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THIRD ORDER LEVELS
SEA LEVEL DATUM OF 1929

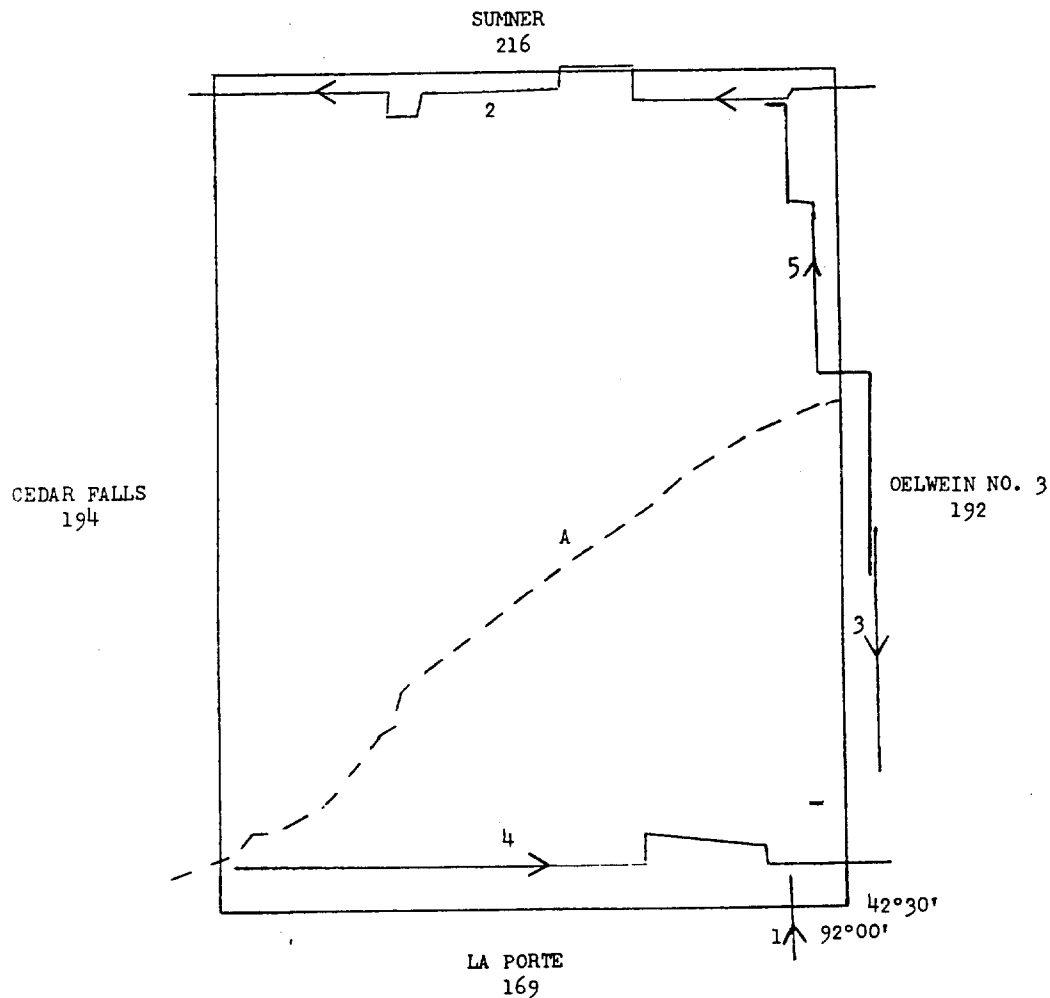
UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

