

KS

U. S. DEPARTMENT OF COMMERCE

Jesse H. Jones, Secretary

COAST AND GEODETIC SURVEY

Leo Otis Colbert, Director

**PLANE COORDINATES
ELEVATIONS AND DESCRIPTIONS OF STATIONS**

Local Control Survey Projects

**Civil Works Administration
and
Federal Emergency Relief Administration
Professor L. E. Conrad
Nov. 28, 1933, to Apr. 15, 1934**

KANSAS

G-41

**Compiled by
New York Computing Office
U. S. Coast and Geodetic Survey
Work Projects Administration
Projects OP-765-97-3-3
OP-65-2-97-46
OP-165-2-97-73**

FOREWORD

The data described in the following pages resulted from control survey projects of the Civil Works Administration and the Federal Emergency Relief Administration during the period from November 28, 1933, to April 5, 1934. The work was in charge of Professor L.E. Conrad, Department of Civil Engineering, State Agricultural College, Manhattan, Kansas.

The project was initiated by the United States Coast and Geodetic Survey on November 28, 1933, and remained under the direction of this organization until February 15, 1934. Subsequent to this date the project was sponsored locally in the State.

The leveling was accomplished with a check between established bench marks of $0.05 \text{ foot} \sqrt{\text{distance in miles}}$ or better. The traverse was accomplished with specifications for Second-order accuracy, i.e. a check of $1/10,000$ on established stations. Where no elevations or coordinates are given in the descriptions of stations additional field work is necessary to complete the surveys or to obtain proper control and the required accuracy.

The field notes were computed and adjusted to some extent in the State during the life of the project. The final work of this nature, together with the preparation of the manuscript, was done in the New York Computing Office of the U.S. Coast and Geodetic Survey, under Work Projects Administration projects O.P.765-97-3-3, O.P.65-2-97-46, and O.P.165-2-97-73.

The elevations are given in feet based on the Sea-level Datum of 1929.

The stations have been numbered in accordance with their locations in sections, townships, and ranges, and are arranged by lines in that order.

Additional information concerning this work may be obtained by addressing the Director, U.S. Coast and Geodetic Survey, Washington, D.C.

Kansas Geodetic Survey

FOREWORD

The data described in the following pages resulted from a project of the Civil Works Administration and the Federal Highway Administration during the period from November 22, 1933, to April 5, 1934. The work was done in cooperation with the U. S. Coast and Geodetic Survey, Department of Civil Engineering, State Agricultural College, Manhattan, Kansas.

The project was initiated by the United States Coast and Geodetic Survey on November 22, 1933, and terminated under the direction of this organization on February 15, 1934. Subsequent to this date the project was sponsored locally in the State.

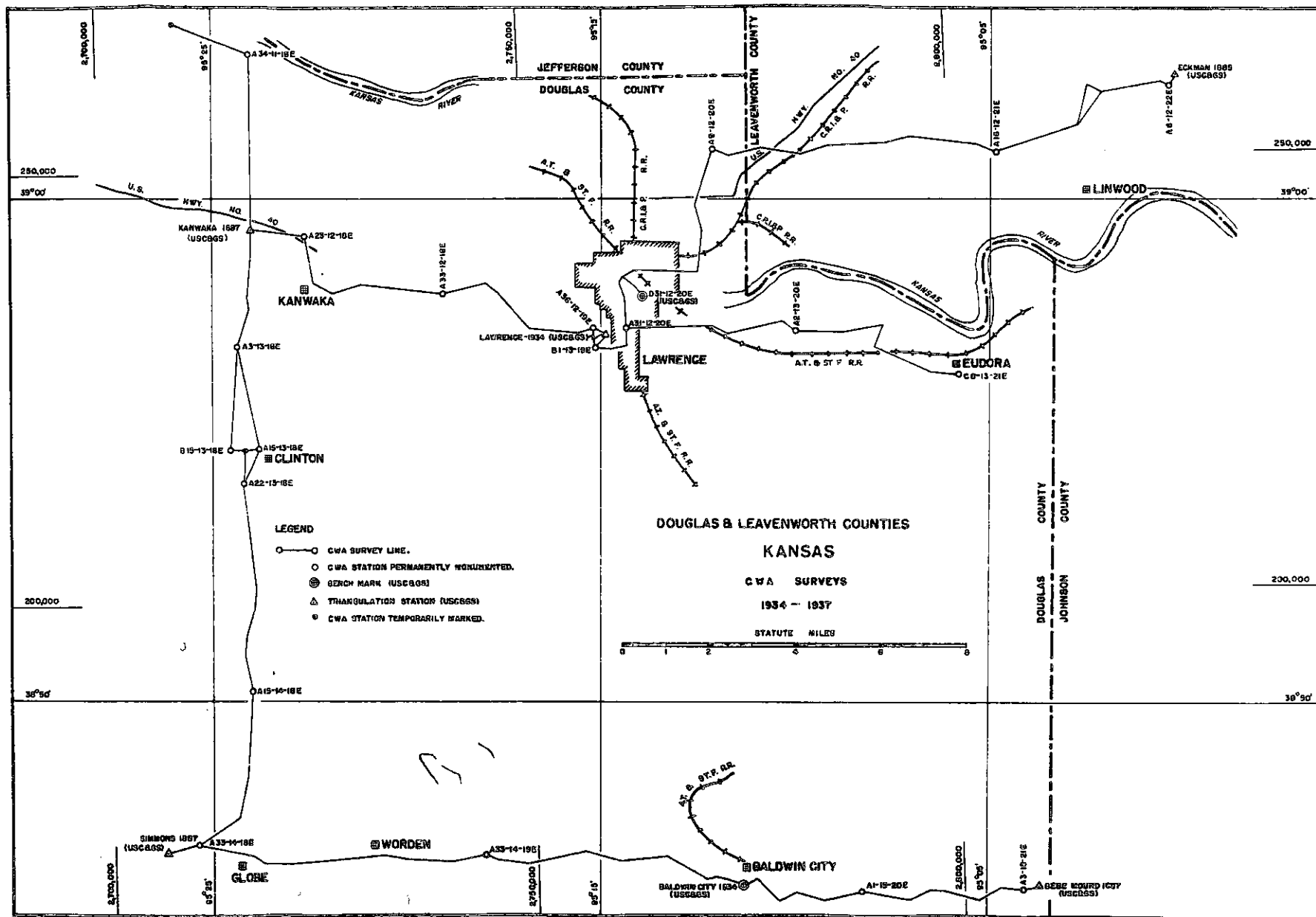
The survey was accomplished with a check between established bench marks of U. S. Coast and Geodetic Survey. The survey was accomplished with a check between second-order bench marks, i. e., a check of 1410.000 on established stations. While no elevations or coordinates are given in the descriptions of stations additional field work is necessary to complete the survey or to obtain proper control and the required accuracy.

The field notes were compiled and adjusted to some extent in the State during the life of the project. The final work of this nature, together with the preparation of the final report, was done in the New York Computing Office of the U. S. Coast and Geodetic Survey, under the project administration of the U. S. Coast and Geodetic Survey, Office of the Chief of the Survey, Washington, D. C.

The elevations are given in feet based on the level datum of 1929.

The stations have been numbered in accordance with their location in sections, townships, and ranges and are arranged by lines in that order.

Additional information concerning this work may be obtained by addressing the Director, U. S. Coast and Geodetic Survey, Washington, D. C.



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KANSASUNITED STATES COAST AND GEODETIC SURVEY AND STATE SURVEY
Second-order traverse and third-order leveling

Field work done by Local Control Survey parties in 1933 and 1934.

Douglas County

From U.S.C. & G.S. triangulation station KANWAKA to U.S.C. & G.S. triangulation station BIRMINGHAM.

KANWAKA (U.S.C. & G.S.) (Douglas County, F.D. Granger, 1887; 1910).--About 18 miles east of Topeka, 10 miles northwest of Lawrence, and 5 miles south of Le Compton, in the northeast corner of the NW $\frac{1}{4}$ sec. 22, T.12 S., R.18 E., in Kanwaka Township, in a pasture south of U.S. Road no. 40, on land owned (1930) by Thomas Anderson. The underground, station, and witness marks are described in notes 1, 2, and 3. The post marking the station is inscribed "F.D.G. 1887" on the south side near the top. A standard bronze reference tablet is in the concrete roadbed of U.S. Road no. 40, 0.7 foot from the south edge of the concrete, 29.02 meters (95.2 feet) due north from the station. Additional distances and directions are as follows: Quarter-section corner of sections 22 and 23 is 441.05 meters (1,447.0 feet) north and east; quarter-section corner of sections 22 and 27 is 856.58 meters (2,810.3 feet) south and west; George Anderson's house is 381.46 meters (1,251.5 feet) north and west. Elevation: 1,129.219 feet.

Plane coordinates: (N), $x = 2,740,018.03$ feet; $y = 250,854.90$ feet.

A27-12-18E (Kans.Geod.S.) (Douglas County, L.E. Conrad, 1934).--About 7.5 miles west and 1 mile north of Lawrence, 4 miles south and 0.5 mile west of Leocompton, in north center of NW $\frac{1}{4}$ sec. 27, T.12 S., R.18 E., in Kanwaka Township, on property of the Kansas City Life Insurance Company, 764 feet east of centerline of north-south half-section line road, and 351 feet south of east-west section line. Station is a U.S.C. & G.S. and State Survey standard disk in concrete flush with ground. Elevation: 1,107.145 feet.

Plane coordinates: (N), $x = 2,739,686.74$ feet; $y = 247,946.05$ feet.

A34-12-18E (Kans.Geod.S.) (Douglas County, L.E. Conrad, 1934).--About 7.5 miles west of Lawrence, 1.5 miles west of Kanwaka, on right-of-way of north-south half-section line county road, in northwest corner of NW $\frac{1}{4}$ sec. 34, T.12 S., R.18 E., in Kanwaka Township, 73.6 feet south of centerline of east-west section-line road (Stull Road), 34 feet east of centerline of north-south half-section line road (Globe Road), and 1 foot west of north-south property-line fence. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 2 inches above ground. Elevation: 1,036.304 feet.

Plane coordinates: (N), $x = 2,739,150.36$ feet; $y = 242,899.62$ feet.

B34-12-18E (Kans.Geod.S.) (Douglas County, L.E. Conrad, 1934).--About 3.75 miles north, and 0.5 mile west of Clinton (by road), in sec. 34, T.12 S., R.18 E., 1,373.5 feet south of centerline of east-west section-line road (Stull Road), and in culvert. Station is a monel metal rivet in concrete, projecting 1/4 inch above surface of concrete.

No elevation or coordinates have been determined for this station.

A3-13-18E (Kans.Geod.S.) (Douglas County, L.E. Conrad, 1934).--About 7.5 miles west of Lawrence, 2.75 miles north and 0.5 mile west of Clinton, 1.25 miles south of Stull Road, near center of NW $\frac{1}{4}$ sec. 3, T.13 S., R.18 E., in Kanwaka Township, on property of Mrs. Buchheim, 206.5 feet east of north-south quarter-section line fence, and directly under east-west quarter-section fence. Station is a U.S.C. & G.S. and State Survey standard disk in concrete flush with ground. Elevation: 1,009.247 feet.

Plane coordinates: (N), $x = 2,738,204.31$ feet; $y = 236,346.96$ feet.

A10-13-18E (Kans.Geod.S.) (Douglas County, L.E. Conrad, 1934).--About 7-1/2 miles west (U.S. Highway 40 and Stull Road) of Lawrence (Douglas County) city limits, 3 miles south of Stull Road, on pier of steel bridge over the Wakarusa River, 1 mile north and 1/2 mile west of Clinton village (Douglas County), at point where bridge is in southwest corner of SW $\frac{1}{4}$ sec. 10, T.13 S., R.18 E., and 0.9 mile south of east-west road along north edge of section. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, flush with ground.

No elevation or coordinates have been determined for this station.

A15-13-18E (Kans.Geod.S.) (Douglas County, L.E. Conrad, 1934).--About 2 miles south and 7-1/4 miles west of Lawrence, on U.S. Highway 73W, 1/2 mile north and 1/4 mile west of Clinton village, on top of high knoll, on land belonging to W.J. Cummings, in northwest corner of NE $\frac{1}{4}$ sec. 15, T.13 S., R.18 E., 1,116.3 feet S. 50° W. of half-section corner stone, 353.6 feet S. 19° E. of centerline of 20-inch hackberry tree. (Directions are magnetic and distances measured with steel tape.) Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 1 inch above ground. Elevation: 994.332 feet.

Plane coordinates: (N), $x = 2,741,315.12$ feet; $y = 223,984.68$ feet.

B15-13-18E (Kans.Geod.S.) (Douglas County, L.E. Conrad, 1934).--About 9 miles west and 2 miles south of Lawrence, 3/4 mile west and 1/2 mile north of Clinton, in northwest corner of NW $\frac{1}{4}$ sec. 15, T.13 S., R.18 E., Clinton Township, on land of Emma S. Cummings, 1,116.3 feet S. 50° W. of half-section corner stone, 353.6 feet S. 19° E. of centerline of 20-inch hackberry tree (magnetic). Witness mark No. 1 is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 3 inches, with arrow pointing to station. This mark is in the east-west half-section line fence, 354 feet east of north-south section line, and 235.5 feet north of station. Witness mark No. 2 is a U.S.C. & G.S. and State Survey standard disk in boulder, projecting 6 inches, with arrow pointing to station. This mark is 112 feet south of east-west half-section line fence, 186 feet east of north-south section line, and 182.4 feet S. 65° W. (magnetic) of station. Station is a U.S.C. & G.S. and State Survey standard disk in concrete flush with the ground. No elevation has been determined for this station.

Plane coordinates: (N), $x = 2,737,279.97$ feet; $y = 224,171.59$ feet.

A22-13-18E (Kans.Geod.S.) (Douglas County, L.E. Conrad, 1934).--About 8-1/2 miles west and 2 miles south of Lawrence, 1/2 mile west and 1/4 mile south of Clinton, on right-of-way of Globe Road in northeast corner of SE $\frac{1}{4}$ sec. 22, T.13 S., R.18 E., Clinton Township, 994 feet north of east-west half-section line fence, 34 feet west of centerline of Globe Road, and 1 foot east of property-line fence. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 1 inch above ground. Elevation: 952.464 feet.

Plane coordinates: (N), $x = 2,739,733.77$ feet; $y = 220,178.68$ feet.

A34-13-18E RV (Kans.Geod.S.) (Douglas County, L.E. Conrad, 1934).--About 11.5 miles west and 7 miles north of Baldwin, by U.S. Highway 50 and Globe Road, in Clinton Township, 1/2 mile west and 2 miles south of Clinton village, on concrete culvert, on Globe Road right-of-way, in northeast corner of NE $\frac{1}{4}$ sec. 34, T.13 S., R.18 E., 442 feet south of centerline of east-west section-line road, 5 feet from south end of west hub-guard, and .35 foot from inside edge. Station is a monel metal rivet in concrete, projecting 1/8 inch above ground. Elevation: 875.275 feet.

No coordinates have been determined for this station.

B34-13-18E (Kans.Geod.S.) (Douglas County, L.E. Conrad, 1934).--About 11.5 miles west and 7 miles north of Baldwin, by U.S. Highway 50 and Globe Road, 2 miles south and 1/2 mile west of Clinton, in southwest corner of SW $\frac{1}{4}$ sec. 34, T.13 S., R.18 E., Clinton Township, 146.1 feet N. 5° E. (magnetic) of section-corner stone, 142.75 feet north of section-corner stone, 34 feet east of centerline of Globe Road, and 1 foot west of property-line fence. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 2 inches above ground. Elevation: 1,061.442 feet.

Plane coordinates: (N), $x = 2,740,283.21$ feet; $y = 206,096.17$ feet.

A3-14-18E (Kans.Geod.S.) (Douglas County, L.E. Conrad, 1934).--About 11.5 miles west and 5-3/4 miles north of Baldwin, by U.S. Highway 50 and Globe Road, 3.25 miles south and 1/2 mile west of Clinton, in northwest corner of SW $\frac{1}{4}$ sec. 3, T.14 S., R.18 E., Marion Township, 1,373 feet south of section-corner stone, 34 feet east of centerline of Globe Road, and 1 foot west of property-line fence. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 2 inches above ground. Elevation: 1,021.830 feet.

Plane coordinates: (N), $x = 2,740,325.86$ feet; $y = 204,578.95$ feet.

B3-14-18E RV (Kans.Geod.S.) (Douglas County, L.E. Conrad, 1934).--About 11.5 miles west and 5.1 miles north of Baldwin, by U.S. Highway 50 and Globe Road, 3.9 miles south and 1/2 mile west of Clinton, in SE $\frac{1}{4}$ sec. 3, T.14 S., R.18 E., Marion Township, on north wingwall on west end of one-span concrete culvert, (culvert is 0.1 mile north of south east-west section-line road), on right-of-way of Globe Road. Station is a monel metal rivet set 0.25 foot west of west edge of culvert, 0.15 foot south of north edge of north rail post, and projects 3/16 inch.

No elevation or coordinates have been determined for this station.

A10-14-18E (Kans.Geod.S.) (Douglas County, L.E. Conrad, 1934).--About 11 miles west and 4.5 miles north of Baldwin, by U.S. Highway 50 and Globe Road, 4.5 miles south and 1/2 mile west of Clinton, in southeast corner of SE $\frac{1}{4}$ sec. 10, T.14 S., R.18 E., Marion Township, 136 feet N. 25° W. (magnetic) of quarter-corner stone of section, 130.9 feet north of centerline of east-west half-section, on line road, 57.75 feet N. 40° E. (magnetic) of northeast corner of stone foundation of frame house, and 35 feet west of centerline of Globe Road. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, 1 inch below ground. Elevation: 1,076.553 feet.

Plane coordinates: (N), $x = 2,740,453.55$ feet; $y = 198,191.07$ feet.

A15-14-18E (Kans.Geod.S.) (Douglas County, L.E. Conrad, 1934).--About 11.5 miles west and 3-3/4 miles north of Baldwin, by U.S. Highway 50 and Globe Road, 5-1/4 miles south and 1/2 mile west of Clinton, on right-of-way of Globe Road, west center of NW $\frac{1}{4}$ sec. 15, T.14 S., R.18 E., Marion Township, 34 feet east of centerline of north-south half-section line road (Globe Road), and 3 feet south of east-west quarter-section fence line. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 1 inch above ground. Elevation: 1,069.519 feet.

Plane coordinates: (N), $x = 2,740,674.81$ feet; $y = 194,095.03$ feet.

A27-14-18E (Kans.Geod.S.) (Douglas County, L.E. Conrad, 1934).--About 11.5 miles west and 1.9 miles north of Baldwin, by U.S. Highway 50 and Globe Road, 7.1 miles south and 0.5 mile west of Clinton, in east center of NE $\frac{1}{4}$ sec. 27, T.14 S., R.18 E., Marion Township, 602 feet south of centerline of east-west section-line road, 48.7 feet N. 29° E. (magnetic) of southeast corner of concrete foundation of small one-story frame house, and 34 feet

west of centerline of north-south half-section line road (Globe Road). Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 2 inches above ground. Elevation: 1,124.229 feet.

