

THIRD-ORDER LEVELS  
NATIONAL GEODETIC VERTICAL DATUM OF 1929

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

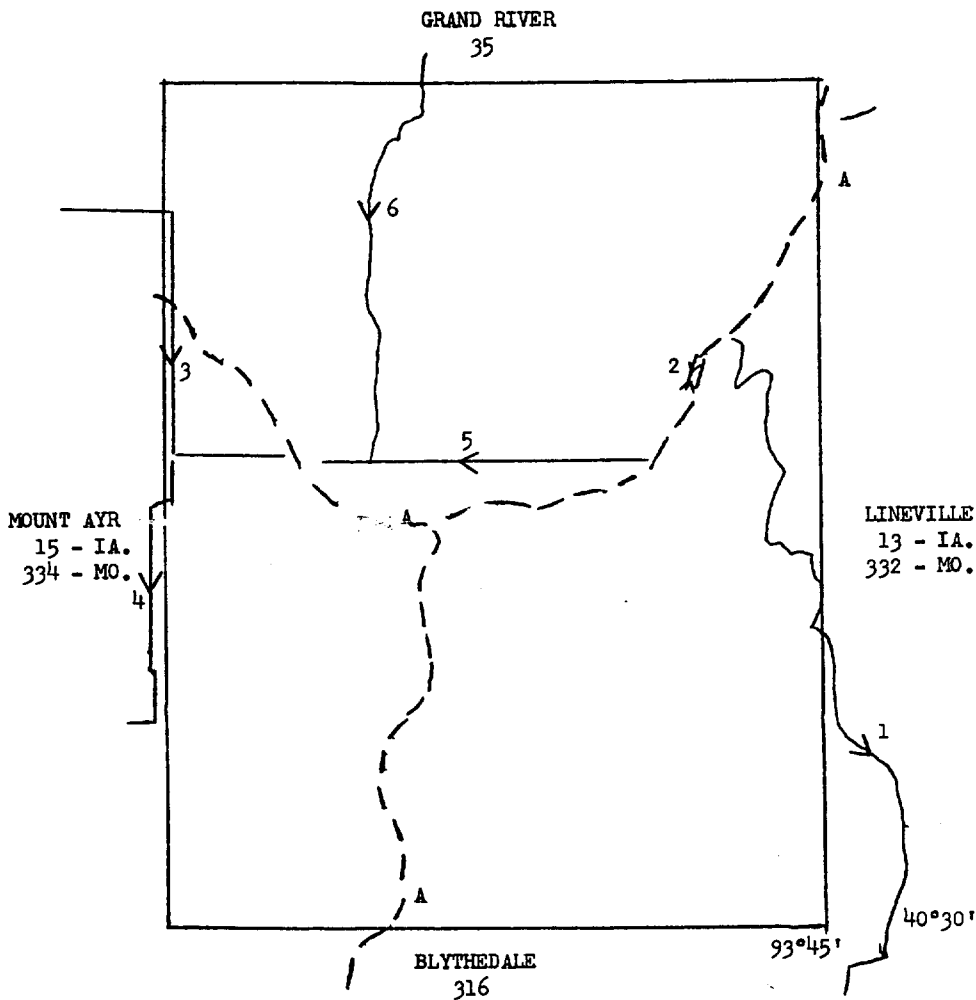
Decatur County, Iowa

Harrison and Mercer Counties, Missouri

Edition of: 5-7-79

PR: ADP/cb

40-093-43  
LAMONI QUADRANGLE  
333 - MISSOURI  
14 - IOWA  
N4030-W9345/15  
DIAGRAM NK 15-11  
CENTERVILLE



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

Quadrangle No. 400934

14C

LINE 1

FEET

R.L. Fuerst, 1963; Book CV-1598

LAMONI QUAD. - 14

- |                                                                                                                                                                                                                                                                                                                  |          |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| 0.0 Davis City, 3.1 mi NE. along the C.B. & Q. RR. from station at; at the Koyle Junction station sign, at road crossing, 36 ft SE. of center of track, 27 ft SW. of center of road; 8 ft NW. of power pole and about 2 ft lower than track; a USC&GS standard disk stamped "A 115 1935" in top of concrete post | 1008.213 |
| 0.4 UE 115 A, T. 68 N., R. 25 W., near center secs. 19, 101 ft S. and 9.5 ft E. of center of 210 ft bridge on top of concrete curb; chiseled square                                                                                                                                                              | 964.12   |
| 1.3 UE 115 B, T. 68 N., R. 25 W., 0.25 mi W. of center sec. 30, at intersection of old Hwy. 65 and road E.; 39 ft S., 64 ft W. and 3 ft higher than intersection, in NW. side of power pole; head of rail spike                                                                                                  | 1080.50  |
| 2.3 UE 115 C, T. 68 N., R. 25 W., 0.15 mi N. of quarter cor. between secs. 29 and 30, 52 ft S., 21 ft W. and 1 ft lower than Y-rd. (Rds. S., NW. & NE.) on top of W. end of 24-in. corrugated steel culvert; in painted square chiseled cross; near power pole                                                   | 1078.05  |
| 3.0 UE 115 D, T. 66 N., R. 25 W., near cor. secs. 29, 30, 31 and 32; 150 ft S. of school house, 22 ft N., 30 ft W. and level with road at drive E.; in E. side of power pole, head of rail spike                                                                                                                 | 1023.24  |
| 3.5 Davis City, 0.5 mi N. and 2.25 mi E. of; T. 68 N., R. 25 W., near quarter cor. between secs. 31 and 32; 133 ft S., 22 ft W. and 4.5 ft lower than crossroads; 1 ft E. of right-of-way fence; in concrete post; standard tablet stamped "19 RLF 1963 981"                                                     | 980.795  |