42-092-12
DUNKERTON QUADRANGLE
193 - IOWA
N4230-W9200/15
DIAGRAM NK 15-5
WATERLOO

Bremer Black Hawk, Buchanan
and Fayette Counties

Edition of: 3-1-78

PR:ADP/cb



USC&GS VERTICAL CONTROL DATA
A. Quadrangle 420921

193B

LINE 1

FEET

C. L. Crutchfield, 1969; Book CV 2526

LA PORTE QUAD. - 169

- | | | | | |
|----|----|------|--|--------|
| 1 | 56 | 17.7 | UE 80 C, 0.8 mi W. along U. S. Hwy. 20, thence 1.0 mi N. along a County rd. from tablet, center of crossroads; a concrete nail, not painted | 984.2 |
| 57 | | 18.7 | UE 80 D, 0.8 mi W. along U. S. Hwy. 20, thence 2.0 mi N. along a County Rd. from tablet, 15 ft S. and 32 ft W. and 3.1 ft lower than T-rd. E.; top of the S. end of a metal culvert; a punched hole, not painted | 970.95 |

DUNKERTON QUAD. - 193

- | | | | |
|----|------|--|--------|
| 58 | 19.2 | UE 74 A, 0.5 mi E. along a county rd. from bolt, 43 ft S. and 25 ft E. and 2.1 ft lower than T-rd. S., top of the E. end of a concrete tile culvert; a chiseled square, painted "UE" | 965.77 |
|----|------|--|--------|

LINE 2

C. L. Crutchfield, 1969; Book CV 2490

GELWEIN NO. 3 QUAD. - 192

- | | | | | |
|----|----|-----|--|----------|
| 3 | 15 | 0.0 | Westgate, Fayette County, 1.7 mi SE. along the Chicago, Great Western RR. from the station at; 0.4 mi NW. of milepost 174, at the crossing of a section rd., 54 ft N. of the center of the rd., 45.3 ft NE. of the NE. rail, 25.7 ft NW. of one right-of-way fence, and 2 ft SW. of another right-of-way fence; USC&GS standard disk stamped "E 38 1934" and set in the top of a concrete post projecting about 4 in. above ground | 1079.335 |
| 19 | | 0.1 | UE E 38 A, 680 ft W. and 7.7 ft higher than tablet, center of crossroads; a RR. spike, painted "UE E A" | 1087.02 |

DUNKERTON QUAD. - 193

- | | | | | |
|----|-----|--|--|----------|
| 19 | 1.2 | UE E 38 B, 1.2 mi W. along a county rd. from tablet, 18 ft S. and 372 ft W. and 2.0 ft lower than T-rd. S., top of the S. end of the most eastward concrete tile culvert; a chiseled square, painted "UE E B" | 1067.81 | |
| 20 | | 2.1 | UE E 38 C, 2.1 mi W. along a county rd. from tablet, 25 ft S. and 25 ft W. and 4.3 ft lower than T-rd. E., top of the S. end of a metal corrugated culvert; a punched hole, painted "UE E C" | 1048.32 |
| 21 | | 3.5 | At Downing Park, 0.25 mi S. of cor. secs. 28, 29, 32 and 33, T. 92 N., R. 10 W., 315 ft N. and 220 ft W. and 6.3 ft lower than crossroads, at the concrete base of a playground slide; a standard tablet flush with the ground, and stamped "61 CLC 1969 1018" | 1017.999 |
| 22 | | 3.5 | Reference mark, 25 ft N. and 25 ft W. and 0.7 ft lower than tablet, top of a concrete slab which holds the water fountain; a chiseled square, painted "RM" | 1017.31 |
| 23 | | 4.3 | UE 61 A, 0.9 mi W. along a county rd. from tablet, 13 ft S. and 54 ft W. and 1.2 ft lower than center of wooden bridge over Little Wapsipinicon River; top of the SW. end; a RR. spike in a wooden piling; painted "UE 61 A" | 1006.21 |
| | | 5.7 | | |
| 24 | | Downing Park, 2.0 mi W. of; near cor. secs. 25, 30, 36 and 31, T. 92 N., Rs. 10 and 11 W., 760 ft N. and 20 ft E. and 1.6 ft lower than T-rd. E.; top of the E. end of a concrete tile culvert; a standard tablet stamped "62 CLC 1969 1057" | 1057.680 | |
| 25 | | 5.7 | Reference mark, 40 ft W. and 0.1 ft higher than tablet, top of the W. end of a concrete tile culvert; a chiseled square, painted "RM" | 1057.23 |
| 26 | | 6.7 | UE 62 A, near center sec. 25, T. 92 N., R. 11 W., 29 ft S. and 4.7 ft lower than center of E.-W. gravel rd. and N.-S. fence line, top of the W. end of a metal corrugated culvert; a punched hole, painted "UE 62 A" | 1062.95 |

