

STATE OF IOWA

THIRD ORDER LEVELS
SEA LEVEL DATUM OF 1929

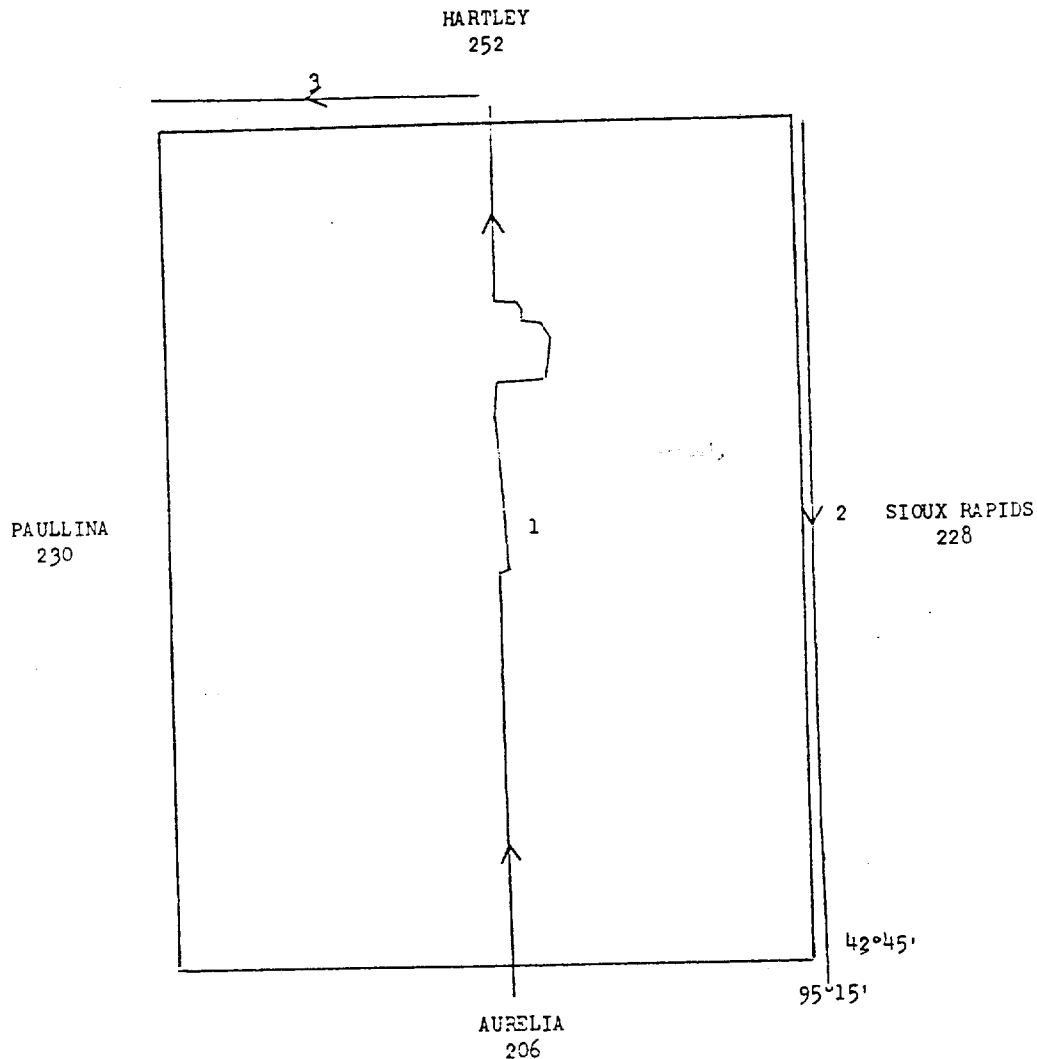
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

PETERSON QUADRANGLE
229 - IOWA
N42°45'-W95°15'/15
Diagram NK 15-4
Ft. Dodge, Iowa

