

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

41-092-34
PELLA QUADRANGLE
74 - IOWA
N4115-W9245/15
DIAGRAM NK 15-8
DES MOINES

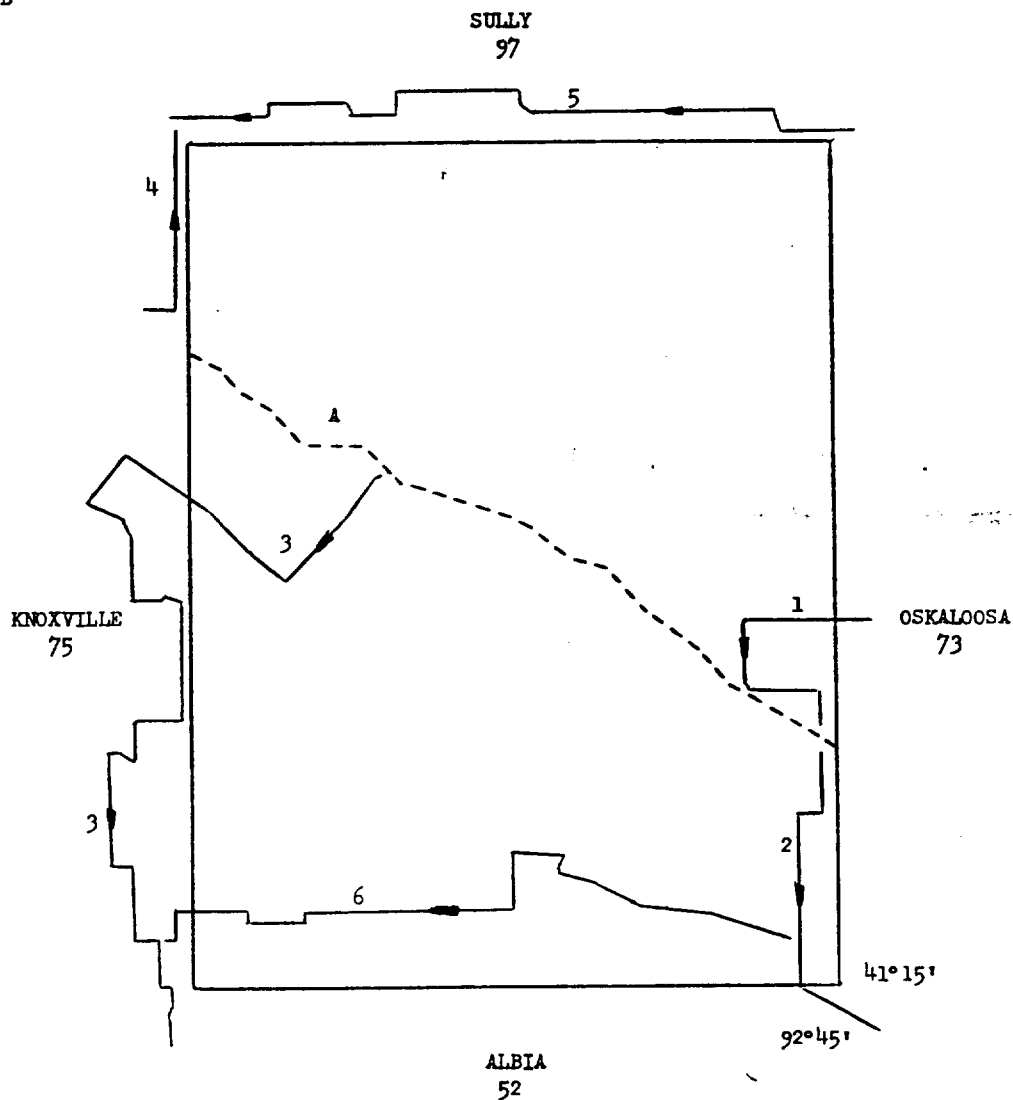
HIRD-ORDER LEVELS
NATIONAL GEODETIC VERTICAL DATUM OF 1929

Final adjustment of 1976

Mahaska and Marion Counties

Edition of: 4/8/76

PR: ADP/lcb/CB



U.S. (USC&GS) VERTICAL CONTROL DATA

Quadrangle No. 410923

74 D

LINE 1

FEET

W.E. Knouse, 1967; Book CV-2192

OSKALOOSA QUAD. - 73

- 11.5 Leighton, 2 mi N. and 2 mi E. from, T. 76 N., R. 16 W.; in S. central portion of sec. 19, 14 ft N. and 59 ft E. of rd. at drive N., 14 ft N. of center of rd. at drain, on top and center of N. concrete headwall of box culvert, a standard tablet stamped "4 WEK 1967" 783.879
- 11.5 Reference mark, T. 76 N., R. 16 W., in S. central portion of sec. 19, 24 ft N. and 17 ft E. of road at drive N., on E. end of 4-ft. steel culvert, chisled square 784.81

