

THIRD-ORDER LEVELS
NATIONAL GEODETIC VERTICAL DATUM OF 1929

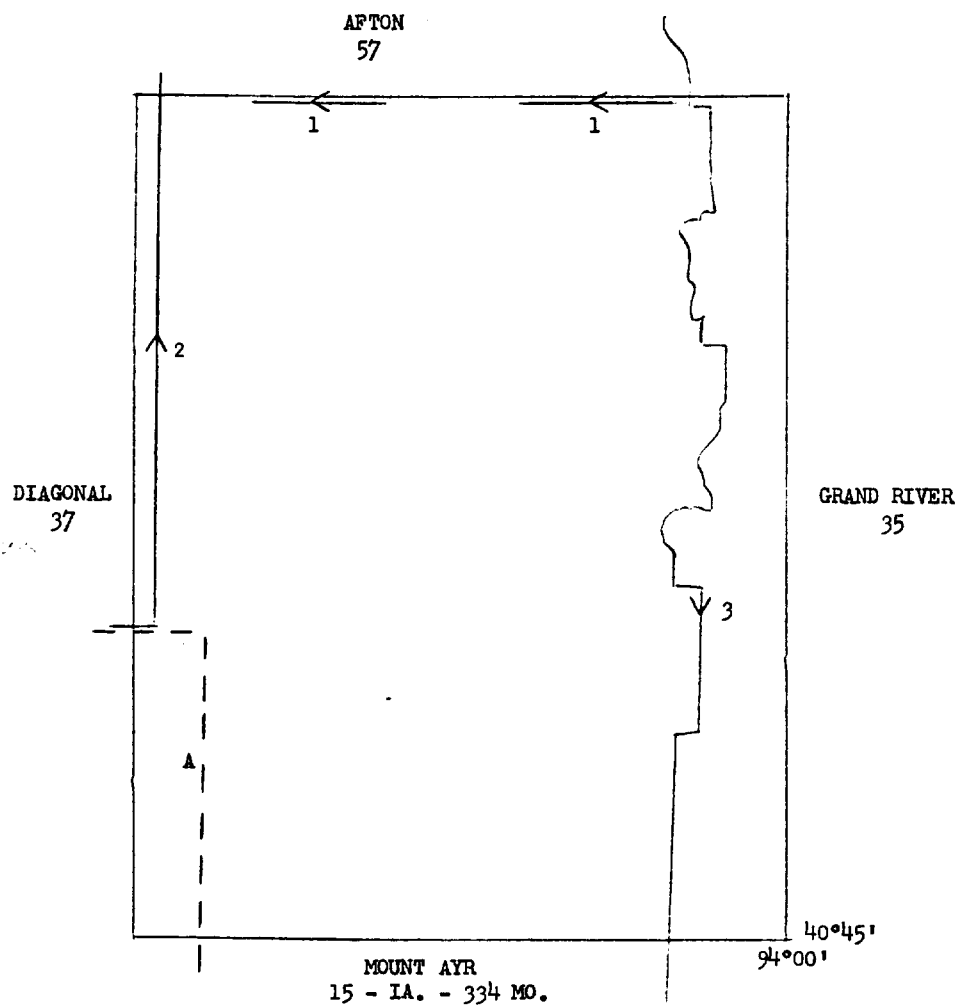
UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

