

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

THIRD ORDER LEVELS
SEA LEVEL DATUM OF 1929

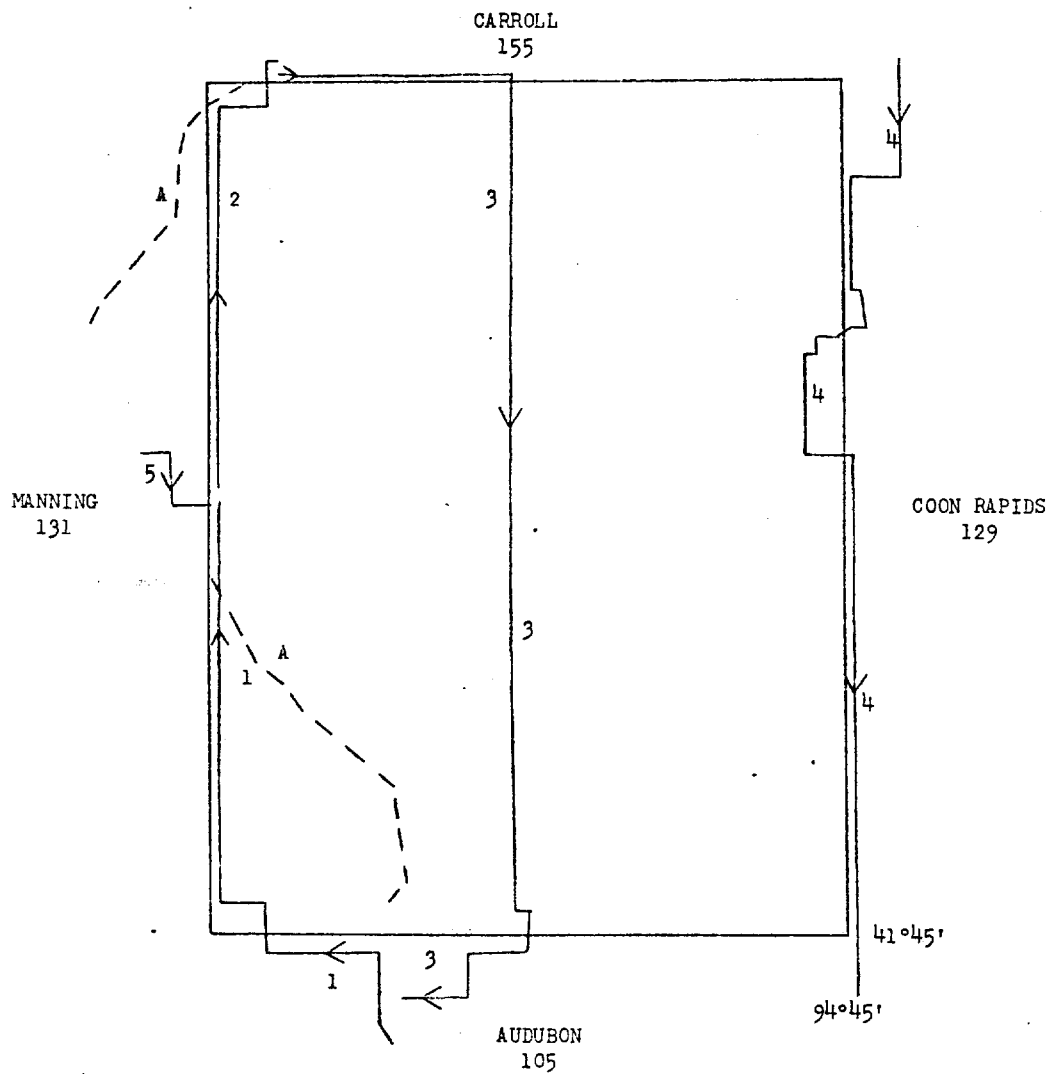
FINAL ADJUSTMENT OF 1969

Carroll and Audubon Counties

Edition of 9/4/69

PR:AXH/CVB:gh

DEDHAM QUADRANGLE
130 - IOWA
N4145-W9445/15
DIAGRAM NK 15-7
OMAHA



USC&GS VERTICAL CONTROL DATA

A. Quadrangle No. 410944

130 C

LINE 1

FEET

P. J. Hohenberger, 1968; Book CV 2938

AUDUBON QUAD. - 105

- | | | |
|----------|---|----------|
| 3 61 0.0 | USC&GS Triangulation Station AUDUBON 1934; Audubon, about 4.0 mi NW. of; about 6.0 mi SW. of Gray, 183 ft WNW. of a well, 106 ft NW. of a fence corner, 65 ft SW. of the SW. corner of a shed and about 100 yds. NW. of a farm home; mark projects about 12 in. and the disk is stamped "AUDUBON 1930" | 1350.338 |
| 61 0.9 | UE AUDUBON A, about 0.8 mi N. along U. S. Hwy. 71 from jct. with Broadway St. (leading E.) at Audubon, T. 80 N., R. 35 W., at NE. cor. sec. 20, 32 ft S., 53 ft W. and 8.0 ft lower than crossroads (U. S. 71 and County Rd. "N"), on top, in center of W. headwall of a concrete box culvert; a chiseled cross | 1352.91 |
| 62 2.0 | UE AUDUBON B, about 1.8 mi N. along U. S. Hwy. 71 from jct. with Broadway St. (leading E.) at Audubon, 19 ft S., 77 ft W. and 0.2 ft higher than crossroads, at SE. wingwall of a concrete bridge; a chiseled cross | 1322.45 |
| 64 3.0 | UE Audubon C, T. 80 N., R. 35 W., at cor. secs. 7, 8, 17 and 18, at center of crossroads; a chiseled cross | 1392.98 |
| 65 4.0 | UE Audubon D, T. 80 N., Rs. 35 and 36 W., at cor. secs. 7, 12, 13 and 18, at center of T-rd. N.; a chiseled cross | 1436.64 |
| 66 4.1 | Audubon, 2.0 mi N. and 2.25 mi W. of; near cor. secs. 7, 12, 13 and 18, T. 80 N., Rs. 35 and 36 W., 617 ft N. and 34 ft W. of T-rd. N., 2 ft S. and 2 ft W. of NE. fence corner of wind break, in concrete post; standard tablet stamped "TT 30 LB 1956" | 1442.752 |
| 66 5.0 | UE 30 LB A, about 0.9 mi N. along gravel rd. from B.M., 28 ft S., 34 ft W. and 1.0 ft lower than crossroads, in NE. base of a right-of-way fence corner post projecting 0.3 ft; a rail spike | 1473.94 |

