

THIRD-ORDER LEVELS
NATIONAL GEODETIC VERTICAL DATUM OF 1929

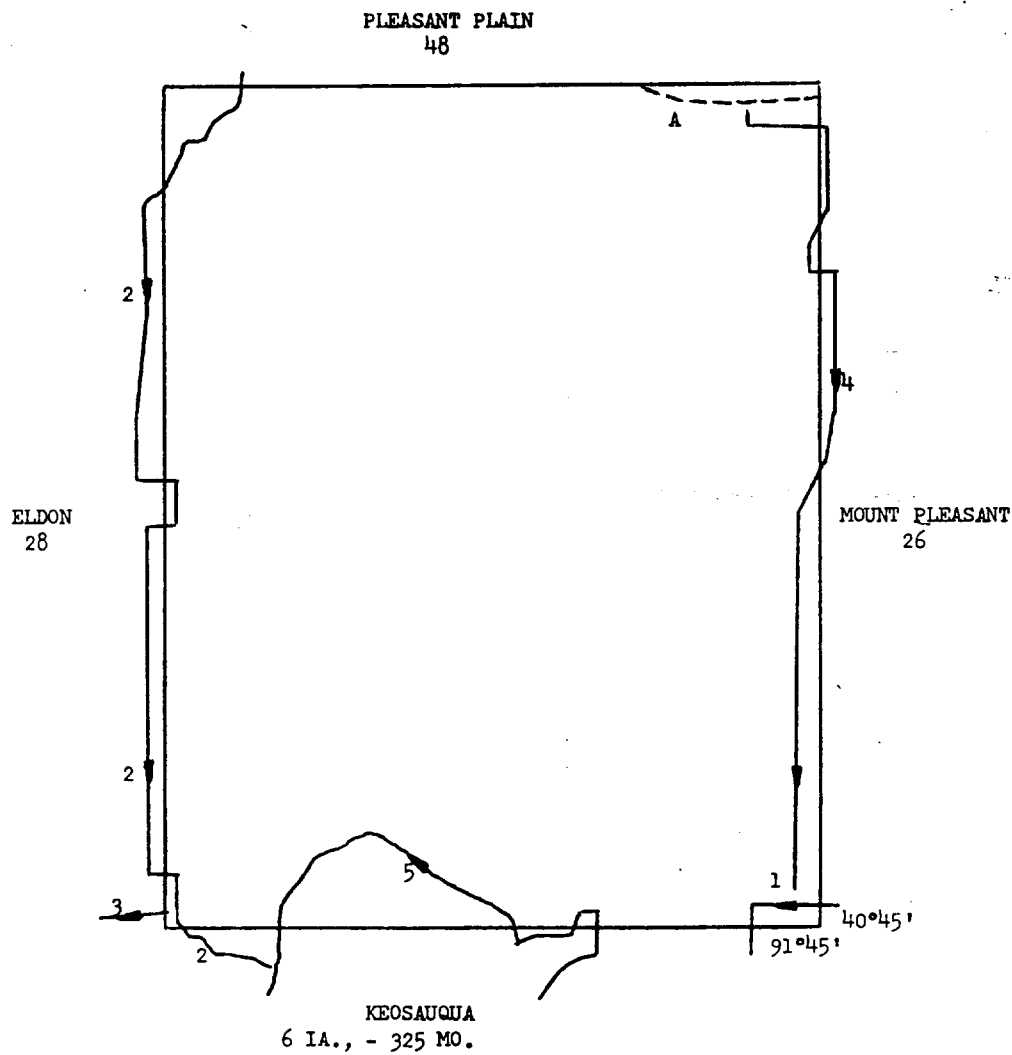
Jefferson and Van Buren Counties

Edition of: 3-16-77

PR: ADP/LB/cb

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

40-091-44
MOUNT ZION QUADRANGLE
27 - IOWA
N4045-W9145/15
DIAGRAM NK 15-12
BURLINGTON



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

A. Quadrangle No. 400911

27 D

LINE 1

FEET

R.G. Wood, 1966; Book CV-2050

MT. PLEASANT QUAD. - 26

- 8.6 Reference mark, about 660 ft S. of tablet; 30 ft E. of center of road at drain crossing; and on E. end of 30-in. concrete tube culvert; a chiseled square 727.65
- 8.6 Farmington, about 8.5 mi N. of; about 4 mi N. and 4.5 mi E. of Bonaparte, T. 69 N., R. 7 and 8 W.; near approx. cor. secs. 24, 25, 19 and 30; 36 ft S., 32 ft E. and 2.4 ft lower than crossroads; 6 ft S. of telephone pole; 1.5 ft W. of E. right-of-way fence and in concrete post; a standard tablet stamped "7 RGW 1966" 737.881
- 10.0 UE 7 RGW A, 1.3 mi W. along a gravel road from tablet; 33 ft S., 120 ft E. and 3.2 ft lower than road at driveways N. and S.; on NW. side of power pole; a rail spike 731.18