Plane coordinates: (N), $x = 2,740,941.25$ feet; $y = 184,216.51$ feet.

A34-14-18E (Kans.Geod.S.) (Douglas County, L.E.Conrad, 1934). --About 11.75 miles west and 1 mile north of Baldwin, by U.S. Highway 50 and Globe Road, 8 miles south and 3/4 mile west of Clinton, in north center of NE1/4 sec. 34, T.14 S., R.18 E., Marion Township, 1,280 feet west of centerline of north-south half-section line road (Globe Road), 145.8 feet S.40°E. (magnetic) of southeast corner of concrete block foundation of small frame house, and 25 feet south of centerline of east-west section-line road. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, flush with ground. Elevation: 1,149.943 feet.

Plane coordinates: (N), $x = 2,739,826.12$ feet; $y = 179,452.59$ feet.

SIMMONS (U.S.C. & G.S.) (Douglas County, F.D.Granger, 1887; 1930). --About 14 miles west of Baldwin City, near the center of the SW1/4 sec. 32, T.14 S., R.18 E., near the summit of a prominent rocky hill used as a feed lot on land formerly owned by P.A.Simmons and still known as the Simmons farm. The underground mark is a drill hole in the head of an iron bolt tightly wedged in a hole drilled in a ledge of limestone about 2-1/2 feet below the surface of the ground. The station and witness marks are described in notes 1 and 2. The following distances and azimuths are from the station: Northwest corner of stone wall, 43.34 meters (142.2 feet), 272°52'; southwest corner of section 32, 663.40 meters (2,176.5 feet), 291°36'; northwest corner of the Simmons house, 87.57 meters (287.3 feet), 354°50'. A farmyard gate is 22.3 meters (73 feet) about west. Elevation: 1,192.402 feet.

Plane coordinates: (N), $x = 2,731,256.96$ feet; $y = 174,731.27$ feet.

Douglas County

From U.S.C. & G.S. triangulation station SIMMONS (described elsewhere in this publication to U.S.C. & G.S. triangulation station BEBE MOUND.

No coordinates have been established for stations in this line.

A33-14-18E (Kans.Geod.S.) (Douglas County, L.E.Conrad, 1934). --About 12.5 miles west by U.S.Highway 50 and 1/4 mile north of Baldwin, 1/2 mile west and 1/4 mile north of Worden, in the southeast corner of NE1/4 sec. 33, T.14 S., R.18 E., Marion Township, 48.75 feet west of centerline of north-south half-section line road, and 1 foot north of east-west quarter-section line. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, flush with ground. Elevation: 1,161.849 feet.

B34-14-18E RV (Kans.Geod.S.) (Douglas County, L.E.Conrad, 1934). --About 11.5 miles west of Baldwin, 3.5 miles west of Worden, in sec. 34, T.14 S., R.18 E., Marion Township, on two-span concrete culvert on right-of-way of U.S.Highway 50, 3 feet from west end of north hub-guard of culvert; (culvert is 392.25 feet east of centerline of north-south half-section line road) (Globe Road), which bisects B34-14-18E. Station is a monel metal rivet in concrete, projecting 3/16 inch above concrete. Elevation: 1,056.440 feet.

A3-15-18E (Kans.Geod.S.) (Douglas County, L.E.Conrad, 1934). --About 11 miles west of Baldwin by U.S.Highway 50, 3 miles west of Worden, in northeast corner of NE1/4 sec. 3, T.15 S., R.18 E., Marion Township, 85 feet west of north-south section line, 49 feet south of centerline of east-west section-line road (U.S. Highway 50), and 1 foot due north of concrete post right-of-way marker. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 2 inches above ground. Elevation: 1,076.830 feet.

A2-15-18E (Kans.Geod.S.) (Douglas County, L.E.Conrad, 1934). --About 10.5 miles west of Baldwin, 2.5 miles west of Worden, by U.S.Highway 50, in northeast corner of NE1/4 sec. 2, T.15 S., R.18 E., Marion Township, 49 feet south of centerline of east-west section-line road (U.S.Highway 50), 23 feet west of centerline of north-south half-section line road, and 4 feet east and 1 foot north of concrete post right-of-way marker. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 2 inches above ground. Elevation: 1,084.682 feet.

A31-14-19E (Kans.Geod.S.) (Douglas County, L.E.Conrad, 1934). --About 8-1/2 miles west of Baldwin, 1/2 mile west of Worden, in southwest corner of SW1/4 sec. 31, T.14 S., R.19 E., Willow Springs Township, 378 feet east of north-south half-section line, 49-1/2 feet north of centerline of east-west road (U.S.Highway 50), and 1 foot west of concrete post right-of-way marker. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 3 inches above ground. Elevation: 1,112.137 feet.

A5-15-19E (Kans.Geod.S.) (Douglas County, L.E.Conrad, 1934). --In Worden, in northwest corner of NW1/4 sec. 5, T.15 S., R.19 E., Willow Springs Township, on lawn of Worden Evangelical Church, 72.2 feet south of centerline of east-west section-line road (U.S.Highway 50), 60.3 feet east of centerline of north-south section-line road, and 2 feet west and 6 inches north of northwest corner of church. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, flush with ground. Elevation: 1,089.385 feet.

A4-15-19E RV (Kans.Geod.S.) (Douglas County, L.E.Conrad, 1934). --About 6-3/4 miles west of Baldwin by U.S.Highway 50, 1-1/4 miles east of Worden, in north center of NW1/4 sec. 4, T.15 S., R.19 E., Willow Springs Township, on two-span concrete highway culvert over West Toy Creek, 6 inches from east end and 5-1/4 inches from south edge of south hub-guard of culvert.

Station is a monel metal rivet, projecting 1/4 inch above concrete. Elevation: 1,003.114 feet.

A3-14-19E (Kans.Geod.S.) (Douglas County, L.E.Conrad, 1934). --About 6 miles west of Baldwin by U.S.Highway 50, 2 miles east of Worden, in southeast corner of SE1/4 sec. 33, T.14 S., R.19 E., Willow Springs Township, 189 feet west of centerline of north-south section-line road, 63.5 feet north of centerline of east-west section-line road (U.S.Highway 50), 13.5 feet north of property-line fence, and 2.8 feet east of west boundary fence of township yard. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 3 inches above ground. Elevation: 1,076.565 feet.

A3-15-19E (Kans.Geod.S.) (Douglas County, L.E.Conrad, 1934). --About 5.8 miles west of Baldwin by U.S.Highway 50, and 2.2 miles east of Worden, in northeast corner of NW1/4 sec. 3, T.15 S., R.19 E., Willow Springs Township, on property of Edward F. Hyland, 998 feet east of centerline of north-south section-line road, 54.3 feet south of centerline of east-west section-line road (U.S.Highway 50), 8.3 feet east and 4.3 feet south of right-of-way marker, and 3.5 feet south of property fence line. Station is a U.S.C. & G.S. and State Survey standard disk in concrete flush with ground. Elevation: 1,085.982 feet.

B3-15-19E RV (Kans.Geod.S.) (Douglas County, L.E.Conrad, 1934). --About 5 miles west of Baldwin by U.S.Highway 50, and 3 miles east of Worden, in northeast corner of NE1/4 sec. 3, T.15 S., R.19 E., Willow Springs Township, on three-span concrete bridge over East Toy Creek on U.S.Highway 50, (bridge is 0.9 mile east of west section line), 4 feet from east end of south hub-guard of bridge. Station is a monel metal rivet in concrete, projecting 1/4 inch above concrete. Elevation: 982.690 feet.

A2-15-19E (Kans.Geod.S.) (Douglas County, L.E.Conrad, 1934). --About 4.5 miles west of Baldwin by U.S.Highway 50, and 3.5 miles east of Worden, in northeast corner of NE1/4 sec. 2, T.15 S., R.19 E., at Willow Springs Township crossroads, 38 feet west of centerline of north-south half-section line road (U.S.Highway 73 W.), and 29.4 feet south of centerline of east-west section-line road (U.S.Highway 50). Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 1 inch above ground. Elevation: 1,012.931 feet.

A36-14-19E (Kans.Geod.S.) (Douglas County, L.E.Conrad, 1934). --About 4.3 miles east of Worden by U.S.Highway 50, and 3.7 miles west of Baldwin on highway right-of-way, in southwest corner of SE1/4 sec. 36, T.14 S., R.19 E., Willow Springs Township, 813.3 feet east of north-south section-line property fence, 33 feet north of centerline of east-west section-line road (U.S.Highway 50), and 1 foot south of east-west property-line fence. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 1 inch above ground. Elevation: 1,096.190 feet.

A6-15-20E (Kans.Geod.S.) (Douglas County, L.E.Conrad, 1934). --About 5 miles east of Worden by U.S.Highway 50, and 3 miles west of 6th Street in Baldwin, in northwest corner of NW1/4 sec. 6, T.15 S., R.20 E., Palmyra Township, on Cities Service Company pipeline right-of-way, 78.8 feet S.63°E. (magnetic) of chiseled cross in pavement marking section-corner stone, 47 feet south of centerline of pavement of U.S.Highway 50, and 12 feet south of property-line fence. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 2 inches above ground. Elevation: 1,092.793 feet.

A5-15-20E RV (Kans.Geod.S.) (Douglas County, L.E.Conrad, 1934). --About 6.3 miles east of Worden by U.S.Highway 50, 1.17 miles west of 6th Street in Baldwin, Palmyra Township, 0.3 mile west from west north-south section line, on south wingwall of west approach to single-span concrete bridge over Great Toy Creek, (bridge is 3/10 mile from west north-south section line), 3.1 feet from west end and 0.3 foot north of south side of wingwall. Station is a monel metal rivet in concrete, projecting 3/16 inch above ground. Elevation: 1,011.047 feet.

A4-15-20E (Kans.Geod.S.) (Douglas County, L.E.Conrad, 1934). --In Baldwin, in northwest corner of NW1/4 sec. 4, T.15 S., R.20 E., Palmyra Township, 1 mile west of 6th Street, at crossroads, 155.5 feet east of centerline of Lawrence Street, 27 feet south of centerline of High Street, 108.6 feet N.20°E. (magnetic) of northwest corner of stone house, and 91.6 feet N.10°W. (magnetic) of northeast corner of stone porch of stone house. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, flush with ground. Elevation: 1,096.934 feet.

B4-15-20E (Kans.Geod.S.) (Douglas County, L.E.Conrad, 1934). --In Baldwin, Palmyra Township, in parking on south side of High Street, between 14th and Main Streets, in north center of NW1/4 sec. 4, T.15 S., R.20 E., approximately 300 feet east on High Street from Atchison, Topeka & Santa Fe Railroad tracks, 36.5 feet from northeast corner and 40.0 feet from northwest corner of two-story frame house (1417 High Street), 14.7 feet south of south edge of 20-inch pavement on High Street, and 12.3 feet S.85°E. of centerline of 20-inch elm trees. (Bearing magnetic and distances measured with metallic cloth tape.) Station is a U.S.C. & G.S. and State Survey standard disk in concrete, flush with ground. Elevation: 1,047.702 feet.

C4-15-20E (Kans.Geod.S.) (Douglas County, L.E.Conrad, 1934). --In Baldwin, Palmyra Township, in park south of High Street, between 11th and 12th Streets, in center of sections 15 and 20E., 132 feet west of centerline of 11th Street, 21.9 feet south of south edge of pavement on High Street, 124.2 feet S.30°E. of stone foundation of two-story frame house (1112 High Street), 110.1 feet S.8°W. of southwest corner of stone foundation of two-story frame house (1104 High Street), and 85.5 feet N.29°E. of centerline of 24-inch elm tree. (Bearings magnetic and distances measured with metallic cloth tape.) Station is a U.S.C. & G.S. and State Survey standard disk in concrete, flush with ground. Elevation: 1,011.405 feet.

D4-15-20E (Kans.Geod.S.)(Douglas County, L.E.Conrad, 1934).
--In Baldwin, at northwest corner of intersection of highway and 8th Street, in center of NE $\frac{1}{4}$ sec. 4, T.15 S., R.20 E., Palmyra Township, 16 feet north of north curb of High Street, 9.2 feet east and 3.75 feet south of southeast corner of stone foundation of brick building, and 7.2 feet west of west curb of 8th Street. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, 3 inches under brick sidewalk and under brick marked with chiseled cross. Elevation: 1,054.594 feet.

Baldwin City (Kans.Geod.S.)(Douglas County, L.E.Conrad, 1934).--In Baldwin, in alley between High and Indiana Streets and between 6th and 7th Streets, in northeast corner of NE $\frac{1}{4}$ sec. 4, T.15 S., R.20 E., Palmyra Township, at center of southeast concrete footing of water tower, and 3/10 foot northeast of south-west side of footing. Station is a U.S.C. & G.S. and State Survey standard disk flush with ground. Elevation: 1,037.268 feet.

A3-15-20E (Kans.Geod.S.)(Douglas County, L.E.Conrad, 1934).
--In Baldwin, in parking lot southwest of intersection of High and Third Streets, in northeast corner of NW $\frac{1}{4}$ sec. 1, T.15 S., R.20 E., Palmyra Township, 61.6 feet N.35°E. of northeast corner of north wing of frame house, 53.7 feet west of centerline of Third Street, 30 feet south of centerline of High Street, 19.6 feet N.60°E. (magnetic) of 20-inch soft maple, and 15.4 feet north of property line. Station is a U.S.C. & G.S. and State Survey standard disk in concrete flush with ground. Elevation: 1,045.245 feet.

A10-15-20E (Kans.Geod.S.)(Douglas County, L.E.Conrad, 1934).
--About 9.25 miles east of Edgerton (Johnson County) and 0.75 mile east of 6th Street in Baldwin, by U.S.Highway 50, in northeast corner of NW $\frac{1}{4}$ sec. 10, T.15 S., R.20 E., Palmyra Township, 1,400.2 feet west of east north-south section line, 63 feet south of centerline of power line, and 30 feet south of centerline of east-west section-line road (U.S.Highway 50). Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 1 inch above ground. Elevation: 1,081.198 feet.

A2-15-20E (Kans.Geod.S.)(Douglas County, L.E.Conrad, 1934).
--About 9 miles west of Edgerton by U.S.Highway 50, (Johnson County) and 1.1 miles east of 6th Street in Baldwin, in center of SW $\frac{1}{4}$ sec. 2, T.15 S., R.20 E., Palmyra Township, 573.5 feet east of north-south section line, 31 feet north of centerline of U.S.Highway 50, and 2.4 feet south of property-line fence. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 1 inch above ground. Elevation: 1,077.912 feet.

All-15-20E (Kans.Geod.S.)(Douglas County, L.E.Conrad, 1934).
--About 8.1 miles west of Edgerton and 1.9 miles east of 6th Street in Baldwin, by U.S.Highway 50, in north center of NE $\frac{1}{4}$ sec. 11, T.15 S., R.20 E., Palmyra Township, 554.2 feet west of north-south section line, 105.3 feet N.5°E. of northeast corner of foundation of one-story frame house, 32 feet south of centerline of east-west section-line road (U.S.Highway 50), and 1 foot north of right-of-way fence. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 1 inch above ground. Elevation: 1,084.258 feet.

Al-15-20E (Kans.Geod.S.)(Douglas County, L.E.Conrad, 1934).
--About 7.25 miles west of Edgerton and 2.75 miles east of 6th Street in Baldwin, by U.S.Highway 50, in southwest corner of SE $\frac{1}{4}$ sec. 1, T.15 S., R.20 E., Palmyra Township, 234.2 feet east of quarter-section line (first quarter-line west of east section line), 71 feet S.8°W. of southeast corner of two-story frame house, 31 feet north of centerline of east-west section-line road (U.S.Highway 50), and 1.7 feet south of property-line fence. Station is a U.S.C. & G.S. and State Survey standard disk in concrete and flush with ground. Elevation: 1,097.080 feet.

A7-15-21E (Kans.Geod.S.)(Douglas County, L.E.Conrad, 1934).
--About 6.25 miles west and 3.75 miles east of 6th Street in Baldwin, by U.S.Highway 50, in northwest corner of NE $\frac{1}{4}$ sec. 7, T.15 S., R.18 E., Palmyra Township, 955.5 feet west of centerline of north-south section-line road, 129.6 feet south of southwest corner of large two-story frame house, 31 feet south of centerline of east-west section-line road (U.S.Highway 50), and 2.2 feet north of south property-line fence. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 1 inch above ground. Elevation: 1,111.616 feet.

A5-15-21E (Kans.Geod.S.)(Douglas County, L.E.Conrad, 1934).
--About 5.8 miles west of Edgerton and 4.2 miles east of 6th Street in Baldwin, by U.S.Highway 50, in southeast corner of SW $\frac{1}{4}$ sec. 5, T.15 S., R.21 E., Palmyra Township, 1,019.2 feet east of centerline of north-south section-line road, 32 feet north of centerline of east-west section-line road (U.S.Highway 50), and 0.8 foot south of north property-line fence. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 1 inch above ground. Elevation: 1,096.294 feet.

B5-15-21E (Kans.Geod.S.)(Douglas County, L.E.Conrad, 1934).
--About 4.5 miles east of 6th Street in Baldwin, along U.S.Highway 50, in south center sec. 5, T.15 S., R.21 E., on northwest wingwall of two-span concrete culvert, 0.8 foot east of west end, and 0.1 foot north of north face of hub-guard. Station is a metal metal rivet in concrete, projecting 3/16 inch above surface of concrete. Elevation: 1,072.647 feet.

A9-15-21E (Kans.Geod.S.)(Douglas County, L.E.Conrad, 1934).
--About 5.4 miles east of 6th Street in Baldwin and 4.6 miles west of Edgerton, by U.S.Highway 50, on right-of-way, in north center of NE $\frac{1}{4}$ sec. 9, T.15 S., R.21 E., Palmyra Township, 541.6 feet west of north-south half-section line, 32 feet south of centerline of highway, and 0.8 foot north of south property-line fence. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 1 inch above ground. Elevation: 1,101.429 feet.

A4-15-21E RV (Kans.Geod.S.)(Douglas County, L.E.Conrad, 1934).--About 6 miles east of 6th Street in Baldwin, and 4 miles west of Edgerton, on U.S.Highway 50, in sec. 4, T.15 S., R.21 E., Palmyra Township, on northwest wingwall of single-span concrete

culvert crossing U.S.Highway 50, 100 feet west of east section line, 0.65 foot east of west end of north hub-guard, and 0.3 foot north of north face of hub-guard. Station is a metal metal rivet in concrete, projecting 3/16 inch above concrete. Elevation: 1,058.927 feet.

A3-15-21E (Kans.Geod.S.)(Douglas County, L.E.Conrad, 1934).
--About 6.3 miles east of 6th Street in Baldwin, and 3.7 miles west of Edgerton by U.S.Highway 50, on right-of-way in south center of SE $\frac{1}{4}$ sec. 3, T.15 S., R.21 E., Palmyra Township, 720.2 feet west of half-section line, 108.7 feet south of southwest corner of foundation of frame house, 32 feet north of centerline of U.S.Highway 50, and 1.3 feet south of property-line fence. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 2 inches above ground. Elevation: 1,097.745 feet.