DEBHAM QUAD. - 130

- | | | |
|--------|---|----------|
| 67 5.8 | USC&GS Triangulation Station AUDUBON 2 1968, 97.5 ft S. of the SE. corner of a storage shed, 82 ft W. of the SW. corner of a barn and 51 ft NW. of the NW. corner of a small building; 11.0 mi NE. of Kimballton, 4.0 mi NW. of Audubon, and on property owned by Mr. Glen Christensen; USC&GS standard disk stamped "AUDUBON 2 1968", set in the top of a 12-in. round concrete monument flush with the ground | 1494.244 |
| 67 5.8 | Reference mark 5; 51 ft NNE. of the NE. corner of a small building and 1.5 ft W. of the SW. corner of the barn; a USC&GS standard disk stamped "AUDUBON 2 NO 5 1968" and set in the top of a 12-in. round concrete monument that is flush with the ground surface | 1497.864 |
| 67 5.8 | Reference mark 4; 82 ft NW. of the NW. corner of the barn and 1 ft SW. of the SE. corner of a storage shed; USC&GS standard disk stamped "AUDUBON 2 NO 4 1968", set in the top of a 12-in. round concrete monument that is flush with the ground surface | 1498.168 |
| 68 6.2 | UE Audubon 1968 A, about 0.25 mi W. along gravel rd. from B.M., T. 80 N., R. 36 W., at cor. secs. 1, 2, 11 and 12, at center of crossroads (gravel) | 1442.5 |
| 68 6.6 | UE Audubon 1968 B, about 0.25 mi W., thence 0.5 mi N. along gravel rd. from B.M., 37 ft E. and 1.3 ft lower than rd., in W. base of a T-fence corner post projecting 0.3 ft; a rail spike | 1479.67 |
| 69 7.6 | UE Audubon 1968 C, 0.25 mi W., thence 1.5 mi N. along gravel rd. from B.M., 26 ft N., 13 ft E. and 0.2 ft lower than center of small wooden bridge, set flush with top of a cut-off power pole used as bridge piling; a RR. spike | 1326.06 |

LINE 1 (Cont'd)

DEDHAM QUAD. - 130

FEET

- 3 70 8.1 Manning, Carroll County, 8.0 mi S. and 3.5 mi E. of center of; T. 81 N., R. 36 W., near the NE. cor. sec. 35, 457 ft S., 35 ft W. and 10.5 ft lower than crossroads, 59 ft N. of a private drive W. to farmhouse, 19 ft N. and 6.0 ft E. of a 2.0-ft diameter yellow pine tree, 27 ft N. and 1.0 ft E. of a fence corner N.-W., 10 ft S. and 6.0 ft W. of a power pole painted "B.M.", 2.5 ft N. of a witness sign; a standard tablet crimped to the top of a copper rod stamped "36 PJH 1969" 1382.440
- 71 8.8 UE 36 PJH A, about 0.65 mi N. along gravel rd. from B.M., 8.0 ft S., 8.0 ft E. and 0.3 ft higher than center of a steel and wooden bridge; top of N. one of two bolts 1322.72
- 72 9.2 UE 36 PJH B, about 1.1 mi N. along gravel rd. from B.M., at center of crossroads (gravel) 1386.7
- 73 10.0 UE 36 PJH C, about 1.8 mi N. along gravel rd. from B.M., 21 ft W. and 3.2 ft lower than rd., on top of W. end of a 2.5 ft corrugated pipe culvert; a punch mark and painted square 1420.21
- 74 10.2 UE 36 PJH D, about 2.1 mi N. along gravel rd. from B.M., at center of crossroads (gravel) 1416.0
- 4 1 11.1 Manning, Carroll County, 5.0 mi S. and 3.5 mi E. of center of; T. 81 N., R. 36 W., near NW. cor. sec. 13, 0.15 mi S. of T-rd. W., 47 ft S., 34 ft E. and 3.5 ft lower than rd. at drive E. to farmhouse, 10 ft N. of extended center of a drive W. to farmhouse, 59.5 ft N. and 1.0 ft W. of a T-fence E., 32 ft S. of a fence corner, 3.5 ft N. of a power pole painted "B.M.", 2.0 ft S. of a witness sign; a standard tablet crimped to the top of a copper rod stamped "37 PJH 1969" 1483.192
- 2 11.6 UE 37 PJH A, about 0.5 mi N. along gravel rd. from B.M., at center of T-rd. E. (gravel), set flush with rd.; a rail spike (NOTE: Spike was set 5.0 ft S. and 13.0 ft E. of S. fence post of a rd. sign denoting a double headed arrow) 1402.27
- 3 12.4 UE 37 PJH B, about 1.3 mi N. along gravel rd. from B.M., 24 ft N., 14 ft E. and 0.2 ft lower than center of wooden bridge; set flush with top of a cut-off power pole used as a bridge piling; a rail spike 1374.22
- 4 13.2 UE 37 PJH C, about 2.1 mi N. along gravel rd. from B.M., 41 ft S., 41 ft E. and 2.2 ft lower than crossroads, in W. base of a fence corner post (1.3 ft in diameter) and projecting 0.3 ft; a rail spike 1439.04

MANNING QUAD. - 131

- 5 13.5 Gray, 1.9 mi N. along the C. & NW. RR. from the station at; 6 poles N. of Milepost C 23, at the Audubon-Carroll county line and a rd. crossing, 48 ft E. of the center of the track, 32 ft S. of the center of the rd., 3.5 ft S. and 2 ft W. of a right-of-way fence corner and level with the track; USC&GS standard disk stamped "F 100 1935" and set in the top of a concrete post 1391.257