<u>LINE 2 (Cont'd)</u>		<u>DUNKERTON QUAD. - 193</u>	<u>FEET</u>
3 27 7.7	UE 62 B, near center sec. 26, T. 92 N., R. 11 W., 37 ft S. and 15 ft W. and 0.9 ft higher than crossroads, in the center of the W. concrete wheel guard of a concrete and wooden bridge; a chiseled square, painted "UE 62 B"		1038.88
28 8.5	Oran, 3.0 mi N. and 1.7 mi W. of; about 0.2 mi W. of the center of secs. 26 and 35, 12 ft S. and 0.3 ft lower than center of E.-W. rd. at a drain crossing, in the center of the S. headwall of a concrete box culvert; a standard tablet stamped "63 CLC 1969 1034"		1033.694
29 8.5	Reference mark, 24 ft N. and normal to tablet, in the center of the N. headwall of a concrete box culvert; a chiseled square, painted "RM"		1033.73
30 9.3	UE 63 A, 0.8 mi W. along a county rd. from tablet, 12 ft S. and 24 ft E. and 0.1 ft lower than crossroads, in the center of the S. headwall of a concrete box culvert; a chiseled cross, painted "UE 63 A"		1015.70
31 9.8	Buck Creek, 0.5 mi S. of, near cor. secs. 27, 28, 33 and 34, T. 92 N., R. 11 W., 142 ft S. and 14 ft W. and 1.6 ft lower than crossroads, in the center of the W. headwall of a concrete box culvert; a 1-in. hex. steel bolt embedded in concrete, painted "BM" (TBM 64)		1007.05
32 9.8	Reference mark, 28 ft E. and 0.2 ft higher than bolt, in the center of the E. headwall of a concrete box culvert; a chiseled square, painted "RM"		1007.25
33 10.3	UE 64 A, 0.5 mi W. along a county rd. from bolt, 35 ft N., 12 ft W. and 0.7 ft lower than crossroads, in the center of the W. headwall of a concrete box culvert; a chiseled cross, painted "UE 64 A"		1023.25
34 11.6	UE 64 B, near center sec. 32, T. 92 N., R. 11 W., 28 ft N. and 19 ft W. and 1.8 ft lower than a 90° turn in gravel rd. leading N. and W., T-rd. N., top of the W. end of a metal corrugated culvert; a punched hole, painted "UE 64 B"		981.58
35 12.0	UE 64 C, near center of secs. 31 and 32, T. 92 N., R. 11 W., 62 ft W. of center of E. end of a wooden bridge over Wapsipinicon River; a copper nail and washer, painted "UE centerline"		975.43
36 12.7	UE 64 D, near cor. secs. 29, 30, 31 and 32, T. 92 N., R. 11 W., 17 ft N. of a 90° turn in a gravel rd. leading S. and W.; a copper nail and washer at center of S. end of a small wooden bridge over an E.-W. drainage ditch; painted "UE 64 D"		972.59
37 13.8	UE 64 E, near cor. secs. 25, 30, 36 and 31, T. 92 N., R. 11 and 12 W., 16 ft N. and 630 ft W. and 0.7 ft lower than crossroads, in the side of the N. end of a wooden box culvert; a RR. spike, painted "UE 64 E"		990.72
38 14.4	Readlyn, 3.0 mi N. and 0.8 mi E. of; 0.3 mi E. of the cor. secs. 25, 26, 35 and 36, T. 92 N., R. 12 W., 11 ft S. and 0.8 ft lower than center of E.-W. gravel rd. at a small drain crossing, in the center of the S. headwall of a concrete box culvert; a standard tablet stamped "65 CLC 1969"		1030.903
39 14.4	Reference mark, 22 ft N. and 0.2 ft lower than tablet, in the center of the N. headwall of a concrete box culvert; a chiseled square, painted "RM"		1030.74
40 14.7	UE 65 A, 0.3 mi W. along a county rd. from tablet, 25 ft N. and 35 ft W. and 2.7 ft lower than crossroads; top of the N. end of a metal corrugated culvert; a punched hole, painted "UE 65 A"		1043.52
41 15.7	UE 65 B, 1.3 mi W. along a county rd. from tablet, 11 ft S. and 150 ft W. and 1.6 ft lower than crossroads, in the center of the S. headwall of a concrete box culvert; a chiseled cross, painted "UE 65 B"		1027.34
43 17.7	Readlyn, 2.75 mi N. and 2.75 mi W. of; T. 92 N., R. 12 W., near cor. secs. 28, 29, 32 and 33, 33 ft S. and 134 ft W. of T-rd. N., 1 ft S. of right-of-way fence, in concrete post; standard tablet stamped "TT 6 MWL 1961"		997.784