BEHE MOUND (U.S.C. & G.S.)(Douglas County, F.D.Granger, 1887; 1922).--About 3 miles east of Edgerton, in Palmyra Township, 1/4 mile west of the Johnson-Douglas County line, and 2-1/4 miles north of the Franklin-Douglas County line, in a cultivated field owned (1922) by Mrs. Dwyer, who lives in Edgerton, and farmed by W.A.Smith. The underground, station, and witness marks are described in notes 1 and 2, the station mark being 11 inches below the surface. A 6-inch pipe line passes above and 8 inches northeast of the station mark. Reference mark no.1, a standard bronze tablet in a block of concrete, is just south of the north fence of the poultry yard, 27.28 meters (89.5 feet), N.15°E. (magnetic) from the northeast corner of the Dwyer house, and 106.59 meters (349.7 feet) S.9°E. (magnetic) from the station. Reference mark no.2, similar to no.1, is in a small pasture just out from the garden fence, 43.74 meters (143.5 feet) S.62°W. from the station. A fence is 11.6 meters (38 feet) south of the station and the center of the Dwyer house is 142 meters (466 feet) from the station in azimuth 7°09'. Elevation: 1,124.041 feet.

Plane coordinates: (N), $x = 2,837,886.84$ feet; $y = 173,183.10$ feet.

Douglas County

From U.S.C. & G.S. triangulation station KANWAKA (described elsewhere in this publication) to U.S.C. & G.S. triangulation station LAWRENCE.

A23-12-18E (Kans.Geod.S.)(Douglas County, L.E.Conrad, 1934).
--About 4 miles south and 1 mile east of Leocompton, and 6 miles west and 1 mile north of city limits of Lawrence, along U.S.Highway 40, in southeast corner of SE $\frac{1}{4}$ sec. 23, T.12 S., R.18 E., Kanwaka Township, 587-1/2 feet north of east-west section line, 27.3 feet west of centerline of north-south section-line road, and 8 inches from north-south property-line fence. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 2 inches above ground. Elevation: 1,062.907 feet.

Plane coordinates: (N), $x = 2,746,794.72$ feet; $y = 249,107.63$ feet.

A34-11-18E (Kans.Geod.S.)(Douglas County, L.E.Conrad, 1934).
--In Leocompton, in approximate east center of sec. 34, T.11 S., R.18 E., Leocompton Township, near Atchison, Topeka & Santa Fe Railway station, on south end of headwall of culvert 37E., 1.5 feet from east edge of wall and 0.6 foot from south face of wall. Station is a U.S.C. & G.S. and State Survey standard disk in concrete. No elevation or coordinates have been determined for this station.

A25-12-18E (Kans.Geod.S.)(Douglas County, L.E.Conrad, 1934).
--In Kanwaka, on U.S.Highway 40, in southwest corner of SW $\frac{1}{4}$ sec. 25, T.12 S., R.18 E., 519.5 feet north of east-west section-line road, 27.6 feet east of centerline of north-south section-line road, and 14 inches west of north-south right-of-way fence. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 4 inches above ground. Elevation: 1,064.334 feet.

Plane coordinates: (N), $x = 2,747,024.26$ feet; $y = 243,738.98$ feet.

A36-12-18E (Kans.Geod.S.)(Douglas County, L.E.Conrad, 1934).
--About 5.5 miles west of Lawrence city limits, by U.S.Highway 40, and 1/2 mile east of Kanwaka Village, in northwest corner of NW $\frac{1}{4}$ sec. 36, T.12 S., R.18 E., 180 feet east of north-south half-section line, 32.5 feet south of centerline of east-west section-line road, directly under east-west property-line fence. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 1 inch above ground. Elevation: 1,081.704 feet.

Plane coordinates: (N), $x = 2,749,847.06$ feet; $y = 243,242.09$ feet.

A30-12-19E (Kans.Geod.S.)(Douglas County, L.E.Conrad, 1934).
--About 5 miles west of Lawrence and 1 mile east of Kanwaka along U.S.Highway 40, in south center of SW $\frac{1}{4}$ sec. 10, T.12 S., R.19 E., Kanwaka Township, on George A. Dave property, 776.5 feet east of centerline of north-south section-line road, 47.1 feet north of centerline of east-west section-line road, and 18.5 feet north of east-west property-line fence. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting about 2 inches above ground. Elevation: 1,072.710 feet.

Plane coordinates: (N), $x = 2,753,100.87$ feet; $y = 243,402.44$ feet.

B30-12-19E (Kans.Geod.S.)(Douglas County, L.E.Conrad, 1934).
--About 4 miles west of Lawrence city limits by U.S.Highway 40, and 2 miles east of Kanwaka Village, in south center of SE $\frac{1}{4}$ sec. 30, T.12 S., R.19 E., Kanwaka Township, at right-of-way of east-west section-line road, and 560 feet west of centerline of north-south section-line road. Station is a metal metal rivet set in center of hub-guard of concrete culvert (single span) projecting 1/4 inch. Elevation: 1,021.428 feet.

No coordinates have been determined for this station.

A33-12-19E (Kans.Geod.S.)(Douglas County, L.E.Conrad, 1934).
--About 3 miles west of Lawrence and 3 miles east of Kanwaka, along U.S.Highway 40, in northwest corner of NW1/4 sec. 33, T.12 S., R.19 E., Wakarusa Township, 167.75 feet east of centerline of north-south section-line road, and 29.75 feet south of centerline of east-west section-line road. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, flush with ground. Elevation: 1,068.945 feet.
Plane coordinates: (N), $x = 2,753,141.77$ feet; $y = 241,710.69$ feet.

A27-12-19E (Kans.Geod.S.)(Douglas County, L.E.Conrad, 1934).
--About 3 miles west of Lawrence and 4 miles east of Kanwaka, along U.S.Highway 40, in southwest corner of SW1/4 sec. 27, T.12 S., R.19 E., Wakarusa Township, 574.5 feet east of centerline of north-south section-line road, and 31.8 feet north of centerline of U.S.Highway 40. Station is a U.S.C. & G.S. and State Survey standard disk in concrete projecting about 1 inch above ground. Elevation: 1,029.240 feet.
Plane coordinates: (N), $x = 2,758,870.30$ feet; $y = 241,947.69$ feet.

A34-12-19E (Kans.Geod.S.)(Douglas County, L.E.Conrad, 1934).
--About 1-1/4 miles by road west of Lawrence city limits, 4-1/4 miles by U.S.Highway 40 east to Kanwaka Village, in north center of NE1/4 sec. 34, T.12 S., R.19 E., Wakarusa Township, 713 feet west of centerline of north-south half-section line road, 33 feet south of centerline of east-west section-line road, and 1 foot north of east-west property-line fence, on right-of-way of road. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 2 inches above ground. Elevation: 1,005.990 feet.
Plane coordinates: (N), $x = 2,770,225.46$ feet; $y = 243,924.66$ feet.

A35-12-19E (Kans.Geod.S.)(Douglas County, L.E.Conrad, 1934).
--About 1 mile west of Lawrence, 6 miles south and 6 miles east of Leecompton, in southwest corner of SW1/4 sec. 35, T.12 S., R.19 E., Wakarusa Township, 52 feet north of east-west property-line fence, 37 feet east of north-south section line, and 33 feet north of centerline of east-west section-line road. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 2 inches above ground. Elevation: 981.615 feet.
Plane coordinates: (N), $x = 2,773,775.08$ feet; $y = 238,800.14$ feet.

A1-13-19E (Kans.Geod.S.)(Douglas County, L.E.Conrad, 1934).
--In Lawrence, at west edge of town, in north center of NW1/4 sec. 1, T.13 S., R.19 E., Wakarusa Township, 649 feet east of north-south section line, 27.5 feet south of centerline of east-west section-line road, and 1 foot north of east-west property-line fence. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting about 1.5 inches above ground. Elevation: 1,015.992 feet.
Plane coordinates: (N), $x = 2,779,664.11$ feet; $y = 238,936.62$ feet.

A36-12-19E (Kans.Geod.S.)(Douglas County, L.E.Conrad, 1934).
--In Lawrence, on Kansas University Campus, in southwest corner of SW1/4 sec. 36, T.12 S., R.19 E., Wakarusa Township, 229.5 feet S.10°W. of southeast corner of laboratories building, 92.3 feet N.46°E. of brick foundation of frame house, and 43.9 feet N.68°E. northeast of half-section line stone. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, flush with ground. Elevation: 981.951 feet.
Plane coordinates: (N), $x = 2,781,710.49$ feet; $y = 239,033.72$ feet.

B1-13-19E (Kans.Geod.S.)(Douglas County, L.E.Conrad, 1934).
--At southwest edge of Lawrence, just outside of city limits, south of Kansas University, in University Place Annex, at intersection of 18th and Maine Streets, in south center of SW1/4 sec. 1, T.13 S., R.19 E., Wakarusa Township, 78.55 feet N.22°W. of northwest corner of concrete foundation of residence at 1800 Maine Street, 36 feet east of centerline of Maine Street, 29.5 feet north of centerline of 18th Street, and 10 inches south of property-line fence. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, flush with ground. Elevation: 882.792 feet.
Plane coordinates: (N), $x = 2,782,730.83$ feet; $y = 237,018.22$ feet.

LAWRENCE (U.S.C. & G.S.)(Douglas County, C.I.A., 1934; Kans. Geod.S., 1934).--In Lawrence, on the north tower of Frazer Hall, on the campus of Kansas State University, in sec. 36, T.12 S., R.19 E. The original station was the aneroid support, but the aneroid has been removed. U.S.C. & G.S. standard disk has been set in its place. Over the point a rigid plate supported by a pipe has been set to support transit head or target. No elevation has been determined for this station.
Plane coordinates: (N), $x = 2,783,695.18$ feet; $y = 239,126.15$ feet.

Douglas and Leavenworth Counties

From U.S.C. & G.S. triangulation station LAWRENCE (described elsewhere in this publication) to U.S.C. & G.S. triangulation station ECKMAN.

No coordinates have been established for stations in this line.

A6-13-20E (Kans.Geod.S.)(Douglas County, L.E.Conrad, 1934).
--In Lawrence, in parking space on east side of Louisiana Street, just above point where 18th Street comes to dead end, in southwest corner of SW1/4 sec. 6, T.13 S., R.20 E., Wakarusa Township, 7.8 feet east of east curb of Louisiana Street, 12.5 feet north of extended north curb line of 18th Street, 10.8 feet south of

centerline of 40-foot curb, and 4.1 feet west of concrete sidewalk. Station is a U.S.C. & G.S. and State Survey standard disk in concrete. Elevation: 881.017 feet.

B1-13-20E (Kans.Geod.S.)(Douglas County, L.E.Conrad, 1934).--In Lawrence, in front of residence 1732 Kentucky Street, in east center of NW1/4 sec. 1, T.13 S., R.20 E., Wakarusa Township, 128.9 feet north of north curb of 18th Street extended, 33 feet N.85°W. of northwest corner of foundation of 1732 Kentucky Street, 12.2 feet N.2°W. (magnetic) of centerline of 20-inch elm, and 5.2 feet east of east curb of Kentucky Street. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, flush with ground. Elevation: 875.711 feet.

A11-12-20E (Kans.Geod.S.)(Douglas County, L.E.Conrad, 1934).
--In Lawrence, on parking in front of 1446 Kentucky Street, in southeast corner of SW1/4 sec. 31, T.12 S., R.20 E., Wakarusa Township, 47.2 feet S.60°W. of southeast corner of porch foundation of building at 1446 Kentucky Street, 8.9 feet north of north curb of 15th Street extended, 7.1 feet S.51°W. (magnetic) of north centerline of 4-inch hard maple, and 5.7 feet east of east curb of Kentucky Street extended. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, flush with ground. Elevation: 881.947 feet.

B11-12-20E (Kans.Geod.S.)(Douglas County, L.E.Conrad, 1934).
--In Lawrence, Wakarusa Township, in parking in front of residence 1202 Kentucky Street, in southeast corner of NW1/4 sec. 31, T.12 S., R.20 E., 10.6 feet east of east curb of Kentucky Street, 29.4 feet south of south curb line (extended) of 12th Street, 40.4 feet N.66°W. of northwest corner of porch foundation of residence 1202 Kentucky Street, and 7.4 feet S.45°W. of centerline of 2-foot soft maple tree. (Bearings magnetic and distances measured by a metallic cloth tape.) Station is a U.S.C. & G.S. and State Survey standard disk in concrete, flush with ground. No elevation has been determined for this station.

C11-12-20E (Kans.Geod.S.)(Douglas County, L.E.Conrad, 1934).--In Lawrence, in northeast corner of SW1/4 sec. 31, T.12 S., R.20 E., Wakarusa Township, in parking in front of 840 Kentucky Street, 101.6 feet north of curb (extended) of 9th Street, 40.25 feet N.45°W. of northwest corner of brick house at 224 West 9th Street, 30.6 feet S.60°W. of northwest corner of cement block porch at 840 Kentucky Street, 14.3 feet S.80°W. (magnetic) of centerline of 20-inch elm, and 12.2 feet east of east curb of Kentucky Street. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, flush with ground. Elevation: 858.831 feet.

D11-12-20E (U.S.C. & G.S.)(Douglas County, Kans.Geod.S., 1934).
--In Lawrence, at intersection of 7th and New Jersey Streets, at Atchison, Topeka & Santa Fe Railway station, in northeast corner of NW1/4 sec. 3, T.12 S., R.20 E., Wakarusa Township, at railroad milepost 26-25, at southwest side of station directly southwest of ticket window, and in center of top of stone partition. Station is a U.S.C. & G.S. and State Survey standard disk set in limestone with cement. U.S.C. & G.S. elevation: 825.264 feet.

A30-12-20E (Kans.Geod.S.)(Douglas County, L.E.Conrad, 1934).
--In Lawrence, on 6th Street parking, at north corner of Central Park, in east center of SW1/4 sec. 30, T.12 S., R.20 E., Wakarusa Township, 11.7 feet west of west curb of Kentucky Street extended, 16.2 feet north of cement sidewalk, 11.4 feet N.20°E. of centerline of 12-inch hard maple, and 11 feet south of south curb of 6th Street. Station is a U.S.C. & G.S. and State Survey standard disk in concrete flush with ground. Elevation: 833.860 feet.

B30-12-20E (Kans.Geod.S.)(Douglas County, L.E.Conrad, 1934).
--In Lawrence, Wakarusa Township, on west side of south end of concrete bridge (seven spans) over Kansas River, in west center of southeast quarter sec. 30, T.12 S., R.30 E., 4.8 feet from west edge of southwest approach footing, and 55.1 feet from south face of same footing. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, flush with the ground. No elevation has been determined for this station.

C30-12-20E (Kans.Geod.S.)(Douglas County, L.E.Conrad, 1934).
--In North Lawrence, near intersection of Locust and Second Streets, north center of NE1/4 sec. 30, T.12 S., R.20 E., Grant Township, 101.1 feet west of west curb of Second Street, and 3 feet south of centerline of Locust Street. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, flush with ground. No elevation has been determined for this station.

A29-12-20E (Kans.Geod.S.)(Douglas County, L.E.Conrad, 1934).
--In North Lawrence, in foundation of city pumping station between North Seventh, North Eighth, Lincoln, and Maple Streets, in lot 14, Simpson's Central Addition, in southwest corner of SW1/4 sec. 29, T.12 S., R.20 E., Grant Township, at north side of pumping station, and 0.7 foot from east jamb of masonry opening. Station is a U.S.C. & G.S. and State Survey standard disk in exposed concrete foundation, flush with ground. No elevation has been determined for this station.

B29-12-20E (Kans.Geod.S.)(Douglas County, L.E.Conrad, 1934).
--In North Lawrence, near the intersection of Locust and North Eighth Streets, directly in front of 788 Locust Street, 43.2 feet west of centerline of North Eighth Street, 16.8 feet south of centerline of Locust Street, and 1.7 feet south of south curb of Locust Street. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, flush with ground. No elevation has been determined for this station.

C29-12-20E (Kans.Geod.S.)(Douglas County, L.E.Conrad, 1934).
--In Lawrence, 1 mile east of North Seventh Street, 5-1/4 miles west and 2-1/2 miles north of Eudora, by State Highway 10, in northeast corner of NE1/4 sec. 29, T.12 S., R.20 E., Grant Township, 185 feet south of centerline of east-west half-section line road, 68.4 feet S.30°E. of southeast corner of schoolhouse (Bismark School District No.79), and 26 feet west of centerline of east section-line road. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, flush with ground. No elevation has been determined for this station.

A21-12-20E (Kans.Geod.S.)(Douglas County, L.E.Conrad, 1934).
--About 1/2 mile east and 1/4 mile north of Lawrence, 5-1/4 miles west and 1-1/4 miles north of Eudora, in southwest corner of

NW¼SW¼ sec. 21, T.12 S., R.20 E., Grant Township, 1,600.9 feet north of centerline of east-west section-line road, 25.3 feet east of centerline of north-south section-line road and 21 feet S.84°W. of centerline of 2-foot elm tree. Station is a U.S.C. & G.S. and State Survey standard disk in concrete flush with ground. No elevation has been determined for this station.

A20-12-20E (Kans.Geod.S.)(Douglas County, L.E.Conrad, 1914).--About 1 mile north and 1/2 mile east of Lawrence, 5-1/4 miles west and 4 miles north of Eudora, in northeast corner of NE¼NE¼ sec. 20, T.12 S., R.20 E., Grant Township, 303.5 feet south of centerline of east-west section-line road (U.S.Highway 40), 60 feet S.84°E. (magnetic) of northeast corner of foundation frame house, and 39 feet west of centerline of north-south section-line road. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, flush with ground. No elevation has been determined for this station.

A9-12-20E (Kans.Geod.S.)(Douglas County, L.E.Conrad, 1914).--About 2 miles north and 0.75 mile east of Lawrence, 5.25 miles west and 5 miles north of Eudora, in south center of SE¼SW¼ sec. 9, T.12 S., R.20 E., Grant Township, 490 feet east of first quarter-section line west, directly in line with telephone pole line, and 28 feet north of centerline of east-west section-line road. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 2 inches above ground. No elevation has been determined for this station.

A16-12-20E (Kans.Geod.S.)(Douglas County, L.E.Conrad, 1914).--In North Lawrence, 2 miles north and 1-3/4 miles east of intersection of North Seventh and North Streets, in northwest corner of NE¼NE¼ sec. 16, T.12 S., R.20 E., Grant Township, 1,242.5 feet east of centerline of north-south section-line road (county line), and 25 feet south of centerline of east-west section-line road. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 2 inches above ground. No elevation has been determined for this station.