LINE 2

P. J. Hohenberger, 1969; Book CV 2338

DEDHAM QUAD. - 130

- 4 7 0.0 UE 37 PJH C (described in Line 1) 1439.04
- 7 1.0 UE F 100 A, about 0.25 mi E., thence 1.0 mi N. from B.M., along gravel rd., T. 82 N., R. 37 W., near SE. cor. sec. 26, 42 ft N., 54 ft W. and 2.0 ft higher than crossroads, 10 ft W. of right-of-way fence corner N.-W., in S. base of a RR. tie used as fence support and projecting 0.3 ft; a rail spike 1441.64

<u>LINE 2 (Cont'd)</u>		<u>DEDHAM QUAD. - 130</u>	<u>FEET</u>
4	8	2.0 UE F 100 B, about 0.25 mi E., thence 2.0 mi N. along gravel rd. from B.M., 20 ft N., 300 ft E. and 14.8 ft lower than crossroads, on top, in center of N. headwall of a concrete box culvert; a chiseled square	1430.76
9	2.9	Manning, Carroll County, 0.25 mi S. and 3.5 mi E. of center of; T. 82 N., R. 36 W., near N. sixteenth cor. between secs. 23 and 24, 69 ft N., 42 ft W. and 0.8 ft lower than rd. at line fence E., 150 ft N. of center of gate, 5.0 ft N. of a power pole, 2.5 ft N. and 0.5 ft E. of a white wooden witness post, 1.0 ft E. of a right-of-way fence; a standard tablet crimped to the top of a copper rod, stamped "37 A PJH 1969" (located at the top of a hill)	1537.498
10	3.1	Reference mark, 0.25 mi N. of B.M., 15 ft N., 99 ft E. and 3.2 ft higher than crossroads (State Hwy. 141 and N.-S. gravel rd.) at a concrete run-off for hwy. water, on top, near N. end of curve in E. concrete curb; a chiseled square	1490.34
11	3.8	UE 37 PJH AA, about 1.0 mi N. along gravel rd. from B.M., at SE. corner of a rd. overpass, 10 ft E. and 0.9 ft higher than E. end of overpass, 1.5 ft N. of S. end of wooden railing, on top of screw stud projecting 0.2 ft	1481.67
12	4.1	UE 37 PJH BB, about 1.25 mi N. along gravel rd. from B.M., at center of crossroads (gravel)	1505.2
13	4.8	UE 37 PJH CC, about 1.95 mi N. along gravel rd. from B.M., 13 ft S., 14 ft E. and 1.3 ft lower than center of a small wooden bridge, set flush with top of a cut-off power pole used as bridge piling; a rail spike	1400.72
14	5.1	UE 37 PJH DD, about 2.25 mi N. along gravel rd. from B.M., at center of crossroads (gravel)	1404.1
15	5.5	Manning Carroll County, 2.5 mi N. and 3.5 mi E. of center of; T. 82 N., R. 36 W., at quarter cor. between secs. 1 and 2, 53 ft S., 38 ft E. and 4.0 ft lower than rd. at drive E. to farmhouse, 4.0 ft S. and 1.0 ft E. of a power pole painted "B.M.", 3.5 ft S. and 1.5 ft W. of a T-fence E. leading to S. edge of a grain storage bin, 1.5 ft N. of a witness sign; a standard tablet crimped to the top of a copper rod stamped "38 PJH 1969"	1413.808
16	5.5	Reference mark, 110 ft NE. of B.M., 74 ft S. and 26 ft W. of SW. corner of a farmhouse, at SW. corner of a concrete foundation projecting 2.0 ft; a chiseled cross	1413.01
16	6.3	UE 38 PJH A, about 0.65 mi N. along gravel rd. from B.M., 620 ft N., 14 ft E. and 1.1 ft lower than crossroads, 25 ft NE. of center of a small bridge, set flush with top of a cut-off power pole used as a bridge piling; a rail spike	1365.78
17	7.0	UE 38 PJH B, about 1.4 mi N. along gravel rd. from B.M., 900 ft S., 18 ft E. and 14.4 ft lower than crossroads, on top of E. end of a 3.5 ft corrugated pipe culvert; a punch mark and painted square	1387.06
18	8.0	UE 38 PJH C, about 2.4 mi N. along gravel rd. from B.M., 34 ft N., 39 ft W. and 1.5 ft higher than rd. at drive E. to farmhouse, at NE. corner of a concrete base (projecting 2.0 ft) for a double stack grain bin; a chiseled square	1419.72
19	8.2	UE 38 PJH D, about 2.55 mi N. along gravel rd. from B.M., at center of crossroads (gravel)	1403.24
19	8.4	Reference mark, about 1050 ft S. of B.M., 11 ft W. and 0.6 ft higher than rd., on top of N. end of W. concrete curb of a small bridge; a chiseled cross	1389.06

<u>LINE 2 (Cont'd)</u>		<u>DEDHAM QUAD. - 130</u>	<u>FEET</u>
4	20 8.6	Manning, Carroll County, 5.45 mi N. and 3.5 mi E. of center of; T. 83 N., R. 36 W., near quarter cor. between secs. 23 and 24, 293 ft S., 30 ft W. and 0.3 ft higher than rd. at quarter line fence W. (slightly offset with fence E.) 72.5 ft N. and 78 ft E. of NE. corner of a farmhouse, 56 ft N. and 1.0 ft E. of a fence corner N.-W., 24 ft N. of center of gate, 3.5 ft S. and 1.0 ft E. of a fence post, 2.0 ft S. of a witness sign; a standard tablet crimped to the top of a copper rod stamped "39 PJH 1969"	1420.046
	21 9.2	UE 39 PJH A, about 0.55 mi N. along gravel rd. from B.M., 43 ft N., 101 ft E. and 9.7 ft lower than crossroads, in W. base of a 3.5 ft diameter oak tree and projecting 0.5 ft above ground; a rail spike (NOTE: the oak tree described above is the E. one of a pair of trees)	1427.65
	22 10.1	UE 39 PJH B, about 0.55 mi N. thence 1.0 mi E. along gravel rd. from B.M., at center of crossroads (gravel)	1404.8
	23 10.8	UE 39 PJH C, about 0.55 mi N., thence 1.0 mi E., thence 0.65 mi N. along gravel rds. from B.M., at a small concrete bridge near the SW. corner of the town of Halbur, 14 ft E. and 0.6 ft higher than rd., on top of N. end of E. concrete curb; a chiseled square	1345.19
	24 11.1	At Halbur, Carroll County, on the C. & NW. RR., 100 ft SW. of the station, at a rd. crossing, 30 ft SW. of the center of the rd., 25 ft NW. of the center of the track, and 7 ft SW. of a pole; a USC&GS standard disk stamped "E 90 1935" and set in the top of a concrete post	1337.514