MT. ZION QUAD. - 27

- 10.9 Reference mark, 45 ft NE. of tablet; 21 ft N., 6 ft E. and 2.1 ft lower than E.-W. road at field entrance N., on E. end of 24-in. concrete tube culvert; a chiseled square 739.79
- 10.9 Bonaparte, about 4 mi N. and about 2.2 mi E. of; T. 69 N., R. 8 W.; near quarter cor. secs. 22 and 27; about 600 ft W.-SW. of Fred Eden farmhouse; 18 ft S., 38 ft W. and 1.2 ft lower than E.-W. road at field entrance N., 10 ft W. of road at field entrance S., in concrete post; 2 ft E. of standard witness post; a standard tablet stamped "ET 6 RFP 1966" 740.648

KEOSAUQUA QUAD. - 6 IA. 325 MO.

- 2.9 UE 6 RFP B, 0.7 mi W. to paved county road, thence 1.2 mi S. along county hwy. to road curve from tablet, in center of area formed by road curve; and road W., on N. side of power pole; a rail spike 734.99
- 13.3 UE 6 RFP C, 0.7 mi W., thence 1.2 mi S., thence 0.4 mi W. along road from tablet; on an unimproved road; at a curve 15 ft S. of road; and on E. side of an 18-in. scaly bark hickory tree; a RR. spike; about 2 ft higher than road 717.24

LINE 2

F.D. Ragan, 1964; Book CV-1702

PLEASANT PLAIN QUAD. - 48

- 0.0 Fairfield at; on the Chicago, Burlington and Quincy RR., 150 ft E. of the station, at a street crossing, 44 ft W. of the center of street, 15 ft S. of the center of S. track, and in the NE. corner of E. RR. park; a USC&GS standard disk stamped "M 124 1935" and set in top of a concrete post 771.527
- 0.6 UE M 124 A; about 0.5 mi SW. of tablet; 28.7 ft W., 25.1 ft N. and 0.4 ft lower than center of cross streets (W. Burlington Ave. and S. 5th St.) in Fairfield; 0.2 ft N. of street curb, in the SE. corner of concrete sidewalk; chiseled square 768.59
- 1.5 UE M 124 B, about 1.15 mi (airline) SW. of tablet; 27.7 ft N., 21.8 ft W. and 1 ft higher than center of cross streets (W. Filmore Ave. and S. 7th Street) in SW. portion of Fairfield, in the SE. corner of the S. end of concrete sidewalk; chiseled square 763.18
- 2.5 UE M 124 C, about 2.5 mi (airline) SW. of tablet; T. 71 N., R. 10 W.; in NW $\frac{1}{4}$ sec. 2, about 550 ft SW. of T-rd. NE.; 265 ft NE. of T-rd. S.; 33 ft SE., 12.5 ft NE. and 4.1 ft lower than center of NE.-SW. road; at private drive SE., in the NE. end of an 18-in. circular metal culvert; a punched hole 742.6

LINE 2 (Cont'd)