| 3.5 Reference mark, T. 68 N., R. 25 W., near quarter cor. between secs. 31 and 32; 500 ft S. and 24 ft W. of crossroads; on the W. end of E.-W. 96 in. corrugated steel culvert; chiseled cross on head of 0.75-in. bolt                                                                                         | 973.38   |
| 4.3 UE 19 A, T. 66 N., R. 23 W., near center of NW $\frac{1}{4}$ sec. 5, 13 ft S., 27 ft E. and 2 ft lower than road at field entrance E. on top of S. end of 12-in. corrugated steel culvert; painted square chiseled cross; near telephone pole                                                                | 1087.49  |
| 5.3 UE 19 B, T. 67 N., R. 25 W., near N. sixteenth cor. between secs. 7 and 8; 30 ft S., 32 ft E. and 7.5 ft lower than road at private drive E.; on top of SE. end of 48-in. corrugated steel culvert; painted square; chiseled cross; near power pole                                                          | 1020.60  |

LINEVILLE QUAD. - 13

- |                                                                                                                                                                                                                                                                                                                                                                                              |          |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| 6.5 Pleasanton, 2.5 mi N. of; in the NW $\frac{1}{4}$ sec. 9, T. 67 N., R. 25 W.; 39 ft W. of center of road, 64 ft N. of field entrance W. and 2 ft E. of W. right-of-way fence; in concrete post; projecting 2-in.; standard tablet stamped "REFERENCE MARK 1 ET 2 MES 1963"                                                                                                               | 1083.346 |
| 6.5 Pleasanton, 2.5 mi N. of; in the NW $\frac{1}{4}$ sec. 9; T. 67 N., R. 25 W., 76 ft S. of an abandoned stucco farm house; at the crest of ridge; 14 ft S. of center of wire gate at a farm drive E.; 29 ft E. of center of gravel road; 2 ft W. of the E. right-of-way fence; 1.5 ft W. of witness post; in concrete post; projecting 2-in. standard tablet stamped "ET 2 MES 1963 1086" | 1086.541 |
| 7.4 UE 2 A, T. 67 N., R. 25 W., near cor. secs. 8, 9, 16 and 17, 40 ft S., 30 ft E. and 6 ft lower than T-rd. W.; on E. end of 96-in. corrugated steel culvert; painted square chiseled cross; near power pole                                                                                                                                                                               | 1001.20  |
| 7.9 UE 2 B, T. 67 N., R. 25 W., near quarter cor. between secs. 16 and 17, 40 ft N., 39 ft E. and 4 ft lower than T-rd. E.; in W. side of power pole; head of rail spike                                                                                                                                                                                                                     | 1075.60  |