LINE 3

<u>P. J. Hohenberger, 1969; Book CV 2338</u>		<u>CARROLL QUAD. - 155</u>	
NOTE: FINAL THREE MILES OF THIS LINE CONTAIN 0.16 FEET OF ERROR			
4	25 0.0	USC&GS "E 90 1935" (described in Line 2)	1337.514
	25 0.0	Reference mark, 310 ft S. of B.M., 12 ft E. of rd. at N. end of a small concrete bridge, 1.0 ft W. of steel guard rail post, on top of N. end of E. concrete curb; a chiseled square	1341.48
	25 1.0	UE E 90 A, about 0.95 mi generally E. from B.M., along paved rd., 22 ft S., 253 ft W. and 10.9 ft lower than crossroads, on top of W. end of S. headwall of a concrete culvert; a chiseled cross	1368.74
	26 1.8	UE E 90 B, about 1.75 mi generally E. along paved rd. from B.M., at a concrete bridge, 11 ft N. and 0.5 ft higher than rd., on top of W. end of N. concrete curb, 1.0 ft S. of steel guard rail post; a chiseled cross	1315.80
	27 2.0	UE E 90 C, about 2.0 mi generally E. along paved rd. from B.M., at center of crossroads (paved)	1345.56
	28 3.0	UE E 90 D, Roselle, at center of; at center of crossroads (paved)	1376.25
	29 3.2	Carroll, Carroll County, 4.5 mi S. and 2.8 mi W. of; T. 83 N., R. 35 W., about 0.2 mi E. of quarter cor. between secs. 15 and 16, 1010 ft E. of crossroads at Roselle, 49 ft N. and 16 ft E. of rd. at drive S. to farmhouse, 104 ft W. of drive N. to farmhouse, 1.5 ft N. and 16 ft E. of center of concrete cover for cistern, 1.0 ft S. and 4.0 ft E. of a fence corner N.-E., 2.0 ft W. of a witness sign; a standard tablet crimped to the top of a copper rod stamped "40 PJH 1969"	1360.442
	29 3.3	Reference mark, 320 ft SE. of B.M., 28 ft S. of rd., on top of E. end of S. headwall of a concrete culvert; a chiseled cross	1347.85

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LINE 3 (Cont'd)		DEDHAM QUAD. - 130	FEET
4	30	4.1 UE 40 PJH A, about 0.8 mi E. along paved rd. from B.M., set flush with center of crossroads (paved); a rail spike	1390.48
31	5.1	UE 40 PJH B, about 1.8 mi E. along paved rd. from B.M., 500 ft S., 23 ft E. and 6.6 ft higher than T-rd. W. (U. S. 71 and paved rd. W.), on top, in center of E. headwall of a small concrete box culvert; a brass plug stamped I.H.C. B.M. (elev. by USGS)	1309.54
32	5.6	Azimuth mark for USC&GS Triangulation Station ROSELLE 1950; 50 ft W. of the center of hwy., 27 ft S. of the approx. center of driveway, 12 ft SE. of power pole, 4 ft SE. of witness post and 1 ft E. of fence; mark projects about 3 in. and the disk is stamped "ROSELLE 1950"	1356.501
33	6.5	UE Roselle A, about 0.85 mi S. along U. S. Hwy. 71 from B.M., 317 ft N., 28 ft W. and 8.7 ft lower than T-rd. E., on top, incenter of W. headwall of a small concrete box culvert; a brass plug stamped "I.H.C. B.M." (elev. by USGS)	1363.87
34	7.5	UE Roselle B, about 1.85 mi S. along U. S. Hwy. 71 from B.M., 287 ft N., 20 ft W. and 11.0 ft higher than crossroads, on top, in center of W. headwall of a concrete box culvert; a chiseled square	1341.81
35	8.5	Carroll, Carroll County, 7.9 mi S. and 1.0 mi W. of; T. 83 N., R. 35 W., near the SW. cor. sec. 36, 251 ft N., 51 ft E. and 1.2 ft higher than T-rd. W. at fence E., 18.5 ft S. of a transmission line pole painted "B.M.", 1.5 ft N. and 1.5 ft W. of a fence post, 2.0 ft N. of a witness sign; a standard tablet crimped to the top of a copper rod stamped "41 PJH 1969"	1319.269
36	8.5	Reference mark, 151 ft S. and 23 ft W. of B.M., 28 ft E. of hwy., on top of S. end of E. headwall of a concrete box culvert; a chiseled cross	1317.05
36	8.7	UE 41 PJH A, about 0.3 mi S. along U. S. Hwy. 71 from B.M., at NW. corner of a long concrete bridge, 14 ft W. and 0.3 ft higher than hwy., on top of concrete curb; a brass plug stamped "I.H.C. B.M." (elev. by USGS)	1273.67
37	9.5	UE 41 PJH B, about 1.0 mi S. along U. S. Hwy. 71 from B.M., 440 ft N., 19 ft E. and 7.2 ft lower than crossroads, on top, in center of E. headwall of a concrete box culvert; a brass plug stamped "I.H.C. B.M." (elev. by USGS)	1286.76
38	10.7	UE 41 PJH C, about 2.2 mi S. along U. S. Hwy. 71 from B.M., 620 ft S., 21 ft W. and 19.2 ft lower than crossroads, on top, in center of W. headwall of a concrete box culvert; a brass plug stamped "I.H.C. B.M." (elev. by USGS)	1350.65
39	11.6	UE 41 PJH D, about 3.0 mi S. along U. S. Hwy. 71 from B.M., 87 ft N. of center of N. lanes, 48 ft W. of center of W. lanes, 9.1 ft lower than crossroads, on top of W. end of a 3.0-ft cement pipe culvert; a chiseled cross	1377.70
40	11.9	Carroll, Carroll County, 11.3 mi S. and 1.0 mi W. of; T. 82 N., R. 35 W., near the N. sixteenth cor. between secs. 23 and 24, 0.3 mi S. of jet. with U. S. Hwy. 71, 98 ft S., 40 ft W. and 1.7 ft higher than rd. at line fence W., 97 ft S. of line fence E., 4.0 ft N. of a power pole painted "B.M.", 1.5 ft N. and 1.5 ft E. of a fence corner post, 2.0 ft S. of a witness sign; a standard tablet crimped to the top of a copper rod stamped "42 PJH 1969"	1436.857
41	13.1	UE 42 PJH A, about 1.2 mi S. along gravel rd. from B.M., at SW. corner of a small wooden bridge, 21 ft S., 12 ft W. and 0.4 ft lower than center of bridge, set flush with top of a cut off power pole used as a bridge piling; a rail spike	1371.42