ELDON QUAD. - 28

FEET

- 3.5 Reference mark, 220 ft ENE. of tablet; about 150 ft down-stream from new concrete bridge, in the NW. corner of the NE. rock bridge abutment (abandoned); chiseled square 669.85
- 3.5 Fairfield, 1.8 mi S. and 1.7 mi W. of junction of U.S. Hwy. 34 and State Hwy. 1 at; T. 71 N., R. 10 W.; near center of sec. 3; 142.5 ft SW., 13 ft SE. and 2.1 ft lower than center of concrete bridge over Big Cedar Creek; 88 ft NE. and 2.4 ft higher than center of T-rd. S.-SW.; in the SE. end of the SW. concrete bridge abutment; standard tablet stamped "1 FDR 1964 680" 680.294
- 4.6 UE 1 A, 1.05 mi SW. along gravel road from tablet; T. 71 N., R. 10 W., near quarter cor. between secs. 9 and 10; 15.3 ft N., 14.6 ft E. and 0.8 ft lower than center of N.-S. road at wooden bridge; in E. side of 12-in. pole which forms part of the NE. wingwall of wooden bridge; head of a RR. spike 676.59
- 5.6 UE 1 B, 1.98 mi SSW. along gravel road from tablet; T. 71 N., R. 10 W.; about 700 ft N. of quarter cor. between secs. 15 and 16, 21.5 ft S., 24.5 ft W. and 2.2 ft lower than center of T-rd. W.; in the S. end of a 24-in. circular metal culvert; punched hole 755.5
- 6.2 UE 1 C, 2.6 mi SSW. along gravel road from tablet; about 0.3 mi W. of Jefferson County Home; T. 71 N., R. 10 W.; at cor. secs. 15, 16, 21 and 22; 24.6 ft N., 23 ft E. and 2.2 ft lower than center of crossroads, in the E. end of a 24-in. circular metal culvert; a punched hole 755.4
- 7.5 Fairfield, 5.6 mi S. and 2.2 mi W. of junction of U.S. Hwy. 34 and State Hwy. 1 at; about 3.3 mi (airline) SE. of crossroads at Libertyville; T. 71 N., R. 10 W.; 0.2 mi N. of quarter cor. between secs. 27 and 28; 17.3 ft E. and 0.3 ft lower than center of N.-S. road at culvert; in the center of E. concrete headwall of a 3 x 4 ft concrete box culvert; a standard tablet stamped "2 FDR 1964 743" 743.004
- 7.5 Reference mark; 126 ft SW. of tablet; 27 ft W. and 11.3 ft N. of center of N.-S. road at private drive W. to barn, in the N. end of an 18-in. circular metal culvert; punched hole 744.10
- 8.2 UE 2 A, 0.7 mi S. along gravel road from tablet; T. 71 N., R. 10 W.; at cor. secs. 27, 28, 33 and 34; 21 ft N., 18.6 ft W. and 1.5 ft lower than center of crossroads; in the N. end of an 18-in. circular concrete culvert; chiseled square 754.20
- 9.2 UE 2 B, 1.7 mi S. along gravel road from tablet; T. 71 N., R. 10 W.; in SW. corner of SW $\frac{1}{4}$ of sec. 34; at Jefferson and Van Buren County Line; 25.5 ft E., 17 ft N. and 1.8 ft lower than center of T-rd. S.; at offset crossroads; in N. end of 36-in. circular metal culvert; punched hole 754.1
- 10.0 UE 2 C, 2.5 mi S. along gravel road from tablet; T. 70 N., R. 10 W.; about 0.2 mi S. of quarter cor. between secs. 3 and 4; 23.8 ft E., 18 ft S. and 1 ft higher than center of T-rd. E.; 0.1 ft above ground, in the W. side of a telephone pole; head of a RR. spike 755.92
- 10.7 Reference mark, 138.7 ft NW. of tablet; 83 ft E. and 63 ft N. of center of E.-W. road at field entrance S., 0.6 ft above ground, in the ENE. side of a 12-in. hickory tree; head of a RR. spike 685.70
- 10.7 Birmingham, 2.8 mi W. and 0.2 mi N. of crossroads at; T. 70 N., R. 10 W.; in NW $\frac{1}{4}$ sec. 10; about 0.2 mi ESE. of T-rd. N.; 36 ft NE. and 11.1 ft lower than center of E.-W. road at culvert; in the center of the N. concrete headwall of a 6 ft by 6 ft concrete box culvert; standard tablet stamped "3 FDR 1964 677" 677.373
- 10.7 UE 3 A, 0.2 mi SE. and 0.7 mi S. along gravel road from tablet; T. 70 N., R. 10 W., at quarter cor. between secs. 10 and 15; 95.2 ft SE. and 1.7 ft lower than center of T-rd. E., 26.0 ft S. and 8 ft W. of center of N.-S. road at field entrance S.; in the W. end of a 16-in. circular metal culvert; punched hole 749.7

MOUNT ZION QUAD. - 27

LINE 2 (Cont'd)