Buena Vista, Cherokee, Clay
and O'Brien Counties

Final Adjustment of 1969

Edition of 11/3/72
PR: AKH/AS/kw



USC&GS LEVELING

A = Quadrangle No. 420951

Based on Supplemental Adjustment of 1936, 1937 and 1939

229 A

FEET

LINE 1

J. H. Tyndale, 1968; Book CV-2324

AURELIA QUAD. - 206

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|---|---|-----|--|----------|
| 8 | 3 | 2.7 | Aurelia, 1.5 mi N. and 3.5 mi E. of; 385 ft S., 37 ft W. and 2.7 ft lower than crossroad (Co. Hwy. "C" N.-S.), cor. secs. 31, 32, 5 and 6, Tps. 91 and 92 N., R. 38 W.; 68 ft N. of jog in W. right-of-way fence; 7 ft NE. of metal witness sign; 1 ft E. of W. right-of-way fence on 10 ft copper coated steel rod inside 6 in. concrete tile; standard tablet stamped "53 T 1968 1418" | 1417.827 |
| 4 | | 2.8 | Reference mark, 368 ft N. of tablet; 17 ft S., 45 ft W. of crossroad, 3 ft concrete tile culvert; chiseled square, painted "RM" | 1418.66 |
| 5 | | 3.8 | UE; center of crossroad (Iowa Hwy. 3 E.-W.; Co. Hwy. "C" N.-S.), cor. secs. 29, 30, 31 and 32, T. 92 N., R. 38 W.; ½ in. bolt in X-mark; painted square, painted "UE Centerline" | 1390.16 |

PETERSON QUAD. - 229

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| 6 | 4.8 | UE; center of crossroad (Co. Hwy. "C" N.-S.), cor. secs. 19, 20, 29 and 30, T. 92 N., R. 38 W.; ½ in. bolt in painted square, painted "UE Centerline" | 1398.38 |
| 7 | 5.8 | Reference mark, 139 ft E. of tablet; 66 ft N., 42 ft W. of crossroad (Co. Hwy. "C" N.-S.), S. side power pole; rail spike, painted "RM" | 1428.05 |
| 8 | 5.8 | Aurelia, 4.5 mi N. and 3.5 mi E. of; 34 ft N., 181 ft W. and 0.7 ft higher than crossroad (Co. Hwy. "C" N.-S.), cor. secs. 17, 18, 19 and 20, T. 92 N., R. 38 W.; 30 ft E. of metal witness sign and E. gate post; 1 ft S. of N. right-of-way fence; on 10 ft copper coated steel rod inside 6 in. concrete tile; standard tablet stamped "54 T 1968 1430" | 1429.883 |
| 9 | 6.9 | UE; center of crossroad (Co. Hwy. "C" N.-S.), cor. secs. 7, 8, 17 and 18, T. 92 N., R. 38 W.; copper nail and washer, painted "UE Centerline" | 1437.39 |
| 10 | 7.9 | UE; center of crossroad (Co. Hwy. "C" N.-S.), cor. secs. 5, 6, 7 and 8, T. 92 N., R. 38 W., ½ in. rebar flush with asphalt; painted square, painted "UE Centerline" | 1429.78 |
| 11 | 9.0 | Reference mark, 228 ft N. of tablet; 31 ft N., 42 ft E. of crossroad (Co. Hwy. "C" N.-S.), S. side power pole; rail spike; painted "RM" | 1472.77 |
| 12 | 9.1 | Aurelia, 7.5 mi N. and 3.5 mi E. of; 197 ft S., 40 ft E. and 2.8 ft higher than crossroad (Co. Hwy. "C" N.-S.), cor. secs. 31, 32, 5 and 6, Tps. 92 and 93 N., R. 38 W.; 7 ft S. of metal witness sign; 1 ft W. of E. right-of-way fence; on 10 ft copper coated steel rod inside 6 in. concrete tile; standard tablet stamped "55 T 1968 1473" | 1472.59 |
| 13 | 10.1 | UE; center of crossroad (Co. Hwy. "C" N.-S.), cor. secs. 29, 30, 31 and 32, T. 93 N., R. 38 W.; ½ in. re-rod in painted square; painted "UE Centerline" | 1484.13 |
| 14 | 11.1 | UE; center of crossroad (Co. Hwy. "C" N.-S.), cor. secs. 19, 20, 29 and 30, T. 93 N., R. 38 W.; ½ in. re rod in painted square, painted "UE Centerline" | 1512.57 |
| 15 | 12.1 | Peterson, 3.5 mi S. and 1.5 mi W. of; 300 ft S., 40 ft W. and 3.0 ft higher than crossroad (Co. Hwy. "C" N.-S., Co. "E" W.), cor. secs. 17, 18, 19 and 20, T. 93 N., R. 38 W.; 72 ft S. center of concrete walk to main entrance Midwest Christian Childrens Home (marked "Brooke School"); 93 ft E. of E. face brick building with arched roof; 13 ft S. of N. end cyclone mesh fence; 80 ft W. of metal witness sign; 1 ft E. of W. right-of-way fence; on 10 ft copper coated steel rod inside 6 in. concrete tile; standard tablet stamped "56 T 1968 1494" | 1494.385 |