| <u>LINE 1 (Cont'd)</u>                                                                                                                                                                                                                                                                                          | <u>LINEVILLE QUAD. - 13</u> | <u>FEET</u> |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|-------------|
| 8.8 UE 2 C, T. 67 N., R. 25 W., near quarter cor. between secs. 20 and 21; 39 ft S., 17 ft W. and 3 ft lower than T-rd. N.; in N. side of power pole; head of a RR. spike                                                                                                                                       |                             | 1100.38     |
| 9.6 Pleasanton, T. 67 N., R. 25 W., in sec. 21, in the NW. cor. of City Park, 70 ft S., 37 ft E. and 0.5 ft lower than cross streets; 15 ft S. of 36-in. birch tree; in concrete post; standard tablet stamped "20 RLF 1963 1090"                                                                               |                             | 1090.095    |
| 9.6 Reference mark, Pleasanton, 150 ft S. and 75 ft W. of tablet; 34 ft N. and 28 ft W. of cross-streets; on SW. cor. of sidewalk; chiseled square                                                                                                                                                              |                             | 1088.29     |
| 10.5 UE 20 A, T. 67 N., R. 25 W., 0.25 mi W. of quarter cor. between secs. 32 and 33; 195 ft S. and 18 ft W. of T-rd. E.; 12 ft N., 18 ft W. and 2 ft lower than road at drive W.; on N. end of 12-in. corrugated steel culvert; chiseled cross; near power pole                                                |                             | 1084.08     |
| 11.3 UE 20 B, T. 66 N., R. 25 W., 0.3 mi S. of E. sixteenth cor. on N. sec. line of sec. 5; 170 ft S. and 50 ft W. of intersection of curve in Co. Hwy. "B" and gravel road SW.; 25 ft SE. from normal of gravel road; in SW. side of power pole; head of a rail spike                                          |                             | 1078.91     |
| 12.0 UE 20 C, T. 66 N., R. 25 W., near E. sixteenth cor. between secs. 5 and 8, 49 ft S., 17 ft E. and 1.5 ft lower than T-rd. E.; intersection of road NW.-SE.; and road E.; 4 ft W. of fence; in E. side of power pole; head of rail spike                                                                    |                             | 1066.32     |
| 12.8 Saline, 0.5 mi N. and 0.75 mi W. of; T. 66 N., R. 25 W., 3 mi N. of cor. secs. 8, 9, 16 and 17, in sec. 8; about 125 ft S. of two story farmhouse; 41 ft S., 24 ft E. and 1.5 ft higher than road at drive W.; 1 ft W. of right-of-way fence; in concrete post; standard tablet stamped "21 RLF 1963 1065" |                             | 1064.654    |
| 12.8 Reference mark, 180 ft S. of tablet; 18 ft W. and 9 ft S. of road at field entrance W.; on top of corrugated steel culvert; chiseled cross                                                                                                                                                                 |                             | 1061.44     |
| 13.6 UE 21 A, T. 66 N., R. 25 W., near quarter cor. between secs. 16 and 17; 34 ft N., and 37 ft W. and level with crossroads; in SE. side of power pole; head of a RR. spike                                                                                                                                   |                             | 1055.19     |
| 14.2 T. 66 N., R. 25 W., about 0.25 mi N. of center of sec. 16, at Saline, Mo., at a 90° curve in main street from N. to E., 18 ft S. and 15 ft E. of intersection of curve and drive SE., on the SW. end of 14-in. corrugated steel culvert; chiseled cross; near power pole                                   |                             | 953.89      |
| 14.8 UE 21 C, T. 66 N., R. 25 W., near N. sixteenth cor. between secs. 15 and 16, 22 ft S. and 160 ft E. of T-rd. W., on top of center of E. concrete and rock head to 36-in. corrugated steel culvert; chiseled square; near power pole                                                                        |                             | 1032.98     |
| 15.6 Saline, 0.5 mi S. and 0.25 mi E. of; T. 66 N., R. 25 W., 189 ft E. of cor. secs. 15 and 16, 21 and 22; 30 ft W. of County road "B" at road E.; in concrete post; standard stamped "PTS 72 JS 1923 MO 1056"                                                                                                 |                             | 1056.742    |

LINE 2

R.L. Fuerst, 1963; Book CV-1598

LAMONI QUAD. - 14

|                                                                                                                                                                                                                                                             |         |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| 0.0 Davis City at; on the C.B. & Q. RR., 180 ft SW. of the station at a concrete culvert in the center of the top of the NW. headwall; 16 ft NW. of the center of main track; and about 1.5 ft lower than track a USC&GS standard disk stamped "Y 114 1935" | 910.467 |
| 0.2 Reference mark, 4, chiseled square on concrete headwall for corrugated drain pipe slightly landward from S. end of bridge                                                                                                                               | 913.60  |
| .2 Reference mark 2, is a bronze tablet set in concrete pier at end approach walk to gate house                                                                                                                                                             | 901.251 |

LINE 3

FEET

R.R. Barrett, 1978; Book CV-3436

MOUNT AYR QUAD. - 334 MO. 15 IA.

- |   |     |     |                                                                                                                                                                                                                                                                                                                                                                       |          |
|---|-----|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| 3 | 1   | 0.0 | BM, At Kellerton, Ringgold County, on the Chicago, Burlington & Quincy RR., just E. of the station, at the Main Street crossing, 30 ft W. of the centerline of the street, 26 ft S. of the centerline of the track, 2 ft S. of a powerline pole, and between the curb and sidewalk, a standard USC&GS disk stamped "P 117 1935" and set in the top of a concrete post | 1199.630 |
| 1 | 0.0 |     | BM, Kellerton, at T. 68 N., R. 28 W., near W. sixteenth cor. between secs. 2 and 11, 3 ft N., 8 ft W. from NE. cor. of the post office; 27 ft S., 43 ft W. and ft than cross street, 3 ft W. of a metal flag pole, 17 ft S., 1 ft E. of a fire hydrant; standard tablet on 10 copperweld rod, protected by a 5-in. drain tile, stamped "8 RRB 1978"                   | 1203.639 |
| 6 | 0.9 |     | UE 8 A, 0.9 mi E. of tablet, 24 ft N., 14 ft E. and 2.5 ft lower than crossroads, on E. end of a corrugated metal culvert; punched hole                                                                                                                                                                                                                               | 1134.88  |
| 9 | 1.9 |     | UE 8 B, 1.9 mi E. of tablet, 32 ft S., 53 ft W. and 6.5 ft higher than T-rd. S., 1 ft SW. of a fence corner post, copperweld rod, projecting 7-in.; painted white                                                                                                                                                                                                     | 1140.59  |

LAMONI QUAD. - 333 MO. - 14 IA.