LINE 3

FEET

C. L. Crutchfield, 1969; Book CV 2490

OELWEIN NO. 3 QUAD. - 192

- | | | |
|----------|--|---------|
| 3 53 4.5 | UE 66 B, 1.6 mi W. along a county rd. from bolt, 43 ft N. and 27 ft E. and 3.0 ft lower than crossroads, top of the E. end of a concrete tile culvert; a chiseled square, painted "UE 66 B" | 1025.53 |
| 54 5.5 | UE 66 C, 1.6 mi W., thence 1.0 mi S. along a county rd. from bolt, 83 ft S. and 113 ft E. and 2.2 ft lower than crossroads; top of the SW. corner of a water pump foundation, at the school grounds; a chiseled square, painted "UE 66 C" | 1010.37 |
| 55 5.8 | Bryantsburg, 1.0 mi N. and 4.0 mi W. of, 0.25 mi S. of the cor. secs. 13, 14, 23 and 24, T. 90 N., R. 10 W., 11 ft N. and 27 ft E. and 2.2 ft lower than center of N.-S. gravel rd. at an E.-W. fence line, top of the E. end of the most southern three concrete tile culverts; a standard tablet stamped "67 CLC 1969" | 995.501 |
| 56 5.8 | Reference mark, 44 ft W. of center of N.-S. rd. at E.-W. fence line, 11 ft S. and 71 ft W. and 1.8 ft lower than tablet, top of the S. end of a concrete tile; a chiseled square, painted "RM" | 993.65 |
| 57 6.6 | UE 67 A, 0.7 mi S. along a county rd. from tablet, 41 ft S. and 78 ft W. and 4.2 ft lower than crossroads; top of the E. end of a metal corrugated culvert; a punched hole, painted "UE 67 A" | 1012.06 |
| 58 7.1 | UE 67 B, 1.2 mi S. along a county rd. from tablet, 36 ft S. and 30 ft W. and 2.9 ft lower than T-rd. W.; top of the W. end of a concrete tile culvert; a chiseled square, painted "UE 67 B" | 1008.30 |
| 59 7.6 | UE 67 C, 1.7 mi S. along a county rd. from tablet, 27 ft S. and 39 ft E. and 3.5 ft lower than T-rd. E.; top of the S. end of a concrete tile culvert; a chiseled square, painted "UE 67 C" | 1004.35 |
| 60 8.3 | UE 67 D, 2.4 mi S. along a county rd. from tablet, 19 ft S. and 30 ft W. and 2.4 ft lower than T-rd. W., top of the S. end of a concrete tile culvert; a chiseled square, painted "UE 67 D" | 1001.17 |
| 61 9.3 | Littleton, 0.8 mi N. and 2.0 mi E. of; 0.25 mi N. of the cor. secs. 1, 2, 11 and 12, T. 89 N., R. 10 W., 35 ft S. and 25 ft W. and 1.5 ft lower than T-rd. W., top of the W. end of a large concrete tile culvert; a standard tablet stamped "68 CLC 1969" | 984.748 |