ELDON QUAD. - 28

FEET

- 12.2 UE 3 B, about 0.8 mi (airline) SSW. of tablet; T. 70 N., R. 10 W.; at cor. secs. 9, 10, 15 and 16; 238.7 ft W. and 26 ft S. of center of T-rd. S.; at offset crossroads (dim road N.) 30 ft SW. and level with center of T-rd. N.; 0.1 ft above ground in the E. side of a telephone pole; head of a RR. spike 741.45
- 13.3 UE 3 C; about 1.9 mi (airline) S. of tablet; T. 70 N., R. 10 W.; about 0.1 mi S. of cor. secs. 15, 16, 21 and 22; 82 ft S., 13.3 ft W. and 0.3 ft lower than center of steel bridge over creek, in the W. side of a 12-in. pole which forms part of SW. wingwall of steel bridge; head of a RR. spike 632.30
- 14.5 Reference mark, 201.3 ft SE. of tablet; 45 ft N. and 33 ft E. of center of T-rd. N.; at offset crossroads, in the E. end of 24-in. concrete circular culvert; chiseled square 742.31
- 14.5 Birmingham, 3 mi W. and 2.7 mi S. of center of crossroads at; T. 70 N., R. 10 W.; in NW $\frac{1}{4}$ sec. 27, 155 ft N., 128 ft W. and 0.5 ft higher than center of T-rd. N.; at offset crossroads; (State Hwy. 16 and gravel roads) 210.6 ft NE. of center of T-rd. S.; 15.3 ft E. of NE. cor. schoolhouse; in the SE. corner of a 4 x 4 ft concrete well curb; standard tablet stamped "4 FDR 1964 745" 745.499
- 15.5 UE 4 A, 0.9 mi S. along gravel road from tablet; T. 70 N., R. 10 W.; near cor. secs. 27, 28, 33 and 34; about 400 ft S. of farmhouse; on W. side of road, about 350 ft N. of red barn on W. side of road; 18.6 ft E. and 2.5 ft lower than center of N.-S. road at culvert; in the E. end of 18-in. circular metal culvert; punched hole 712.0
- 15.4 UE 4 B, 1.8 mi S. along gravel road from tablet; T. 70 N., R. 10 W.; in SE. cor. SE $\frac{1}{4}$ sec. 33, 17.2 ft W., 25.4 ft N. and 2.7 ft lower than center of T-rd. N.; in the W. end of a 20-in. circular metal culvert; punched hole 655.2
- 16.9 UE 4 C, 1.8 mi S. and 0.5 mi W. along gravel roads from tablet; T. 69 N., R. 10 W.; in NW. corner of NE $\frac{1}{4}$ sec. 4, 41 ft E., 36 ft S. and 4.7 ft higher than center of T-rd. S.; 0.1 ft above ground, in the E. side of powerline pole; head of a RR. spike 637.43
- 17.4 Reference mark, 227.4 ft NW. of tablet; 224 ft NW., 27.9 ft SW. and 6 ft higher than center of NW.-SE. road at steel bridge over creek; 0.1 ft above ground, in the SW. side of a power pole; head of a RR. spike 604.90
- 17.4 Birmingham, 5 mi S. and 3.4 mi W. of crossroads at; about 2 mi upriver from the village of Kilbourn; T. 69 N., R. 10 W.; near center sec. 4, 70 ft S. of NW.-SE. road at steel bridge; 9 ft N. and 19.7 ft lower than wooden RR. bridge 502, in the N. end of a 2.1 by 19.6 RR. bridge support, which is on W. side of small drain, standard tablet stamped "5 FDR 1964 584" 583.859
- 18.9 UE 5 A, about 1.3 mi (airline) SSE. of tablet; T. 69 N., R. 10 W.; in SE $\frac{1}{4}$ sec. 9, 27.6 ft S., 43 ft W. and 4.7 ft higher than center of T-rd. E., 0.1 ft above ground in the E. side of a powerline pole; head of a RR. spike 709.31
- 19.7 UE 5 B, about 2 mi SSE. of tablet; T. 69 N., R. 10 W., at quarter cor. between secs. 15 and 16, 26 ft S., 28 ft W. and 6.5 ft lower than center of T-rd. W.; in the W. end of a 30-in. circular metal culvert; punched hole 726.3

MOUNT ZION QUAD. - 27

- 20.5 Reference mark, 205 ft N. of tablet; 43 ft W., 16.6 ft N. and 2 ft lower than center of T-rd. NW.; in N. end of 24-in. circular metal culvert; punched hole 666.04
- 20.5 Pittsburg, 1.5 mi N. and 0.3 mi W. of concrete bridge over Des Moines River at; T. 69 N., R. 10 W.; near quarter cor. between secs. 15 and 22, about 190 ft S. of center of T-rd. NW.; 72 ft S. of center of N.-S. road at private drive E.; 21.5 ft W. and 5.9 ft lower than center of N.-S. road at box culvert; in the N. end of the W. concrete headwall of a 6 x 6 ft box culvert; standard tablet stamped "6 FDR 1964 662" 662.427

LINE 2 (Cont'd)

MOUNT ZION QUAD. - 27

FEET

21.2 UE 6 A, 0.66 mi S. along gravel road from tablet; T. 69 N., R. 10 W.; near center of sec. 22; 178.4 ft N., 32 ft W. and 6.6 ft higher than center of N.-S. road fork W.; 13 ft N. of center of cut-off road between road forks; 0.4 ft above ground, in the E. side of a powerline pole; head of a rail spike 642.50

KEOSAUQUA QUAD. - 6

22.5 Keosauqua, about 2 mi (airline) NW. of Des Moines River bridge at; at Pittsburg; T. 69 N., R. 10 W.; in SE $\frac{1}{4}$ of sec. 27; 14.2 ft N. and 0.7 ft higher than center of E. end of concrete bridge over Des Moines River, in the E. end of the N. concrete bridge curb; standard tablet stamped "7 FDR 1964 598" 597.511