- |    |     |  |                                                                                                                                                                                                                                                                                                                                                                            |          |
|----|-----|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| 16 | 9.0 |  | BM, Kellerton, 3 mi E. and about 0.1 mi S. of, about 660 ft S. of cor.secs. 5, 6, 7 and 8, T. 68 N., R. 27 W., 30 ft S., 38 ft W. and 3 ft higher than entrance W. to farm buildings, 9 ft E. of the E. side of a steel grain bin, 1.8 W. of power pole and witness sign, standard tablet, on 10 ft copperweld rod; protected by a 0.5 ft drain tile, stamped "9 RRB 1978" | 1125.163 |
| 17 | 3.0 |  | Reference mark, 13.5 ft SSW. from BM, 42 ft S., 44 ft W. and 4.4 ft higher than entrance W.; on SE. cor. concrete foundation for a grain dryer fan; chiseled square                                                                                                                                                                                                        | 1126.57  |
| 20 | 3.9 |  | UE 9 A, 0.9 mi S. of tablet; 23 ft S., 39 ft E., and 0.1 ft higher than crossroads, on S. end corrugated metal culvert, punched hole                                                                                                                                                                                                                                       | 1154.16  |
| 25 | 5.0 |  | UE 9 B, 2 mi S. of tablet; about 530 ft S. of crossroads; 11 ft N., 29 ft W., and 2.4 ft lower than road at field entrance W.; on N. end corrugated metal culvert; a punched hole                                                                                                                                                                                          | 1164.47  |
| 28 | 5.9 |  | BM, Kellerton, 3 mi E. and 3 mi S. from; 3 mi N. and 3 mi W. of Lamoni, T. 68 N., R. 27 W., near cor. secs. 19, 20, 29 and 30; 65 ft S., 42 ft E. and 1.7 ft lower than crossroads; 2 ft E. and 0.5 ft N. of fence corner; 4 ft E. of power pole, standard tablet, on 10 ft copperweld rod, protected by 5-in. drain tile, stamped "10 RRB 1978"                           | 1164.992 |
| 29 | 5.9 |  | Reference mark, 33 ft S., 127 ft W. and 3 ft lower than crossroad, 33 ft S., 14 ft E. of road, at drive S., on E. end of a corrugated metal culvert, punched hole                                                                                                                                                                                                          | 1163.66  |
| 32 | 6.9 |  | UE 10 A, 1 mi S. of tablet; 41 ft S., 23 ft E., and 3.7 ft lower than crossroads, on E. end corrugated metal culvert; punched hole                                                                                                                                                                                                                                         | 1092.36  |
| 35 | 8.0 |  | UE 10 B, 2.1 mi S. of tablet, 456 ft S., 18 ft E., and 7.3 ft lower than crossroads, on E. end of metal culvert; punched hole                                                                                                                                                                                                                                              | 1154.03  |
| 38 | 9.1 |  | UE 10 C, 2 mi S. and 1 mi E. of tablet; 27 ft N., 18 ft E., and 1.1 ft lower than T-rd. N. on E. end of metal culvert, punched hole                                                                                                                                                                                                                                        | 1148.86  |
| 40 | 9.6 |  | UE 10 D, 2 mi S. and 2.5 mi E. of tablet, at bridge over Shane Creek, 18 ft S., 12 ft W. and 0.1 ft lower than centerline bridge; a rail spike driven vertically in piling                                                                                                                                                                                                 | 1107.29  |

LINE 3 (Cont'd)

LAMONI QUAD. - 333 MO. - 14 IA.

FEET

- 3 43 10.7 BM, NGS "T 117 1935", top of 8-in. mark was snapped off cleanly, it was cleaned and carefully replaced...1.3 mi NW. along the Chicago, Burlington & Quincy RR. from the station at Lamoni, Decatur County, at a road crossing, 48 ft E. of the centerline of the track, 33 ft N. of the centerline of the road, 8 ft N. of a fence corner, 1 ft W. of the fence line, and about 2 ft lower than the track, a standard USC&GS disk set in concrete post and stamped "T 117 1935" 1152.596

LINE 4

R.R. Barrett, 1978; Book CV-3436  
TIED TO ISOLATED BENCH MARKS...

LAMONI QUAD. - 14 IA. - 333 MO.

- 4 1 0.0 UE 10 B, 2.1 mi S. of BM 10 RRB 1978, 456 ft S., 18 ft E. and 7.3 ft lower than crossroads; on E. metal culvert, punched hole 1154.03

MOUNT AYR QUAD. - 15 IA. - 334 MO.

