650.015
Biggsville, 0.2 mi SE. of, at RR. bridge over South Henderson Creek, on S. end of E. abutment; chiseled square	649.20
Biggsville, 1.5 mi along Hwy. E. of, near N $\frac{1}{4}$ cor. sec. 22, T. 10 N., R. 4 W., on S. side of Hwy. at junction of T-rd. N., at drain under driveway to field, on top of W. concrete headwall; chiseled square	685.68
Biggsville, 2.0 mi E. of, near NW. cor. sec. 23, T. 10 N., R. 4 W., in SE. angle of crossroads, at culvert under N.-S. road, on top of E. concrete headwall; chiseled square	684.76
Biggsville, 2.5 mi E. of, near S $\frac{1}{4}$ cor. sec. 14, T. 10 N., R. 4 W., in NW. angle of junction of T-rd. N., at culvert under road N., on top of W. concrete headwall; chiseled square	690.37

ISOLATED BENCH MARKS (Cont'd)

FEET

Biggsville, 3.0 mi E. of, near NE. cor. sec. 23, T. 10 N., R. 4 W., 380 ft W. of junction of T-rd. S., at Hwy. culvert, on E. end of S. concrete headwall; standard tablet stamped "1 A 1931"	680.316
Reference mark, 400 ft E. of tablet, in SE. angle of junction of T-rd. S. at culvert under road S., on top of E. concrete headwall; chiseled square	692.66
Biggsville, 4.0 mi E. of, 1.1 mi S. thence 2.0 mi W. from Kirkwood, near S. cor. secs. 13 and 18, T. 10 N., Rs. 3 and 4 W., on N. side of Hwy. at junction of T-rd. S., at concrete culvert under driveway to field, on top of E. headwall; chiseled square	706.93
Kirkwood, 1.1 mi S. thence 1.0 mi W. from, near SE. cor. sec. 18, T. 10 N., R. 3 W., 125 ft W. of junction of T-rd. S., at Hwy. culvert, on top of E. end of N. concrete headwall; chiseled square	697.87
Kirkwood, 1.1 mi S. thence 0.5 mi W. from, near S $\frac{1}{4}$ cor. sec. 17, T. 10 N., R. 3 W., in NE. angle of junction of T-rd. N., at culvert under N.-S. road, on top of E. concrete headwall; chiseled square	713.26
Gladstone, 1.5 mi SW. of, 0.25 mi N. of center of sec. 21, 60 ft S. and 30 ft W. from intersection of U.S. Hwy. 34, in concrete post; standard tablet stamped "PRIM TRAV STA NO 38 W 1923" (Reported not found 8-63, C.R.N.)	557.163
Reference mark, N. of tablet, in NW. angle of Hwy. intersection, at culvert under N.-S. road, on top of W. concrete headwall; chiseled square	555.87
Gladstone, 2.7 mi SW. of, near center of sec. 28, T. 10 N., R. 5 W., in NE. angle of junction of road SE., 40 ft NW. of center of culvert under road SE., 18 ft SE. of center of S. end of steel bridge, on top of angle of concrete retaining wall; chiseled square	569.84
Hopper, 1.1 mi N. of, 0.25 mi E. of center of sec. 5, T. 9 N., R. 5 W., at offset crossroads, 30 ft S. and 25 ft E. from junction of T-rd. N., in concrete post 8-in. underground; standard tablet stamped "PRIM TRAV STA NO 39 W 1923" (Reported not found 8-63, C.R.N.)	566.920
Hopper, 0.5 mi N. of, 0.15 mi E. of N $\frac{1}{4}$ cor. sec. 8, T. 9 N., R. 5 W., at steel bridge over Ellison Creek, near foot of W. end of S. truss, on head of third rivet of inside row from bottom; chiseled cross	558.82
Hopper, 200 ft N. of road junction, near center of sec. 8, T. 9 N., R. 5 W., on W. side of road, at SE. cor. of schoolhouse, on SE. cor. of lower step of porch steps; chiseled square	571.54

THIRD-ORDER LEVELS
SEA LEVEL DATUM OF 1929

DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

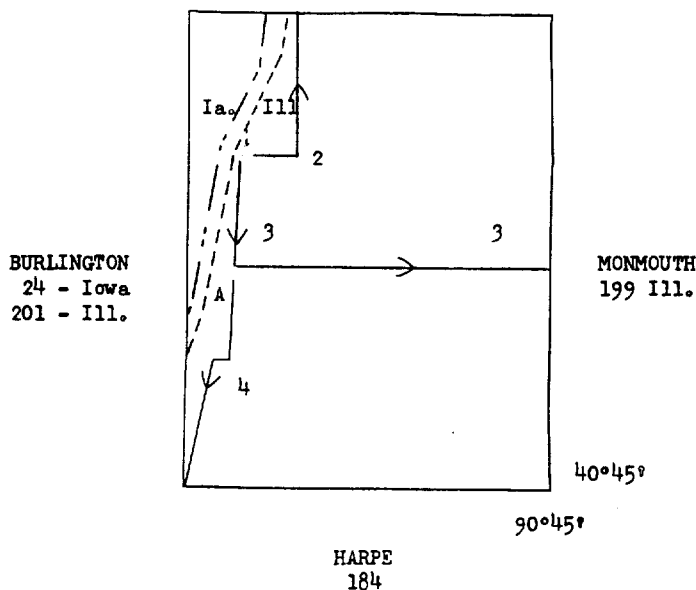
OQUAWKA QUADRANGLE
23 - Iowa, 200 - Illinois
N4045-W9045/15
Diagram NK 15-12
Burlington, Ill.-Mo.-Iowa