A10-12-20E (Kans.Geod.S.)(Leavenworth County, L.E.Conrad, 1914).--About 7.5 miles west and 1 mile north of Linwood, 6 miles south and 4.5 miles west of Tonganoxie, in southeast corner of SE¼SW¼ sec. 10, T.12 S., R.20 E., Reno Township, on property of the Dwyer brothers, 262 feet west of north-south half-section line, 29.4 feet north of centerline of large telephone pole line, 21 feet S.12°W. of centerline of 2-foot elm, and 11 feet S.81°E. (magnetic) of centerline of 2-foot elm. Station is a U.S.C. & G.S. and State Survey standard disk in concrete flush with ground. No elevation has been determined for this station.

A14-12-20E (Kans.Geod.S.)(Leavenworth County, L.E.Conrad, 1914).--About 6.5 miles west and 1 mile north of Linwood, 6 miles south and 3.5 miles west of Tonganoxie, in northwest corner of NE¼NW¼ sec. 14, T.12 S., R.20 E., Reno Township, 989 feet west of north-south half-section line, 54 feet south of centerline of large telephone pole line, and 4.5 feet south of property-line fence. Station is a U.S.C. & G.S. and State Survey standard disk in concrete flush with ground. No elevation has been determined for this station.

A11-12-20E (Kans.Geod.S.)(Leavenworth County, L.E.Conrad, 1914).--About 6 miles south and 3 miles west of Tonganoxie, 6 miles west and 1 mile north of Linwood, in west center of SE¼SE¼ sec. 11, T.12 S., R.20 E., Reno Township, on the W.T.Blakeley property, at side of drive leading to the Blakeley farmhouse, 893 feet west of centerline of east section line, (north-south road), and 403 feet north of centerline of large telephone pole line. Station is a U.S.C. & G.S. and State Survey standard disk in concrete projecting 1 inch above ground. No elevation has been determined for this station.

A7-12-21E (Kans.Geod.S.)(Leavenworth County, L.E.Conrad, 1914).--About 4-1/2 miles west and 1 mile north of Linwood, 6 miles south and 1-1/2 miles west of Tonganoxie, in southeast corner of SE¼SW¼ sec. 7, T.12 S., R.21 E., Reno Township, 338 feet west of north-south half-section line, and 5 feet north of centerline of large telephone pole line. Station is a U.S.C. & G.S. and State Survey standard disk in concrete flush with ground. No elevation has been determined for this station.

B7-12-21E (Kans.Geod.S.)(Leavenworth County, L.E.Conrad, 1914).--About 6 miles south and 1 mile west of Tonganoxie, 4 miles west and 1 mile north of Linwood, in south center of SE¼SE¼ sec. 7, T.12 S., R.21 E., Reno Township, 573 feet west of centerline of east north-south section-line road, and 12.9 feet north of centerline of telephone pole line. Station is a U.S.C. & G.S. and State Survey standard disk in concrete projecting 1 inch above ground. No elevation has been determined for this station.

A9-12-21E (Kans.Geod.S.)(Leavenworth County, L.E.Conrad, 1914).--About 6 miles south of Tonganoxie, 2-3/4 miles west and 1 mile north of Linwood, in southeast corner of SW¼SW¼ sec. 9, T.12 S., R.21 E., Reno Township, on property of W.E.Brook, 60 feet west of west quarter-section line, (north-south), 49.5 feet S.25°E. (magnetic) of southeast corner of foundation of farmhouse porch, and 18.5 feet north of centerline of large telephone pole line. Station is a U.S.C. & G.S. and State Survey standard disk in concrete flush with ground. No elevation has been determined for this station.

A16-12-21E (Kans.Geod.S.)(Leavenworth County, L.E.Conrad, 1914).--About 6 miles south of Tonganoxie, 2-1/2 miles west and 1 mile north of Linwood, in north center of NW¼NE¼ sec. 16, T.12 S., R.21 E., Reno Township, in farmyard on private property, 460 feet east of half-section line, and 119.7 feet south of centerline of large telephone pole line. Station is a U.S.C. & G.S. and State Survey standard disk in concrete flush with ground. No elevation has been determined for this station.

B11-12-21E (Kans.Geod.S.)(Leavenworth County, L.E.Conrad, 1914).--About 5-1/4 miles south and 1-1/4 miles east of Tonganoxie, 1-3/4 miles west and 1-1/4 miles north of Linwood, in southwest corner of NE¼SW¼ sec. 11, T.12 S., R.21 E., Sherman Township, on property of Q.German, 129.6 feet north of south quarter-section line (east-west), and 5 feet east of quarter-

section line (northeast). Station is a U.S.C. & G.S. and State Survey standard disk in concrete flush with ground. No elevation has been determined for this station.

A11-12-21E (Kans.Geod.S.)(Leavenworth County, L.E.Conrad, 1914).--About 5.5 miles south and 1.5 miles east of Tonganoxie, 0.5 mile west and 1.5 miles north of Linwood, in north center of NW¼SE¼ sec. 11, T.12 S., R.21 E., Sherman Township, on property of Q.German, 871 feet east of north-south half-section line, and 27.5 feet south of centerline of east-west half-section line road. Station is a U.S.C. & G.S. and State Survey standard disk in concrete flush with ground. No elevation has been determined for this station.

A2-12-21E (Kans.Geod.S.)(Leavenworth County, L.E.Conrad, 1914).--About 4.5 miles south and 2 miles east of Tonganoxie, 2.5 miles north of Linwood, in north center of NE¼SE¼ sec. 2, T.12 S., R.21 E., Sherman Township, in a pasture on private property. Reference mark No.1 is standard disk with arrow pointing to station, in concrete post, projecting 3 inches, and is 527 feet west of centerline of north-south section-line road, 189.3 feet S.86°W. (magnetic) of station, and 129 feet south of east-west half-section line. Reference mark No.2 is standard disk with arrow pointing to station in concrete post flush with ground, and is on east-west half-section line fence, 716 feet west of centerline of north-south section-line road, and 115.6 feet S.8°E. of station. Station is a U.S.C. & G.S. and State Survey standard disk in concrete flush with ground. No elevation has been determined for this station.

A1-12-21E (Kans.Geod.S.)(Leavenworth County, L.E.Conrad, 1914).--About 5 miles south and 2-3/4 miles east of Tonganoxie, and 2 miles north of Linwood, in sec. 1, T.12 S., R.21 E., Sherman Township, north-south center-section fence line, and 529 feet north of centerline of east-west section-line road. Station is a U.S.C. & G.S. and State Survey standard disk in concrete flush with ground. No elevation has been determined for this station.

B6-12-22E (Kans.Geod.S.)(Leavenworth County, L.E.Conrad, 1914).--About 4.5 miles south and 3.5 miles east of Tonganoxie, 1 mile east and 2.5 miles north of Linwood, in west center of SW¼NW¼ sec. 6, T.12 S., R.22 E., Sherman Township, on property of New York Life Insurance Company, 674 feet north of east-west half-section line, 228 feet east of centerline of north-south section-line road, and about 75 feet N.23°E. (magnetic) of northeast corner of stone foundation of one-story frame house. Station is a U.S.C. & G.S. and State Survey standard disk in concrete projecting 1 inch above ground. No elevation has been determined for this station.

A6-12-22E (Kans.Geod.S.)(Leavenworth County, L.E.Conrad, 1914).--About 4 miles south and 4 miles east of Tonganoxie, 2 miles east and 2.7 miles north of Linwood, in west center of SW¼NE¼ sec. 6, T.12 S., R.22 E., Sherman Township, on private property, and about 2,400 feet S.45°W. of ECKMAN. Reference mark No.1 is a standard disk with arrow pointing to station, set in concrete, projecting 6 inches, and is in a row of large cottonwood trees on north east-west quarter-section line, about 800 feet east of half-section line, and 467 feet south of station. Reference mark No.2 is standard disk with arrow pointing to station, set in concrete, projecting 6 inches, and is in north-south fence row, about 0.375 mile from east section line, 470 feet south of north east-west quarter-section line, and 229.9 feet S.89°W. of station. Station is a U.S.C. & G.S. and State Survey standard disk in concrete 10 inches below ground. No elevation has been determined for this station.

ECKMAN (U.S.C. & G.S.)(Leavenworth County, F.D.Granger, 1885; 1922).--About 8 miles west of north from De Soto, and about 153 meters (502 feet) south and 28 meters (93 feet) west of the northeast corner of sec. 6, T.12 S., R.22 E., in the immediate vicinity of the Daisy Hotel, owned and occupied (1922) by Charles Geish-laeger. The underground, station, and witness marks are described in note 1. The following distances and azimuths are from the station: northeast corner of Daisy Hotel, 24.11 meters (79.1 feet), 355°24'; northwest corner of Daisy Hotel, 23.71 meters (77.8 feet), 17°46'; middle of road, 28.44 meters (93.3 feet) east; E.Martin's house, 292°22'. The station is surrounded by a bed of charcoal. Elevation: 1,005.200 feet. Plane coordinates: (N), $x = 2,851,445.88$ feet; $y = 272,333.75$ feet.

Douglas County

From A11-12-20E (on LAWRENCE to ECKMAN line) to Eudora.

No coordinates have been determined for stations in this line.

A31-12-20E (Kans.Geod.S.)(Douglas County, L.E.Conrad, 1914).--About 5 miles west (along State Highway 10) and 1 mile north of Eudora, 1.25 miles east along 15th Street Road from Lawrenos, in southwest corner of SE¼SW¼ sec. 33, T.12 S., R.20 E., Wakarusa Township, 1,306 feet west of half-section line stone, 32 feet north of centerline of east-west section-line road, and 1 foot south of property-line fence. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, flush with ground. Elevation: 815.186 feet.

A4-13-20E (Kans.Geod.S.)(Douglas County, L.E.Conrad, 1914).--In Lawrence, 1-1/2 miles east of Haskell Avenue, (15th Street Road), 4-3/4 miles west (State Highway 10) and 1 mile north of Eudora, on right-of-way of east-west section-line road, in northwest corner of NW¼NE¼ sec. 4, T.13 S., R.20 E., Wakarusa Township, 77.9 feet S.81°E. (magnetic) of half-section line stone, 67.5 feet N.19°W. (magnetic) of northeast corner of east wall of stone foundation of the Wm. Schacke house, and 2.6 feet north of centerline of concrete wall supporting iron fence. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, flush with ground. Elevation: 821.932 feet.

A14-12-20E (Kans.Geod.S.)(Douglas County, L.E.Conrad, 1934).
--About 3-1/4 miles west along State Highway 10 and 1 mile north of Eudora, 3 miles east of Lawrence city limits, along 15th Street Road, in southwest corner of SE1/4 sec. 34, T.12 S., R.20 E., Wakarusa Township, on property of Mrs. Cox, 446.3 feet west of 2- by 2-inch wooden hub set by Douglas County surveyor as section corner, 26 feet north of centerline of east-west section-line road, in southwest corner of yard, and 2.5 feet north and 2.5 feet east of wire fence. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, flush with ground. Elevation: 823.728 feet.

A2-11-20E (Kans.Geod.S.)(Douglas County, L.E.Conrad, 1934).
--About 1.25 miles east along 15th Street Road from Lawrence city limits, 3 miles west (along State Highway 10) and 1 mile north of Eudora, in northeast corner of NW1/4 sec. 2, T.13 S., R.20 E., Eudora Township, in District 12 schoolyard, 1,165 feet east of 2- by 2-inch wooden hub set by Douglas County surveyor as section corner, 104.7 feet N.50°W. of northwest corner of schoolhouse, 79 feet south of telephone pole line along north side of section-line road, and 2.5 feet east of west schoolyard fence. Station is a U.S.C. & G.S. and State Survey standard disk in concrete flush with ground. Elevation: 812.641 feet.

A1-11-20E (Kans.Geod.S.)(Douglas County, L.E.Conrad, 1934).
--In Lawrence, east of Haskell Avenue, and along 15th Street Road, 2 miles west (along State Highway 10) and 1 mile north of Eudora, in northwest corner of NE1/4 sec. 1, T.13 S., R.20 E., Eudora Township, 960 feet west of north-south half-section line, 107 feet N.30°W. (magnetic) of stone foundation at northeast corner of frame house on property of Conrad Altenbernd, 89.3 feet south of centerline of large telephone pole on north side of east-west road, and 61 feet south of centerline of east-west section-line road. Station is a U.S.C. & G.S. and State Survey standard disk in concrete flush with ground. Elevation: 818.627 feet.

A11-12-21E (Kans.Geod.S.)(Douglas County, L.E.Conrad, 1934).
--About 5 miles east of Lawrence by 15th Street Road, 1-1/4 miles west (by State Highway 10) and 1 mile north of Eudora, in southwest corner of SW1/4 sec. 31, T.12 S., R.21 E., Eudora Township, in schoolyard of Farmland District 71, 80.5 feet S.15°W. of southwest corner of schoolhouse, 53.7 feet N.37°E. of section-corner stone, and 12.7 feet S.87°E. of turnstile in sidewalk. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, flush with ground. Elevation: 813.619 feet.

A6-13-21E (Kans.Geod.S.)(Douglas County, L.E.Conrad, 1934).
--About 5 miles east along 15th Street Road and 0.5 mile south of Lawrence city limits, 1.25 miles west (State Highway 10) and 0.5 mile north of Eudora, in southwest corner of SW1/4 sec. 6, T.13 S., R.21 E., on Atchinson, Topeka & Santa Fe Railway right-of-way, about halfway between mileposts 20 and 21, 52 feet east of centerline of north-south section-line road, 48.15 feet north of centerline of track, and 2.9 feet south of east-west property-line fence. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 3 inches above ground. Elevation: 811.867 feet.

B6-11-21E (Kans.Geod.S.)(Douglas County, L.E.Conrad, 1934).
--About 6-1/2 miles east of Lawrence city limits, and 1/4 mile west of Eudora, along U.S. Highway 10, in southeast corner of SE1/4 sec. 6, T.13 S., R.21 E., Eudora Township, at north end of west pier of four-span steel bridge over Wakarusa River, between the steel supports of the two spans, and about 1 foot north of guardrail. Station is a U.S.C. & G.S. and State Survey standard disk flush with top of concrete pier. Elevation: 816.679 feet.

A8-13-21E (Kans.Geod.S.)(Douglas County, L.E.Conrad, 1934).
--In Eudora, about 7 miles east of Lawrence along State Highway 10, in city block 17, in north center of NE1/4 sec. 8, T.13 S., R.21 E., Eudora Township, on the H. Belcher property, 509 feet S.70°E., of quarter-mile stone, 418.5 feet east of centerline of north-south road along west city limits, and 44.5 feet south of south edge of right-of-way of State Highway 10. Station is a U.S.C. & G.S. and State Survey standard disk in concrete flush with ground. Elevation: 885.647 feet.

B8-11-21E (Kans.Geod.S.)(Douglas County, L.E.Conrad, 1934).
--In Eudora, about 7 miles east of Lawrence along State Highway 10, in city block 147, on Eudora High School lawn, and near the north center of N1/2 sec. 8, T.13 S., R.21 E., Eudora Township, 80.4 feet west of east curb of street to the east, 34.7 feet S.79°W. of southwest corner of flagpole base, and 22.8 feet S.7°30'E. of southeast corner of school building. Station is a U.S.C. & G.S. and State Survey standard disk in concrete flush with ground. Elevation: 866.953 feet.

C8-13-21E (Kans.Geod.S.)(Douglas County, L.E.Conrad, 1934).
--In Eudora, 7 miles east of Lawrence along State Highway 10, in city block 217, in northeast corner of NE1/4 sec. 8, T.13 S., R.21 E., Eudora Township, 91.3 feet north of curb of 10th Street (State Highway 10), 22 feet east of centerline of B Street, and 74.3 feet N.50°E. of northeast corner of concrete foundation of the Clara Gooddiller house. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, flush with ground. Elevation: 880.225 feet.

Riley, Wabaunsee, and Geary Counties

From U.S.C. & G.S. triangulation station ZEAN DALE to U.S.C. & G.S. triangulation station HUNBOLDT.

ZEAN DALE (U.S.C. & G.S.)(Riley County, F.D.Granger, 1885; 1922; Kans.Geod.S., 1934).--About 10 miles northwest of Alma, on land owned by Mr. Durine, of Topeka, and leased (1922) by A.S. Allandorph, of Alma, with headquarter ranch about 2 miles south of the station. The station is 8.91 meters (29.25 feet) southwest of the intersection of sections 15, 16, 21, and 22, 7.04 meters (23.1 feet) south of the section fence to the north, and 5.73 meters (18.8 feet) west of the section fence to the east.

It is on the crest of a large, broken prairie, which at this point falls off abruptly to the valley of the Kaw River to the north. In a little ravine about 1/2 mile to the east is a well of good water. The underground, station, and witness marks are described in note 1, the marble post bearing the inscription "F.D.G. 1888" on the south face. Elevation: 1,525.570 feet.
Plane coordinates: (N), $x = 2,451,441.54$ feet; $y = 278,370.94$ feet.

C21-11-9E (Kans.Geod.S.)(Riley County, L.E.Conrad, 1934).--About 15.5 miles southeast of Manhattan, 10.6 miles northwest of Alma, Wabaunsee County, 5 miles south and 1 mile east of Zeandale (city), the first station 0.6 mile west by speedometer, of ZEAN DALE, 1,000 steps by most direct route from Zeandale, in NE1/4 sec. 21, T.11 S., R.9 E., Zeandale Township, 22.6 feet east of gatepost in east-west section-line fence, and 37.7 feet from centerline of west gatepost in same fence line, (there is a deep ravine with some timber growing in it between this station and ZEAN DALE). Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 2 inches above ground. Elevation: 1,461.761 feet.

No coordinates have been determined for this station.

D21-11-9E (Kans.Geod.S.)(Riley County, L.E.Conrad, 1934).--About 10.6 miles (by speedometer) from Alma, Wabaunsee County, in NE1/4 sec. 21, T.11 S., R.9 E., Zeandale Township, 3,494 feet south of ZEAN DALE, 1,287.2 feet from C21-11-9E, on north end of ridge running southwest and east of deep ravine. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, flush with ground.

No elevation or coordinates have been determined for this station.

A21-11-9E (Kans.Geod.S.)(Riley County, L.E.Conrad, 1934).--About 14.5 miles southeast of Manhattan, 12 miles northwest of Alma, Wabaunsee County, (along country roads), in SW1/4 sec. 21, T.11 S., R.9 E., Zeandale Township, on land owned by C.W.Allandorph, Topeka, (Williams foreman), about 0.8 mile west and 1 mile south (by auto) S.45°W. of ZEAN DALE, 80.3 feet east of west line of sec. 21, 43.5 feet north of south fence of Township road, and 3.2 feet north of wire fence. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, 33 inches below ground. Elevation: 1,464.423 feet.

Plane coordinates: (N), $x = 2,446,751.96$ feet; $y = 273,673.04$ feet.

A20-11-9E (Kans.Geod.S.)(Riley County, L.E.Conrad, 1934).--About 14.15 miles southeast of Manhattan, 12.3 miles northwest of Alma, Wabaunsee County, (along country roads), in SE1/4 sec. 20, T.11 S., R.9 E., Zeandale Township, on land owned by C.W.Allandorph, (Williams foreman), 0.2 mile west of gate of station A21-11-9E, 0.3 mile west of west gatepost of same station, and 18.1 feet N.15°W. of west gatepost on north side of Township road. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, 33 inches below ground. Elevation: 1,439.082 feet.