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PETERSON QUADRANGLE
229 - IOWA

FEET

LINE 1 (Cont'd)

PETERSON QUAD. - 229

8	16	12.1	Reference mark, 364 ft NNE. of tablet; 62 ft N., 30 ft E. of crossroad, 2 ft concrete tile drive culvert; chiseled square; painted "RM"	1485.56
17	13.2	UE; center of crossroad (Co. Hwy. "C" N.-S.), cor. secs. 7, 8, 17 and 18, T. 93 N., R. 38 W.; $\frac{1}{2}$ in. rebar in painted square; painted "UE Centerline"	1466.93	
18	14.2	UE; center of crossroad (Co. Hwy. C N.-S.), cor. secs. 5, 6, 7 and 8, T. 93 N., R. 38 W.; $\frac{1}{2}$ in. bolt; painted "UE Centerline"	1415.54	
19	15.3	Reference mark, 200 ft SE. of tablet; 35 ft S., 51 ft E. of crossroad; W. side power pole; rail spike, painted "RM"	1413.75	
20	15.3	Peterson, 0.5 mi S. and 1.5 mi W. of; 142 ft N., 51 ft W. and 0.3 ft lower than crossroad (Co. Hwy. "C" N.-S.), cor. secs. 31, 32, 5 and 6, Tps. 93 and 94 N., R. 38 W.; 77 ft N. of metal witness sign; 1 ft E. of W. right-of-way fence; on 10 ft copper coated steel rod inside 6 in. concrete tile; standard tablet stamped "57 T 1968 1416"	1415.461	
21	16.3	UE; center of T-rd. S. (Iowa Hwy. 10 E.-W.), $\pm$ 500 ft S. of cor. secs. 29, 30, 31 and 32, T. 94 N., R. 38 W.	1271.5	
22	16.4	UE; 38 ft S., 420 ft E. and 10.5 ft lower than T-rd. S., (Iowa Hwy. 10 E.-W.), $\pm$ 500 ft S. of cor. secs. 29, 30, 31 and 32, T. 94 N., R. 38 W.; 4 x 4 ft concrete box culvert; center S. headwall; chiseled square, painted "UE"	1261.04	
23	16.8	At Hwy. 10 bridge over Little Sioux River at W. edge of Peterson; on left downstream wingwall; chiseled square, painted red. (Est. by Water Resources Division U.S.G.S. Iowa Dist.)	1229.42	
23	16.8	$\frac{1}{2}$ mi W. of Peterson on Hwy. 10, on through truss bridge over Little Sioux River, on top of right upstream wingwall; two chiseled cross marks on concrete within 0.5 ft of one another at same elev. (INRC mark) Elev. by USGS	1229.40	
25	17.8	Peterson, 0.5 mi N. and 0.5 mi W. of; 150 ft S., 35 ft E. and 1.9 ft lower than T-rd. E., $\pm$ 500 ft NE. of cor. secs. 28, 29, 32 and 33, T. 94 N., R. 38 W., 9 ft NE. of metal witness sign; 1 ft W. of E. right-of-way fence; on 7 ft copper coated steel rod inside 6 in. concrete tile; standard tablet stamped "58 T 1968 1415"	1414.472	
26	17.8	Reference mark, 190 ft NNE. of tablet; 28 ft N., 81 ft E. of T-rd. E.; S. side power pole; rail spike; painted "RM"	1416.21	
27	18.7	UE; 18 ft N., 54 ft E. and 3.8 ft lower than crossroad, cor. secs. 20, 21, 28 and 29, T. 94 N., R. 38 W.; 1.5 ft corrugated steel drive culvert; punch hole, painted "UE"	1413.60	
28	19.8	UE; 32 ft S., 30 ft E. and same elev. as PI of rds. S. and W.; $\pm$ 1000 ft E. of center SW $\frac{1}{4}$ sec. 20, T. 94 N., R. 38 W.; W. side power pole; rail spike, painted "UE"	1413.88	
29	20.7	Peterson, 2.5 mi N. and 1.5 mi W. of; 213 ft S., 30 ft W. and 1.2 ft lower than crossroad, cor. secs. 17, 18, 19 and 20, T. 94 N., R. 38 W.; 63 ft W. of metal witness sign; 1 ft E. of W. right-of-way fence; on 10 ft copper coated steel rod inside 6 in. concrete tile; standard tablet stamped "59 T 1968 1408"	1407.713	
30	20.8	Reference mark, 191 ft N. of tablet; 22 ft S. and 33 ft W. of crossroad; 3 ft concrete tile culvert; chiseled square, painted "RM"	1405.02	