PELLA QUAD. --74

- 12.0 UE 4 WEK A, T. 76 N., Rs. 16 and 17 W., between SW $\frac{1}{4}$ sec. 19 and SE $\frac{1}{4}$ sec. 24; 28 ft S. and 29 ft E. of T-rd. E., S. end of corrugated steel culvert, punched hole 811.01
- 12.7 UUE 4 WEK B, T. 76 N., Rs. 16 and 17 W., near quarter cor. secs. 25 and 30, 27 ft N. and 35 ft W. of T-rd. W., on top of a 5/8-in. reinforcement rod in a concrete right-of-way post, top of reinforcement rod 844.59
- 13.4 Leighton, 1 mi N. and 0.5 mi E. from, T. 76 N., R. 17 W., in E. central portion of sec. 25, 225 ft SE. along State Hwy. 163 from crossroads, 25 ft NE. and perpendicular to center of Hwy. 163, on top of concrete headwall of culvert, a standard tablet stamped "5 WEK 1967" 854.372
- 13.5 Reference mark, T. 76 N., R. 17 W., in E. central portion of sec. 25, 21 ft S. and perpendicular to center of E-W rd., 47 ft NE. and perpendicular to center of State Hwy. 163, about 100 ft ESE. of rd. crossing, on top of SE. end of corrugated steel culvert, punched hole 853.68
- 14.2 UE 5 WEK A, T. 76 N., R. 17 W., near center of sec. 26, center of paved rd. at T-rd. W.; (T-rd. W. is par to slightly offset crossroads), chiseled square at center of rd. 849.24
- 15.0 UE 5 WEK B, T. 76 N., R. 17 W., about 0.2 mi N. of center sec. 35, 25 ft W. of center of paved rd., on top of W. end of corrugated steel culvert, punched hole 815.94
- 15.7 At Leighton, Mahaska County, T. 76 N., R. 17 W., in extreme S. central portion of sec. 35, about 900 ft SE. from Chicago, Rock Island and Pacific RR. crossing between powerline tower 283 and 284, 73 ft NE. of center of the track along a N.-S. field line, about 180 ft SW. of a 90° bend in county rd., which turns from N. to E., a USGS standard cap stamped "760 Iowa" and riveted on the top of a 3 $\frac{1}{2}$ -in. iron pipe 759.854

LINE 2

W.E. Knouse, 1967, Book CV-2192

PELLA QUAD. - 74

- 0.0 "BM 760" (previously described in line 1) 759.854
- 0.5 UE 760 A, Ts. 75 and 76, N., R. 17 W., near cor. secs. 1, 2, 35 and 36, 47 ft N. and 6 ft E. of T-rd. S., 47 ft N. and 13 ft E. of road at drive N., in S. side of a power pole, a rail spike 827.80
- 1.2 UE 760 B, T. 75 N., R. 17 W., about 0.72 mi S. of cor. secs. 1, 2, 35 and 36, 30 ft N. and 19 ft W. of rd. at fence W., 19 ft W. of rd. at drain, about 5.9 ft lower than rd. at drain, on top of W. end of a steel culvert, chiseled cross 792.78
- 2.0 UE 760 C, T. 75 N., R. 17 W., near quarter cor. secs. 11 and 12, 21 ft N. and 420 ft E. of crossroads, on top N. end of corrugated steel culvert, punched hole (UE about 2.7 ft lower than rd. at drain) 827.14