40-094-11
TINGLEY QUADRANGLE
36 - IOWA
N4045-W9400/15
DIAGRAM NK 15-10
NEBRASKA CITY

Clark, Decatur, Union and Ringgold Counties

Edition of: 5-5-79

PR: ADP/cb



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

A. Quadrangle No. 400941

36 C

LINE 1

FEET

R.D. Searcy, 1950; Book CV-352

TINGLEY QUAD. - 36

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|------|---|----------|
| 3.9 | Thayer, 2 mi S. and 1 mi E. from, near cor. secs. 25, 26, 35 and 36, T. 72 N., R. 28 W., 28 ft N. of road, 177 ft W. of T-rd. S. and about 670 ft W. of T-rd. N., at summit of high hill, 17 ft E. of wire gate and field road N., in concrete post; standard tablet stamped "12 RDS 1950" | 1165.396 |
| 6.0 | Thayer, 2 mi S. and 1 mi W. of, near cor. secs. 27, 28, 33 and 34, T. 72 N., R. 28 W., 18 ft S. of road, 235 ft E. of T-rd. S., in concrete post; standard tablet stamped "13 RDS 1950" (Not found 7-78, AJK) | 1160.862 |
| 7.1 | UE 13 B, about 1 mi W. of tablet, center of bridge over Grand River; 22 ft above water level at this date 7-28-50 | 1034.6 |
| 11.2 | Talmage, 2.5 mi S. and 2 mi W. from, Afton, 2 mi S. and 2.3 mi E. from, near E. sixteenth cor. secs. 26 and 35, T. 72 N., R. 29 W., 378 ft N. and 33 ft E. of crossroads, 27 ft S. of power pole, in concrete post; standard tablet stamped "15 RDS 1950" (Dest. 9-68, letter) | 1213.387 |
| 12.9 | UE 15 F, center of bridge over Sand Creek; 12 ft above the water level at this date 8-2-50 | 1082.9 |
| 13.2 | Afton, 2 mi S. and 0.5 mi E. from, near cor. secs. 27, 28, 33 and 34, T. 72 N., R. 28 W., 200 ft S., 40 ft W. and 12.2 ft lower than E.-W. road at a trail road N., in the woods S. of the road, 57 ft E. of the SE. corner of an abandoned school house, in a concrete post; a standard tablet stamped "16 RDS 1950" | 1129.430 |
| 13.2 | Reference mark, 57 ft W. of tablet, on NE. corner of bottom concrete step; chiseled square | 1134.18 |

LINE 2

R.R. Barrett, 1978; Book CV-3435

DIAGONAL QUAD. - 37 IA.

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|-----|---|----------|
| 1 4 | 0.0 BM, 6.3 mi NE. along the Mount Ayr Road (county road C) from the water tower at Diagonal, Ringgold County, at the foot of two steep hills, at a 6 by 6 ft box culvert, in the center of the top of the S. headwall, 18 ft S. of the centerline of the road and level with the road, a standard USC&GS disk stamped "S 104 1935" | 1160.808 |
|-----|---|----------|

TINGLEY QUAD. - 36 LA.

- | | | |
|----|---|----------|
| 6 | 0.2 UE Z 104 A, 0.2 mi E. of BM, 20 ft N., 28 ft E. and 2.8 ft lower than crossroad, in N. end of concrete culvert; chiseled square | 1201.41 |
| 8 | 1.0 Centerline bridge | 1146.2 |
| 10 | 1.3 UE Z 104 B, 0.2 mi E., 1 mi N. of BM, 22 ft N., 265 ft E. of T-rd. E., on N. end of 6 ft corrugated metal culvert; chiseled cross | 1160.74 |
| 13 | 2.3 UE Z 104 C, 0.2 mi E., 2 mi N. of BM, 15 ft N., 19 ft E. of road at drive E., (drive E. is at E.-W. fence which is section corner) on N. end of corrugated metal culvert; a chiseled +, 2.2 ft lower than road at drive | 1256.41 |
| 15 | 2.8 REference mark, 41.5 ft SSW. from BM, 18.5 ft S., 25 ft W. from T-rd. W., on S. end of concrete culvert; a chiseled square | 1262.31 |
| 16 | 2.8 BM, Tingley, 2.5 mi W. and 1.5 mi N. of, at the quarter cor. between secs. 7 and 12, T. 70 N., R. 29 W., R. 30 W., 22.5 ft N. and 16 ft W. of T-rd. W., 9.8 ft S. and 18.8 ft E. of right-of-way fence corner and witness sign, a standard tablet welded to 10 ft of copper weld rod, protected by a 5-in. drain tile set 0.2 ft below the ground and stamped "ET 8 JWO 1975" | 1263.884 |