<u>LINE 3 (Cont'd)</u>	<u>DEDHAM QUAD. - 130</u>	<u>FEET</u>
4 42 13.6 UE 42 PJH B, about 1.7 mi S. along gravel rd. from B.M., at center of crossroads (gravel)		1430.1
43 14.6 UE 42 PJH C, about 2.7 mi S. along gravel rd. from B.M., 108 ft N., 12 ft W. and 1.7 ft higher than T-rd. E., on top of S. end of W. headwall of a concrete culvert; a chiseled cross		1347.22
44 14.9 Carroll, Carroll County, 14.3 mi S. and 1.0 mi W. of; T. 81 N., R. 35 W., near the N. sixteenth cor. between secs. 1 and 2, 219 ft S., 33 ft E. and 3.8 ft lower than center of a small bridge, 60 ft N. of a drive E. to farmhouse, 34.5 ft S. of a power pole painted "B.M.", 45.5 ft N. and 1.5 ft W. of a fence corner N.-E., 4.0 ft S. of a fence post, 2.0 ft N. of a witness sign; a standard tablet crimped to the top of a copper rod stamped "43 PJH 1969"		1339.965
45 15.7 UE 43 PJH A, about 0.8 mi S. along gravel rd. from B.M., 590 ft S., 12 ft W. and 8.3 ft lower than crossroads, at NW. corner of a steel and wooden bridge, set flush with top of a cut-off power pole used as a bridge piling; a rail spike		1337.84
46 16.5 UE 43 PJH B, about 1.7 mi S. along gravel rd. from B.M., at center of crossroads, set flush with paved rd.; a rail spike		1394.99
47 16.8 UE 43 PJH C, about 2.0 mi S. along gravel rd. from B.M., 19.5 ft N., 12 ft W. and 0.2 ft higher than center of small wooden bridge, set flush with top of cut-off power pole used as a bridge piling; a rail spike		1346.93
48 17.6 UE 43 PJH D, about 2.7 mi S. along gravel rd. from B.M., at center of crossroads (gravel)		1404.0
48 17.7 Audubon, Audubon County, 6.9 mi N. and 2.5 mi E. of center of; T. 81 N., R. 35 W., near the NE. cor. sec. 23, about 600 ft S. of crossroads, 151 ft N., 31.5 ft W. and 2.7 ft lower than center of a small wooden bridge, 211 ft S. of center of a wooden gate, in right-of-way fence, 11.5 ft N., of a power pole painted "B.M.", 1.25 ft E. of a fence, 1.5 ft N. of a witness sign; a standard tablet crimped to the top of a copper rod stamped "44 PJH 1969"		1363.612
49 18.6 UE 44 PJH A, about 0.9 mi S. along gravel rd. from B.M., 37 ft N., 168 ft E. and 6.6 ft lower than crossroads, on top of S. rim of circular concrete base for a cornerrib and projecting 1.0 ft above ground; a chiseled square		1364.27
50 19.6 UE 44 PJH B, about 1.9 mi S. along gravel rd. from B.M., 39 ft N., 33 ft W. and 1.5 ft lower than crossroads, in E. base of a fence corner post projecting 0.5 ft above ground; a rail spike		1407.38
51 20.3 Audubon, Audubon County, 4.4 mi N. and 2.5 mi E. of center of; T. 81 N., R. 35 W., near quarter cor. between secs. 35 and 36, at an old farm site, 21 ft S., 39 ft W. and 1.2 ft higher than rd. at drive W., 58 ft S. and 41 ft E. of SE. corner of old farmhouse foundation, 115 ft N. and 5.0 ft E. of NE. corner of barn, 1.5 ft N. and 6.5 ft W. of a power pole painted "B.M.", 3.0 ft S. and 1.5 ft W. of a wooden fence post, 1.5 ft S. of a witness sign; a standard tablet crimped to the top of a copper rod stamped "45 PJH 1969"		1410.818
52 20.6 UE 45 PJH A, about 0.35 mi S. along gravel rd. from B.M., 44 ft S., 38 ft E. and 4.5 ft lower than T-rd. W., in NW. base of a pointed fence corner post projecting 0.5 ft above ground; a rail spike		1374.34
53 21.5 UE 45 PJH B, about 1.2 mi S. along gravel rd. from B.M., at center of wooden bridge across small creek		1299.7
54 21.7 UE 45 PJH C, about 1.6 mi S. along gravel rd. from B.M., about 300 ft S. of a T-rd. W., 45 ft S., 8.0 ft E. and 1.6 ft lower than center of a long wooden bridge, near E. end of S. set of pilings, directly above cut-off power pole used as bridge piling, set flush with top of a square wooden beam; a rail spike		1290.13