<u>LINE 2 (Cont'd)</u>	<u>PELLA QUAD. - 74</u>	<u>FEET</u>
2.6 Leighton, 1.7 mi S. and 1 mi E. from; T. 75 N., R. 17 W.; in S. central portion of sec. 12; about 850 ft S. and 17 ft W. of T-rd. S., on top of S. end of W. concrete headwall of box culvert; a standard tablet stamped "6 WEK 1967"		802.771
2.6 Reference mark; T. 75 N., R. 17 W.; in S. central portion of Sec. 12; about 850 ft S. and 16 ft E. of T-rd. S.; on top of N. end of E. concrete headwall of concrete box culvert; chiseled square		802.09
3.5 UE 6 WEK A; T. 75 N., R. 17 W.: near center sec. 13; 35 ft N. and 49 ft E. of T-rd. E.; in SW. side of a power pole; rail spike		838.47
4.0 UE 6 WEK B; T. 75 N., R. 17 W.; near quarter cor. secs. 13 and 24; 165 ft N. and 22 ft W. of crossroads; 22 ft W. and 10 ft S. of rd. at drive W.; on top of S. end of concrete pipe culvert under drive; chiseled square		770.06
4.7 Leighton, 1 mi E. and 3.75 mi S. from; T. 75 N., R. 17 W.; in S. central portion of sec. 24; 11 ft E. of center of rd., 0.8 ft higher than center of bridge; on S. end of E. wheel guard of bridge; a standard tablet stamped "7 WEK 1967"		716.522
4.7 Reference mark; T. 75 N., R. 17 W.; in S. central portion of sec. 24; 11 ft W. of center of rd., on N. end of W. concrete wheel guard; chiseled square		716.52
5.0 UE 7 WEK A; T. 75 N., R. 17 W.; near quarter cor. secs. 24 and 25; 73 ft E. of center of rd. N.; 88 ft N. of center of E.-W. rd.; in SE. side of a power pole; rail spike		733.64
5.0 UE 7 WEK B; T. 75 N., R. 17 W.; about 0.1 mi SE. of center of sec. 25, along a gravel rd.; 25 ft W. of center of rd., on W. end of steel culvert; chiseled cross and NW. edge sec. 36;		755.11
6.5 UE 7 WEK C; T. 75 N., R. 17 W.; near NE. edge of sec. 35 about 300 ft ESE. along rd. from T-rd. NE., 25 ft N. of center of rd., 9 ft E. of center of drive, on E. end concrete pipe culvert; chiseled square		688.63
8.0 Leighton, 6.25 mi S. and 1.5 mi E. from; 3.0 mi S. and 6.0 mi W. from Oskaloosa; T. 74 N., R. 17 W.; in NE. portion of sec. 1; 21 ft W. of center of rd., about 100 ft SW. of rd. at curve; about 400 ft N. of T-rd. W., on top and near center of W. headwall of culvert; a standard tablet stamped "8 WEK 1967"		681.649
8.0 Reference mark; T. 74 N., R. 17 W.; in NE. portion of sec. 1; 139 ft N. and 18 ft W. of T-rd. W.; on top of W. end of a corrugated steel culvert; punched hole		681.05
8.5 UE 8 WEK A; T. 74 N., R. 16 W.; in N. central portion of sec. 6; 11 ft S. of center of rd., about 900 ft E. of T-rd. N., on E. end of S. concrete wheel guard of bridge; chiseled square (UE is about 0.6 ft higher than center of bridge)		686.01
9.4 Oskaloosa; about 4 mi S. and 5 mi W. of; at approx. $S\frac{1}{4}$ between secs. 5 and 6; T. 74 N., R. 16 W.; at NE. cor. of concrete bridge over Des Moines River; standard tablet stamped "4 HK 1966"		693.851

LINE 3

<u>C.H. Baker, 1964; Book CV-1704</u>	<u>PELLA QUAD. - 74</u>	
0.0 Pella, about 3.0 mi NW. along the C.R.I.&P. RR. from; about 0.2 mi SE. of the crossing of State Hwy. 163; 46 ft SW. of a farm rd. crossing near power transmission line tower 167, 48 ft W. of a pole; and 46 ft SW. of the center of track; a standard USC&GS disk stamped "F 5 1930" and set in top of a concrete post (Reported not found 10-75 CWH)		877.452