- 3 1.2 Reference mark, 57 ft E. of BM, 63.5 ft N., 34 ft W. centerline road at entrance N.; 0.8 ft S. of fence and witness tag 1146.01
- 4 1.2 BM, Lamoni, 3.3 mi W. of; about 0.3 mi W. of cor. secs. 5, 6, 7 and 8, T. 67 N., R. 27 W., on the top of a hill; 64 ft N., 91 ft W. and 2.7 ft higher than road at field entrance N., 110 ft W. of a power pole, 1 ft S. of fence post and witness sign; standard tablet, on 10 ft copperweld rod, protected by a 5-in. drain tile, stamped "11 RRB 1978" 1145.419
- 8 2.4 UE 11 A, 0.2 mi W. and 1 mi S. of tablet, 52 ft S., 20 ft E. and 2.7 ft lower than crossroads, on E. end of metal culvert; a punched hole 1138.45
- 12 3.9 UE 11 B, 0.2 mi W. and 2.5 mi S. of tablet, 60 ft S., 20 ft E., and 1.8 ft lower than T-rd. E., on E. end of concrete culvert; chiseled square 1105.52
- 14 4.4 UE 11 C, 0.2 mi W., and 3 mi S. of tablet, 14 ft S., 23 ft E., and 2.6 ft lower than T-rd. W., on E. end of metal culvert; a punched hole 1121.61
- 15 4.9 Reference mark, 65 ft NW. of BM, 16 ft N., 19 ft W. centerline of road, at field entrance W., on N. end of metal culvert, a punched hole 1132.08
- 16 4.9 BM, Lamoni, 3.5 mi W. and 3.5 mi S. of; T. 67 N., R. 27 W., on NW. cor. sec. 31, 203 ft S. of IA.-MO. state line (E.-W. fence) on Mo.-Co. Hwy. KK., 19 ft S., 34.5 ft E. and 0.3 ft lower than road at field entrance W., 1 ft W. of fence, 6 ft E. of power pole, and witness sign; opposite a small group of trees E., standard tablet on 10 ft copperweld rod, protected by a 5-in. drain tile, stamped "12 RRB 1978" 1133.749
- 20 5.9 UE 12 A, 1 mi S. of tablet, 22 ft S., 15 ft E. and 2.1 ft lower than crossroads on E. end metal culvert; a punched hole 1082.31
- 24 6.9 BM, T. 66 N., R. 28 W., near N. cor. secs. 1 and 2, 20 ft N. of T-rd. S.; 75 ft SE. of SE. cor. of dwelling owned by W.A. Gruenwolf, in concrete post; standard tablet stamped "855 1934 1109" 1108.809
- 26 7.5 UE 855 A, 0.6 mi W. of tablet, at bridge over W. Fork Big Creek, 7 ft S. (normal) and centerline bridge, and 0.1 ft higher, top of a steel bolt, painted white 998.43

LINE 5

FEET

R.R. Barrett, 1978; Book CV-3436

LAMONI QUAD. - 14 IA. - 333 MO.

|    |     |                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                              |         |
|----|-----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| 6  | 7   | 0.0                                                                                                                                                                                                                                                                                                                                                                                                                            | At Davis City, Decatur County, on the Chicago, Burlington & Quincy RR., 180 ft SW. of the station, at a concrete culvert, in the center of the top of the NW. headwall, 15 ft NW. of the centerline of the main track, and about 1.5 ft lower than track, a USC&GS disk stamped "Y 114 1935" | 910.467 |
| 9  | 1.4 | UE Y 114 A, 1.4 mi W. of tablet along County Hwy. J 52; 320 ft N., 25 ft E. and 10 ft lower than T-rd. N. on E. end of metal culvert; punched hole                                                                                                                                                                                                                                                                             | 993.20                                                                                                                                                                                                                                                                                       |         |
| 13 | 2.4 | UE Y 114 B, 2.4 mi W. of tablet; 25 ft N., 16 ft E. of road fork, 16 ft N., 36 ft W. and 1.5 ft lower than centerline bridge, in top of the northwestern most wooden piling, a RR. spike                                                                                                                                                                                                                                       | 934.08                                                                                                                                                                                                                                                                                       |         |
| 15 | 3.2 | UE 4 114 C, 3.2 mi W. of tablet, 17 ft N., 181 ft W. and 7.8 ft lower than T-rd. N. to Slip-Bluff Park, on N. end of metal culvert; a punched hole                                                                                                                                                                                                                                                                             | 996.89                                                                                                                                                                                                                                                                                       |         |
| 17 | 3.8 | Reference mark, 41 ft NW. of BM, at NW. cor. of overpass, 7 ft E. of the E. end of the concrete abutment, a chiseled square                                                                                                                                                                                                                                                                                                    | 1088.69                                                                                                                                                                                                                                                                                      |         |
| 18 | 3.8 | BM, Davis City, 3.8 mi W. of, 1 mi N., 3.5 mi E. of Lamoni; T. 67 and 68 N., R. 26 W., near quarter cor. between secs. 32 and 5, at an overpass over Interstate 35, at the SW. cor. of the overpass, 14 ft S. of centerline of road, 6.5 ft E. of the E. end of the concrete abutment, 3.5 ft E. of witness post and 1.8 ft higher than centerline of overpass standard tablet set in the concrete curb, stamped "20 RRB 1978" | 1088.709                                                                                                                                                                                                                                                                                     |         |
| 21 | 4.9 | UE 20 A, 1 mi W. of tablet, 40 ft S., 73 ft W., and 5.5 ft lower than T-rd. S., near S. end large metal culvert; punched hole                                                                                                                                                                                                                                                                                                  | 1035.41                                                                                                                                                                                                                                                                                      |         |
| 24 | 6.1 | BM, Lamoni, 1 mi N. and 1 mi E. of; near cor. secs. 1, 2, 35 and 36, T. 67 N., R. 27 W., 43 ft S., 173 ft E. and 1.4 ft higher than crossroad, 43 ft S., 33 ft E. centerline road at entrance S.; 1.5 ft N., 11 ft W. of the NE. cor. of a metal covered machine shed, 1.5 ft S. of a power pole and witness sign, standard tablet on 10 ft copperweld rod protected by a 5-in. clay tile, set flush and stamped "21 RRB 1978" | 1127.805                                                                                                                                                                                                                                                                                     |         |
| 25 | 6.1 | Reference mark, 23 ft S., 152 ft E. of crossroad, 23 ft S., 13 ft E. entrance S., on E. end of metal culvert, a punched hole                                                                                                                                                                                                                                                                                                   | 1126.69                                                                                                                                                                                                                                                                                      |         |
| 28 | 7.1 | UE 21 A, 1 mi W. of tablet, 27 ft S., 26 ft E. and 1.7 ft lower than crossroad, on S. end of metal culvert; punched hole                                                                                                                                                                                                                                                                                                       | 1142.06                                                                                                                                                                                                                                                                                      |         |
| 29 | 7.6 | BM "T 117 1935" (Described in Line 3)                                                                                                                                                                                                                                                                                                                                                                                          | 1152.596                                                                                                                                                                                                                                                                                     |         |