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PETERSON QUADRANGLE
229 - IOWA

FEET

LINE 1 (Cont'd)

PETERSON QUAD. - 229

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| 8 31 | 21.8 | UE; 36 ft N., 33 ft W. and 3.7 ft higher than T-rd. W., cor. secs. 7, 8, 17 and 18, T. 94 N., R. 38 W.; E. side power brace pole; rail spike, painted "UE" | 1396.58 |
| 32 | 22.9 | UE; cor. secs. 5, 6, 7 and 8, T. 94 N., R. 38 W.; 22 ft S., 24 ft W. of crossroad 3 ft concrete tile culvert; chiseled square, painted "UE" | 1413.36 |
| 33 | 23.8 | Reference mark, 1370 ft W. of tablet; 22 ft N. and 32 ft E. of crossroad; 3 ft concrete tile culvert; chiseled square, painted "RT" | 1417.20 |
| 34 | 24.1 | Peterson, 5.0 mi N. and 1.25 mi W. of, 5.0 mi S. and 3.75 mi W. of Royal, near W. sixteenth cor. secs. 5 and 32, Tps. 94 and 95 N., R. 38 W.; 62 ft N., and 58 ft E. of T-fence S., 31 ft N. and 12 ft E. from center of E.-W. rd. at farm entrance N., 3 ft SE. from the E. gate post, 2.4 ft S. of U.S.G.S. Survey marker on a metal post; in a concrete post set flush with the ground; standard tablet stamped "ET 8 DLH 1966" | 1421.096 |

HARTLEY QUAD. - 252

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| 37 | 26.5 | Sutherland, 2.5 mi N., 6.0 mi E. of; Royal, 3.75 mi S., 5.25 mi W. of; at the O'Brien-Clay County line, T. 95 N., R. 38 W.; and 39 W., near cor. secs. 25, 30, 31 and 36; 52 ft N. and 117 ft W. of the crossroads, 52 ft N. and 130 ft E. of T-drive N., 75 ft SW. of SW. cor. of white frame house, 18 ft SE. of a 24 in. walnut tree, 2 ft N. of a fence and witness sign, standard tablet set in a concrete post, projecting 1 in. stamped "42 DWB 1967 1421; painted "BM 42" | 1421.485 |
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LINE 2