LINE 4

C. L. Crutchfield, 1969; Book CV 2490

DUNKERTON QUAD. - 193

- | | | |
|---------|---|---------|
| 4 4 0.0 | Dewar, Black Hawk County, 2.1 mi SW. along the Chicago Great Western RR. from; 500 ft SE. of East Waterloo Township School 8, 41.5 ft SW. of pole 267+19, 46 ft S. of the center of the track, and 31 ft E. of the center of a rd. crossing; USC&GS standard disk stamped "P 11 1933" and set in the top of a concrete post | 876.652 |
| 4 0.1 | Reference mark, 410 ft N. of tablet, 21 ft S. and 28 ft E. and 0.5 ft lower than crossroads, in the center of the S. end of a concrete box culvert; a chiseled square, not painted | 881.29 |
| 5 1.3 | UE P 11 A, 1.26 mi E. along a County Rd. from RM, 30 ft N. and 15 ft E. and 1.8 ft lower than T-rd. N., top of the E. end of a concrete tile culvert; a chiseled square, not painted | 877.24 |
| 6 2.1 | UE P 11 B, 2.0 mi E. along a County Rd. from RM, center of crossroads; a brass washer embedded in concrete, not painted | 949.73 |
| 7 3.0 | Dewar, 1.0 mi S. and 0.9 mi E. of, 0.1 mi W. of the cor. secs. 13, 18, 19, and 24, T. 89 N., R. 11 and 12 W., 10.5 ft N. and 0.9 ft higher than center of E.-W. gravel rd. at small drain crossing, in the center of the N. end of a concrete box culvert; a standard tablet stamped "70 CLC 1969" | 964.446 |

<u>LINE 4 (Cont'd)</u>		<u>DUNKERTON QUAD. - 193</u>	<u>FEET</u>
4 8	3.0	Reference mark, 21 ft S. and 0.5 ft higher than tablet, in the center of the S. headwall of a concrete box culvert; a chiseled square, not painted	964.90
9	4.1	UE 70 A, 1.1 mi E. along a County Rd. from tablet, 18 ft N. and 32 ft W. and 2.8 ft lower than crossroads, top of the N. end of a concrete tile culvert; a chiseled square, not painted	958.11
10	4.5	UE 70 B, 1.5 mi E. along a county rd. from tablet, center of a concrete floor bridge over a drain, not painted	927.35
11	5.1	UE, 2.1 mi E. along a county rd. from tablet, top of a brass plug stamped 16, 17, 20 and 21, near center of crossroads, in the W. lane of N.-S. concrete hwy. 281, flush with concrete, not painted	973.97
12	6.0	Dewar, 1.0 mi S. and 3.9 mi E. of, 0.12 mi W. of the cor. secs. 15, 16, 21 and 22, T. 89 N., R. 11 W., 17 ft N. and 700 ft W. and 5.5 ft lower than crossroads, top of the N. end of a concrete tile culvert; a standard tablet stamped "CLC 1969" (BM 72 CLC 1969)	984.841
13	6.0	Reference mark, 35 ft S. and 0.2 ft lower than tablet, top of the S. end of a concrete tile culvert; a chiseled square, not painted	984.59
14	7.1	UE 72 A, 1.1 mi E. along a county rd. from tablet, 23 ft S. and 28 ft E. and 3.2 ft lower than crossroads, in top of the S. end of a concrete tile culvert; a chiseled square, not painted	971.45
15	8.1	UE 72 B, 2.1 mi E. along a county rd. from tablet, 30 ft S. and 22 ft E. and 2.9 ft lower than T-rd. S., top of the E. end of a concrete tile culvert; a chiseled square, painted "UE"	977.02
16	9.2	Jesup, 2.5 mi N. and 1.5 mi W. of, 0.1 mi N. of the cor. secs. 13, 18, 19 and 24, T. 89 N., R. 10 and 11 W., 11.5 ft E. and 0.3 ft lower than center of N.-S. rd. at small drain crossing in the center of the E. headwall of a concrete box culvert; a standard tablet stamped "73 CLC 1969"	976.239
17	9.2	Reference mark, 23 ft W. and 0.3 ft lower than tablet, in the center of the W. headwall of a concrete box culvert; a chiseled square, painted "RM"	975.91
18	9.9	UE 73 A, 0.6 mi N. along a county rd. from tablet, 42 ft S. and 32 ft W. and 3.5 ft lower than T-rd. S., on the S. side of a power pole; a RR. spike, painted "UE"	971.34
19	10.9	UE 73 B, 0.6 mi N. and 1.0 mi E. along a county rd. from tablet, center of crossroads; a chiseled square, center of hwy. painted "UE"	970.22
20	12.1	UE 73 C, 0.6 mi N. and 2.2 mi E. along a county rd. from tablet, 32 ft S. and 10 ft W. and 2.9 ft lower than T-drive S., top of the W. end of a metal corrugated culvert; a punched hole, painted "UE"	986.37
21	12.4	UE 73 D, 0.6 mi N. and 2.5 mi E. along a county rd. from tablet, 35 ft S. and 56 ft W. and 1.2 ft lower than T-rd. W., on the S. side of a corner fence post; a RR. spike, painted "UE"	977.24
22	12.9	UE, Jesup, 2.5 mi N. and 1.0 mi E. of, near center secs. 16 and 21, T. 89 N., R. 10 W., 87 ft NE. and 15 ft W. and 1.2 ft lower than T-rd. E., in the center of the W. headwall of a concrete box culvert; a steel bolt stamped "U.S. BM" (This UE was intended for BM 74 which was omitted)	961.41
23	12.9	Reference mark, 30 ft E. and 0.4 ft lower bolt, in the center of the E. headwall of a concrete box culvert; a chiseled square, painted "RM"	961.04