<u>LINE 3 (Cont'd)</u>		<u>DEDHAM QUAD. - 130</u>	<u>FEET</u>
4	54 22.3	UE 45 PJH D, about 2.0 mi generally S. along gravel rd. from B.M., T. 80 N., R. 35 W., at the center of the NW $\frac{1}{4}$ sec. 12, 12 ft S., 37 ft E. and 0.5 ft lower than T-rd. W., in S. base of a power pole painted "UE" and projecting 0.5 ft; a rail spike	1337.35
		<u>AUDUBON QUAD.-105</u>	
5	8 24.2	Audubon, 1.75 mi N. and 1.5 mi E. of; T. 80 N., R. 35 W., near cor. secs. 10, 11, 14, and 15; 35 ft N. and 267 ft E. and 12.8 ft lower than crossroad, between right-of-way fence and power pole, in concrete post; a standard tablet stamped "1 LB 1956"	1374.822
9	25.2	UE 1 LB A, about 1.0 mi S. along gravel rd. from B.M., 32 ft S., 16 ft W. and 4.1 ft lower than T-rd. N., on top of W. end of a 3.5 ft cement pipe culvert; a chiseled square	1341.50
10	25.9	UE 1 LB B, about 1.0 mi S. along gravel rd. thence 0.7 mi W. along concrete rd. from B.M., 23 ft S. and 4.5 ft lower than rd., on top of E. end of S. headwall of a concrete box culvert; chiseled square	1396.80
11	26.2	UE 1 LB C, about 1.0 mi S. along gravel rd. thence 1.0 mi W. along concrete rd. from B.M., at center of crossroads; a chiseled square	1420.38
12	27.2	UE AUDUBON A, (described in Line 1)	1352.91

LINE 4

<u>P. J. Hohenberger, 1969; Book CV 2338</u>		<u>GLIDDEN QUAD. - 154</u>	
4	60 4.0	Reference mark, about 450 ft S. of B.M., 250 ft N., 14 ft E. and 2.8 ft lower than T-rd. W., on top, near center of E. headwall of a concrete culvert; a chiseled square	1215.83
61	4.0	Glidden, Carroll County, 2.85 mi S. of; T. 83 N., R. 33 W., near the N. sixteenth cor. between secs. 7 and 8, 700 ft N. of T-rd. W., 93 ft N., 38 ft E. and 1.9 ft lower than rd. at drive E., 30 ft N. and 82 ft W. of NW. corner of a farmhouse, 67 ft N. and 7.0 ft W. of a 2.0-ft diameter spruce tree, 55.5 ft N. of a power pole, painted "B.M.", 3.5 ft S. and 1.0 ft W. of a T-fence E., 3.0 ft N. of a witness sign; a standard tablet crimped to a copper rod stamped "46 PJH 1969"	1213.121
61	4.5	UE 46 PJH A, about 0.65 mi S. along paved rd. from B.M., 1.0 ft E. of center of T-rd. E., set flush with pavement; a spike probably denoting section corner	1255.30
		<u>COON RAPIDS QUAD. - 129</u>	
62	5.6	UE 46 PJH B, about 1.7 mi S. along paved rd. from B.M., 495 ft S., 23 ft E. and 5.8 ft lower than crossroads, on top, in center of E. headwall of a concrete box culvert; a chiseled square	1242.22
63	6.0	UE 46 PJH C, about 2.1 mi S. along paved rd. from B.M., set flush with pavement at center of T-rd. E.; a rail spike	1232.36
64	7.1	Glidden, Carroll County, 6.15 mi S. along paved rd. from; T. 83 N., R. 33 W., near quarter cor. between secs. 29 and 30, at the top of a hill, 750 ft S. of crossroads, 4.0 ft S. and 39 ft W. of rd. at drive E. to farmhouse, 209 ft N. of drive W. to farmhouse, 127 ft N. and 1.3 ft E. of a fence corner N.-W., 54 ft S. of a T-fence W., 58 ft S. of a power pole painted "B.M.", 6.0 ft N. of a T-fence W., 2.0 ft N. of a witness sign; a standard tablet crimped to the top of a copper rod stamped "47 PJH 1969"	1270.393