Plane coordinates: (N), $x = 2,444,989.85$ feet; $y = 273,621.39$ feet.

A30-11-9E (Kans.Geod.S.)(Riley County, L.E.Conrad, 1934).--About 13.6 miles northwest of Alma, Wabaunsee County, 13 miles southeast of Manhattan (along country roads), in SW1/4 sec. 30, T.11 S., R.9 E., Zeandale Township, on land of W.E.Blaasing, 9.55 miles west (through pasture to road) of station A20-11-9E, 0.8 mile southwest along Township road, 726.4 feet east of intersection of wire-and-rock fence (rock fence on north-south 1/2-mile line), 112 steps south of southeast-corner stone of NE1/4 sec. 30, 100° (magnetic) from same corner stone, 48.8 feet west of west gatepost in corner of fence, and 5 feet north of east-west fence. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, 33 inches below ground. Elevation: 1,414.976 feet.

Plane coordinates: (N), $x = 2,439,168.61$ feet; $y = 271,589.31$ feet.

B30-11-9E (Kans.Geod.S.)(Riley County, L.E.Conrad, 1934).--About 13.9 miles northeast of Alma, Wabaunsee County, 12.75 miles southeast of Manhattan (along country roads), in SE1/4 sec. 30, T.12 S., R.9 E., Zeandale Township, on second level of hill north of private east-west road, on land owned by W.E.Blaasing, 744.5 feet, 255° (magnetic) from stone with cross on it, near stone fence in southwest corner of NW1/4 sec. 30, 232 steps, 190° (magnetic) from stone pile on high mound, 280° (magnetic) from station A30-11-9E, 119 steps north of corner of stone fence, 116.5 feet from corner stone at southeast corner of NW1/4 sec. 30, and northwest of cattleyard with grove of trees in it. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, 35 inches below ground. Elevation: 1,328.316 feet.

Plane coordinates: (N), $x = 2,437,750.22$ feet; $y = 271,521.95$ feet.

A25-11-8E (Kans.Geod.S.)(Riley County, L.E.Conrad, 1934).--About 14.2 miles southeast of Manhattan, 13.5 miles northwest of Alma, Wabaunsee County, (along country roads), in SW1/4 sec. 25, T.11 S., R.8 E., Zeandale Township, on land of R.O.Yeager, 2,170 feet (measured on surface of ground) due west of southeast corner fence post of sec. 25, and 1.1 feet due south of wire fence. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, 35 inches below ground. Elevation: 1,426.643 feet.

Plane coordinates: (N), $x = 2,434,022.38$ feet; $y = 267,589.32$ feet.

B25-11-8E (Kans.Geod.S.)(Riley County, L.E.Conrad, 1934).--About 14.3 miles southeast of Manhattan, 13 miles northwest of Alma, Wabaunsee County, (along country roads), in SW1/4 sec. 25, T.11 S., R.8 E., on land owned by R.D.Yeager, 4,580.3 feet (measured on surface of ground due west of southeast corner fence post of sec. 25), 2,410.3 feet due west of station A25-11-8E, and 3.4 feet due north of east-west section-line fence between sections 25 and 36. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, 35 inches below ground. Elevation: 1,408.245 feet.

Plane coordinates: (N), $x = 2,431,619.81$ feet; $y = 267,505.01$ feet.

A35-11-8E (Kans.Geod.S.)(Riley County, L.E.Conrad, 1934).--About 13.5 miles northwest of Alma, Wabaunsee County, 12 miles southeast of Manhattan, (along country roads), in NE1/4 sec. 35,

T.11 S., R.8 E., Zeandale Township, on land owned by Herman Koepsel, of Alma, 612 steps, 350° (magnetic) from intersection of north-south road with Riley-Wabunsee County line, 225° (magnetic) from the Koepsel farmhouse, and 1 foot due west of east fence on north-south road (60 feet between fences). Station is a U.S.C. & G.S. and State Survey standard disk in concrete, 19 inches below ground. Elevation: 1,392.564 feet.

Plane coordinates: (N), $x = 2,427,773.22$ feet; $y = 264,062.57$ feet.

C30-11-9E (Kans.Geod.S.)(Riley County, L.E.Conrad, 1934).-- About 12.9 miles southeast of Manhattan Post Office building, on high ridge running east-west, in NE $\frac{1}{4}$ sec. 30, T.11 S., R.9 E., in Zeandale Township, 278 paces north of north section-line fence, and 100 paces west of east section line. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 1 inch above ground. Elevation: 1,432.998 feet.

Plane coordinates: (N), $x = 2,440,616.53$ feet; $y = 272,128.15$ feet.

D30-11-9E (Kans.Geod.S.)(Riley County, L.E.Conrad, 1934).-- About 12.6 miles southeast of Manhattan Post Office building, 1-1/4 miles east of Mineral Springs schoolhouse, on high point at west end of ridge running east-west, northeast of the Bleasing farmhouse, in NE $\frac{1}{4}$ sec. 30, T.11 S., R.9 E., on the Bleasing property, and 16.3 feet N.25°E. of old stone landmark. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 1 inch above ground. Elevation: 1,411.446 feet.

Plane coordinates: (N), $x = 2,437,970.73$ feet; $y = 272,217.20$ feet.

A24-11-8E (Kans.Geod.S.)(Riley County, L.E.Conrad, 1934).-- About 11.4 miles southeast of Manhattan Post Office building, in SW $\frac{1}{4}$ sec. 24, T.11 S., R.8 E., on property of C.W.Falk in Zeandale Township, on prominent outcropping of limestone north-east of Mineral Springs schoolhouse, 241 paces N.70°E. (magnetic) of northeast corner of Mineral Springs schoolhouse, 7 paces east of where rock outcrop breaks into south slope, and 5 paces east of where outcrop breaks into west slope. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 3 inches above ground. Elevation: 1,274.708 feet.

Plane coordinates: (N), $x = 2,431,718.48$ feet; $y = 273,142.75$ feet.

A26-11-8E (Kans.Geod.S.)(Riley County, L.E.Conrad, 1934).-- About 10.4 miles by highway southeast of Manhattan Post Office building, in northwest corner of NW $\frac{1}{4}$ sec. 26, T.11 S., R.8 E., on the J.J.Smiley property, 1.6 feet east of fence line between Riley and Geary Counties, and 60 paces south of north section-line fence. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 3 inches above ground. Elevation: 1,261.977 feet.

Plane coordinates: (N), $x = 2,425,659.87$ feet; $y = 272,587.88$ feet.

B35-11-8E (Kans.Geod.S.)(Riley County, L.E.Conrad, 1934).-- About 11.8 miles (highway) southeast of Manhattan Post Office building, near point of first high prominent ridge on west side of road, 0.7 mile south of the J.J.Smiley ranch house, near north line of SW $\frac{1}{4}$ sec. 35, T.11 S., R.8 E., Zeandale Township, 64 paces west of present auto road, and approximately 60 feet above road level. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 3 inches above ground. Elevation: 1,361.260 feet.

Plane coordinates: (N), $x = 2,426,892.11$ feet; $y = 265,934.31$ feet.

A2-12-8E (Kans.Geod.S.)(Wabunsee County, L.E.Conrad, 1934).-- About 13.2 miles northwest of Alma, 12.3 miles southeast of Manhattan, Riley County, in NW $\frac{1}{4}$ sec. 2, T.12 S., R.8 E., Washington Township, on the I.M.Aye property, 31.8 feet east of east fence of north-south road; Riley County road is 60 feet fence to fence, and Wabunsee County road 45 feet fence to fence, and 1 foot south of east-west county line fence. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 3 inches above ground. Elevation: 1,392.060 feet.

Plane coordinates: (N), $x = 2,438,054.98$ feet; $y = 262,244.57$ feet.

A33-11-8E (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).-- About 17 miles northeast of Junction City, 11 miles southeast of Manhattan, Riley County, in SE $\frac{1}{4}$ sec. 33, T.11 S., R.8 E., Jackson Township, on the J.M.Aye cattle range, 50° (magnetic) from section corner common to sections 4, 5, 32, and 33, Tps.11 and 12, about 3,309 feet due east of section line between sections 32 and 33, and 1.5 feet due south of quarter-section line, 80 rods north of section line between sections 33 and 34. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 6 inches above ground. Elevation: 1,446.683 feet.

Plane coordinates: (N), $x = 2,417,630.53$ feet; $y = 263,513.86$ feet.

B33-11-8E (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).-- About 17 miles northeast of Junction City, 10.5 miles southeast of Manhattan, Riley County, in SW $\frac{1}{4}$ sec. 33, T.11 S., R.8 E., Jackson Township, on the J.M.Aye cattle range, 1,744.4 feet 22° (magnetic) from section corner common to sections 4, 5, 32, and 33, Tps.11 and 12, and 922.7 feet east of section line between sections 32 and 33. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 1 inch above ground. Elevation: 1,447.140 feet.

Plane coordinates: (N), $x = 2,416,060.09$ feet; $y = 263,505.16$ feet.

A31-11-8E (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).-- About 18.8 miles east of Junction City, 9.8 miles south of Manhattan, Riley County, in SE $\frac{1}{4}$ sec. 31, T.11 S., R.8 E., Jackson Township, on the Nickelson brothers cattle range, narrow strip of tillable land to south of point, north of ravine, on peak of high round rocky knoll surrounded by prairie, 1,075.4 feet 312° (magnetic) from southwest corner of section 32, 853.3 feet 220° (magnetic) from cottonwood (tree is 22.5 feet west of section-line fence), 643.8 feet due west of section line between sections

31 and 32, and 219.3 feet due east of east fence of State Highway 13. The following bearings are from station: 150° (magnetic) to shed in ravine. Station is a U.S.C. & G.S. and State Survey standard disk in concrete. Elevation: 1,419.252 feet.

Plane coordinates: (N), $x = 2,409,206.04$ feet; $y = 262,966.30$ feet.

B31-11-8E (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).-- About 15 miles east of Junction City, 10 miles south of Manhattan, Riley County, in SW $\frac{1}{4}$ sec. 31, T.11 S., R.8 E., Jackson Township, on property of Nickelson brothers, 1,024.5 feet 270° (magnetic) from 80-rod stone at southwest corner of SE $\frac{1}{4}$ sec. 31, 542.5 feet 60° (magnetic) from southeast corner of the Nickelson brothers house, 352.5 feet north of stone fence, and 216° (magnetic) to station A31-11-8E. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, flush with ground. Elevation: 1,327.119 feet.

Plane coordinates: (N), $x = 2,407,522.00$ feet; $y = 262,143.53$ feet.

A6-12-8E (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).-- About 15.3 miles east of Junction City, 13 miles south of Manhattan, Riley County, in NW $\frac{1}{4}$ sec. 6, T.12 S., R.8 E., Jackson Township, on the Nelson cattle range, 537.6 feet 60° (magnetic) from northeast corner of stone house, 286 feet due north of centerline of McDowell Creek Road, and 27.5 feet due south of east-west half-section line. The following bearings are from the station: to small concrete bridge 290° (magnetic); from frame house, 340° (magnetic). Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 1 inch above ground. Elevation: 1,265.598 feet.

Plane coordinates: (N), $x = 2,400,082.27$ feet; $y = 259,418.19$ feet.

A1-12-7E (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).-- About 14.9 miles east of Junction City, 13.5 miles south of Manhattan, Riley County, in SW $\frac{1}{4}$ sec. 1, T.12 S., R.7 E., Wingfield Township, on the Infield cattle range, 286.1 feet 270° (magnetic) from wire fence on quarter-section line, 246.4 feet 115° (magnetic) from southeast corner of stone cave, and 1.6 feet north of north fence of McDowell Creek Road, 82° (magnetic) to wood barn. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 1 inch above ground. Elevation: 1,185.310 feet.

Plane coordinates: (N), $x = 2,397,489.14$ feet; $y = 259,400.54$ feet.

A11-12-7E (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).-- About 15.5 miles southwest of Manhattan, Riley County, 13.5 miles east of Junction City, in NE $\frac{1}{4}$ sec. 11, T.12 S., R.7 E., Wingfield Township, 458.2 feet 190° (magnetic) from northeast corner fence post of NW $\frac{1}{4}$ sec. 11, and 208.8 feet west of north-south wire fence at half-section line, 55° (magnetic) from HUMBOLDT. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 2 inches above ground. Elevation: 1,374.158 feet.

Plane coordinates: (N), $x = 2,391,020.34$ feet; $y = 256,233.62$ feet.

HUMBOLDT (U.S.C. & G.S.)(Geary County, F.D.Granger, 1889;1922).-- About 14 miles east of Junction City, 35 miles south of Westgate Post Office, on the dividing ridge between Humboldt and McDowell creeks, and about 200 feet north and 880 feet west of the southeast corner of NE $\frac{1}{4}$ sec. 10, T.12 S., R.7 E., Wingfield Township, varying in width from 1,500 feet to 1 mile, and falls off more abruptly on its eastern than on its western border. The station is on the highest point of the ridge, near its northeastern border, in pasture land that has never been under cultivation. (The land is now owned by E.A.Chase.) The underground mark is a standard bronze station tablet in a block of concrete 30 inches below the surface. The station mark is a standard bronze tablet in concrete. Reference mark No.1, a standard bronze tablet in a solid outcrop of rock, is 167 meters (549 feet) N.75°E. (magnetic) from the station. Reference mark No.2, similar to No.1, is in the solid rock outcrop, 181.42 meters (595.2 feet) S.20°E. (magnetic) from the station. Stone witness posts, with diagonal grooves terminating in arrowheads pointing to the station, are in the meridian, about 8 feet north and south of the station. The following distances and azimuths are from the station: southwest corner section 10, 1,598 meters (5,242 feet), 57°07'; quarter-section stone, 1,343 meters (4,406 feet), 87°09'; clump of trees at the W.Roper house, 1-1/2 miles, 109°55'; stone pile on cone-shaped hill near Ogden, 158°03'; hill at end of range to northeast, about 8 miles, 136°; hill east of station, about 2-1/2 miles, 263°35'. Three truck loads of rock were placed around the station mark. (There is a power line about 1/2 mile south of this station.) Elevation: 1,412.377 feet.

Plane coordinates: (N), $x = 2,387,826.98$ feet; $y = 254,102.99$ feet.

Geary and Riley Counties

From U.S.C. & G.S. triangulation station HUMBOLDT (described elsewhere in this publication) to U.S.C. & G.S. triangulation station ENRICSEN.

A10-12-7E (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).-- About 18.4 miles southwest of Manhattan, Riley County, 14.5 miles east of Junction City, in NW $\frac{1}{4}$ sec. 10, T.12 S., R.7 E., Wingfield Township, on the E.A.Chase property, about 0.45 mile N.20°W. (magnetic) of HUMBOLDT, 426.5 feet east and 285.5 feet south of west stone gatepost of wire fence on east-west section line (east gatepost is about 900 feet west of corner common to sections 2, 3, 10, and 11). Station is a U.S.C. & G.S. and State Survey standard disk in concrete projecting 4 inches above ground. Elevation: 1,396.955 feet.

Plane coordinates: (N), $x = 2,387,281.25$ feet; $y = 256,292.68$ feet.

A3-12-7E (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).--
About 12.1 miles southwest of Manhattan, Riley County, 1.1 miles
east of Junction City, in SE4NE4 sec. 1, T.11 S., R.7 E., Wing-
field Township, on the John Lithman property, 111.4 feet
N.50°W., of intersection of east line of section 1 and McDowell
Creek Road, 436.8 feet south of east centerline of rock bridge
near north township line, 21 feet south of corner post of fence,
and 5.1 feet west of fence. The following bearings are from station
to east side of Fuller's house, 140'; southwest corner of
rock barn, 164'. Station is a U.S.C. & G.S. and State Survey
standard disk in concrete, projecting 4 inches above ground.
Elevation: 1,156.283 feet.
Plane coordinates: (N), $x = 2,187,704.10$ feet; $y = 261,423.02$
feet.

A14-11-7E (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).--
About 12 miles southwest of Manhattan, Riley County, 1.2 miles
east of Junction City, in SW4NE4 sec. 14, T.11 S., R.7 E., Wing-
field Township, on District 7 school grounds adjoining the
P.E.Tully property, 79.95 feet (magnetic) 250° azimuth from north-
west corner (rock section) of schoolhouse, 71.3 feet azimuth 258°
of centerline of well, and 57.4 feet (magnetic) azimuth 75° from
fence corner. Station is a U.S.C. & G.S. and State Survey stand-
ard disk in concrete, flush with ground. Elevation: 1,151.531
feet.
Plane coordinates: (N), $x = 2,186,545.26$ feet; $y = 260,444.17$
feet.

B14-11-7E (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).--
About 11.7 miles southwest of Manhattan, Riley County, 1.5 miles
east of Junction City, in SW4NE4 sec. 14, T.11 S., R.7 E., Wing-
field Township, on the St. Joseph Catholic Church grounds, ad-
joining property of Mr. John Brannick, 119.9 feet east of north-
south half-section wire fence, and 44 feet north of east-west
half-section line, 72.9 feet 182° (magnetic) azimuth from north-
west corner and 14.45 feet azimuth 250° (magnetic) from southwest
corner of the church. Station is a U.S.C. & G.S. and State Survey
standard disk in concrete, flush with ground. Elevation:
1,147.096 feet.
Plane coordinates: (N), $x = 2,185,925.25$ feet; $y = 264,470.40$
feet.

A28-11-7E (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).--
About 10.5 miles east of Junction City, 10.1 miles southwest of
Manhattan, Riley County, in SE4NE4 sec. 28, T.11 S., R.7 E., Wing-
field Township, on farm of Harold Westgate, 111.65 feet
224° (magnetic) from southwest corner of stone house, 362.3 feet
136° azimuth (magnetic) from quarter-section line corner post west
of road, 128.7 feet azimuth 200° (magnetic) from northwest cor-
ner of stone house. Station is a U.S.C. & G.S. and State Survey
standard disk in concrete, projecting 4 inches above ground.
Elevation: 1,125.290 feet.
Plane coordinates: (N), $x = 2,181,902.80$ feet; $y = 270,666.95$
feet.

B28-11-7E (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).--
About 10.35 miles southwest of Manhattan, Riley County, 10.2
miles northeast of Junction City, in SW4NE4 sec. 28, T.11 S.,
R.7 E., Wingfield Township, on the Harold Westgate property, 0.25
mile from station A28-11-7E, north-northeast of windmill, 1,642.2
feet 240° (magnetic) from southwest corner of rock house, 237 feet
north of north fence of road (width of road 38.3 feet), and 135.3
feet west of north-south fence. Station is a U.S.C. & G.S. and
State Survey standard disk in concrete, flush with ground. Elevation:
1,160.272 feet.
Plane coordinates: (N), $x = 2,180,497.85$ feet; $y = 270,043.65$
feet.