<u>LINE 3 (Cont'd)</u>	<u>PELLA QUAD. - 74</u>	<u>FEET</u>
3.6 UE, center of drive NW. into Elam Cemetery		770.7
5.1 UE; 25 ft E. of center of Co. Hwy. "P"; 100 ft S. of Pella Pump House and 20 ft N. of center of Wabash RR. tracks; a chiseled cross on NE. cor. of bolt of signal box 5; a Corps of Engineers mark designated "TBM 64" (USGS elevation)		713.826
6.5 UE, chiseled square in S. headwall of culvert; 120 ft W. of T-rd. W.; 12 ft S. and 4.4 ft below center of rd.		723.38
6.5 Howell, approximately 0.8 mi S. and 0.5 mi W. of; in NE ¹ / ₄ sec. 30, T. 76 N., R. 18 W.; approximately 0.5 mi S. of intersection of Hwy. "P" and Wabash RR. tracks; a chiseled square on downstream right headwall of bridge over Des Moines River; on Co. Hwy. "P", 2 inches downstream from point where gas line pipe crosses bridge; a Corps of Engineers mark designated "TBM R 58" (USGS elevation) (Reported not found 10/75, CWH)		713.051
7.9 Pella, about 2.25 mi S. and 2.5 mi W. of; T. 76 N., R. 18 W.; at S. end of Red Rock Dam, on top of high hill at Corps of Engineers Rock Island District Office of Red Rock Dam; 34 ft NE. of NW. cor. of office building; 24 ft N. of building, in NW. cor. of Chlorination Cover; standard Corps of Engineers brass tablet set in top of concrete form and 3 in. above ground (USGS elevation) (Reported not found 10/75, CWH)		830.470
7.9 Knoxville, about 3.0 mi N. and 6.0 mi E. of center of Red Rock Dam; T. 76 N., R. 19 W.; SE ¹ / ₄ of SE ¹ / ₄ sec. 24; about 0.25 mi NW. of SW. end of Dam, 3 ft SW. of SW. cor. of steel link fence surrounding Corps of Engineers Radio Tower; a standard tablet stamped "ET 8 DB 1964"		830.362
9.6 UE, spike in power pole; 3.5 ft below center of rd. opposite; about 550 ft N. of T-rd. N. and 30 ft W. of rd. N.		879.70
<u>KNOXVILLE QUAD. - 75</u>		
10.4 Knoxville, 1.5 mi N. and 5 mi E. of; T. 76 N., R. 19 W.; near quarter cor. between secs. 35 and 36; 70 ft S., 30 ft E. and 1.3 ft below center of rds., 1 ft W. of fence; standard tablet set in top of concrete post; stamped "51 HB 1964"		881.160
11.3 UE, top of steel "I" beam used as piling; 25 ft N., 12 ft W. and 1.5 ft below center of bridge		758.60
12.5 UE, top of E. lip of bridge at center of bridge over drain and RR.; Dr. 41 ft below UE; RR. 27 ft below UE; UE 1 ft above flooring of bridge		789.1
13.7 UE, chiseled square on SW. cor. of bridge 6203; 0.5 ft above center of bridge		740.57
14.5 Knoxville, 4 mi E. along State Hwy. 92; about 1 mi E. of bridge over small river; about 0.75 mi W. of cemetery; T. 75 N., R. 19 W.; near SE. cor. of sec. 11 at crest of small hill; on S. side of rd. opposite large cottonwood tree; 2 ft N. of fence, a standard tablet set in top of concrete post; flush with ground; stamped "62 HB 1964"		859.967
13.7 Reference mark; bolt in top of small concrete culvert 345; in S. side of rd. about 390 ft W. of tablet		847.14
18.1 Pershing, near NE. cor. of City Limits; T. 75 N., R. 19 W.; near quarter cor. between secs. 25 and 26; 96 ft N., 33 ft E. and 1 ft lower than T-rd. N.; 1 ft W. of fence; standard tablet set in top of concrete post; stamped "63 HB 1964"		892.860
18.1 Reference mark; spike in pole; 57 ft N. of tablet		892.10

<u>LINE 3 (Cont'd)</u>	<u>KNOXVILLE QUAD. - 75</u>	<u>FEET</u>
18.7 UE, chiseled square on small concrete culvert at NE. intersection of offset crossroads; 27 ft N. and 21 ft E. of intersection of rds. N. and W.; and 1.7 ft below center of rd.		885.47
20.1 UE, chiseled square on bottom step of entrance to house; 45 ft E., 54 ft N. and 2 ft above bend in rd.		898.97

MELCHER QUAD. - 53

20.6 Ts. 74 and 75 N., R. 19 W.; 20 ft W. by 10 ft N. of cor. secs. 2, 3, 34 and 35; 1.25 mi N. of Attica; E. of T-rd. W.; iron post stamped "PTS 2 1908 908 Iowa"	906.269
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LINE 4