LINE 6

R.R. Barrett, 1978; Book CV-3436

GRAND RIVER QUAD. - 35 IA.

|   |    |      |                                                                                                                                      |         |
|---|----|------|--------------------------------------------------------------------------------------------------------------------------------------|---------|
| 9 | 75 | 20.3 | UE 26 A, 1.2 mi E. of tablet; 54 ft S., 19 ft E. and 2.4 mi lower than T-rd. W., on E. end of metal culvert; punched hole            | 1090.83 |
|   | 79 | 21.6 | UE 26 B, 1.2 mi E., 1.2 mi S. of tablet; 42 ft S., 33 ft W. and 4 ft lower than cross-road, on W. end of metal culvert; punched hole | 981.41  |

LINE 6 (Cont'd)

LAMONIA QUAD. - 333 MO.

FEET

|    |      |                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                   |        |
|----|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|--------|
| 10 | 3    | 22.6                                                                                                                                                                                                                                                                                                                                                                                                    | Reference mark, 6 ft N., 17 ft E. (normal) of N. end of concrete bridge, center of NE. wing-wall, chiseled square | 959.66 |
| 4  | 22.6 | BM, Grand River, about 0.75 mi S. and 2.75 mi E. from, in NE $\frac{1}{4}$ sec. 1, T. 69 N., R. 27 W., at bridge over Thompson River, 2 ft S., 12 ft W. (normal) of the N. end of bridge; on N. end of the W. concrete curb, standard tablet stamped "27 RRB 1978"                                                                                                                                      | 960.078                                                                                                           |        |
| 7  | 23.8 | UE 27 A, 1.1 mi S. of tablet; 26 ft N.; 42 ft W. and level with T-rd. W., on E. end of metal culvert; punched hole                                                                                                                                                                                                                                                                                      | 964.19                                                                                                            |        |
| 9  | 24.5 | UE 27 B, 1.9 mi S. of tablet; 16 ft S., 29 ft E. and 1.7 ft lower than centerline of crossroads, on S. end of metal culvert; punched hole                                                                                                                                                                                                                                                               | 970.12                                                                                                            |        |
| 12 | 25.5 | BM, Grand River, 3.5 mi S. and 3 mi E. from, T. 69 N., R. 27 W., near cor. secs. 13, 18, 19 and 24; 56 ft N., 62 ft W. and 1.5 ft higher than a T-rd. W.; 1 ft SW. of fence corner and witness sign, 6 ft N. of a telephone pole; standard tablet set on copperweld rod, protected by a 5-in. drain tile, stamped "28 RRB 1978"                                                                         | 1011.690                                                                                                          |        |
| 13 | 25.5 | Reference mark, 105 ft S. and across road from BM, 44 ft S., 54 ft W. of T-rd.; 3 ft S., 2 ft E. of fence corner and witness tag, top of copperweld rod, in 5-in. drain tile                                                                                                                                                                                                                            | 1009.30                                                                                                           |        |
| 16 | 26.3 | UE 28 A, 6.07 mi S. of tablet, 15 ft N., 32 ft W. and 0.9 ft lower than T-rd. E. on N. end of metal culvert under field entrance W., punched hole                                                                                                                                                                                                                                                       | 1005.68                                                                                                           |        |
| 21 | 27.6 | UE 28 B, 1.9 mi S. of tablet, at a steel bridge over Grand River; 186 ft E. of a road fork, 7 ft N., 88 ft W. and 1.9 ft lower than centerline bridge on top of a round steel pier; top of a square bolt; painted white                                                                                                                                                                                 | 948.02                                                                                                            |        |
| 25 | 28.5 | UE 28 C, 2.3 mi S. and 0.4 mi W. from tablet; about 210 ft N. of a T-rd. N., at a small bridge, 21 ft N., 15 ft E. and even with the centerline of bridge, in top of a wooden piling, top of a rail spike; driven vertically and projecting 0.1 ft                                                                                                                                                      | 935.51                                                                                                            |        |
| 27 | 28.5 | Reference mark, 93 ft S. (along drive) and 15 ft W. of T-rd. N., 1 ft N. of fence corner; top of a steel RR. rail; a painted yellow and projecting 1.5 ft; chiseled cross                                                                                                                                                                                                                               | 944.78                                                                                                            |        |
| 28 | 28.6 | Grand River, about 6 mi S. and 2.5 mi E. from; 7.5 mi N. and 1.5 mi E. of Lamoni, T. 69 N., R. 27 W., near center sec. 36, 109 ft S. along drive, 15 ft W. and 4.4 ft higher than State Hwy. 2 at T-rd. N.; 14 ft S. of fence corner; 71 ft NW. of NW. cor. stone dwelling; 1 ft W. of fence and witness sign, standard tablet on copperweld rod protected by a 5-in. drain tile, stamped "29 RRB 1978" | 944.346                                                                                                           |        |