A15-11-7E (Kans.Geod.S.)(Riley County, L.E.Conrad, 1934).--
About 12.5 miles northeast of Junction City, Geary County, 5.2
miles southwest of Manhattan (along country roads) on school
grounds of District 12, in SW4NE4 sec. 15, T.11 S., R.7 E., Ash-
land Township, about 1.85 miles north of Riley-Geary County line,
95.6 feet 150° (magnetic) from southeast corner of bridge, 36.8
feet 198° (magnetic) from well pump, 27.1 feet 208° (magnetic)
from northwest corner of schoolhouse, and 21.6 feet 290° (mag-
netic) from southwest corner of schoolhouse. Station is a U.S.
C. & G.S. and State Survey standard disk in concrete post, 36 in-
ches below ground. Elevation: 1,078.115 feet.
Plane coordinates: (N), $x = 2,182,734.22$ feet; $y = 250,261.48$
feet. See end of this list.

A16-11-7E (Kans.Geod.S.)(Riley County, L.E.Conrad, 1934).--
About 12.7 miles northeast of Junction City, Geary County, 8
miles southwest of Manhattan (along country roads), in NE4NE4
sec. 16, T.11 S., R.7 E., Ashland Township, on land owned by
Henry Erichsen, 449.1 feet 76° (magnetic) from northeast corner
of culvert, near northwest corner of section 15, 275.85 feet 25°
(magnetic) from northeast post of bridge on curve of north-south
road, at fork of road, 48° (magnetic) from windmill on the Zigler
farm, 34.6 feet due south of north fence of east-west road, and
3.7 feet 240° (magnetic) from U.S.O.S. mark. Station is a U.S.
C. & G.S. and State Survey standard disk in concrete, 35 inches
below ground. No elevation has been determined for this station.
Plane coordinates: (N), $x = 2,182,612.71$ feet; $y = 281,636.27$
feet.

A17-11-7E (Kans.Geod.S.)(Riley County, L.E.Conrad, 1934).--
About 11.4 miles northeast of Junction City, Geary County, 8.6
miles southwest of Manhattan, 1.5 miles southeast of Ogden (along
country roads), in NE4SE4 sec. 17, T.11 S., R.7 E., Ashland
Township, on land owned by John Wood, 200 steps west of center-
line of road at foot of hill, 15.6 feet south of east-west half-
section line fence in section 17, and 155° (magnetic) from con-
e-shaped hill with pile of stone at summit, (hayfield slopes down
toward road north of tablet). Station is a U.S.C. & G.S. and
State Survey standard disk in concrete, 36 inches below ground.
Elevation: 1,225.553 feet.
Plane coordinates: (N), $x = 2,176,467.08$ feet; $y = 280,108.03$
feet.

B17-11-7E (Kans.Geod.S.)(Riley County, L.E.Conrad, 1934).--
About 11.6 miles northeast of Junction City, Geary County, 1.75
miles east of Ogden (along country roads), in NW4SW4 sec. 17,

T.11 S., R.7 E., Ashland Township, on land owned by John Wood, 0.2
mile west of 155° (magnetic) from A18-11-7E, 551.6 feet 110° (mag-
netic) from intersection of east-west half-mile fence of section
17 and north-south section-line fence, between sections 17 and
18, due south of pile of rock on hill, 225.3 feet south of east-
west half-mile fence in section 17, and 10.1 feet southeast of
south fence along road 47.2 feet wide from fence to fence. Sta-
tion is a U.S.C. & G.S. and State Survey standard disk in concrete,
36 inches below ground. Elevation: 1,236.130 feet.
Plane coordinates: (N), $x = 2,175,258.71$ feet; $y = 279,857.96$
feet.

A18-11-7E (Kans.Geod.S.)(Riley County, L.E.Conrad, 1934).--
About 9.2 miles northeast of Junction City, Geary County, 1.2
miles southeast of Ogden (along country roads), in SW4SE4 sec. 18,
T.11 S., R.7 E., Ogden Township, on land owned by J. Bolter, on
west slope of high hill (serving as cattle range), 638 feet azi-
muth 50° (magnetic) from north-south stone fence on half-mile
line of section 18, 39 feet azimuth 140° (magnetic) from center-
line of same east-west road, 12.4 feet azimuth 340° (magnetic)
from east-west wire fence along road, 142° (magnetic) from Ogden
Catholic Church, and 65° (magnetic) from windmill on the Bolter
farm. Station is a U.S.C. & G.S. and State Survey standard disk
in concrete, 15 inches below ground. Elevation: 1,200.172 feet.
Plane coordinates: (N), $x = 2,170,138.55$ feet; $y = 278,389.69$
feet.

B18-11-7E (Kans.Geod.S.)(Riley County, L.E.Conrad, 1934).--
About 9 miles northeast of Junction City, Geary County, 0.9 mile
south of river bridge in Ogden, in SE4SW4 sec. 18, T.11 S., R.7 E.,
Ogden Township, on land of Joseph Bolter, 599 feet 260° (magnetic)
from intersection of north-south half-mile section fence with east-
west road, 249.7 feet 50° (magnetic) from windmill, 18.4 feet 270°
(magnetic) from centerline of road, and 18° (magnetic) from north
end of stone bridge. Station is a U.S.C. & G.S. and State Survey
standard disk in concrete, 16 inches below ground. Elevation:
1,101.491 feet.
Plane coordinates: (N), $x = 2,168,977.12$ feet; $y = 278,036.84$
feet.

A7-11-7E (Kans.Geod.S.)(Riley County, L.E.Conrad, 1934).--
About 10 miles southwest of Manhattan, 1 block south of Kansas
River bridge in Ogden, in SE4SW4 sec. 7, T.11 S., R.7 E., Ogden
Township, on land owned by A. Estes, 516.2 feet 170° (magnetic)
from southeast corner of east truss on bridge, 72.3 feet due west
of east fence of north-south road, 12.3 feet due west of west fence
of same road, 61.2 feet 110° (magnetic) from southeast corner of
the Estes farmhouse, and 60.6 feet 280° (magnetic) from corner
post at intersection of east fence of north-south road and south
fence of east-west section-line road. Station is a U.S.C. & G.S.
and State Survey standard disk in concrete, 35 inches below ground.
Elevation: 1,045.426 feet.
Plane coordinates: (N), $x = 2,169,342.34$ feet; $y = 282,648.13$
feet.

B7-11-7E (Kans.Geod.S.)(Riley County, L.E.Conrad, 1934).--
About 9.5 miles southwest of Manhattan (along country roads), 0.7
mile south of Ogden Post Office, in block 71, sec. 7, T.11 S.,
R.7 E., on road right-of-way, adjacent to land owned by W.F. Howard
on Elm Street, 1,024 feet 330° (magnetic) from square mark on
stone at northwest corner of bridge abutment, 381.2 feet 146°
(magnetic) from cottonwood, 48.8 feet 224° (magnetic) from fence
of north-south road (52.3 feet wide), and 2.3 feet 300° (magnetic)
from telephone pole. Station is a U.S.C. & G.S. and State Survey
standard disk in concrete, 33 inches below ground. Elevation:
1,041.320 feet.
Plane coordinates: (N), $x = 2,168,809.46$ feet; $y = 284,537.93$
feet.

C7-11-7E (Kans.Geod.S.)(Riley County, L.E.Conrad, 1934).--
About 9-1/2 miles southwest of Manhattan on U.S. Highway 408, 0.5
mile southwest of post office in Ogden, on Walnut Street, in lot
16, sec. 7, T.11 S., R.7 E., Ogdenburg, on street right-of-way,
in block 49, 676.2 feet 148° (magnetic) from centerline of Union
Pacific Railroad track, 47.8 feet 50° (magnetic) from west fence
of road, and 1.8 feet 238° (magnetic) from east fence of same road.
Station is a U.S.C. & G.S. and State Survey standard disk in con-
crete, 35 inches below ground. Elevation: 1,048.434 feet.
Plane coordinates: (N), $x = 2,167,254.70$ feet; $y = 285,892.15$
feet.

A1-11-6E (Kans.Geod.S.)(Riley County, L.E.Conrad, 1934).--
About 9-1/2 miles southwest of Manhattan, 0.2 mile northwest of
Ogden Post Office, in SE4 sec. 1, T.11 S., R.6 E., block 3, on
land owned by St. Patrick's Catholic Church, 133.2 feet 140° (mag-
netic) from southwest corner of parsonage, 126.1 feet 120° (mag-
netic) from southeast corner of church, and 27.4 feet north of
concrete fence. Station is a U.S.C. & G.S. and State Survey stand-
ard disk in concrete, 36 inches below ground. Elevation:
1,122.783 feet.
Plane coordinates: (N), $x = 2,165,583.02$ feet; $y = 288,307.18$
feet.

TT-1-M (U.S.O.S., 1926)(Riley County, Kans.Geod.S., 1934).--
In Ogden, about 0.2 mile northwest of post office on land adjacent
to St. Patrick's Church, in SE4 sec. 1, T.11 S., R.6 E., block 3,
178.3 feet, 80° (magnetic) from lower east corner of cornerstone
of church, 94.7 feet, 40° (magnetic) from Geodetic traverse and
BM 2-16, and 9.4 feet 140° (magnetic) from southeast corner post
of wall around churchyard. Station is a U.S.O.S. standard disk in
concrete.
No elevation or coordinates have been determined for this
station.

A6-11-7E (Kans.Geod.S.)(Riley County, L.E.Conrad, 1934).--
About 9 miles southwest of Manhattan, 0.7 mile northeast of Ogden
Post Office, in NW4SE4 sec. 6, T.11 S., R.7 E., adjacent to U.S.
Highway 40, on land owned by Josephine Weichelbaum, 530.5 feet
50° (magnetic) from wire fence on north-south half-section line,
88 steps 170° (magnetic) from northeast corner of the Bagdad
Pavilion, 86.7 feet 210° (magnetic) from wire fence on west side
of pavilion, 35.7 feet 140° (magnetic) from centerline of highway,
and 1.1 feet 160° (magnetic) from wire fence on west side of

highway. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, 35 inches below ground. Elevation: 1,131 feet. Plane coordinates: (N), $x = 2,169,600.38$ feet; $y = 289,818.87$ feet.

A16-10-6E (Kans.Geod.S.)(Riley County, L.E.Conrad, 1934).-- About 9.6 miles southwest of Manhattan (along country roads), 1.5 miles northeast of post office in Ogden, in SE $\frac{1}{4}$ sec. 16, T.10 S., R.6 E., on road right-of-way, 115.1 feet 140° (magnetic) from corner stone at intersection of sections 16, 11, 1 and 6, 94.6 feet north of wire fence on north side of east-west road (width 40.4 feet) and 0.8 foot west of wire fence on west side of north-south road (fence to fence 16.9 feet wide). Station is a U.S.C. & G.S. and State Survey standard disk in concrete, 36 inches below ground. Elevation: 1,124 feet. Plane coordinates: (N), $x = 2,168,661.72$ feet; $y = 293,413.63$ feet.

A25-10-6E (Kans.Geod.S.)(Riley County, L.E.Conrad, 1934).-- About 11.25 miles southwest of Manhattan (along country roads), 2.85 miles northeast of Ogden Post Office, in SE $\frac{1}{4}$ sec. 25, T.10 S., R.6 E., on land owned by O.B.Reed, 185 feet north of north hedge fence on north side of east-west half-mile road (width 41 feet), 1.3 feet west of west fence of north-south section-line road (width 40 feet), and 90° (magnetic) from the O.B. Reed windmill. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, 36 inches below ground. Elevation: 1,143 feet. Plane coordinates: (N), $x = 2,168,514.27$ feet; $y = 301,399.51$ feet.

C24-10-6E (Kans.Geod.S.)(Riley County, L.E.Conrad, 1934).-- About 11.75 miles southwest of Manhattan (along country roads), 3.3 miles northeast of Ogden Post Office, in SE $\frac{1}{4}$ sec. 24, T.10 S., R.6 E., on land of Joe Forch, 140° (magnetic) from farmhouse, 178 feet 170° (magnetic) from center of windmill, 66.5 feet west of west fence of north-south road (width from fence to fence 36 feet), and 0.9 foot north of wire fence (wire-rock fence) on east-west section line. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, 36 inches below ground. Elevation: 1,165 feet. Plane coordinates: (N), $x = 2,168,393.04$ feet; $y = 303,824.37$ feet.

A13-10-6E (Kans.Geod.S.)(Riley County, L.E.Conrad, 1934).-- About 7 miles southwest of Manhattan (along country roads), 4.55 miles northeast of Ogden Post Office, in SE $\frac{1}{4}$ sec. 13, T.10 S., R.6 E., on land owned by Harry Wood, 773.6 feet north of stone fence between sections 18 and 19, 180° (magnetic) from stone farmhouse, 138° (magnetic) from ERICSSON, and 0.7 foot west of west wire fence of north-south road, (width 26.5 feet). Station is a U.S.C. & G.S. and State Survey standard disk in concrete, 36 inches below ground. Elevation: 1,327 feet. Plane coordinates: (N), $x = 2,168,370.87$ feet; $y = 309,753.55$ feet.

B13-10-6E (Kans.Geod.S.)(Riley County, L.E.Conrad, 1934).-- About 5.1 miles northeast of Ogden, 4.0 miles south of Keats, (along country roads), on township road right-of-way, in SE $\frac{1}{4}$ sec. 13, T.10 S., R.6 E., 74.4 feet west of north-south wire fence on east side of road between sections 13 and 18, 106.6 feet east of fence on west side of road, 0° (magnetic) from windmill, and 11.75 feet south of reference stone with arrow. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, 33 inches below ground. Elevation: 1,288 feet. Plane coordinates: (N), $x = 2,168,287.40$ feet; $y = 312,983.07$ feet.

ERICSSON (U.S.C. & G.S.)(Riley County, F.D.Granger, 1889; 1922; Kans.Geod.S., 1934).-- About 9 miles west of Manhattan, 13 miles east of Milford, Geary County, on main road between these towns crossing Overall Ridge, and in SE $\frac{1}{4}$ sec. 12, T.10 S., R.6 E., 146 meters (479 feet) north of centerline of road on land belonging (1922) to A.J.Willner. The underground, station, and reference marks are described in notes 1, 2, and 3. The two stone witness posts contain standard bronze reference tablets. One is north 2.368 meters (7.77 feet), the other south 2.408 meters (7.90 feet) from station. The southwest corner of section 12 is 605.9 meters (1,988 feet) distant in azimuth 77°07'. Additional references are as follows: Northeast corner of the Willner house, 22.83 meters (74.9 feet), S.20°W. (magnetic), southwest corner of stone barn, 24.4 meters (80 feet), N.19°W. (magnetic). Elevation: 1,351.129 feet. Plane coordinates: (N), $x = 2,165,043.24$ feet; $y = 314,814.58$ feet.

Geary County

From U.S.C. & G.S. triangulation station HUMBOLDT (described elsewhere in this publication) to U.S.C. & G.S. triangulation station ROBBINS.

A16-12-7E (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).-- About 12.0 miles southeast of Junction City Post Office building, on the Chase ranch, 0.6 mile east of the Chase ranch house, in NW $\frac{1}{4}$ sec. 16, T.12 S., R.7 E., Wingfield Township, at south side of 39-foot highway, 156.5 feet east of centerline of east stone gatepost, about 135 feet N.40°W., of northeast corner of old abandoned farmhouse, 33.5 feet north of west twin cedar, and 1 foot north of east-west fence line. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 2 inches above ground. Elevation: 1,285.56 feet. Plane coordinates: (N), $x = 2,182,002.79$ feet; $y = 250,391.77$ feet.

B16-12-7E (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).-- About 11.5 miles (highway) southeast of Junction City Post Office, in NW $\frac{1}{4}$ sec. 16, T.12 S., R.7 E., Wingfield Township, on the

Chase ranch, 0.15 mile east of ranch house, at north side of road on a pronounced ledge at the foot of very prominent knoll, and 191.5 feet north of fence line. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 2 inches above ground. Elevation: 1,298.08 feet. Plane coordinates: (N), $x = 2,179,461.92$ feet; $y = 250,889.99$ feet.

C16-12-7E (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).-- About 11.2 miles southeast of Junction City Post Office, in NW $\frac{1}{4}$ sec. 16, T.12 S., R.7 E., Wingfield Township, on ridge running east-west across wooded ravine about 560 feet north of half-section line fence, 311 feet east of north-south section-line fence, N.20°E. (magnetic) from stone corner post common to both fences, and due south of the Chase ranch house. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, flush with ground. Elevation: 1,344.142 feet. Plane coordinates: (N), $x = 2,178,546.34$ feet; $y = 248,997.78$ feet.

A17-12-7E (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).-- About 10.8 miles southeast of Junction City Post Office building, in NE $\frac{1}{4}$ sec. 17, T.12 S., R.7 E., Wingfield Township, on property of the Chase ranch, on Sugar Loaf Mound, about 300 feet south of fence line on 40-foot highway running east-west, about 150 feet west of north-south section-line fence, and approximately 100 feet above present roadbed. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 3 inches above ground. Elevation: 1,311.96 feet. Plane coordinates: (N), $x = 2,175,442.74$ feet; $y = 250,739.85$ feet.

B17-12-7E (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).-- About 9.7 miles southeast of Junction City Post Office building, in NW $\frac{1}{4}$ sec. 17, T.12 S., R.7 E., Wingfield Township, on property of Frank A. Ross, on a rocky bluff overlooking Humboldt Creek, 644 feet north of east-west stone fence, 370 feet east of stone section-line fence, and 50 feet south of limestone outcrop. Station is a U.S.C. & G.S. and State Survey standard disk in a slab, flush with ground. Elevation: 1,332.342 feet. Plane coordinates: (N), $x = 2,173,386.73$ feet; $y = 247,731.89$ feet.

A24-12-6E (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).-- About 8.2 miles southeast of Junction City Post Office building, in SW $\frac{1}{4}$ sec. 24, T.12 S., R.6 E., Jefferson Township, on the Powers ranch property belonging to the Metropolitan Life Insurance Company, on ridge leading northwest, on fence line, about 888 feet north of a lone cottonwood, 408 feet south of rock outcrop, 312 feet 53° (azimuth) from small clump of trees in ravine, and 210.6 feet 264° (azimuth) from a lone elm. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 2 inches above ground. Elevation: 1,339.41 feet. Plane coordinates: (N), $x = 2,166,593.71$ feet; $y = 243,996.97$ feet.

B24-12-6E (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).-- About 7.9 miles southeast of Junction City Post Office building, in SW $\frac{1}{4}$ sec. 24, T.12 S., R.6 E., Jefferson Township, near crest of divide running east to west, 0.9 foot east of north-south half-section line, 510.8 feet north of fence corner common to four quarters, approximately 685 feet south of east-west fence. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 2 inches above ground. Elevation: 1,339.356 feet. Plane coordinates: (N), $x = 2,165,301.31$ feet; $y = 243,521.43$ feet.