<u>LINE 2 (Cont'd)</u>		<u>TINGLEY QUAD. - 36 IA.</u>	<u>FEET</u>
1 18	3.3	UE 8 A, 0.5 mi N. of tablet, 25.5 ft N., 22 ft W. and 3.7 ft lower than crossroad, on W. end of corrugated metal culvert; a chiseled +	1249.88
20	3.9	Bridge	1164.8
22	4.3	UE 8 B, 1.5 mi N. of tablet, 27 ft N., 49 ft W. and 1.6 ft lower than crossroad, on N. end of concrete culvert; a chiseled square	1182.58
26	5.3	Reference mark, 60 ft N., 33 ft E. and 3.4 ft lower than T-rd. W. of right-of-way fence, 36 ft N. of BM, top of a steel fence post, projecting 1 ft above ground level	1229.89
27	5.3	BM, Tingley, 2.5 mi W. and 4 mi N. of; 1 mi E. and 1 mi N. of Shannon City, near cor. secs. 25, 30, 31 and 36, T. 71 N., R. 29 W.; 96 ft N., 33 ft E. of T-rd. W.; 1.5 ft W. of right-of-way fence, 1 ft W. of witness sign, a standard tablet welded on 10 ft of copper-weld rod, protected by a 5-in. drain tile, set ground level and stamped "1 RRB 1978"	1228.637
30	5.8	Centerline bridge	1151.4
31	5.8	UE 1 A, 0.5 mi N. of tablet; 16 ft S., 12 ft E. and 0.1 ft higher than centerline of bridge in 12-in. wooden pier, top of rail spike, driven vertically	1151.46
33	6.4	UE 1 B, 1 mi N. of tablet; 3 ft N., 13 ft E. and 0.5 ft lower than T-rd. W.; 17 ft W. of fence corner, about 9-in. S. of the N. end of a corrugated metal culvert under a field entrance E.; top of bolt	1213.40
37	7.4	UE 1 C, 2 mi N. of tablet, 83 ft N., 25 ft W. and 5.5 ft lower than T-rd. W., on W. end of 66-in. corrugated metal culvert; punched hole	1189.86
39	7.9	Reference mark, 14 ft N., 145 ft E. and 5.4 ft lower than T-rd. E., on N. end of a corrugated metal culvert; punched hole	1243.60
41	7.9	BM, Shannon City, 1 mi E. and 3.5 mi N. from, 1 mi W. of Arispe, at quarter cor. between secs. 13 and 18, T. 71 N., R. 29 W., 62 ft N., 38 ft E. and 2.6 ft higher than T-rd. E., 11.5 ft S., 38 ft E. of centerline of road at entrance W.; on top of a small mound in "Island" formed by Co. Hwy. H 45 (N. & E.) and gravel road S., 1 ft W. of a witness sign, a standard tablet welded on 10 ft of copper-weld rod, protected by a 5-in. drain tile, set ground level and stamped "2 RRB 1978"	1251.600
43	8.6	Centerline bridge	1185.4
44	8.6	UE 2 A, 0.7 mi N. of tablet, at a small bridge, 14 ft S., 10 ft W. and 3.1 ft lower than centerline bridge, on concrete abutment; chiseled square	1182.35
47	9.4	Bridge	1197.9
48	9.4	UE 2 B, about 1.5 mi N. of tablet; about 200 ft N. of crossroad, at a bridge, 10 ft W. and 2.1 ft lower than centerline bridge, 2.7 ft E. of the W. end of a steel beam; painted square	1195.84
51	10.2	Reference mark, 58 ft N., 79 ft W. of BM, 5 ft S., 25 ft W. of centerline road at field entrance W.; 1.5 ft S., 1 ft E. of fence post at S. end of a wire gate, top of a steel fence post; painted white and projecting 6-in.	1269.62
52	10.3	BM, Arispe, 1 mi W. and 2.5 mi N. from, about 800 ft S. of cor. secs. 1, 6, 31 and 36, T. 71 N., R. 29 W., at crest of hill, 12 ft S., 34 ft E. and 1.5 ft higher than road at field entrance E.; 1.5 ft S., 1.5 ft W. of fence post at S. end of wire gate, 1 ft W. of witness sign, a standard tablet welded on 10 ft copper-weld rod, protected by a 5-in. drain tile, set ground level, stamped "3 RRB 1978"	1270.697

<u>LINE 2 (Cont'd)</u>	<u>TINGLEY QUAD. - 36 IA.</u>	<u>FEET</u>
1 56 10.8 UE 3 A, 0.6 mi N. of tablet; at a small bridge, 5.5 ft N., 14.5 ft E. and 0.8 ft higher than centerline of bridge, at the NE. end of the NE. wooden wingwall, in top of a round wooden piling, driven vertically; a rail spike		1201.28

AFTON QUAD. - 57 IA.