LAMONI QUAD. - 333

|    |      |                                                                                                                                                                       |        |
|----|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
| 31 | 29.8 | UE 29 A, 0.5 mi W. and 1 mi S. of tablet; 59 ft N. (normal) 21 ft E. and 2.1 ft higher than crossroad, on E. end of a metal culvert; punched hole                     | 992.67 |
| 34 | 30.4 | UE 29 B, 0.5 mi W. and 1.5 mi S. of tablet, 69 ft S., 11 ft W. and ft lower than centerline of steel bridge, top of square bolt, painted white                        | 936.27 |
| 36 | 30.8 | UE 29 C, 0.5 mi W. and 2 mi S. from tablet, 19 ft S., 24 ft E. and 3.1 ft lower than crossroad, on S. end of metal culvert; punched hole                              | 989.15 |
| 39 | 31.5 | UE 29 D, 0.5 mi W. and 2.6 mi S. from tablet, 25 ft S., 10 ft W. and 1.4 ft higher than centerline bridge, 3 ft N. of the S. end of concrete curbing; chiseled square | 955.30 |

LINE 6 (Cont'd)

LAMONI QUAD. - 333

FEET

|            |                                                                                                                                                                                                                                                                                                                                                                                                                                    |          |
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| 10 42 32.2 | Reference mark, 21 ft S., 11 ft W. and 0.6 ft higher than centerline bridge on S. end of the W. concrete curbing; chiseled square                                                                                                                                                                                                                                                                                                  | 971.60   |
| 43 32.2    | BM, Lamoni, about 4.2 mi N. and 1 mi E. from; T. 68 N., R. 27 W., about 1000 ft N. of cor. secs. 13, 14, 23 and 24, at a concrete and steel bridge over Pot Hole Creek, 21 ft S., 11 ft E. and 0.6 ft higher than centerline of bridge, on S. end of the E. concrete curb, standard tablet stamped "30 RRB 1978"                                                                                                                   | 971.635  |
| 47 33.5    | UE 30 A, 1.3 mi S. of tablet, 110 ft N., 20 ft W. and 2.3 ft lower than T-rd. N.; on W. end metal culvert; punched hole                                                                                                                                                                                                                                                                                                            | 1115.87  |
| 50 34.6    | UE 30 B, 2.4 mi S. of tablet; 35 ft N., 23 ft E. and 3.2 ft lower than crossroad, on E. end of metal culvert; punched hole                                                                                                                                                                                                                                                                                                         | 1118.39  |
| 52 35.6    | Reference mark, 23 ft S., 152 ft E. of crossroads, 23 ft S., 13 ft E. entrance S., on E. end of metal culvert; punched hole                                                                                                                                                                                                                                                                                                        | 1126.69  |
| 53 35.6    | BM, Lamoni, 1 mi N. and 1 mi E. of; near cor. secs. 1, 2, 35 and 36, T. 67 N., R. 27 W., 43 ft S., 173 ft E. and 1.4 ft higher than crossroad, 43 ft S., 33 ft E. of centerline rd. at entrance S.; 1.5 ft N., 11 ft W. of the NE. cor. of a metal covered machine shed, 1.5 ft S. of a power pole and witness sign, standard tablet, on 10 ft copperweld rod, protected by a 5-in. clay tile, set flush and stamped "21 RRB 1978" | 1127.805 |

ISOLATED BENCH MARKS

|                                                                                                                                                                                                                                                                                                                                   |          |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| T. 66 N., R. 27 W., quarter cor. between secs. 19 and 30, 36 ft S. and 42 ft E. from Hwy. 69 at crossroads, in NW. cor. of yard of Banner School (schoolhouse destroyed), in concrete post; standard tablet stamped "P T S 67 JS 1923 MO 1099" (Not found 08-78 AJK)                                                              | 1099.422 |
| T. 66 N., R. 27 W., E. sixteenth cor. between secs. 22 and 27, 9 ft S. of T-rd. N.; in concrete post standard tablet stamped "P T S 68 JS 1923 MO" (Destroyed 8-39, JGJ)                                                                                                                                                          | 1064.965 |
| Small concrete bridge over creek, on SE. corner of wingwall; chiseled square                                                                                                                                                                                                                                                      | 992.97   |
| T. 66 N., R. 27 W. S. sixteenth cor. secs. 23, 15 ft S. and 45 ft E. from T-rd. N.; on top of SW. wingwall of bridge; chiseled square                                                                                                                                                                                             | 1001.05  |
| Andover, 4.8 mi S. along the C.B. & Q. RR. from the station at; 3 poles S. of milepost 58; at a road crossing, 42 ft E. of the center of track, 30 ft N. of the center of road, 3 ft W. of right-of-way fence, and about 1.5 ft higher than track; a USC&GS standard disk stamped "J 83 1935" and set in the top of concrete post | 1092.570 |
| Blythedale, 1.8 mi N., 2.4 mi E. of, 720 ft W. of sixteenth cor. (S.) secs. 19 and 20, 62 ft NE. of NE. cor. of old house, 10 ft W., 5 ft S. of a fence corner, 0.5 ft E. of a witness post; 0.2 ft below surface in a concrete post; a standard tablet stamped "P T S 69 JS 1923 MO 1044"                                        | 1043.623 |
| T. 66 N., R. 26 W., 0.2 mi S. of cor. secs. 17, 18, 19 and 20; at bottom of drain, 15 ft W. of road, in headwall of concrete culvert; chiseled square                                                                                                                                                                             | 976.82   |
| Akron, S. limits of; in SE $\frac{1}{4}$ sec. 15, T. 66 N., R. 26 W., 390 ft N. of T-rd. W.; in concrete walk to door of Methodist Church; standard tablet stamped "P T S 70 JS 1923 874" (Not found 9-77, FWK)                                                                                                                   | 874.157  |
| T. 66 N., R. 26 W., E. sixteenth cor. between secs. 13 and 24; 60 ft S. and 20 ft E. from T-rd. E.; 75 ft W. of dwelling of John S. George, in concrete post; standard tablet stamped "P T S 71 JS 1923 MO 53" (Not found, 07-78, AJK)                                                                                            | 953.808  |