LINE 4 (Cont'd)

DUNKERTON QUAD. - 193

FEET

- 4 24 13.4 UE 74 A, (described in Line 1) 965.77
- 25 13.8 UE 74 B, 1.0 mi E. along a county rd. from bolt, center of concrete bridge floor; a chiseled square, painted "UE centerline" 931.00

OELWEIN NO. 3 QUAD. - 192

- 26 14.4 UE 74 C, 1.6 mi E. along a county rd. from bolt, 24 ft S. and 96 ft E. and 2.3 ft lower than T-drive S., top of the S. end of a concrete tile culvert; a chiseled square, painted "UE" 950.50
- 27 15.4 UE 74 D, 2.5 mi E. along a county rd. from bolt, 23 ft S. and 220 ft W. and 0.6 ft lower than T-rd. S., top of the S. end of the most eastward of 3 concrete tile culverts; a chiseled square, painted "UE" 937.14
- 28 15.9 UE, Ottersville, 0.5 mi N. and 1.1 ft lower than center of bridge over Wapsipinicon River, top of steel rivet stamped "U.S. BM" (This UE was intended for BM 75, which was omitted) 916.36

LINE 5

C.D. Lien, 1977; Book CV-3390

OELWEIN NO. 3 QUAD. - 192

- 2 0.0 Bryantsburg, 1 mi N. and 4 mi W. of, 0.25 mi S. of cor. secs. 13, 14, 23 and 24, T. 90 N., R. 10 W., 11 ft N. and 27 ft E. and 2.2 ft lower than center of N.-S. gravel road at an E.-W. fence line, top of the E. end of the most southern three concrete tile culverts; a standard tablet stamped "67 CLC 1969" 995.501
- 7 3.3 UE 66 AA, 2.3 mi N. along road from tablet, 102 ft N. and 40 ft W. of; and 1.3 ft lower than crossroads; and 1 ft N. and 4.7 ft E. of the SE. cor. of a school house, a chiseled square on the SE. cor. of a concrete step to entrance of school house 1036.87
- 10 1.3 BM, Fairbanks, 3 mi E. of; T. 90 and 91 N., R. 10 W., sec. cor. 1, 2, 35 and 36, 71 ft N., and 66 ft E. of; and 4.8 ft lower than crossroads and 1 ft S. and 11 ft E. of a large concrete post for right-of-way fence line, set on top of a 0.5 in. copper coated steel which is set inside a 6-in. tile, a standard tablet stamped "4 CDL 1977" 1045.530
- 13 1.5 UE 4 A, 1 mi N. along road from tablet, 20 ft N. and 32 ft W. of; and 3.5 ft lower than crossroads, a chiseled square on the top of a concrete culvert 1061.27
- 17 5.8 UE 4 B, 1 mi N. and 1.5 mi W. along road from tablet; 54 ft S. and 24 ft E. of and 2.9 ft lower than crossroads, 8 ft S. and 24 ft E. of centerline of road at field entrance E. a chiseled square, on a concrete culvert 1034.31