59 11.4 UE 3 B, about 1.1 mi N. of tablet; 38 ft S., 16 ft E. and 2.4 ft lower than T-rd. W. (private drive E.) on E. end of an 8-in. corrugated metal culvert; a punched hole	1269.58
62 12.8 Afton, 1.5 mi S. and 1.5 mi W. from; near quarter cor. secs. 29 and 30; T. 72 N., R. 29 W., 39 ft S. and 822 ft W. from road at T-rd. S., at crest of hill, 120 ft E. of T-fence N., 24 ft E. of metal gate, in concrete post; standard tablet stamped "17 RDS 1950" (RESET 1978 by R.R.B.)	1217.948

LINE 3

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

AFTON QUAD. - 57 IA.

7 2 0.0 BM, At Thayer, Union County, on the Chicago, Burlington & Quincy RR., 600 ft E. of the station, at a road crossing (overpass 375.92), in the top of the SE. corner of the NE. concrete foundation of a pedestal, 13 ft N. of the centerline of the N. track, and 2 ft higher than the track, a standard N.C.S. disk stamped "Y 109 1935"	1107.048
4 1.0 UE Y 109 A, 1 mi S. of tablet, 40 ft N., 54 ft W. (normal) and 4.7 ft lower than cross-road, on NW. end of concrete culvert; chiseled square	1109.35
8 2.5 UE Y 109 B, 2.3 mi S. and 0.1 mi E. of tablet, 680 ft E. of crossroads, 12 ft S., 49 ft E. and 1.2 ft higher than center of wooden bridge, in top of the round wooden piling, driven vertically; a rail spike	1032.05

TINGLEY QUAD. - 36 IA.

10 3.0 BM "12 RDS 1950" (Described in Line 1)	1165.396
11 3.0 Reference mark, 59 ft W. of tablet, 28 ft N. of road, on top of iron rod projecting 6-in. above ground	1164.31
16 4.3 UE 12 RDS A, 1.3 mi S. of tablet, 40 ft N., 48 ft W. and 7.6 ft higher than centerline of T-rd. N., 1 ft W. of fence corner post and witness tag, a copper-weld rod, projecting 0.4 ft and painted white	1118.44
18 5.1 Reference mark No. 1, 54 ft SW. of BM, 9 ft N. and 16 ft E. centerline of road, at drive E. on N. end of metal culvert; a punched hole	1054.82
19 5.1 BM, Thayer, about 4 mi S. and 1.25 mi E. of, near W. sixteenth cor. between secs. 1 and 12, T. 71 N., R. 28 W., about 400 ft N. of a T-rd. E.; at the Ray J. Lewis Farm, 38 ft N., 55 ft E. centerline of road, at drive E., 1.5 ft N., 1 ft W. of SW. cor. of metal machinery shed, standard table, on 10 ft of copperweld rod, protected by a 5-in. drain tile, stamped "19 RRB 1978"	1056.770
20 5.1 Reference mark No. 2, 35 ft SE. of BM, 18 ft S., 26 ft E. of the SW. cor. of steel building, on concrete slab; chiseled square	1057.36
24 6.3 UE 19 A, about 1 mi SSW. of tablet, 520 ft S. of a T-rd. E.; 13 ft N., 32 ft E. centerline of road at field entrance E., on N. end of metal culvert; punched hole	1045.93