J. H. Tyndale, 1968; Book CV-2324

SIOUX RAPIDS QUAD. - 228

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| 9 1 | 0.0 | Royal, 5.2 mi S. and 1.5 mi E. of; near W $\frac{1}{4}$ cor. between secs. 5 and 32; Tps. 94 and 95 N., R. 37 W., 32 ft S. and 7 ft W. of E.-W. rd. at field entrance S.; 2 ft N. of fence; in concrete post; standard tablet stamped "ET 19 HK 1964 1388" | 1388.265 |
| 1 | 1.2 | UE; center of crossroad (Iowa Hwy. 284 N.-S.), cor. secs. 5, 6, 7 and 8, T. 94 N., R. 38 W.; copper nail and washer, painted "UE Centerline" | 1394.89 |
| 2 | 2.2 | Reference mark, 137 ft N. of tablet, 32 ft S. and 36 ft E. of crossroad, 2 ft concrete tile drive culvert; chiseled square, painted "RT" | 1399.38 |
| 3 | 2.3 | Linn Grove, 5.5 mi N. of; 169 ft S., 43 ft E. and 1.0 ft lower than crossroad, cor. secs. 7, 8, 17 and 18, T. 94 N., R. 37 W.; 10 ft N. of metal witness sign, 1 ft W. of E. right-of-way fence; on 10 ft copper coated steel rod; standard tablet stamped "66 T 1968 1400" | 1400.366 |
| 4 | 3.2 | UE; center of crossroad (Iowa Hwy. 284 N.-S.), cor. secs. 17, 18, 19 and 20, T. 94 N., R. 37 W.; copper nail and washer, painted "UE Centerline" | 1415.46 |
| 5 | 4.3 | UE; center of crossroad (Iowa Hwy. 284 N.-S.), cor. secs. 19, 20, 29 and 30, T. 94 N., R. 37 W.; copper nail and washer, painted "UE Centerline" | 1412.58 |
| 6 | 5.3 | Linn Grove, 2.5 mi N. of; 297 ft S., 60 ft E. and 6.6 ft lower than T-rd. S., (Iowa Hwy. 284 N. is offset), 7 ft S. of metal witness sign; 1 ft W. of E. right-of-way fence; on 8 ft copper coated steel rod, inside 6 in. concrete tile; standard tablet stamped "65 T 1968 1387" | 1387.531 |

FEET

LINE 2 (Cont'd)