Henderson and Warren Counties

KEITHSBURG
44 - Iowa
215 - Ill.

Typed 10/12/65

PR: CB/et



USC&GS LEVELING

A. No. 400904

Feet

LINE 1

ISOLATED BENCH MARKS - NOT SHOWN ON DIAGRAM

- Smithshire, 1.0 mi E. thence 2.0 mi S. from, near $N\frac{1}{2}$ cor. sec. 20, T. 9 N., R. 3 W., 30 ft S. and 40 ft E. from crossroads; standard iron post with bronze cap stamped "Prim Trav Sta No 4 1914 722" 720.396
- T. 12 N., R. 4 W., 0.1 mi S. of center of sec. 35, 60 ft S. of S. entrance to Old No. 1 School, in concrete post; standard tablet stamped "31 S 1923" (Reported not found 6/54, C&GS) 694.344
- T. 12 N., R. 4 W., near $W\frac{1}{2}$ cor. sec. 32, in NE. angle of junction of rd. N., 12 ft NW. of fence cor., in concrete post; standard tablet stamped "32 S 1923" (Recovered in 1931) 565.561

LINE 2

NORTH IN NORTHWEST PORTION OF QUAD. (By S. R. Archer, 1931, Book B-4140)

- Oquawka, at NW. cor. of Schuyler and Second Streets, at SW. cor. of brick store building of Robert Moir, 2 ft above water table, in stone pillar, center of hole in copper bolt (USCE EM 17; recovered by USC&GS in 1935) 535.829
- Oquawka, at SE. cor. of Schuyler and Third Streets, at NW. cor. of brick building, on W. side, 2.5 ft above ground; center of hole in copper bolt (USCE EM 18; recovered by USC&GS in 1935) 547.614

23 D
OLD

OQUAWKA QUADRANGLE
23 - Iowa, 200 - Illinois

LINE 2 (Cont'd)

	<u>Feet</u>
Oquawka, in yard of Henderson County courthouse, in concrete post; standard tablet stamped "Prim Trav Sta No 36 W 1923"	561.826
Oquawka, at NE. cor. of Schuyler and Eighth Streets, at drain under street N., on top of E. concrete headwall; chiseled square	554.35
T. 11 N., R. 5 W., near center of sec. 2, 200 ft N. and 30 ft E. from crossing of Chicago, Burlington & Quincy RR., in concrete post; standard tablet stamped "Prim Trav Sta No 35 W 1923"	572.578

LINE 3

GENERALLY EAST THROUGH CENTER OF QUAD. (By S. R. Archer, 1931, Book B-4140)

Oquawka, 0.5 mi along State Hwy. 164 S. of intersection of Schuyler and Eighth Streets, near quarter cor. between secs. 22 and 27, T. 11 N., R. 5 W., 1 ft E. of center of concrete pavement, in line with concrete right-of-way markers on each side of highway; chiseled square	544.49
Oquawka, 2.5 mi along Hwy. S., thence 0.7 mi along rd. SE. from, 1.8 mi along rd. NE. of Gladstone, 0.25 mi E. of center of sec. 3, T. 10 N., R. 5 W., 35 ft N. and 25 ft W. from crossroads, in concrete post; standard tablet stamped "Prim Trav Sta No 37 W 1923"	538.734
Gladstone, 0.5 mi along rd. NE. of, in SW $\frac{1}{4}$ sec. 10, T. 10 N., R. 5 W., at S. stone abutment of bridge over South Henderson Creek, on E. end of bridge seat; chiseled square	541.14
Gladstone, 1.8 mi E. of, at W. abutment of RR. bridge over South Henderson Creek, on S. parapet wall; chiseled square	579.50
Gladstone, 2.7 mi E. of, 3.0 mi NW. of Biggsville, near N $\frac{1}{4}$ cor. sec. 13, T. 10 N., R. 5 W., 250 ft S. of rd. crossing, on SW. side of rd., in NE. cor. of yard of dwelling of W. Hedges, in concrete post; standard tablet stamped "Prim Trav Sta No 40 W 1923" (Reported destroyed 3/65, JAW)	593.027
Biggsville, 2.2 mi NW. of, at bridge over branch of South Henderson Creek, on top of W. end of S. headwall; chiseled square	604.16
Biggsville, 1.3 mi NW. of, 150 ft S. of rd. crossing at N. abutment of rd. bridge over South Henderson Creek, on top of E. parapet; chiseled square	611.26
Biggsville, 0.5 mi NW. of station, at E. abutment of RR. bridge over South Henderson Creek, on top of S. parapet; chiseled square	642.13
Biggsville, 20 ft S. and 120 ft W. from point on track directly in front of station, at W. side of triangular lawn, in concrete post; standard tablet stamped "Prim Trav Sta No 41 W 1923" (Recovered by USC&GS in 1935) (Reported destroyed 7/46, B.L.)	650.015
Biggsville, 0.2 mi SE. of, at RR. bridge over South Henderson Creek, on S. end of E. abutment; chiseled square	649.20
Biggsville, 1.5 mi along Hwy. E. of, near N $\frac{1}{4}$ cor. sec. 22, T. 10 N., R. 4 W., on S. side of Hwy. at junction of T-rd. N., at drain under driveway to field, on top of W. concrete headwall; chiseled square	685.68
Biggsville, 2.0 mi E. of, near NW. cor. sec. 23, T. 10 N., R. 4 W., in SE. angle of crossroads, at culvert under N.-S. rd., on top of E. concrete headwall; chiseled square	684.76