LINE 4 (Cont'd)	COON RAPIDS QUAD. - 129	FEET
4 65 7.1 Reference mark, 750 ft N. of B.M., at center of T-rd. W. at offset crossroads, set flush with pavement; a rail spike		1259.70
65 8.3 UE 47 PJH A, about 1.0 mi W. of B.M., along gravel rd., 254 ft N., 257 ft E. and 26.0 ft lower than T-rd. S., 33 ft E. of SE. corner of metal barn, on top of SW. corner of octagonal concrete base for corn crib and projecting 0.5 ft; a chiseled square		1192.94
66 8.8 UE 47 PJH B, about 1.0 mi W., thence 0.5 mi S. along gravel rd. from B.M., 13 ft N., 14 ft W. and 0.6 ft lower than center of a small wooden bridge, set flush with top of a cut-off power pole used as bridge piling; a rail spike		1187.22
67 9.9 Glidden, Carroll County, 7.5 mi S. and 1.0 mi W. of center of; Tps. 82 and 83 N., Rs. 33 and 34 W., at cor. secs. 1, 6, 31 and 36, near NE. corner of Carrollton, 119.5 ft N., 28 ft W. and 0.8 ft lower than T-rd. N. (NE.-SW. rd. at rd. N.), 47 ft N. and 120.5 ft E. of NE. corner of an old brick school, 96 ft N. and 1.0 ft E. of corner of a wooden fence surrounding school, 57 ft N. of center of a gate, 14 ft S. of a T-fence W., 12.5 ft S. and 18 ft E. of nearest tree, 2.5 ft N. of a witness sign; a standard tablet crimped to a copper rod, stamped "48 PJH 1969"		1214.535
68 9.9 Reference mark, 138.5 ft SW. of B.M., at the front entrance to abandoned school, at the SE. corner of the N. pedestal; a chiseled square		1221.73
68 10.5 UE 48 PJH A, about 0.75 mi generally S. along gravel rd. from B.M., T. 82 N., Rs. 33 and 34 W., near quarter cor. between secs. 1 and 6, about 0.2 mi S. of a right-angle curve in rd., 13 ft W. and 0.2 ft higher than rd.; on top, in center of W. headwall of a concrete box culvert; a chiseled square		1205.80
69 11.1 UE 48 PJH B, about 1.3 mi generally S. along gravel rd. from B.M., T. 82 N., R. 33 W., near the SW. cor. sec. 6, 11 ft E. and 2.3 ft higher than rd.; on top, in center of E. headwall of a concrete bridge; a chiseled cross		1174.76
70 11.8 UE 48 PJH C, about 2.0 mi generally S. along gravel rd. from B.M., T. 82N., R. 33 W., about 0.25 mi W. of the center of sec. 7, 22 ft S., 28 ft E. and 0.8 ft lower than T-rd. N., on top of S. end of a 3.0 ft cement pipe culvert; a chiseled cross		1200.72
71 12.6 UE 48 PJH D, about 2.0 mi generally S. along gravel rd. from B.M., thence 0.8 mi W. along gravel rd., at NW. corner of large steel bridge across Middle Raccoon River, 8.0 ft N. and 0.6 ft higher than rd. at W. end of bridge, 1.5 ft E. of W. end of wooden curb; top of an iron bolt		1169.10
DEDHAM QUAD. - 130		
72 13.0 Dedham, Carroll County, 1.25 mi N. and 3.0 mi E. of; T. 82 N., R. 34 W., at the S. sixteenth cor. between secs. 11 and 12, 41 ft S., 232 ft E. and 2.3 ft lower than T-rd. E., 1.0 ft N. and 189 ft E. of a fence corner S.-E., 7.0 ft W. of a power pole, 2.5 ft E. of a witness sign; a standard tablet crimped to the top of a copper rod stamped "49 PJH 1969"		1209.474
73 13.5 UE 49 PJH A, about 0.5 mi S. along gravel rd. from B.M., near NE. corner of a long wooden bridge, 298 ft N., 8.5 ft E. and 1.7 ft higher than T-rd. W., 7.0 ft S. of N. end of bridge, on wooden curb; top of second bolt S. of N. end of bridge		1180.90
74 14.0 UE 49 PJH B, about 1.0 mi S. along gravel rd. from B.M., at center of a wooden bridge		1191.8

<u>LINE 4 (Cont'd)</u>		<u>DEDHAM QUAD. - 130</u>	<u>FEET</u>
4 75	14.5	UE 49 PJH C, about 1.5 mi S. along gravel rd. from B.M., 186 ft N., 19 ft E. and 8.2 ft lower than center of rd. underpass, on top, in center of SE. wingwall of a concrete culvert; a chiseled square	1240.52
76	14.9	UE 49 PJH D, about 1.85 mi S. along gravel rd. from B.M., 22 ft S., 41 ft W. and 1.9 ft lower than T-rd. W., on top of S. end of a 3.0 ft corrugated pipe culvert; a punch mark and painted square	1309.88
77	15.4	Reference Mark No. 2 for Triangulation Station REYNOLDS; NNW. of the station, 1 ft S. of fence, 68 ft ENE. of the NE. corner of dwelling. 48 ft NNW. of the station, 1 ft S. of fence, 68 ft ENE. of the NE. corner of dwelling, 48 ft NNW. of well; flush with top of ground	1374.089
77	15.4	Reference Mark No. 1 for Triangulation Station REYNOLDS; WSW. of the station, 6 in. N. of fence, 42 ft S. of the SE. corner of dwelling; flush with the top of the ground	1373.288
<u>COON RAPIDS QUAD. - 129</u>			
78	16.3	UE Reynolds A, about 0.9 mi E. of B.M., along gravel rd., 20 ft N., 22 ft W. and 0.5 ft higher than crossroads, on top, in center of NW. headwall of a concrete culvert; a chiseled square	1253.51
79	17.8	Reference mark, 112 ft WNW. of B.M., 48.5 ft S. and 73.5 ft E. of crossroads, on top of E. end of S. headwall of a concrete box culvert; a chiseled square	1348.56
80	18.4	Dedham, Carroll County, 2.0 mi S. and 4.0 mi E. of; T. 82 N., Rs. 33 and 34 W., near cor. secs. 25, 30, 31 and 36, 89 ft S., 176 ft E. and 1.4 ft higher than crossroads (State Hwy. 141 and S. gravel rd.) 1.0 ft N. and 147 ft E. of a right-of-way fence corner S. and E., 7.0 ft W. of a power pole painted "B.M.", 4.5 ft E. of a wooden fence post, 1.5 ft E. of a witness sign; a standard tablet crimped to the top of a copper rod stamped "50 PJH 1969"	1351.942
80	18.4	UE 50 PJH A, about 1.0 mi S. along gravel rd. from B.M., 24 ft N., 18 ft E. and 1.0 ft lower than crossroads, on top of N. end of a 2.5 ft cement pipe culvert; a chiseled square	1208.73
5 20	18.8	UE 50 PJH B, about 1.4 mi S. along gravel rd. from B.M., 4.0 ft N., 12 ft W. and 0.2 ft higher than rd. at N. end of a long steel and wooden bridge, set flush with top of a cut-off power pole used as a bridge piling; a rail spike	1198.33
21	19.4	UE 50 PJH C, about 2.0 mi S. along gravel rd. from B.M., 22 ft S., 30 ft W. and 4.3 ft lower than crossroads, on top of S. end of a 2.5 ft corrugated pipe culvert; a punch mark and painted square	1205.34
23	20.0	Dedham, Carroll County, 4.7 mi S. and 4.0 mi E. of; T. 81 N., Rs. 33 and 34 W., near the S. sixteenth cor. between secs. 7 and 12, 1700 ft N. of crossroads, 154 ft N., 29 ft E. and 9.5 ft higher than rd. at drive E. to farmhouse, 77 ft N. and 34 ft W. of NW. corner of a farmhouse, 26 ft S. of a T-fence E., 10.5 ft N. and 1.0 ft W. of a fence corner N.-E., 5.5 ft N. and 2.0 ft W. of a power pole painted "B.M.", 2.5 ft S. of a witness sign; a standard tablet crimped to the top of a copper rod stamped "51 PJH 1969"	1339.055
24	20.3	UE 51 PJH A, about 0.3 mi S. along gravel rd. from B.M., 43 ft N., 35 ft E. and 4.6 ft lower than crossroads, in SW. base of a fence corner post and projecting 0.5 ft; a rail spike	1355.88
25	20.8	UE 51 PJH B, about 0.75 mi S. along gravel rd. from B.M., 19 ft S., 12 ft E. and 2.1 ft lower than center of small bridge, set flush with top of a cut-off power pole used as a bridge piling; a rail spike	1283.60