LINE 3 (Cont'd)		TINGLEY QUAD. 36 - 1A.	FEET
7 27	7.2	UE 19 B, about 1.25 mi S. and 0.5 mi W. from tablet; 312 ft N., 25 ft W. and 17.2 ft lower than T-rd. E., 23 ft N. and 23 ft W. centerline road at drive W., on N. end of metal culvert; punched hole	1037.08
32	8.4	Reference mark, 422 ft E. of T-rd. E., 13 ft S., 18 ft E. and level with centerline of bridge, driven in top of SE. wooden piling; a R.R. spike	1018.33
33	8.4	BM, Thayer, about 6.2 mi S. and 0.8 mi E. of; 8.75 mi N. and 0.8 mi E. of Beaconsfield, T. 71 N., R. 28 W., in NE $\frac{1}{4}$ sec. 23, 34 ft S., 291 ft E. and 2.5 ft lower than T-rd. E.; 115 ft W., 34 ft S. of small wooden bridge, 5 ft S. and 2 ft E. of a fence corner, 5 ft S. and 2 ft E. of a fence corner, 5 ft S. o a witness sign, standard tablet on 10 ft copper rod, protected by a 5-in. drain tile, set flush and stamped "18 RRB 1978"	1018.962
36	9.3	UE 18 A, 0.2 mi E. and 0.7 mi S. of tablet, 16 ft S., 115 ft E. and 0.2 ft lower than T-rd. N., 16 ft S. and 11 ft E. of centerline bridge, in top of the SE. wooden piling; a rail spike	1011.99
38	9.9	UE 18 B, 0.7 mi S. and 0.7 mi E. from tablet, 168 ft S., 10 ft E. and 5.9 ft lower than T-rd. S. on E. end of metal culvert; a punched hole	1064.16
41	10.8	Road at drain	1010.1
44	11.5	Reference mark, 11.5 ft S., 83 ft W. and 1.7 ft lower than centerline of bridge, in top of wooden piling, a rail spike	992.88
45	11.5	BM, Beaconsfield, about 6.5 mi N. and 1.5 mi E. of near center of sec. 36, T. 71 N., R. 28 W., 40 ft S., 30 ft W. and 2.2 ft lower than T-rd. S.; 2.5 ft S., 1.5 ft E. of a fence corner, 6 ft SW. of a power pole, 1 ft E. of a witness sign, a standard tablet set on 10 ft copperweld rod, protected by a 5-in. clay tile, set flush, stamped "17 RRB 1978"	989.066
49	12.7	UE 17 A, about 1.1 mi SSW. of tablet, about 265 ft E. (normal), 21 ft S. and 24.2 ft lower than T-rd. N. on SW. end of metal culvert; a punched hole	1139.157
52	13.6	UE 17 B, about 1.5 mi S. and 0.3 mi W. of tablet, 110 ft S., 46 ft E. and 1.8 ft lower than T-rd. S., 2.5 ft NE. of a power pole and witness tag, set in ground level, protected by a 5-in. clay tile, the top of a copperweld rod, (NOTE: rod is not centered in tile)	1049.31
54	14.2	UE 17 C, about 2 mi S. and 0.3 mi W. of tablet, at steel bridge over Sand Creek, 13.5 ft S., 43.5 ft E. and 0.5 ft higher than centerline of bridge, in top of the SE. wooden piling, a rail spike	1130.87
58	15.5	Reference mark, 47 ft N., 25 ft W. and 0.3 ft lower than T-rd. W.; 12 ft N. of fence corner post at E. end of wire gate; 1 ft E. of fence and witness tag, in a 5-in. clay tile, the top of a copper weld rod, projecting about 0.1 ft	1196.97
59	15.5	BM, Beaconsfield, about 4.5 mi N. and 0.25 mi E. of, near center sec. 11, T. 70 N., R. 28 W., 30 ft N., 44 ft W. and 0.3 ft lower than T-rd. W., 10.5 ft W. of fence corner post at W. end of wire gate, 1.5 ft S. of the fence, 1 ft S. of witness sign, a standard tablet, on copperweld rod, protected by a 5-in. drain tile, set ground level, stamped "16 RRB 1978"	1196.962
61	16.9	T-rd. N.	1196.6
64	17.4	UE 16 A, about 1.4 mi S. and 0.5 mi E. of tablet, 12 ft N., 30 ft E. and 0.1 ft higher than T-rd. S. on N. end of a metal culvert; a punched hole	1149.23
68	18.4	Reference mark, 36 ft S., 34 ft W. and 4.5 ft lower than crossroad, on S. end of metal culvert; a punched hole	1105.77