<u>C.H. Baker, 1964; Book CV-1704</u>	<u>KNOXVILLE QUAD. - 75</u>
0.0 Otley, about 1.9 mi SE. along the C.R.I.&P. RR. from the station at; 61 ft E. of State Hwy. 163 at station 311; 44 ft SW. of center of track and 22 ft SW of a pole; a USC&GS standard disk stamped "E 5 1930" set in top of a concrete post	887.833
0.5 UE, N. rail at center of rd., T. 77 N., R. 18 W.; near cor. secs. 25, 26, 35 and 36; N. rail of track at center of N.-S. rd.	886.2
1.3 UE, Otley, 1.5 mi E. and 1.0 mi S. of; T. 77 N., R. 19 W.; near cor. secs. 23, 24, 25 and 26; 25 ft E. and 16 ft S. of T-rd., E. and 1.5 ft lower than T-rd. E.; (S. end of corrugated pipe culvert)	869.9
2.3 UE, T. 77 N., R. 19 W.; near cor. secs. 13, 14, 23 and 24; 100 ft W. and 20 ft S. and 5.3 ft lower than center of crossroads; chiseled square in SE. cor. of headwall of culvert	836.98
3.0 Otley, 1 mi N. and 1.5 mi E. of; T. 77 N., R. 19 W.; near quarter cor. between secs. 13 and 14; 300 ft S. of drive W.; 25 ft E. of center of rd., 1 ft W. of fence, flush with ground and level with rd., standard tablet set in top of concrete post stamped "51 HB 1964 ET"	899.886
3.0 Reference mark; spike in pole about 200 ft SW. of tablet	899.28
3.8 USC&GS and State Survey marker "115": Tablet is set in top of concrete post, 3 ft W. of fence; 18 ft N. of power pole; 48 ft N. of center of rd. at drive E. (reported moved by local farmers) Elevation by USGS	867.169
4.2 UE, NE. headwall of bridge; T. 77 N., R. 19 W.; about 0.25 mi S. of cor. secs. 1, 2, 11 and 12; chiseled square on NE. cor. of headwall of bridge over Van Zante Creek	763.75
4.7 Otley, 2.5 mi N. and 1.5 mi E. of; T. 77 N., R. 19 W.; near NE. cor. SE $\frac{1}{4}$ of SE $\frac{1}{4}$ sec. 2; 32 ft W. of center of N.-S. rd. at drive W.; 9 ft S. at N.-S. fence; 2 ft NE. of telephone pole; a standard tablet stamped "ET 7 DB 1964" and set in concrete post	762.856

NEWTON QUAD. - 98

5.4 T-rd. S.; N. of; iron post stamped "PTS 4 1908 Iowa" Ts. 77 and 78 N., R. 19 W.; near cor. secs. 1, 2, 35 and 36	766.837
6.2 UE, chiseled square on SE. headwall of culvert; T. 78 N., R. 19 W.; near center of sec. 35; 30 ft E. and 2.2 ft below center of rd., chiseled square on SE. headwall of concrete culvert (dr. 2.6 ft below UE)	806.14

LINE 5

FEET

C.D. Lien, 1975; Book CV-3242

MONTEZUMA QUAD. - 96

1 19 5.8 Sully, 5.5 mi S., 5.5 mi E. of, T. 77 N., R. 16 W., quarter cor. between secs. 5 and 6, 16.5 ft S., 291.9 ft W. of and 1.4 ft lower than centerline road at T-rd. S., cemented in the center of a concrete headwall, a standard tablet stamped, "2 CDL 1975" 866.124

SULLY QUAD. - 97

22 6.5 UE 2 A, 0.7 mi W. along road from tablet, T. 77 N., R. 16 W., near center of sec. 6, 26.2 ft N., 22.9 ft W. of and 1.7 ft lower than centerline road at T-rd. N., a chiseled square on a concrete culvert 892.95

25 7.5 UE 2 B, 2 mi W. along road from tablet, T. 77 N., R. 17 W., near the center of sec. 1, 23 ft S., 9 ft E. of and 2.2 ft lower than Y-rd., a chiseled square on a concrete culvert 874.92

27 8.1 Sully, 5 mi S., 3.75 mi E. of; Ts. 77 and 78 N., R. 17 W., near the W. sixteenth cor. between secs. 1 and 36, 22.7 ft N. of and 4.4 ft lower than centerline rd. at drain and Y-rd. and 117.2 ft NE. and 22.7 ft N. of a T-rd. N., cemented in the NW. cor. of a concrete headwall a standard tablet stamped "3 CDL 1975" 853.989

28 8.1 Reference mark, 19 ft S. and 4 ft E. of a T-rd. N. and 41.7 ft S. and 113 ft SW of tablet, a punched hole in a metal culvert 855.53

30 8.9 UE 3 A, 0.78 mi W. along rd. from tablet, Ts. 77 and 78 N., R. 17 W., near the quarter cor. between secs. 2 and 35, 26.2 ft S., 29.5 ft W. of; 4.1 ft lower than centerline rd. at T-rd. S., a punched hole in a metal culvert 856.67

32 9.6 UE 3 B, 1.5 mi W. along rd. from tablet, Ts. 77 and 78 N., R. 17 W., near the E. sixteenth cor. between secs. 3 and 34, 29.5 ft N., 26.2 ft W. of and 1.2 ft lower than centerline rd., at T-rd. N., a punched hole in a metal culvert 854.56

35 10.4 Sully, 5 mi S., 1.5 mi E. of, Ts. 77 and 78 N., R. 17 W., near sec. cors. 3, 4, 33 and 34, 12 ft N. 20 ft W. of, 0.7 ft higher than centerline of bridge over Buckley Creek, cemented in the NW. corner of bridge, a standard tablet stamped "4 CDL 1975" 768.074