LINE 4 (Cont'd)

COON RAPIDS QUAD. - 129

FEET

- 5 26 21.4 UE 51 PJH C, about 1.3 mi S. along gravel rd. from B.M., 22 ft N., 35 ft E. and 5.7 ft lower than T-rd. W., in SW. base of a fence corner post projecting 0.5 ft; a rail spike 1943.32
- 27 22.3 UE 51 PJH D, about 2.3 mi S. along gravel rd. from B.M., at center of T-rd. W. (gravel) 1290.0
- 28 22.5 Dedham, Carroll County, 7.1 mi S. and 4.0 mi E. of; Audubon, Audubon County, 5.9 mi N. and 9.5 mi E. of; T. 81 N., Rs. 33 and 34 W., near the NW. cor. sec. 30, 520 ft S. of a T-rd. W., 57 ft S., 35 ft E. and 3.6 ft lower than rd. at drive E. to farmhouse, 38 ft S. of a power pole painted "B.M.", 36 ft S. and 1.25 ft W. of a fence corner S.-E., 2.25 ft N. of a witness sign; a standard tablet crimped to the top of a copper rod stamped "52 PJH 1969" 1262.113
- 28 22.5 Reference mark, 340 ft S. of B.M., 36 ft N. and 12 ft W. of center of a small wooden bridge, set flush with top of a cut-off power pole used as a bridge piling; a rail spike 1263.83
- 29 23.4 UE 52 PJH A, about 0.9 mi S. along gravel rd. from B.M., 10 ft S., 108 ft E. and 0.5 ft higher than crossroads, 1.25 ft E. of SW. end of bridge, top of N. bolt fastening angle-iron to bridge 1278.09
- 30 24.7 UE 52 PJH B, about 2.2 mi S. along gravel rd. from B.M., about 1000 ft N. of a farmhouse, on the E. side of rd., 25.5 ft W. and 2.5 ft lower than rd., on top of W. end of a 5.0 ft corrugated pipe culvert; a punch mark and painted square 1342.86
- 31 25.0 UE 52 PJH C, about 2.5 mi S. along gravel rd. from B.M., at center of a T-rd. E. (gravel) 1366.6
- 32 25.5 Reference mark, 530 ft E. of B.M., 28 ft N., 63 ft W. and 0.9 ft lower than crossroads, on top of E. end of a 1.5 ft corrugated pipe culvert; a punch mark and painted square 1408.09
- 33 26.1 Audubon, 3.0 mi N. and 9.5 mi E. of; near cor. secs. 1, 6, 7 and 12; T. 80 N., Rs. 33 and 34 W., 580 ft W. and 36 ft N. of crossroad, 26 ft E. of private drive to farmyard, 1 ft N. and 1 ft W. of SW. fence corner of yard, in concrete post; standard tablet stamped "TT 26 LB 1956" (May be "TT 27 LB 1956" and incorrectly identified as "TT 26 LB 1956") 1443.346

CASEY QUAD. - 104

- 34 26.6 UE 27 LB A, about 1.0 mi S. along gravel rd. from B.M., 27 ft S., 193 ft E. and 9.8 ft lower than crossroads, on top of S. end of a 2.5 ft corrugated pipe culvert; a punch mark and painted square 1426.94
- 35 27.6 Audubon, 0.75 mi N. and 9.5 mi E. of, T. 80 N., Rs. 33 and 34 W., near cor. secs. 13, 18, 19 and 24, 144 ft N. and 30 ft W. of T-rd. N., on county line between Audubon and Guthrie Counties, 1 ft W. of telephone pole, and 1 ft E. of fence, in concrete post; standard tablet stamped "5 LB 1956" 1371.953

LINE 5

P. J. Hohenberger, 1969; Book CV 2338

MANNING QUAD. - 131

- 6 19 0.0 Gray, Audubon County, 4.5 mi NW. along the C. & NW. RR. from the station at; in Carroll County, at pole 20+09, at an E.-W. rd. crossing, 47 ft SW. of the center of the track, 22 ft S. of the center of the rd., 47 ft SW. and 9 ft SE. of culvert 2510, 4 ft E. of a right-of-way fence corner, and level with the track; USC&GS standard disk stamped "G 100 1935" and set in the top of a concrete post 1357.035

LINE 5 (Cont'd)

MANNING QUAD. - 131

FEET

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|----|-----|---|--|---------|
| 6 | 19 | 0.7 | UE G 100 A, about 0.7 mi E. along gravel rd. from B.M., 32 ft N., 30 ft W.
and 3.1 ft lower than crossroads, on top of E. end of a 2.0 ft cement
pipe culvert; a chiseled square | 1408.83 |
| 20 | 1.7 | UE G 100 B, about 0.7 mi E. thence 1.0 mi S. along gravel rd. from B.M., 85 ft
S., 19 ft E. and 3.5 ft lower than crossroads, on top of E. end of a 2.0 ft
cement pipe culvert; a chiseled square | 1374.54 | |
| 21 | 2.7 | UE F 100 A, (described in Line 2) | 1441.64 | |