<u>LINE 3 (Cont'd)</u>		<u>TINGLEY QUAD. - 36 IA.</u>	<u>FEET</u>
7	69 18.4	BM, Beaconsfield, 2 mi N. and 0.75 mi E. of; T. 70 N., R. 28 W., near cor. secs. 23, 24, 25 and 26, 62 ft S., 48 ft W. and 3.3 ft lower than crossroad, 13 ft S. of fence corner post, 1 ft W. of fence, 1 ft S., 1 ft E. of powerpole and witness sign, standard tablet on 10 ft copper weld rod, protected by a 5-in. clay tile, stamped "15 RRB 1978"	1106.983
	72 19.4	UE 15 A, 1 mi S. of tablet; 36 ft S., 40 ft W. and 2.7 ft lower than crossroad, on S. end of metal culvert; punched hole	1191.06
	76 20.5	UE 15 B, 2 mi S. and 0.5 mi W. of tablet; at a curve in road, 24 ft W. centerline of road, on W. end of concrete culvert, chiseled square	1184.15
	79 21.4	Reference mark, 46 ft E. of BM, 39 ft N., 69 ft W., and 2.2 ft higher than crossroad, 1 ft N. of fence, 1.5 ft N., 1 ft W. of a power pole and witness tag, in a 5-in. clay tile, top of a copper-weld rod	1172.91
	80 21.4	BM, Beaconsfield, 1 mi S. and 0.25 mi E. of; T. 69 N., R. 28 W., near quarter cor. between secs. 2 and 11, 39 ft S., 115 ft W. and 4.2 ft higher than crossroad, 1 ft N. of fence, 47 ft W. of a power pole, 0.5 ft N. of a witness sign, standard tablet, set on copper-weld rod protected by a 5-in. clay tile, stamped "14 RRB 1978"	1174.884
8	4 22.3	UE 14 A, 0.9 mi S. of tablet; 126 ft S. and 34 ft W. centerline of road at field entrance E., 5.8 ft lower than road, on W. end of large metal culvert; a punched hole	1103.97
	8 23.4	UE 14 B, about 2 mi S. of tablet; 43 ft S., 33 ft E. and 3 ft lower than T-rd. SSE. on S. end of metal culvert; punched hole	1115.64
	13 25.4	Reference mark, 20 ft S., 27 ft W. centerline road at entrance E., 7 ft S. of the S. fence corner post; at a wire gate, 1 ft W. of fence, 1.5 ft NW. of a fence post and witness tag the top of a copper weld rod	1114.21
	14 25.4	BM, Beaconsfield, 4 mi S. and 0.25 mi E. of; 3 mi N. and 0.5 mi E. of Kellerton; T. 69 N., R. 28 W., about 300 ft S. of quarter cor. between secs. 23 and 26, on the crest of a hill, 16 ft N., 30 ft E. and 0.2 ft lower than road at entrance E.; 7 ft N. of the N. fence corner post at a wire gate, 0.6 ft W. of the fence, 1 ft S. of a witness sign, standard tablet on copperweld rod, protected by a 5-in. clay tile, stamped "13 RRB 1978"	1114.109
<u>MOUNT AYR QUAD. - 334 IA.</u>			
	18 26.1	UE 13 A, about 0.7 mi S. of tablet; 28 ft N., 19 ft W. and 2.2 ft lower than T-rd. W., on W. end of a concrete culvert; chiseled square	1175.10
	22 27.4	UE 13 B, about 2 mi S. of tablet; 47 ft N., 31 ft W. and 4.5 ft lower than crossroad, 9 ft W. of fence corner, 3 ft N. of a power pole, 2 ft S. of a fence and witness tag, in 5-in. drain tile, the top of a copperweld rod	1190.14
	24 28.6	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 the sidewalk, a standard USC&GS disk stamped "P 117 1939" and set in the top of a concrete post	1199.630