SIOUX RAPIDS QUAD. - 228

9	7	5.4	Reference mark, 385 ft S. of tablet; 680 ft S., 30 ft E. of T-rd. S. (Iowa Hwy. 264 N.-S.; 10 E.-W.), 3 ft concrete tile culvert; chiseled square, painted "RM"	1385.87
8		6.6	UE; center of T-rd. W. (Iowa 264 N.-S.), quarter cor. secs. 5 and 6, Tps. 93 and 94 N., R. 38 W.; copper nail and washer, painted "UE Centerline"	1317.59
9		7.4	UE; at Hwy. 264 bridge over Little Sioux River at Linn Grove, on right downstream end of wingwall; chiseled square (Est. by USGS Water Resources Div.)	1258.18
9		7.4	UE; at Linn Grove on Hwy. 264 bridge over Little Sioux River, on left downstream wingwall; chiseled square (Est. by USGS Water Resources Div.)	1255.36
10		7.5	UE; center Iowa Hwy. 264 at top N. rail main track Chicago & North Western RR. near cor. secs. 5, 6, 7 and 8, T. 93 N., R. 37 W.; painted "UE Centerline"	1258.6
11		8.5	UE; center of T-rd. N., near quarter cor. secs. 8 and 17, T. 93 N., R. 37 W.; painted "UE Centerline"	1393.01
12		8.9	Reference mark, 200 ft NE. of tablet; 35 ft N. and 54 ft E. of crossroad, S. side of power pole; rail spike, painted "RM"	1397.58
13		8.9	Linn Grove, 0.5 mi S. of; 150 ft S., 40 ft W. and 0.9 ft lower than crossroad, cor. secs. 7, 8, 17 and 18, T. 93 N., R. 37 W.; 110 ft W. of center of Iowa Hwy. 264 on turn, 200 ft SW. of metal witness sign; 1 ft E. of W. right-of-way fence; on 10 ft copper coated steel rod inside 6 in. concrete tile; standard tablet stamped "64 T 1968 1397"	1397.211
14		9.9	UE center of crossroad (Iowa 264 N.-S.), cor. secs. 17, 18, 19 and 20, T. 93 N., R. 37 W.; top $\frac{1}{2}$ in. rebar (bent NE.); painted "UE Centerline"	1355.24
15		11.0	UE; center of crossroad (Iowa 264 N.-S.), cor. secs. 19, 20, 29 and 30, T. 93 N., R. 38 W.; copper nail and washer, painted "UE Centerline"	1344.35
16		12.0	Reference mark, 459 ft N. of tablet; 41 ft S. and 25 ft W. of crossroad, 2.5 ft concrete tile culvert; chiseled square, painted "RM"	1328.20
17		12.1	Rembrandt, 0.75 mi N. and 4.5 mi W. of; 500 ft S., 40 ft W. and 13.8 ft higher than crossroad, cor. secs. 29, 30, 31 and 32, T. 93 N., R. 37 W.; 10 ft NW. of metal witness sign; 1 ft E. of W. right-of-way fence, on 8 ft copper coated steel rod; inside 6 in. concrete tile; standard tablet stamped "63 T 1968 1344"	1344.093
18		13.0	UE; center of crossroad (Co. Hwys. "B" and "N" E.-W.), cor. secs. 31, 32, 5 and 6, Tps. 92 and 93 N., R. 37 W.; copper nail and washer 1 ft W. of $\frac{1}{2}$ in. rebar (bent); painted "UE Centerline"	1334.43
19		14.1	UE; 40 ft S., 20 ft W. and 0.6 ft lower than crossroad, cor. secs. 5, 6, 7 and 8, T. 92 N., R. 37 W.; 3.5 ft concrete tile culvert; chiseled square, painted "UE"	1343.76
20		15.1	Reference mark, 261 ft NNE. of tablet, 22 ft N., 45 ft E. of crossroad; 1.5 ft concrete tile culvert; chiseled square; painted "RM"	1385.01
21		15.1	Rembrandt, 2.25 mi S. and 4.5 mi W. of; 239 ft S., 34 ft W. and 0.2 ft higher than crossroad, cor. secs. 7, 8, 17 and 18, T. 92 N., R. 37 W.; 8 ft S. of metal witness sign; 1 ft E. of W. right-of-way fence, on 10 ft copper coated steel rod, inside 6 in. concrete tile; standard tablet stamped "62 T 1968 1389"	1389.128

FEET

LINE 2 (Cont'd)

SIoux RAPIDS QUAD. - 228

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| 9 22 16.1 | UE; 30 ft N., 32 ft W. and 2.9 ft lower than crossroad, cor. secs. 17, 18, 19 and 20, T. 92 N., R. 37 W.; 1.5 ft concrete tile drive culvert; chiseled square, painted "UE" | 1412.97 |
| 23 17.2 | UE; 274 ft S., 30 ft E. and 1.8 ft higher than crossroad, cor. secs. 19, 20, 29 and 30, T. 92 N., R. 37 W.; 2.5 ft concrete tile drive culvert; chiseled square, painted "UE" | 1409.63 |
| 24 18.1 | Reference mark, 220 ft NE. of tablet; 47 ft N., 40 ft W. of crossroad (Iowa Hwy. 3 E.-W.), 3.5 ft concrete tile culvert; chiseled square, painted "RM" | 1433.87 |
| 25 18.1 | Rembrandt, 5.25 mi S. and 4.5 mi W. of; 61 ft S., 176 ft W. and 2.7 ft lower than crossroad, cor. secs. 29, 30, 31 and 32, T. 92 N., R. 37 W.; {Iowa Hwy. 3 E.-W.}, 7 ft W. of metal witness sign; 1 ft N. of S. right-of-way fence; on 7.5 ft copper coated steel rod inside 6 in. concrete tile; standard tablet stamped "61 T 1968 1433" | 1433.102 |