A23-12-6E (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).-- About 7.3 miles southeast of Junction City Post Office, in SE $\frac{1}{4}$ sec. 23, T.12 S., R.6 E., Jefferson Township, on the San Collin property, 29.3 feet east of east edge of State Highway 57, 175.7 feet (along highway) northwest of the 80-rod line, 600 feet (along highway) north of center of second ravine south of section, between sections 14 and 23, 14.5 feet above center of highway, 2.8 feet outside present fence line, and N.60°E. (magnetic) of northeast corner of barn on the Collin farmstead. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 2 inches above ground. Elevation: 1,196.58 feet. Plane coordinates: (N), $x = 2,161,085.35$ feet; $y = 243,181.69$ feet.

B22-12-6E (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).-- About 5.6 miles southeast of Junction City Post Office by State Highway 57, thence 0.8 mile southwest along country roads, NE $\frac{1}{4}$ sec. 22, T.12 S., R.6 E., Jefferson Township, in churchyard of St. Paul's Lutheran Church, 3.9 feet south and 6.3 feet east of cornerstone at southwest corner of church, 4.7 feet south and 46.4 feet west of southeast corner of church, in line of prolongation of each side of church, and 22.5 feet west and 67 feet north of northwest corner of a small schoolhouse located south of church in line of prolongation of west side of school building. Bearing on northeast corner of the Kramer home is S.12°W. (magnetic). Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 1 inch above ground. Elevation: 1,183.005 feet. Plane coordinates: (N), $x = 2,155,156.75$ feet; $y = 244,025.00$ feet.

A22-12-6E (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).-- About 5.6 miles southeast (along State Highway 57) and 1.4 miles southwest (on country roads) from Junction City Post Office, in NW $\frac{1}{4}$ sec. 22, T.12 S., R.6 E., on west side of road outside of property-line fence around the Paul Kramer property, Jefferson Township, on east edge of cultivated field on west side of north-south road leading past Lutheran Church, 1,631.75 feet west of north-south section line between sections 22 and 23, 676.1 feet north of prolongation of north side of the A.L.Boger home, and 402.6 feet north of 80-rod line. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 2 inches above ground. Elevation: 1,152.019 feet. Plane coordinates: (N), $x = 2,154,802.07$ feet; $y = 241,978.41$ feet.

A19-14-M (U.S.C. & G.S.) (Geary County, Kans. Geod. S., 1914). -- About 5.8 miles southeast of Junction City Post Office, on west side of northwest corner sec. 28, T.12 S., R.6 E., Jefferson Township, 15 feet east of centerline of public road, near west edge of field, and about 1200 feet northwest of a farmhouse. Station is a U.S.C. & G.S. mark. Elevation: 1,327.657 feet. Plane coordinates: (N), $x = 2,346,925.15$ feet; $y = 240,102.50$ feet.

A21-12-6E (Kans. Geod. S.) (Geary County, L.E. Conrad, 1914). -- About 6.2 miles southeast of Junction City Post Office, in SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 21, T.12 S., R.6 E., Jefferson Township, on the John Arkell property, 269 paces west of half-section line fence, 172 paces due north of lone cedar on the Lena Farber property, and 1.3 feet north of section-line fence between sections 21 and 28. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 2 inches above ground. Elevation: 1,307.192 feet. Plane coordinates: (N), $x = 2,348,595.32$ feet; $y = 240,157.15$ feet.

A19-12-6E (Kans. Geod. S.) (Geary County, L.E. Conrad, 1914). -- About 4.6 miles (along country roads) southeast of Junction City Post Office, in SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 19, T.12 S., R.6 E., Jefferson Township, on the Otto Strauss property, in quarter-section north of the Strauss farmhouse, 1,459.75 feet north of ROBBINS, 273 paces east of prolongation of east side of house, 109.6 feet west of north-south section-line fence, and 12.1 feet north of east-west property-line fence. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 3 inches above ground. Elevation: 1,324.941 feet. Plane coordinates: (N), $x = 2,341,526.96$ feet; $y = 240,054.99$ feet.

ROBBINS (U.S.C. & G.S.) (Geary County, F.D. Granger, 1889; 1922). -- About 4-1/4 miles southeast of Junction City, in SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 1, T.11 S., R.6 E., at south end of a field owned (1922) by Ole Strauss, who lives 1/4 mile northwest of the station. The station is north of a small grove of cottonwood trees, 38.1 meters (125 feet) west of the main road, and 4.6 meters (15 feet) north of the fence. West of the road is a peach orchard and ranch building, the whole surrounded by a wire fence. (This ranch and building have since disappeared.) The underground mark is a standard bronze tablet, set in concrete, 34 inches below the surface. The station mark is a standard bronze tablet set in a pyramidal block of concrete. Reference mark no. 1, a bronze tablet, is 20 feet west from the center of the roadway, on the north-and-south fence line, 27.386 meters (89.85 feet) east (magnetic) from the station. Reference marks, 2, 3, and 4 are standard bronze tablets set in stone posts, in an east-and-west line, 5.46 meters (17.9 feet) south of the station. Azimuth and distances to these reference marks and certain other points are as follows: Reference mark no. 2, 325°11', 6.584 meters (21.93 feet); reference mark no. 3, 0°00', 5.456 meters (17.90 feet); reference mark no. 4, 35°00', 6.684 meters (22.93 feet); stone, northeast corner of section 30, 183°19', 555.74 meters (1,823.3 feet); quarter-section stone, 192°11', 157.95 meters (518.2 feet); northeast cottonwood, 287°38', 23.5 meters (76.6 feet); northeast corner ranch building, 35°11', 61.14 meters (200.5 feet). Additional reference marks made are: 91 feet west of west fence along new road along east side of section 30, 776.7 feet south of east-west wire fence between pasture and plowed land, and 89.9 feet west of concrete reference mark with tablet in it, south of which is a group of pine trees. Elevation: 1,330.246 feet. Plane coordinates: (N), $x = 2,341,555.46$ feet; $y = 238,196.37$ feet.

Wabaunsee County

From U.S.C. & G.S. triangulation station ZEAN DALE (described elsewhere in this publication) to U.S.C. & G.S. triangulation station MEYER.

A24-11-9E (Kans. Geod. S.) (Wabaunsee County, L.E. Conrad, 1914). -- About 9.8 miles northwest of the Alma Post Office, in SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 24, T.11 S., R.9 E., on property of Lew Jones, 194.9 feet north of north wire fence of east-west road (width of road 47 feet), and 1.5 feet east of east wire fence of north-south section-line road (width of road 35.3 feet). Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 2 inches above ground. Elevation: 1,357.635 feet. Plane coordinates: (N), $x = 2,462,031.44$ feet; $y = 276,244.36$ feet.

B24-11-9E (Kans. Geod. S.) (Wabaunsee County, L.E. Conrad, 1914). -- About 9.5 miles northwest of the Alma Post Office, in NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 24, T.11 S., R.9 E., on top of ridge in a tillable field on property of the Kansas Life Insurance Company, 742.3 feet west of lone cottonwood on north-south half-section fence line, 717.7 feet south of east-west half-section fence line, and 571.8 feet east of east wire fence of north-south quarter-section road (width of road 40.7 feet from fence to fence). Station is a U.S.C. & G.S. and State Survey standard disk in concrete, 11 inches below ground. Elevation: 1,315.452 feet. Plane coordinates: (N), $x = 2,463,922.70$ feet; $y = 275,344.02$ feet.

A30-11-10E (Kans. Geod. S.) (Wabaunsee County, L.E. Conrad, 1914). -- About 8.2 miles northwest of the Alma Post Office, in NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 30, T.11 S., R.10 E., south of east-west township road right-of-way, 465 feet east of east wire fence of north-south section-line road (width of road 42.4 feet), and 1.5 feet north of south wire fence of east-west section-line road (width of road 38.7 feet). Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 2 inches above ground. Elevation: 1,294.978 feet.

No coordinates have been determined for this station.

A19-11-10E (Kans. Geod. S.) (Wabaunsee County, L.E. Conrad, 1914). -- About 7.4 miles northwest of the Alma Post Office, in SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 19, T.11 S., R.10 E., on road right-of-way, north of east-west township road, 424.7 feet west of north-south section-line fence (between sections 19 and 20), and 1.4 feet south of north wire fence of same road (width of road 50.5 feet from fence to fence). Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 2 inches above ground. Elevation: 1,310.493 feet. Plane coordinates: (N), $x = 2,472,050.01$ feet; $y = 273,534.57$ feet.

A29-11-10E (Kans. Geod. S.) (Wabaunsee County, L.E. Conrad, 1914). -- About 6.9 miles northwest of the Alma Post Office, in NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 29, T.11 S., R.10 E., on road right-of-way, south of east-west township road, 577.4 feet west of west wire fence of north half-section road (width of road 49 feet from fence to fence), 1.5 feet north of south wire fence of same road (width of road 42.3 feet from fence to fence), 124° (magnetic) from windmill. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 1 inch above ground. Elevation: 1,350.397 feet. Plane coordinates: (N), $x = 2,474,566.21$ feet; $y = 273,605.16$ feet.

A27-11-10E (Kans. Geod. S.) (Wabaunsee County, L.E. Conrad, 1914). -- About 4.65 miles north of the Alma Post Office, along State Highway K11, 0.5 mile west by country road, in NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 27, T.11 S., R.10 E., on property of the King estate, 16.1 feet east of east wire fence of north-south section-line road (width of road 60 feet from fence to fence), and 1.6 feet south of south wire fence of east-west township road (width of road 40 feet). Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 1 inch above ground. Elevation: 1,206.715 feet. No coordinates have been determined for this station.

A22-11-10E (Kans. Geod. S.) (Wabaunsee County, L.E. Conrad, 1914). -- About 4.75 miles north of the Alma Post Office, along State Highway K11, in SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 22, T.11 S., R.10 E., on school grounds of District 14, 61 feet south of well, 61.8 feet S.87°E. (magnetic) of southwest corner, 17.9 feet E.12°E. (magnetic) of southeast corner of school building, and 47.2 feet north of south fence of east-west section-line road. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 2 inches above ground. Elevation: 1,165.904 feet. Plane coordinates: (N), $x = 2,485,760.55$ feet; $y = 273,899.76$ feet.

A3-12-10E (Kans. Geod. S.) (Wabaunsee County, L.E. Conrad, 1914). -- About 2.8 miles north of the Alma Post Office, along State Highway K11, in NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 3, T.12 S., R.10 E., on road right-of-way, west of road where highway to Alma turns east, 135° (magnetic) from frame farmhouse, 279 feet south of concrete post south of east-west section-line road (width of road 45.2 feet), and 10.4 feet N.45°E. of west wire fence of highway (width of road 139.8 feet from fence to fence). Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 3 inches above ground. Elevation: 1,129.438 feet. Plane coordinates: (N), $x = 2,486,002.72$ feet; $y = 264,332.33$ feet.

B3-12-10E (Kans. Geod. S.) (Wabaunsee County, L.E. Conrad, 1914). -- About 2.5 miles north of the Alma Post Office, along State Highway K11, in SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 3, T.12 S., R.10 E., on road right-of-way, 606.5 feet north of intersection of west road fence and east-west half-section line (wire-rock fence), 557.2 feet north of north-west wing of culvert (cross mark on culvert), and 0.5 foot S.55°W. of east wire road fence. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, flush with ground. Elevation: 1,154.244 feet. Plane coordinates: (N), $x = 2,487,138.05$ feet; $y = 262,564.79$ feet.

C3-12-10E (Kans. Geod. S.) (Wabaunsee County, L.E. Conrad, 1914). -- About 2 miles north of the Alma Post Office, along State Highway K11, in NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 3, T.12 S., R.10 E., on road right-of-way, at junction of State Highways 10 and 11, 228.6 feet S.50°E. (magnetic) of southeast corner of stone barn (metal mow and roof), 10.6 feet S.60°E. (magnetic) of telephone pole west of road, and 7.6 feet east of rock fence west of road. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 1 inch above ground. Elevation: 1,140.912 feet. Plane coordinates: (N), $x = 2,487,669.62$ feet; $y = 260,558.39$ feet.

A2-12-10E (Kans. Geod. S.) (Wabaunsee County, L.E. Conrad, 1914). -- About 2.3 miles northeast of the Alma Post Office, along State Highway K10, in NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 2, T.12 S., R.10 E., on road right-of-way, 361.6 feet east of east wire fence of north-south section-line road (width of road 48.8 feet), and 1.5 feet north of wire fence south of State Highway 10, and west-northwest of silo. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, flush with ground. Elevation: 1,094.033 feet. No coordinates have been determined for this station.

A15-12-10E (Kans. Geod. S.) (Wabaunsee County, L.E. Conrad, 1914). -- In Alma, west of post office on Third Street, one-half block west of Missouri Avenue, on west side of alleyway, 36.6 feet S.80°W. (magnetic) of northwest corner of post office building, 8.6 feet south of curb, and 2 feet south of sidewalk on south side of Third Street. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, flush with ground. Elevation: 1,089.655 feet. No coordinates have been determined for this station.

B15-12-10E (Kans. Geod. S.) (Wabaunsee County, L.E. Conrad, 1914). -- In Alma, on the county courthouse grounds, in sec. 15, T.12 S., R.10 E., 134.5 feet S.60°E. (magnetic) of northeast corner and 106.7 feet N.70°E. (magnetic) of southeast corner of courthouse, 27.7 feet north of east-west entrance sidewalk, and 6.5 feet N.70°E. (magnetic) of southeast corner of the Quivira Historical Society monument. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, flush with ground. Elevation: 1,091.453 feet. No coordinates have been determined for this station.

D15-12-10E (Kans.Geod.S.)(Wabaunsee County, L.E.Conrad, 1934).--About 0.3 mile south of the Alma Post Office, in sec. 15, T.12 S., R.10 E., on Chicago, Rock Island & Pacific Railway right-of-way, west of southeast corner of the Alma depot, 165.7 feet N.30°E. (magnetic) of mail crane, 135 feet N.56°W. (magnetic) of platform parallel to track, 44.1 feet south of northwest corner of depot ramp, and 17.7 feet N.50°W. (magnetic) of centerline of north main track. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, flush with ground. Elevation: 1,058.133 feet.
Plane coordinates: (N), $x = 2,485,895.48$ feet; $y = 250,436.10$ feet.

D15-12-10E (Kans.Geod.S.)(Wabaunsee County, L.E.Conrad, 1934).--About 0.5 mile southwest of the Alma Post Office, in sec. 15, T.12 S., R.10 E., 1/4 mile southwest along track from Chicago, Rock Island & Pacific Railway depot, on right-of-way, 233 feet N.34°W. (magnetic) of center rod of switch signal, 34.6 feet N.60°W. (magnetic) of centerline of north main track, 23.6 feet N.20°E. (magnetic) of northwest corner of section supply house, and 6.5 feet N.74°E. (magnetic) of milepost 126+20. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, flush with ground. Elevation: 1,058.675 feet.
Plane coordinates: (N), $x = 2,485,045.32$ feet; $y = 249,503.99$ feet.

E15-12-10E (Kans.Geod.S.)(Wabaunsee County, L.E.Conrad, 1934).--About 0.5 mile southwest of the Alma Post Office, along Highway K11, in NE1/4 sec. 15, T.12 S., R.10 E., on property of A.H.Wertzberger, on top of prominent hill, 466 feet west of northwest corner of the Wertzberger stone house, and 153.5 feet S.20°E. (magnetic) of boulder at north brow of hill marked with arrow and cross, and S.5°W. (magnetic) of north end of Mill Creek Bridge. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, flush with ground. Elevation: 1,139.052 feet.
Plane coordinates: (N), $x = 2,486,276.50$ feet; $y = 248,162.22$ feet.

A22-12-10E (Kans.Geod.S.)(Wabaunsee County, L.E.Conrad, 1934).--About 1.6 miles southeast of the Alma Post Office, along State Highway K11, in NW1/4 sec. 22, T.12 S., R.10 E., on grounds of School District 76, 64.3 feet S.50°E. (magnetic) of well, 40.65 feet N.50°E. (magnetic) of southeast corner, 35.75 feet N.90°E. (magnetic) of northeast corner of schoolhouse, and 3 feet west of iron picket fence west of highway. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, flush with ground. Elevation: 1,090.797 feet.
No coordinates have been determined for this station. See end of this list.

B22-12-10E (Kans.Geod.S.)(Wabaunsee County, L.E.Conrad, 1934).--About 1.95 miles southeast of the Alma Post Office, along State Highway K11 and South Branch Road, in SW1/4 sec. 22, T.12 S., R.10 E., 839.4 feet north of south township line between sections 22 and 27, 59.4 feet west of east fence of north-south road, and 3.6 feet east of west wire fence of north-south road. The azimuth to farmhouse is 340° (magnetic). Station is a U.S.C. & G.S. and State Survey standard disk in concrete, flush with ground. Elevation: 1,126.183 feet.
Plane coordinates: (N), $x = 2,487,980.91$ feet; $y = 243,058.18$ feet.

A27-12-10E (Kans.Geod.S.)(Wabaunsee County, L.E.Conrad, 1934).--About 2.4 miles south of the Alma Post Office, along State Highway K11 and South Branch Road, in NE1/4 sec. 27, T.12 S., R.10 E., on road right-of-way, 720.3 feet N.20°W. (magnetic) of northwest corner of concrete bridge rail (rail marked with cross), 56 feet S.70°W. (magnetic) of south end of stone wall east of road, 2.5 feet N.70°E. (magnetic) of wire fence west of road, and 306° (magnetic) from large barn. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 2 inches above ground. Elevation: 1,149.309 feet.
Plane coordinates: (N), $x = 2,488,065.88$ feet; $y = 240,635.75$ feet.

A34-12-10E (Kans.Geod.S.)(Wabaunsee County, L.E.Conrad, 1934).--About 5.5 miles south of the Alma Post Office, along South Branch Road and old township road, in SW1/4 sec. 34, T.13 S., R.10 E., on county farm, south of a mound, east of a deep ravine, 742 feet (measured along surface of ground) east of north-south section line, between sections 33 and 34, 31 feet west of west gatepost, and 2.8 feet north of township line between Tps.12 and 13. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, flush with ground. Elevation: 1,330.388 feet.
Plane coordinates: (N), $x = 2,484,737.92$ feet; $y = 231,577.98$ feet.

A3-13-10E (Kans.Geod.S.)(Wabaunsee County, L.E.Conrad, 1934).--About 6.05 miles south of the Alma Post Office, along South Branch and old township roads, in SW1/4 sec. 3, T.13 S., R.10 E., in fence corner where road runs north-south and angles to southeast and northwest, 14.7 feet south of reference stone marked with arrow, and 4.3 feet S.80°E. (magnetic) of corner fence post west of road (width of road 39 feet). Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 1 inch above ground. Elevation: 1,349.129 feet.
Plane coordinates: (N), $x = 2,484,400.71$ feet; $y = 228,712.97$ feet.

A16-13-10E (Kans.Geod.S.)(Wabaunsee County, L.E.Conrad, 1934).--About 7.65 miles south of the Alma Post Office, along South Branch Road and old township road, in NE1/4 sec. 16, T.13 S., R.10 E., on property of W.F.Stewe, 174 feet west of east fence of old township road, and 58.9 feet S.80°W. (magnetic) of northeast corner stone of sec. 16. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 2 inches above ground. Elevation: 1,458.131 feet.
Plane coordinates: (N), $x = 2,483,944.93$ feet; $y = 221,084.72$ feet.