22.5 Reference mark, 110.4 ft SE. of tablet; 55.3 ft S. and 12.9 ft W. of E.-W. road at field entrance S.; 0.4 ft above ground, in the N. side of the most northern one of two transmission line poles; head of a RR. spike 592.40

LINE 3

F.D. Ragan, 1964; Book CV-1702

MOUNT ZION QUAD. - 27

0.0 UE 6 A (Previously described in Line 2) 642.50

ELDON QUAD. - 28

1.1 UE 6 B, 0.7 mi S. and 1.1 mi W. along gravel road from tablet; T. 69 N., R. 10 W., near center of sec. 21; 80 ft N., and 13.6 ft W. and 1.9 ft higher than center of concrete bridge over Chequest Creek; in the N. end of the E. concrete bridge banister; chiseled square 613.02

1.6 UE 6 C, about 1.5 mi (airline) SW. of tablet; T. 69 N., R. 10 W.; at quarter cor. between secs. 21 and 28; 56.5 ft W., 16.8 ft N. and 2.7 ft lower than center of T-rd. N.; 0.3 ft above ground, in the NNW. side of 39-in. forked elm tree; head of a RR. spike 662.10

LINE 4

D.D. Bolin, 1976; Book CV-3332

MOUNT ZION QUAD. - 27

3 1 0.0 BM, 1.4 mi W. along the Chicago, Burlington & Quincy RR. from the station at Lockridge, Jefferson County, at underpass 245.35, in the top of the NE. cor. of the SE. concrete pedestal foundation, 11 ft S. of the centerline of the S. track and 1.5 ft higher than the track, a standard USC&GS disk stamped "U 124 1935". 731.101

4 1.0 UE U A, 0.5 mi S. and 0.5 mi E. along road and U.S. Hwy. 34 from the disk; T. 71 and 72 N., R. 8 W. near the quarter cor. between secs. 3 and 4, 30 ft S., 66 ft E. and 0.3 ft lower than the centerline of the crossroads; on top and at the S. end of the round concrete culvert; a chiseled square 723.58

MOUNT PLEASANT QUAD. - 26 IA.

6 2.1 UE U B, 0.5 mi S. thence 1.5 mi E. along U.S. Hwy. 34 from the disk; T. 71 and 72 N., R. 8 W., near the center of sec. 2, 29 ft S., 49 ft E. and 1.1 ft lower than the centerline of the crossroads; on top and at the S. end of the round concrete culvert; a chiseled square 673.07

8 2.9 UE U C, 2.9 mi S. and E. along roads from the disk; T. 71 N., R. 8 W., about 0.25 mi N. of the quarter cor. between secs. 2 and 11, 46 ft N., 10 ft W. and 0.9 ft lower than the centerline of the bridge over Wolf Creek on State Road W 40; on top and at the N. end of the W. concrete railing, a chiseled square 625.43

LINE 4 (Cont'd)

MOUNT PLEASANT QUAD. - 26 IA.