37 10.9 UE 4 A, 0.5 mi W. along rd. from tablet, Ts. 77 and 78 N., R. 17 W., near the quarter corner between secs. 4 and 33, 26.2 ft S. and 23 ft E. of, 1 ft lower than crossroads, a punched hole in a metal culvert 825.89

40 12.1 UE 4 B, 1.7 mi W. along rd. from tablet, Ts. 77 and 78 N., R. 17 W., near the W. sixteenth cor. between secs. 5 and 32, 15 ft S. and 0.4 ft lower than centerline of road and 0.1 mi E. of a T-rd., N., a chiseled square on a concrete headwall 833.49

44 13.5 Sully, 5 mi S. and 1.5 mi W. of; Ts. 77 and 78 N., Rs. 17 and 18 W., near sec. cors., 1, 6, 31 and 36, 22 ft N. and 12 ft W. of, same elevation as centerline bridge and 159.3 ft S. of a T-rd. SE., cemented in the NW. cor. of a steel bridge over Elk Creek, a standard tablet stamped "5 CDL 1975" 744.909

45 13.5 Reference mark, 31.3 ft N., 9.3 ft W. of tablet, 43 ft N., 21 ft W. of centerline of bridge and 138 ft S., 24 ft W. of a T-rd. SE., a punched hole in a metal culvert 743.57

49 14.3 UE 5 A, 0.3 mi N. and 0.5 mi W. along rd. from tablet, T. 78 N., R. 18 W., near the center of sec. 36, 28.7 ft N. of, and 4.1 ft lower than centerline of road at T-rd. S. and 28.7 ft N., 15 ft W. of centerline road at a field entrance N., a chiseled square on a concrete culvert 751.90

51 14.8 UE 5 B, 0.3 mi N., 1 mi W. along road from tablet, T. 78 N., R. 18 W., near the quarter cor. between secs. 35 & 36, 12 ft N., 29 ft W. of centerline rd. at T-rd. N., 12 ft N. and 0.6 ft lower than centerline rd. over drain, a chiseled square in the center of a headwall for a 12 ft concrete box culvert 739.68

LINE 5 (Cont'd)

SULLY QUAD. - 97

FEET

- 1 54 15.8 UE 5 C, 0.3 mi N., 2 mi W. along rd. from tablet, T. 78 N., R. 18 W. near the quarter corner between secs. 34 and 35, 14 ft N. of, 0.1 ft higher than centerline of road at drain and 12 ft N., 30 ft E. of centerline of road at a field entrance S., a chiseled cross in the center of a headwall for a 12 ft concrete box culvert 741.74
- 58 16.9 Sully, 5 mi S., 4 mi W. of; T. 77 N., R. 18 W., near the quarter corner between secs. 3 and 34, 15 ft N., 9 ft E. of and 0.8 ft higher than centerline of bridge, 541.2 ft S. of a T-rd. W., cemented in the NE. cor. of a concrete bridge, a standard tablet stamped "6 CLD 1975" 740.087
- 59 17.0 Reference mark, 19 ft N., 50 ft W. of a T-rd. W. and 560 ft N., 59 ft W. of tablet, a chiseled cross on a concrete culvert 735.23
- 63 18.0 UE 6 A, 1.1 mi W. along rd. from tablet, Ts. 77 and 78 N., R. 18 W., near the quarter cor. between secs. 4 and 33, 49.5 ft S., 26 ft E. of and 2.9 ft lower than centerline of road at curve and a field entrance S. a punched hole in a metal culvert 738.56
- 67 19.0 UE 6 B, 0.25 mi N., 1.75 mi W. along road from tablet, T. 78 N., R. 18 W., near the S. sixteenth cor. of sec. 32, 15.8 ft N., 59 ft E. of and 1.9 ft lower than centerline rd. at N. and S. fence lines, a punched hole in a metal culvert 741.38
- 69 19.7 Reference mark, 118 ft W. and 9.8 ft S. of centerline of bridge, 9.8 ft S. of the W. end of bridge on top of a bolt in the SW. cor. of an old steel bridge 748.69
- 70 19.7 Sully, 4.75 mi S., 6.5 mi W. of; T. 78 N., R. 18 W., near the S. sixteenth cor. between secs. 31 and 32, at an old steel bridge over Skunk River, 21 ft N. and 118 ft W. of, and 6.5 ft lower than centerline of bridge, 21 ft N. of the W. end of bridge and 12 ft W. of the W. bank of river, set on top of a half inch copper coated steel rod which is enclosed by a 6 inch tile, a standard tablet stamped "7 CDL 1975" 741.930
- 72 20.1 UE 7 A, 0.35 mi SW. along road from tablet, Ts. 77 and 78 N., R. 18 W., near sec. cors. 5, 6, 31 and 32, 26 ft S., 20 ft W. of and 3.5 ft lower than centerline of road at a T-rd. W., a punched hole in a metal culvert 739.02
- 74 21.0 UE 7 B, 0.35 mi SW., 0.9 mi W. along road from tablet, Ts. 77 and 78 N., Rs. 18 and 19 W., near sec. cors. 1, 6, 31 and 36, 36 ft N., 17 ft W. of and 2.3 ft lower than crossroads, a punched hole in a metal culvert 742.84