STORM LAKE QUAD. - 205

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| 26 19.1 | UE; center of crossroad (Co. Hwy. N.-S.), cor. secs. 31, 32, 5 and 6, Tps. 91 and 92 N., R. 37 W.; quarter in. bolt; painted "UE Centerline" | 1416.10 |
| 27 20.1 | UE; center of crossroad (Co. paved hwy. N.-S.), cor. secs. 5, 6, 7 and 8, T. 91 N., R. 37 W.; round-headed rivet; painted "UE Centerline" | 1406.09 |

LINE 3

D. W. Bennett, 1967; Book CV-2220

HARTLEY QUAD. - 252

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| 12.1 | "42 DWB 1967 1421" (Described in Line 1) | 1421.485 |
| 12.1 | Reference mark, 120 ft W. of mark, punched hole in 18 in. corrugated metal pipe culvert; under drive, painted "RM" | 1419.76 |
| 13.1 | UE 42 A; 1.0 mi W. of tablet, T. 95 N., R. 39 W., near cor. secs. 25, 26, 35 and 36; head of auto valve flush with pavement at center N.-S. asphalt rd., (center crossroads), painted "UE 42 A" | 1425.07 |
| 14.0 | UE 42 B; 1.9 mi W. of tablet, T. 95 N., R. 39 W., near cor. secs. 26, 27, 34 and 35; at a bridge over Waterman Creek, rail spike in top of piling at NE. wingwall of bridge, painted "UE 42 B" Water -15.2 ft 8-7-67 | 1292.54 |
| 15.1 | Sutherland, 2.5 mi N., 3.0 mi E. of; Royal, 3.75 mi S. of, 8.25 mi W. of; T. 95 N., R. 39 W., near cor. secs. 27, 28, 33 and 34; at an abandoned schoolhouse, 58 ft S. and 198 ft W. of crossroads, 88 ft NW. of NW. cor. of school, 27 ft S. of a NE. fence cor., 21 ft N. of a 24 in. maple, 6 ft S. of a witness sign; standard tablet set in concrete post, projecting 2 in.; stamped "43 DWB 1967 1420", painted "BM 43" | 1419.947 |
| 15.1 | Reference mark, about 150 ft SE. of mark, at front entrance of abandoned schoolhouse, chiseled square at NE. cor. of concrete step, painted "RM" | 1418.19 |
| 16.1 | UE 43 A; 1.0 mi W. of tablet, T. 95 N., R. 39 W., near cor. secs. 28, 29, 32 and 33; 60 ft S. and 33 ft W. of crossroads, chiseled square on 18 in. concrete pipe culvert under field entrance W., painted "UE 43 A" | 1444.89 |
| 17.1 | UE 43 B; 2.0 mi W. of tablet, T. 95 N., R. 39 W., near cor. secs. 29, 30, 31 and 32, an auto valve embedded at center N.-S. asphalt rd. (O'Brien "X") and E.-W. gravel rd., painted "UE 43 B" | 1470.26 |

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PETERSON QUADRANGLE
229 - IOWA

FEET

LINE 3 (Cont'd)

PRIMGHAR QUAD. - 253

18.0 Gaza, 0.5 mi S. and 3.5 mi E. of; T. 95 N., Rs. 39 and 40 W., cor. secs. 25, 30, 31 and 36; 23 ft S. and 58 ft W. and 2.9 ft lower than crossroads; 2 ft NW. of power pole and projecting 2 in. above ground; a standard tablet in top of a concrete post stamped "1461 9 LMT 1963", painted "BM 1460.6"

1460.585