DUNKERTON QUAD. - 193

- 19 6.3 Reference mark, 12 ft N. and 27 ft E. of centerline of road at cross field entrances, 30 ft N. and 27 ft E. of centerline of road at E.-W. fences, 30 ft N. and 58 ft E. of tablet, a chiseled square on a concrete culvert 1027.21

LINE 5 (Cont'd)

DUNKERTON QUAD. - 193

FEET

- 2 20 6.4 BM, Fairbanks, 1.5 mi N. and 1.5 mi E. of; T. 91 N., R. 10 W., near the center of sec. 27, 31 ft W. of; and 1.7 ft lower than centerline of road at E.-W. fence lines, 14 ft S. and 31 ft W. of centerline of road at cross field entrances and 1.2 ft E. of a fence corner set on top of a 0.5-in. copper coated steel rod which is set inside a 6-in. tile, a standard tablet stamped "5 CUL 1977" 1028.140
- 24 7.4 UE 5 A, 1.05 mi N. along road from tablet; 500 ft N. of quarter cor. and 20 ft E. of; and 2 ft lower than centerline of road at drain; a punched hole in a metal culvert, the most northerly one of two metal culverts 1030.49
- 27 8.9 UE 5 C, 2.5 mi N. along road from tablet, 34 ft S. and 6 ft W. of; and 2.3 ft higher than centerline of crossroads and 1 ft S. of the NW. cor. of overpass on top of a spike in NW. cor. of overpass, first spike S. of the NW. cor. overpass 1066.59
- 28 9.6 Reference mark, 12 ft S. and 72 ft E. of tablet and 24 ft S. and 10 ft W. of centerline of road at field entrance S., a chiseled square on a concrete culvert 1018.49
- 29 9.6 BM, Fairbank, 4.5 mi N. and 1.2 mi E. of; T. 91 N., R. 10 W., near the quarter cor. between secs. 9 and 10, 16 ft S. and 7 ft E. of centerline of; 7.5 ft lower than centerline of bridge, cemented in the SE. cor. of a concrete base of floor of drain, a standard tablet stamped "6 CDL 1977" 1016.590
- 31 11.3 Fairbank, 6 mi N. and 1 mi E. of; T. 91 and 92 N., R. 10 W., near sec. cors. 3, 4, 33 and 34, 255 ft S. and 32 ft E. of crossroads, 4 ft N. of a power pole and 2 ft N. of a witness post set in the top of a concrete post which projects 4-in. a standard N.G.S. disk stamped "AZIMUTH MARK ORAN 1961" 1061.553
- 33 12.4 UE 6 B, 0.8 mi N. and 0.3 mi W. along road from tablet, 11 ft N. and 21 ft E. of; 0.4 ft lower than centerline of a wooden bridge on top of a copper nail and washer in a bridge piling in the NE. cor. of bridge 1031.76
- 34 13.2 At Downing Park, 0.25 mi S. of cor. secs. 28, 29, 32 and 33, T. 92 N., R. 10 W., 315 ft N. and 220 ft W. and 6.3 ft lower than crossroads, at the concrete base of a playground slide; a standard tablet flush with ground and stamped "61 CLC 1969 1018" 1017.999