NEWTON QUAD. - 98

- 77 22.0 Sully, 5 mi S., 8.5 mi W. of; Ts. 77 and 78 N., R. 19 W., sec. cors. 1, 2, 35 and 36, 43.5 ft N., 13 ft W. of centerline of road at a T-rd. S. and 1.5 ft E. of a N.-S. right-of-way fence line, set on top of a 4-in. iron pipe which projects 1 ft above ground, a brass cap stamped "PTS 4 1908 Iowa" 766.837

LINE 6

C.W. Hartley, 1975, Book CV-3242

PELLA QUAD. - 74

- 3 3 1.0 UE 7 A 1, 1 mi NE of UE along county road in the SW cor. sec. 26, on the S. end of an 18-in. concrete culvert, a chiseled square 680.20
- 7 2.4 EM, Tracy, 3.8 mi E. and 0.5 mi S. of; T. 75 N., R. 17 W. in the NW quarter sec. 27, 1 ft E. of SW cor. of concrete wingwall, a standard tablet stamped "1 CWH 1975" 697.959

<u>LINE 6 (Cont'd)</u>			<u>PELLA QUAD. - 74</u>	<u>FEET</u>
3	9	2.4	Reference mark, 250 ft W. of bench mark at field Entrance N., W. end metal culvert, a punched hole	696.14
12		3.4	UE 1 A, 1 mi NE of tablet along county road on NW cor. of bridge wingwall, a chiseled square	698.29
15		4.2	UE 1 B, About 1.9 mi NW. of tablet along county road on the NW corner of wooden floor bridge, a copper nail and washer	688.98
19		5.7	BM, Tracy, 1.2 mi E. and 0.4 mi N. of; at State Hwy. 92 and the Des Moines River, T. 75 N., R. 17 W., in the SW. quarter sec. 19, 10.5 ft E., SW. cor. of bridge, a standard tablet stamped "2 CWH 1975"	704.174
20		5.7	Reference mark, 53 ft W. of tablet on the W. wingwall of catch basin a chiseled square	703.30
22		6.9	UE 2 A, at Tracy a copper nail and washer at a T-rd. E.	745.2
24		7.8	UE 2 B, about 0.5 mi SW. of Tracy on bridge over Walnut Creek on the NW. cor. of wheel guard, a chiseled square	703.61
27		8.9	Reference mark, about 320 ft E. of tablet, 32 ft N. centerline road at drive N. on the W. end of a metal culvert, a punched hole	770.94
28		9.0	BM, Tracy, 0.5 mi S. and 1.5 mi W. of; T. 75 N., R. 18 W., in the NE quarter sec. 26, centerline of concrete headwall, 21 ft N. of road at drain, a standard tablet stamped "3 CWH 1975"	762.356
33		10.1	UE 3 A, 1.0 mi N. of tablet along county road, 21 ft N., 16 ft W. of, at road N., in the W. end of a metal culvert, a punched hole	842.75
36		12.1	UE 3 B, 3 mi W. of Tracy on a concrete bridge over Walnut Creek, on the SE cor. of bridge, a chiseled square	752.89
39		13.1	BM, Tracy, 0.6 mi S. and 4.5 mi W. of; T. 75 N., R. 18 W., in the SW quarter of sec. 29, center of N. headwall of box culvert, a standard tablet stamped "4 CWH 1975"	803.211
40		13.1	Reference mark, 40 ft S. of tablet on S. headwall, concrete box culvert, a chiseled square	802.24
43		14.2	UE 4 A, 0.8 mi W. of tablet, along county road, 60 ft S., 21 ft E. of a T-rd. S., on the S. end of concrete culvert, a chiseled square	881.67
46		14.9	UE 4 B, 1.4 mi W. along county road from tablet, 277 ft E. of road at fence, 18 ft S. of road on the S. end of metal culvert, a punched hole	863.99