ISOLATED BENCH MARKS (Cont'd)

FEET

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| T. 66 N., R. 27 W., quarter cor. between secs. 18 and 19, 30 ft N. and 10 ft E. from crossroads, 30 ft N. and 120 ft W. from U.S. Hwy. 69 crossroad; on headwall of concrete culvert; chiseled square                                                                                                                                   | 1093.42  |
| T. 66 N., R. 27 W., quarter cor. between secs. 17 and 18, 20 ft N. and 15 ft W. from U.S. Hwy. 69 at crossroad; on concrete pipe culvert; chiseled square                                                                                                                                                                               | 1081.97  |
| T. 66 N., R. 27 W., cor. secs. 8, 9, 16 and 17, 30 ft S. and 25 ft E. from crossroads; 180 ft E. of U.S. Hwy. 69 at crossroad, in concrete post; standard tablet stamped "853 1934 1110" (Destroyed 7-78, AJK)                                                                                                                          | 1110.722 |
| T. 66 N., R. 27 W. cor. secs. 4, 5, 8 and 9, 20 ft S. and 20 ft E. from crossroads; on headwall of concrete culvert; chiseled square                                                                                                                                                                                                    | 1098.09  |
| Tps. 66 and 67 N., R. 27 W., approx. cor. secs. 4, 5, 32 and 33; 36 ft S. and 34 ft E. from U.S. Hwy. 69 at crossroad, 125 ft S. of dwelling; in concrete post; standard tablet stamped "854 1934 1115" (Not found 7-78, AJK)                                                                                                           | 1115.724 |
| Reference mark, 50 ft N. of tablet; on headwall of concrete culvert; chiseled square                                                                                                                                                                                                                                                    | 1116.98  |
| T. 67 N., R. 27 W., S. cor. secs. 33 and 34, 5 ft N. and 30 ft W. from T-rd. N.; in concrete post; a standard tablet stamped "876 1934 1073" (Not found 7-78, AJK)                                                                                                                                                                      | 1072.847 |
| Andover, 0.6 mi SW. along the C.B. & Q. RR. from station at; 6.5 poles NE. of milepost 54, at a road crossing, 186 ft NE. of the center of road, 41 ft NW. of the center of the track and 4 ft SE. of the right-of-way fence, a USC&GS standard disk stamped "M 83 1935" and set in the top of a concrete post (Not found 7-78, A.J.K.) | 1072.048 |
| Tps. 66 and 67 N., Rs. 26 and 27 W., 0.2 mi E. of T-rd. S.; at cor. of NE. cor. of small bridge; on top of concrete abutment; chiseled square                                                                                                                                                                                           | 985.51   |
| Andover, 0.5 mi S., 1.7 mi E. of, T. 66 and 67 N., R. 26 W., 0.2 mi E. of cor. secs. 5, 6, 31 and 32, 41 ft N., 27 ft W. and 1.3 ft higher than T-rd. N., 4.5 ft N., 8 ft W. of a fence corner and witness post; in a conc. post projecting 0.5 ft, a standard tablet stamped "875 1934 1029"                                           | 1029.148 |
| T. 66 N., R. 26 W., near quarter cor. between secs. 4 and 5, 150 ft W. of crossroads; in SW. cor. of steel bridge over Indian Creek, on top of S. end of concrete abutment; chiseled square                                                                                                                                             | 916.78   |
| T. 66 N., R. 26 W., in SW $\frac{1}{4}$ sec. 3, 60 ft SE. of dwelling on property of Frank Jones, 30 ft W. Road; 40 ft E. of well; 10 ft S. of 14-in. black walnut tree; in concrete post; standard tablet stamped "874 1934 886" (Not found 7-78, A.J.K.)                                                                              | 886.137  |
| Pleasanton, IA., 1 mi S., 1.5 mi W. of, T. 67 N., R. 26 W., near quarter cor. secs. 31 and 36, 36 ft N., of road at crest, 1 ft S. of a witness post in a concrete post; a standard tablet stamped "873 1934 997"                                                                                                                       | 997.355  |