FEET

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|----------------------------------|------|-----|--|---------|
| 3 | 11 | 3.3 | UE U D, 1.25 mi S. and 1.5 mi E. along hwy. and roads from the disk; T. 71 N., R. 8 W., about 0.2 mi S. of the quarter cor. between secs. 2 and 11; 66 ft S., 23 ft E.; and 2.9 ft lower than the centerline of the T-rd. W., at the N. entrance to a cemetery on top and at the N. end of the round metal culvert; a punched hole | 714.14 |
| 12 | 3.9 | | Reference mark, 45 ft ENE. of the tablet; 21 ft NE. and 9 ft SE. of the centerline of the bridge, on top and at the NE. end of the SE. concrete bridge railing, a chiseled square | 639.75 |
| 13 | 3.9 | | BM, Lockridge, 2.5 mi S. along State Route W 40 from; T. 71 N., R. 8 W., in the SE $\frac{1}{4}$ of the SW $\frac{1}{4}$ of sec. 11; 24 ft SW., 9 ft NW. and 0.7 ft higher than the center of the bridge, on top and at the SW. end of the NW. concrete bridge railing, a standard tablet stamped "12 DDB 1976" | 640.771 |
| <u>MOUNT ZION QUAD. - 27</u> | | | | |
| 17 | 5.3 | | UE 12 A, 1.4 mi S. along road from the tablet; T. 71 N., R. 8 W. near the W. sixteenth cor. between secs. 14 and 23; 24 ft S., 295 ft E. and 8.2 ft lower than the centerline of the T-rd. E.; on top and at the S. end of the round metal culvert; a punched hole | 738.85 |
| <u>MOUNT PLEASANT QUAD. - 26</u> | | | | |
| 20 | 6.8 | | UE 12 B, 2.9 mi S. along road from the tablet; T. 71 N., R. 8 W., near the E. sixteenth cor. between secs. 23 and 26; at the N. end of the parking area of the round Prairie Baptist Church; 63 ft S., 32 ft W. and 2.3 ft lower than the centerline of the crossroads; on top and at the N. end of the round metal culvert; a punched hole | 741.77 |
| 22 | 7.3 | | BM, Lockridge, 4.5 mi S. and 0.5 mi E. of, 6 mi N. and 1.8 mi W. of Hillsboro; T. 71 N., R. 8 W.; quarter mi E. of the center of section of sec. 26, 39 ft S., 52 ft E. and 2.7 ft lower than the centerline of the T-rd. E., 4 ft S. of the cor. fence post; 1 ft W. of the E. right-of-way fence, 1 ft W. of the witness post; set inside of a 6-in. drain tile, a standard tablet stamped "13 DDB 1976" | 741.465 |
| 24 | 8.2 | | UE 13 A, 0.9 mi S. along road from the tablet; T. 71 N., R. 8 W., approx. 1000 ft S. of the center of the NE $\frac{1}{4}$ of sec. 26, 26 ft S., 85 ft W. and 2.6 ft lower than the centerline of the crossroads; on top and at the S. end of the round concrete culvert; a chiseled square | 733.47 |
| 26 | 9.7 | | UE 13 B, 2.4 mi S. along road from the tablet; T. 70 N., R. 8 W., in the SW $\frac{1}{4}$ of the SE $\frac{1}{4}$ of sec. 2; 85 ft N., 10 ft E. and 0.1 ft lower than the centerline of the concrete bridge over Big Cedar River on State Route W 40; on top and at the N. end of the E. concrete railing, a chiseled square | 624.48 |
| 28 | 9.8 | | UE 13 C, 2.6 mi S. along road from the tablet; T. 70 N., R. 8 W.; near the quarter cor. between secs. 2 and 11, 57 ft N., 34 ft W. and 0.8 ft lower than the centerline of the T-rd. W., on top and at the E. end of the second step leading to the Hickory Grove Church entrance, a chiseled square | 677.10 |
| <u>MOUNT ZION QUAD. - 27</u> | | | | |
| 32 | 10.9 | | Reference mark No. 1 is stamped "VAN NO 1 1955" is a standard disk set in the top of a 10-in. square concrete post that projects 3-in. and at about the same elevation as the station. It is 33.9 ft SE. of the center of the gravel road and 10-in. SW. of a power line pole numbered 630 | 742.226 |
| 33 | 10.9 | | Triangulation Station, station is located airline about 11 mi E. of Birmingham, 8 mi S. of Lockridge, 4.5 mi NW. of Hillsboro, 0.75 mi S. of Big Cedar Creek and in a small grassy triangle formed by the rounding of the corner where the road turns to the S. The mark is stamped "VAN 1955" and is set in the top of a 10-in. square concrete post that projects 4-in. It is 69 ft W.-NW. of the center of the gravel road, 58 ft E. of the center of a farm road and 9 ft E.-SE. of a witness post | 742.403 |

LINE 4 (Cont'd)