KNOXVILLE QUAD. - 75

48	15.7		Pershing, near NE. corner of City Limits; T. 75 N., R. 19 W., near quarter cor. between secs. 25 and 26, 96 ft N., 33 ft E. and 1 ft lower than T-rd. N.; 1 ft W. of fence; standard tablet set in top of concrete post, stamped "63 HB 1964"	892.860
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ISLOATED BENCH MARKS

			Otloy, S. side of main street, 0.4 mi W. of NE. cor. of sec. 22; T. 77 N., R. 19 W.; at T-rd. near N. edge of village, 15 ft N. of fence line, 425 ft W. of RR., iron post stamped "884 Iowa" (USC&GS elev.)	882.784
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ISOLATED BENCH MARKS (Cont'd)

	<u>FEET</u>
Pella, SE. cor. of Central College campus; iron post stamped "878 Iowa" (USC&GS elev.) (Reported bad, cap gone, A.M. Hovey 8/41)	876.881
T. 77 N., R. 18 W.; SE. cor. sec. 17, in SE. cor. of Bethel Church Yard, 35 ft SE. of front entrance of church, iron post stamped "860 Iowa"	858.727
T. 76 N., R. 19 W.; SE. cor. sec. 2, 85 ft N. of center of rd., 18 ft W. of rd., 30 ft E. of bank of small creek, iron post stamped "749 Iowa"	747.844
T. 77 N., R. 17 W.; 0.3 mi N. of SE. cor. sec. 8, on S. side of E.-W. rd., on bank, 18 ft E. of corner fence post, iron post stamped "806 Iowa" (Reported not found, probably destroyed 7-75, AEN)	804.856
T. 77 N., R. 17 W.; 0.5 mi N. of SE. cor. of sec. 14, on N. side of E. and W. rd., 60 ft NW. of intersection of roads, 3 ft S. of E. and W. fence, iron post stamped "875 Iowa" (Probably destroyed 7-75, AEN)	873.856
T. 77 N., R. 17 W.; 0.5 mi S. by 0.3 mi E. of NW. cor. of sec. 36, on E. side of N. and S. rd., 15 ft E. of center of N.-S. rd., 50 ft N. of E.-W. rd., 18 ft N. of corner fence post, 3 ft W. of N.-S. fence, iron post standard tablet stamped "724 Iowa"	740.216
T. 76 N., R. 17 W.; 0.3 mi W. of SE. cor. sec. 13, T-corner on W. side of rd., 40 ft N. of center of road, iron post stamped "735 Iowa" (Probably destroyed, A.M. Hovey 6-40)	733.317
T. 76 N., R. 17 W.; about 400 ft N. and 32 ft E. of SW. cor. NW $\frac{1}{4}$ sec. 18, 51 ft NW. from center of RR. track at right angles, 32 ft E. of center of rd., 1 ft W. of N.-S. fence, 6 ft N. of post of fence corner of RR. fence, N. side of C.R.I.&P. RR. right-of-way, iron post stamped "856 Iowa" (Reset A.M. Hovey. 6-40)	855.130
T. 75 N., R. 19 W.; 0.5 mi N. of SE. cor. of sec. 27, S. and 55 ft W. of center of crossroads, 3 ft N. of fence, iron post stamped "888 Iowa"	886.459
T. 75 N., R. 18 W.; 0.25 mi N. of SW. cor. sec. 30, on N. side of rd., near SW. cor. of Vigilance School ground, iron post stamped "886 Iowa"	884.979
T. 75 N., R. 18 W.; 0.25 mi E. of quarter cor. on W. side of sec. 27, iron post stamped "849 Iowa"	847.652
Tracy, 2 blocks E. of Chicago, Burlington and Quincy RR. station, W. side of street, 3 ft E. of fence, 60 ft N. of C.B.&Q. RR. track, iron post stamped "730 Iowa"	728.302
T. 75 N., R. 17 W.; 0.25 mi W. of quarter cor. on E. side of sec. 27, on E. side of rd., 84 ft N. of C.B.&Q. RR. track, 3 ft W. of fence, iron post stamped "700 Iowa"	698.736
T. 75 N., R. 17 W.; quarter cor. on N. side of sec. 24, 30 ft W. and 30 ft N. of center of rd., SE. cor. of Charles Oswaldel's place, crossroads, iron post stamped "772 Iowa"	771.045
Leighton, quarter cor. on S. side of sec. 35, T. 76 N., R. 17 W., W. side of rd., 50 ft N. of RR., iron post stamped "761 Iowa"	759.854
T. 76 N., R. 17 W.; 0.25 mi N. of SW. cor. sec. 19, T-cor. iron post stamped "PTS 8 Iowa 1908 813" (Probably destroyed Hovey, 8-41)	811.246