LINE 3 (Cont'd)

	<u>Feet</u>
Biggsville, 2.5 mi E. of, near $S\frac{1}{4}$ cor. sec. 14, T. 10 N., R. 4 W., in NW. angle of junction of T-rd. N., at culvert under rd. N., on top of W. concrete headwall; chiseled square	690.37
Biggsville, 3.0 mi E. of, near NE. cor. sec. 23, T. 10 N., R. 4 W., 380 ft W. of junction of T-rd. S., at Hwy. culvert, on E. end of S. concrete headwall; standard tablet stamped "1 A 1931"	680.316
Reference mark, 400 ft E. of tablet, in SE. angle of junction of T-rd. S. at culvert under rd. S., on top of E. concrete headwall; chiseled square	692.66
Biggsville, 4.0 mi E. of, 1.1 mi S. thence 2.0 mi W. from Kirkwood, near S. cor. secs. 13 and 18, T. 10 N., Rs. 3 and 4 W., on N. side of Hwy. at junction of T-rd. S., at concrete culvert under driveway to field, on top of E. headwall; chiseled square	706.93
Kirkwood, 1.1 mi S. thence 1.0 mi W. from, near SE. cor. sec. 18, T. 10 N., R. 3 W., 125 ft W. of junction of T-rd. S., at Hwy. culvert, on top of E. end of N. concrete headwall; chiseled square	697.87
Kirkwood, 1.1 mi S. thence 0.5 mi W. from, near $S\frac{1}{4}$ cor. sec. 17, T. 10 N., R. 3 W., in NE. angle of junction of T-rd. N., at culvert under N.-S. rd., on top of E. concrete headwall; chiseled square	713.26

LINE 4

SOUTH ALONG SOUTH PORTION OF WEST BORDER (By S. R. Archer, 1931, Book B-4140)

Gladstone, 900 ft S. of C.B.&Q. RR. station, at S. end of principal business street, in NW. angle of street intersection, on E. side of oil pit at service station, on top of N. end of curb; chiseled square	550.58
Gladstone, 1.5 mi SW. of, 0.25 mi N. of center of sec. 21, 60 ft S. and 30 ft W. from intersection of U.S. Hwy. 34, in concrete post; standard tablet stamped "Prim Trav Sta No 38 W 1923" (Reported not found 8/63, C.R.N.)	557.163
Reference mark, N. of tablet, in NW. angle of Hwy. intersection, at culvert under N.-S. rd., on top of W. concrete headwall; chiseled square	555.87
Gladstone, 2.7 mi SW. of, near center of sec. 28, T. 10 N., R. 5 W., in NE. angle of junction of rd. SE., 40 ft NW. of center of culvert under rd. SE., 18 ft SE. of center of S. end of steel bridge, on top of angle of concrete retaining wall; chiseled square	569.84
Hopper, 1.1 mi N. of, 0.25 mi E. of center of sec. 5, T. 9 N., R. 5 W., at offset crossroads, 30 ft S. and 25 ft E. from junction of T-rd. N., in concrete post 8 in. underground; standard tablet stamped "Prim Trav Sta No 39 W 1923" (Reported not found 8/63, C.R.N.)	566.920
Hopper, 0.5 mi N. of, 0.15 mi E. of $N\frac{1}{4}$ cor. sec. 8, T. 9 N., R. 5 W., at steel bridge over Ellison Creek, near foot of W. end of S. truss, on head of third rivet of inside row from bottom; chiseled cross	558.82
Hopper, 200 ft N. of rd. junction, near center of sec. 8, T. 9 N., R. 5 W., on W. side of rd., at SE. cor. of schoolhouse, on SE. cor. of lower step of porch steps; chiseled square	571.54