MOUNT ZION QUAD. - 27

FEET

- 3 35 11.2 UE VAN A, 0.25 mi S. along road from the triangulation station; T. 70 N., R. 8 W., near the cor. of secs. 10, 11, 14 and 15; 13 ft N., 33 ft W. and 1.5 ft lower than the centerline of the crossroads, on top and at the N. end of the round metal culvert; a punched hole 710.13
- 36 11.4 Azimuth Mark, stamped "VAN 1955" is a standard disk set in the top of a 10-in. square concrete post that projects 4-in. It is 24 ft W. of the center of the road, 2 ft E. of a wire fence line and 1 ft N. of a power line pole. 737.324
- 39 13.3 UE VAN B, 2.2 mi S. along road from the tablet; T. 70 N., R. 8 W., near the cors. of secs. 14, 15, 22 and 23, 531 ft S., 24 ft W. and 35.7 ft lower than the centerline of the crossroads, on top and at the N. end of the concrete head wall of the concrete box culvert; a chiseled square 681.07
- 42 14.3 UE VAN C, 3.1 mi S. along road from the tablet; T. 70 N., R. 8 W. near the cor. of secs. 22, 23, 26 and 27; 20 ft S., 59 ft W. and 1.8 ft lower than the centerline of the T-rd. W., on top and at the W. end of the round metal culvert; a punched hole 740.33
- 45 14.8 BM, Hillsboro, 2.3 mi W. of; T. 70 N., R. 8 W., near the quarter cor. between secs. 26 and 27; 20 ft N., 26 ft W. and 0.8 ft lower than the centerline of the crossroads; on top and at the W. end of the concrete headwall of the concrete box culvert; a standard tablet stamped "14 DDB 1976" 723.930
- 46 14.8 Reference mark, 63 ft SE. of the tablet; 24 ft S., and 21 ft E. of the centerline of the crossroads; on top and 5 ft from the E. end of the concrete headwall of the concrete box culvert; a chiseled square 723.47
- 49 16.3 UE 14 A, 1.5 mi S. along road from the tablet; T. 69 and 70 N., R. 8 W. near the cor. of secs. 34, 35, 2 and 3, 26 ft N. 33 ft W. and 2.6 ft lower than the centerline of the crossroads; on top and at the N. end of the round concrete culvert; a chiseled square 731.54 ✓
- 54 18.4 Reference mark, 85 ft W. of the tablet; 20 ft S. and 25 ft W. centerline of the crossroads; on top of the S. end of the round metal culvert; a punched hole 743.47
- 55 18.4 BM, Hillsboro, 3.5 mi S. and 2.3 mi W. of; T. 69 N., R. 8 W. near the cor. of secs. 10, 11, 14 and 15; 21 ft S., 60 ft E. and 2.0 ft lower than the centerline of the crossroads; 16 ft E. of the field entrance S., 11 ft E. of the E. gate post; 1 ft N. of the witness post; 1 ft N. of the S.-right-of-way fence; set inside of a 6-in. drain tile, a standard tablet stamped "15 DDB 1976" 743.457
- 57 19.4 UE 15 A, 1 mi S. along road from the tablet; T. 69 N., R. 8 W., near the cor. of secs. 14, 15, 22 and 23; 20 ft N., 20 ft E. and 0.8 ft lower than the centerline of the crossroads; on top and at the E. end of the round metal culvert; a punched hole 738.42
- 61 20.7 ET, Bonaparte, about 4 mi N. and about 2.2 mi E. of; T. 69 N., R. 8 W.; near quarter cor. secs. 22 and 27; about 600 ft W.-SW. of Fred Eden farmhouse; 18 ft S., 38 ft W. and 1.2 ft lower than E.-W. road at field entrance N., 10 ft W. of road at field entrance S., in concrete post; 2 ft E. of standard witness post; a standard tablet stamped "ET 6 RFP 1966" 740.648

LINE 5

D.D. Bolin, 1976; Book CV-3332

KEOSAUQUA QUAD. - 6 IA. - 325 MO.

- 1 0.0 BM, Bonaparte, about 2.5 mi N. and about 2.5 mi W. of; about 0.5 mi NE. of Bentonsport, T. 69 N., R. 9 W.; near NW $\frac{1}{4}$ of sec. 36, 25 ft NE., 42 ft NW. and 0.6 ft higher than gravel road at entrance to Bentonsport Cemetery; 14 ft N. of N. end of gate, 1 ft SE. of steel fence, and in concrete post; a standard tablet stamped "9 RGW 1966" 710.252

LINE 5 (Cont'd)

MOUNT ZION QUAD. - 27 IA.

FEET

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|---|-----|-----|---|--------|
| 4 | 4 | 2.3 | UE 8 RGW B A, 2.3 mi NE. and N. along road from the tablet; T. 69 N., R. 8 and 9 W., near the cor. of secs. 19, 24, 25 and 30, 20 ft N., 33 ft E. and 1.9 ft lower than the centerline of the crossroads; on top and at the W. end of the round metal culvert; a punched hole | 731.43 |
| 6 | 3.3 | | Reference mark, 150 ft E. of the tablet; 23 ft S. and 249 ft W. of the centerline of road at curve; on top and at the S. end of the round metal culvert; a punched hole | 689.71 |

KEOSAUQUA QUAD. - 6 IA. - 325 MO.

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|---|-----|-----|---|---------|
| 7 | 3.3 | BM, | Keosauqua; 1.5 mi N. and 4 mi E. of; T. 64 N., R. 9 W., near the center of sec. 25, 36 ft S., 396 ft W. and 0.8 ft lower than the centerline of the road at curve; on the crest of the small hill; 12 ft E. of the center of the closed field entrance to the S.; 1 ft N. of the S. right-of-way fence; 1 ft N. of the witness post; set inside of a 6-in. clay drain tile, a standard tablet stamped "16 DDB 1976" | 697.310 |
| 9 | 4.4 | | UE 16 A, 1 mi W. along road from the tablet; T. 69 N., R. 9 W., near the quarter cor. between secs. 26 and 27, 24 ft S., 335 ft E. and 3.3 ft lower than centerline of the T-rd. E., 24 ft S. and 11 ft E., centerfield entrance S.; on top and at the E. end of the round metal culvert; a punched hole | 712.84 |

MOUNT ZION QUAD. - 27 IA.

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| 13 | 5.3 | UE 16 B, | 2 mi W. and NW. along road from the tablet; T. 69 N., R. 9 W.; in the SE $\frac{1}{4}$ of the SE $\frac{1}{4}$ of sec. 22, 46 ft NW., 20 ft SW. and 1.4 ft lower than the centerline of T-rd. NE. (meas. normal to roads), on top and at the SE. end of the round metal culvert, a punched hole | 691.52 |
| 14 | 5.8 | | Reference mark, 158 ft E. of the tablet; 20 ft S. and 79 ft E. of the concrete bridge, on top of the SE. concrete wingwall; a chiseled square | 582.72 |
| 15 | 5.8 | | BM, Keosauqua, 1.7 mi N. and 4 mi E. of; T. 69 N., R. 9 W., in the SW $\frac{1}{4}$ of the SE $\frac{1}{4}$ of sec. 22; 20 ft S., 82 ft W., 1.3 ft higher than the centerline of the concrete bridge; on top of the SW. concrete wingwall; a standard tablet stamped "17 DDB 1976" | 583.519 |
| 19 | 6.8 | | UE 17 A, 1 mi NW. along road from the tablet; T. 69 N., R. 9 W.; in the SW $\frac{1}{4}$ of the NE $\frac{1}{4}$ of sec. 21, 27 ft S., 230 ft E. and 18.8 ft lower than the centerline of the road at curve at private drive W. on top and at the W. end of the concrete headwall of the concrete box culvert; a chiseled square | 570.95 |
| 22 | 7.3 | | UE 17 B, 1.5 mi NW. along road from the tablet; T. 69 N., R. 9 W., in the SW $\frac{1}{4}$ of the NE $\frac{1}{4}$ of sec. 21, 46 ft NW., 13 ft NE. and 0.2 ft lower than the centerline of the concrete bridge over Rock Creek; on top and near the NW. end of the NE. concrete bridge railing, a chiseled square | 577.92 |
| 24 | 7.7 | | UE 17 C, 1.9 mi NW. along road from the tablet, T. 69 N., R. 9 W., in the NW $\frac{1}{4}$ of sec. 21, about 400 ft SE. of a small wood frame house on a hill; 24 ft NE. and 4.1 ft lower than the centerline of the road at culvert; on top and at the NE. end of the round metal culvert, a punched hole | 594.10 |
| 27 | 9.2 | | UE 17 D, 3.4 mi NW. along road from the tablet, T. 69 N., R. 9 W., in the NE $\frac{1}{4}$ of the SE $\frac{1}{4}$ of sec. 18, 19 ft N., 260 ft E. and 7.6 ft lower than the centerline of the T-rd. E. on top and at the N. end of the round metal culvert; a punched hole | 711.57 |

LINE 5 (Cont'd)

MOUNT ZION QUAD. - 27 IA.

FEET

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| 4 | 30 | 9.6 | BM, Keosauqua; 3.5 mi N. of, T. 69 N., R. 9 W.; in the SE $\frac{1}{4}$ of sec. 18; 111 ft N., 84 ft W. and 1.1 ft higher than the centerline of the T-rd. S.; in the SE. cor. of Forbes Cemetery; about 24 ft NW. of the NW. rail of the track, 1 ft SE. of the witness post set inside of a 6-in. clay drain tile, a standard tablet stamped "18 DDB 1976" | 723.020 |
| 31 | 9.6 | | Reference mark, 170 ft SE. of the tablet; 87 ft SW. and 66 ft SE. of the centerline of the T-rd. E.; 1 ft NW. of the SE. right-of-way fence, on top of a steel rail used to mark the hwy. right-of-way marker and painted orange | 724.94 |
| 34 | 10.8 | | UE 18 A, 1.2 mi SW. along hwy. 1 from the tablet; T. 69 N., R. 10 W.; about 0.2 mi E. of the center of sec. 24; 84 ft S., 36 ft E. and 0.5 ft lower than the centerline of the crossroads, on top of the concrete 4 by 4 in. right-of-way marker and on top of the projecting iron rebar | 688.90 |
| 35 | 11.8 | | UE 18 B, 2.3 mi SW. along hwy. 1 from the tablet; T. 69 N., R. 10 W.; near the center of sec. 25; and at the entrance to the Van Burgen County fair grounds; 48 ft N., 51 ft W. and 0.4 ft higher than the centerline of the crossroads; on top of the 4 by 4 concrete right-of-way marker and on top of the projecting iron rebar | 674.42 |

KEOSAUQUA QUAD. - 6 IA. - 325 MO.

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| 38 | 13.5 | | Keosauqua; at; T. 69 W., R. 10 W.; in SW $\frac{1}{4}$ sec. 36, 20 ft NE. and 4.5 ft higher than center of hwy. at SE. end of concrete bridge over Des Moines River, in top of the SE. end of the NE. concrete bridge banister; standard tablet stamped "8 FDR 1964 597" | 596.596 |
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