MEYER (U.S.C. & G.S.)(Wabaunsee County, F.D.Granger, 1888; 1922; Kans.Geod.S., 1934).--About 6 miles south and 1 mile west of town of Alma, in the NW1/4 sec. 16, T.13 S., R.10 E., on crest of large prairie; about 600 feet south is a public road,

which at this point, from being a north-south road, turns abruptly east and runs again north-south about 1 mile east of the station. The private road to the west and the horse pond to the northwest, described in Special Publication 179, no longer exist. The station is about on the north section line of section 16 and about 1,530 feet due west of corner stone at intersection of sections 9, 10, 15, and 16. It is 294.6 feet west of north-and-south wire fence which is in quarter-mile section line. Witness stones about 4 feet north and south of station are in good condition. The station is a U.S.C. & G.S. and State Survey standard disk stamped "MEYER, 1888." Elevation: 1,460.802 feet.
Plane coordinates: (N), $x = 2,482,153.34$ feet; $y = 220,985.12$ feet.

Geary County

From A24-12-6E (on HUMBOLDT to ROBBINS line) to U.S.C. & G.S. triangulation station REINHARD.

No coordinates have been established for stations in this line.

B24-12-6E (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).--About 7.8 miles southeast of Junction City Post Office along State Highway 57, on Power's ranch, in SE1/4 sec. 23, T.12 S., R.6 E., Jefferson Township, 961.2 feet north of east-west section line, 621.2 feet west of north-south section line, 133 feet south and 235.5 feet east of intersection of highway and 80-rod line, 5.7 feet inside property-line fence, and 9 feet above centerline of road. Bearing on center of high point to southeast is S.80°E. (magnetic). Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 2 inches above ground. Elevation: 1,179.512 feet.

A30-12-7E (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).--About 9.5 miles southeast of Junction City Post Office along State Highway 57, 0.35 mile southeast of school District 38, in SE1/4 sec. 30, T.12 S., R.7 E., Wingfield Township, on the A.P.Davin property, on a hillside road just above a hayfield, 184.2 feet east of centerline of Highway 57, 148.9 feet east of east edge of highway, 7.2 feet north of east-west section line between sections 30 and 31, and 4.6 feet east of 80-rod line. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 3 inches above ground. Elevation: 1,262.541 feet.

A31-12-7E (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).--About 10.5 miles southeast of Junction City Post Office along State Highway 57, in SW1/4 sec. 31, T.12 S., R.7 E., Wingfield Township, on property of I.C.Boyle at east of highway, in a pasture, 7 feet above centerline of road, 2,450 feet southeast (along highway) of prolongation of south side of the Thomas Candon farmhouse, 1,359.4 feet northwest of prolongation of north side of the I.C.Boyle house, and 13.7 feet inside fence line. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 3 inches above ground. Elevation: 1,232.534 feet.

A5-13-7E (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).--About 11.9 miles southeast of Junction City Post Office along State Highway 57, in SW1/4 sec. 5, T.13 S., R.7 E., Liberty Township, on the Elizabeth Breen property, in fence corner west of road, 830.5 feet south (along highway) of prolongation of north side of stone cattle shed on the Breen property, 356.5 feet west (measured downhill) of 80-rod line, 12.5 feet west of centerline of highway, 5.4 feet north of stone fence between sections 5 and 6, and 1.7 feet west of north-south fence line. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 3 inches above ground. Elevation: 1,251.139 feet.

A8-13-7E (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).--About 12.2 miles southeast of Junction City Post Office along State Highway 57, in SE1/4 sec. 8, T.13 S., R.7 E., Liberty Township, on the Patrick Breen property, in hayfield on hillside east of highway, 919.5 feet north (along highway) of prolongation of north side of the Breen house, 800 feet south of centerline of bridge over a tributary to Dry Creek, 121.3 feet west of a fence between pasture and hayfield, 17 feet east of vertical cut east of road, and 9.5 feet above centerline of road. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 1 inch above ground. Elevation: 1,279.332 feet.

A16-13-7E (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).--About 13.8 miles southeast of Junction City Post Office along State Highway 57, in NW1/4 sec. 16, T.13 S., R.7 E., Liberty Township, on the Thomas Candon property, near southwest corner of pasture, 126.73 feet east of north-south half-section line fence, 170.9 feet N.20°E. (magnetic) from northeast corner of the Candon farmhouse, 6.7 feet inside the present east-west fence, and 8 feet above centerline of road. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 3 inches above ground. No elevation has been determined for this station.

A15-13-7E (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).--About 14.1/4 miles southeast of Junction City Post Office along State Highway 57, SW1/4 sec. 15, T.13 S., R.7 E., Liberty Township, on the Thomas Candon property, in a pasture on east side of highway, 1,511 feet south of section line of bridge over a tributary of Dry Creek, 193.2 feet east of section line between sections 15 and 16, 7.8 feet above centerline of road, and 6.6 feet from present property-line fence. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 2 inches above ground. No elevation has been determined for this station.

A22-13-7E (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).--About 15.9 miles southeast of Junction City Post Office along State Highway 57, in SE1/4 sec. 22, T.13 S., R.7 E., Liberty Township, 41.7 feet west of centerline of highway, on the William O. Freeman property, in southeast corner of pasture on west side of highway, 62 paces east of rock outcrop along ravine on the west,

8.5 feet north of stone fence on half-mile line, and 4.5 feet west of stone fence on property line. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 3 inches above ground. No elevation has been determined for this station.

B22-13-7E (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).-- About 16.3 miles southeast of Junction City Post Office along State Highway 57, in SE $\frac{1}{4}$ sec. 22, T.13 S., R.7 E., Liberty Township, on the Swain ranch, west of road in north fence line of abandoned farmhouse, in north line of trees, 565.2 feet north of centerline of east-west section-line road, 261.1 feet south of curve to east, 41.7 feet west of north-south road, and 20.3 feet west of fence corner. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 2 inches above ground. No elevation has been determined for this station.

A24-13-7E (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).-- About 17.4 miles southeast of Junction City Post Office along State Highway 57, in SW $\frac{1}{4}$ sec. 24, T.13 S., R.7 E., Liberty Township, on the John Rupp farm north of highway, 69.7 feet south of southwest corner of farmhouse, 42.9 feet north of centerline of highway, 19.0 feet north of property line, 6.1 feet north and 1.7 feet east of most westerly of four small cedars south of house. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, flush with ground. No elevation has been determined for this station.

B24-14-7E (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).-- About 18.0 miles southeast of Junction City Post Office along State Highway 57, in SW $\frac{1}{4}$ sec. 24, T.13 S., R.7 E., Liberty Township, on the Fred L. Harris property, on a low ridge in pasture north of road, 1,597.8 feet west of centerline of north-south road, 529.3 feet west of prolongation of west side of the Clark farmhouse, 265.3 feet west of north-south property line, 47.8 feet north of centerline of road, and 17.6 feet north of east-west property-line fence. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 2 inches above ground. No elevation has been determined for this station.

A36-13-7E (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).-- About 19.3 miles southeast of Junction City Post Office along State Highway 57, 3 miles north of Dwight, in NE $\frac{1}{4}$ sec. 36, T.13 S., R.7 E., Liberty Township, on the E.L.Brockway property, near northeast corner of pasture, at intersection of State Highway 13 and 57, 102.9 feet south of centerline of east-west road, 33.4 feet west of centerline of State Highway 57, 77.3 feet south of east-west property-line fence, and 10.6 feet west of north-south property-line fence. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 2 inches above ground. No elevation has been determined for this station.

B31-13-8E (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).-- About 19.8 miles southeast of Junction City Post Office along State Highway 57, 2-1/2 miles north of Dwight, Morris County, sec. 31, T.13 S., R.8 E., Liberty Township, in half-section line fence between the E.L.Brockway and the Webster Hoyle properties, on line between lots 7 and 18, 666.2 feet north of prolongation of north side of the Belle Bach house west of highway, 39.1 feet east of the centerline of highway, and 16.3 feet east of half-section line fence corner. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 2 inches above ground. No elevation has been determined for this station.

C31-13-8E (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).-- About 2 miles north and 0.65 mile east of Dwight, Morris County, on the Albert Beiling property, in lot 23, sec. 31, T.13 S., R.8 E., Liberty Township, 34.2 feet north of centerline of road between Geary-Morris Counties, 18.7 feet north of north edge of road, 160.3 feet west of driveway leading into the Bailey farmhouse, and 161 feet south and 25.9 feet east of southwest corner of farmhouse, in line of prolongation of its west side. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, flush with ground. No elevation has been determined for this station.

BM-TP-143 (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).-- About 9.1 miles southeast of Junction City, in limestone water table at northwest corner of limestone schoolhouse in District 38. Station is a chiseled cross. Elevation: 1,208.952 feet.

BM-TP-153 (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).-- About 10 miles southeast of Junction City, approximately 300 feet west of State Highway 57, on the Candon farm on east side of northeast corner of first full course above foundation of limestone chicken house. Station is a chiseled cross. Elevation: 1,203.453 feet.

BM-TP-170 (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).-- About 11.6 miles southeast of Junction City, 90 feet east of State Highway 57, in sec. 5, T.13 S., R.7 E., on the Tom Breen farm, and in first course above west foundation face of northwest corner of limestone stock shed. Station is a chiseled cross. Elevation: 1,236.567 feet.

BM-TP-179 (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).-- About 12.4 miles southeast of Junction City, 30 feet south of State Highway 57, in sec. 8, T.13 S., R.7 E., in second course below port holes on north face of northwest corner of limestone barn of Pat Breen. Station is a chiseled cross. Elevation: 1,279.015 feet.

BM-TP-185 (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).-- About 13.1 miles southeast of Junction City, 100 feet north of State Highway 57, and in top of water table at southwest corner of limestone schoolhouse in District 27. Station is a chiseled cross. Elevation: 1,296.484 feet.

BM-TP-195 (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).-- About 14 miles southeast of Junction City, on State Highway 57, in center of top of east concrete bannister of 10-foot culvert over a small dry creek. Station is a chiseled cross. Elevation: 1,311.724 feet.

HM-TP-204 (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).-- About 15.0 miles southeast of Junction City, 115 feet east of State Highway 57, and in west face of northwest limestone corner stone of foundation of the Fred Spittle farmhouse. Station is a chiseled cross. Elevation: 1,334.441 feet.

BM-TP-222 (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).-- About 15.5 miles southeast of Junction City, 125 feet south of State Highway 57, and in north face of concrete foundation near northeast corner of two-story frame house on the Quinn farm. Station is a chiseled cross. Elevation: 1,461.496 feet.

REINHARD (U.S.C. & G.S.)(Morris County, F.D.Granger, 1886; 1922).-- About 2-1/2 miles northeast of Dwight, in the W $\frac{1}{2}$ sec. 6, T.14 S., R.13 E., on the crest of a large prairie, on the south edge of an open lot at the south end of three rows of cedar trees. Station is on land owned (1922) by Evert R. Simmons, who lives 1/2 mile west of the station. The underground, station, and witness marks are described in note 1. Standard brass reference tablets have been set in the witness posts. The marble post marking the station is inscribed "F.D.G. 1886" on the south face. Additional references are as follows: North to center of road on section line, 157.0 meters (515 feet); east to hedge on east line of Mr. Simmons' farm, 236.0 meters (774 feet). Elevation: 1,550.733 feet.

Plane coordinates: (N). $x = 2,408,677.72$ feet; $y = 198,202.38$ feet.

Geary and Morris Counties

From U.S.C. & G.S. triangulation station HUMBOLDT (described elsewhere in this publication) to U.S.C. & G.S. triangulation station REINHARD (described elsewhere in this publication).

No coordinates have been established for stations in this line.

B10-12-7E (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).-- About 14.0 miles southeast of Junction City Post Office building, near north line of NE $\frac{1}{4}$ sec. 10, T.12 S., R.7 E., Wingfield Township, on the Chase ranch, 512 paces W.15 $\frac{1}{2}$ E. (magnetic) from first high-line tower west of section line. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 2 inches above ground. Elevation: 1,406.712 feet.

B21-12-7E (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).-- About 14-1/4 miles southeast of Junction City Post Office building in NW $\frac{1}{4}$ sec. 21, T.12 S., R.7 E., Wingfield Township, on the Chase ranch, 266 paces N.25 $\frac{1}{2}$ W. (magnetic) from east end of dam on Chase property, 183 paces S.70 $\frac{1}{2}$ E. (magnetic) from corner, and 3.6 feet north of fence line. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 3 inches above ground. Elevation: 1,405.529 feet.

A23-12-7E (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).-- About 14.6 miles southeast of Junction City Post Office building, near southwest corner of SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 23, T.12 S., R.7 E., on the Chase ranch in Wingfield Township, 2.6 miles southeast of HUMBOLDT, 244 paces south of east-west fence line on center point of three points at head of deep gulch bearing southwest, 46 paces north of point where rock outcrop and where point breaks into south slope, and 178 paces S.62 $\frac{1}{2}$ E. (magnetic) of southeast corner of spillway on earth and rock dam. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 3 inches above ground. Elevation: 1,392.099 feet.

NOTE: North-south road is 0.35 mile shorter than is shown on county and township maps.

B25-12-7E (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).-- About 16.8 miles (along Humboldt Road and country roads) southeast of Junction City Post Office, near southwest corner of NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 25, T.12 S., R.7 E., Wingfield Township, on the Powell Schmiedeman property, 134 paces north of fence corner, and 5.3 feet east of north-south fence line. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 2 inches above ground. Elevation: 1,421.763 feet.

A25-12-7E (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).-- About 17.2 miles (along Humboldt Road and country roads) southeast of Junction City Post Office building, in SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 25, T.12 S., R.7 E., Wingfield Township, in hayfield on low ridge running northeast-southwest, on the Paul Schmiedeman property, 540.2 feet east of north-south section line, 449.5 feet south of centerline of road, 382.5 feet north of east-west section-line fence, and 350.2 feet east of rock outcrop. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, flush with ground. Elevation: 1,412.235 feet.

A11-13-7E (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).-- About 19.8 miles southeast of Junction City, in NE $\frac{1}{4}$ sec. 1, T.13 S., R.7 E., on property of W.H.Nacalin, Liberty Township, 185.2 feet west of north-south section-line fence, and 1,195.1 feet south of east-west half-section line fence. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 3 inches above ground. Elevation: 1,442.414 feet.

A12-13-7E (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).-- About 20.3 miles southeast of Junction City Post Office, in NE $\frac{1}{4}$ sec. 12, T.13 S., R.7 E., Liberty Township, on the Will Hintz property, in pasture on low rocky ridge west of road due north of lone cedar standing on ridge north of Humboldt Road, 551.2 feet south of stone corner post at junction of north-south fence line west of road leading north of east-west fence line of section 12, and 23.5 feet west of fence line. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 3 inches above ground. Elevation: 1,423.634 feet.

A7-13-SE (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).-- About 19.8 miles southeast of Junction City Post Office, in lot 21, SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 7, T.13 S., R.3 E., Liberty Township, on west edge of schoolyard (District 5), 100.6 feet west of northwest corner of schoolhouse and in line of prolongation of south side of school, 59.7 feet south of centerline of Humboldt Road, and 22.2 feet N.15°E. (magnetic) of center of well. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 8 inches above ground. Elevation: 1,164.875 feet.

B13-13-SE (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).-- About 2 miles east and 6 miles north of Dwight, Morris County, in lot 11, NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 18, T.13 S., R.8 E., Liberty Township, on east side of Humboldt Road, about 247 feet northwest of the Will Brown house, 9.4 feet inside fence line, and 7.8 feet above road level. Bearing on chimney of the Brown house is S.26°E. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 3 inches above ground. Elevation: 1,380.687 feet.

A18-13-SE (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).-- About 2 miles east and 5.5 miles north of Dwight, Morris County, in lot 13, SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 18, T.13 S., R.3 E., Liberty Township, 0.15 mile (along Humboldt Road) north of the Gleasoner home on the Gleasoner property, 153 feet northwest of present fence corner, 8.9 feet outside of present fence line, and about 5 feet above level of, and on east side of road. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 3 inches above ground. Elevation: 1,392.636 feet.

A19-13-SE (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).-- About 2 miles east and 4.2 miles north of Dwight, Morris County, in SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 19, T.13 S., R.4 E., Liberty Township, on the Albert Brown property, 793.5 feet north of east-west section-line fence, 374.2 feet west of north-south section-line fence, 12.5 feet inside of fence at first point north of section fence (where fence bears northwest), and about 7 feet above roadbed. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 2 inches above ground. Elevation: 1,448.176 feet.

A30-13-SE (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).-- About 2 miles east and 3.7 miles north of Dwight, Morris County, in SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 30, T.13 S., R.8 E., Liberty Township, on the Frank Bieling property, 220.5 feet south of quarter-section line, 76.9 feet east of southeast corner of framework, 69.3 feet north of the prolongation of south side of farmhouse, 69.3 feet south of southeast corner of the masonry work, and 197.1 feet east of prolongation of east side of barn. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 2 inches above ground. Elevation: 1,489.410 feet.

A31-13-SE (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).-- About 2 miles east and 2.45 miles north of Dwight, Morris County, in NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 31, T.13 S., R.8 E., Liberty Township, 258.2 feet south of half-section line, 21.6 feet west of centerline of road, on the Lizzie Alexander farm, 111 feet west and 149.2 feet north of the northwest corner (in a line of prolongation) of north side of the Alexander one- and one-half-story farmhouse, and 3.5 feet west of present fence. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 2 inches above ground. Elevation: 1,519.132 feet.

A6-14-SE (Kans.Geod.S.)(Morris County, L.E.Conrad, 1934).-- About 2 miles east and 2 miles north of Dwight, in NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 6, T.14 S., R.8 E., Ohio Township, on the L.P. Kraft farm, 115 feet south of centerline of east-west road, 23 feet west of centerline of north-south road, 23 feet inside of present north-south fence line, and 2,128.76 feet northeast of REINHARD. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 2 inches above ground. Elevation: 1,538.656 feet.

Geary and Morris Counties

From U.S.C. & G.S. triangulation station ROBBINS to (U.S.C. & G.S.) TT Station No. 83 M. (Station ROBBINS is described elsewhere in this publication.)

No coordinates have been established for stations in this line.

A30-12-6E (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).-- About 5.4 miles southeast of Junction City Post Office building, in NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 30, T.12 S., R.6 E., Jefferson Township, on property of Otto Straus, on a low ridge, south of ROBBINS, 185.0 feet north of road junction to southeast, and 93.5 feet west of section-line fence. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 3 inches above ground. Elevation: 1,318.916 feet.

A5-13-6E (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).-- About 6.1 miles south along Skiddy Road and 0.5 mile east of road from Junction City Post Office, in NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 5, T.13 S., R.6 E., on the C.F. Wetzel property, Blakely Township, in east-west section-line fence between sec. 5, T.13 S., R.6 E., and sec. 32, T.12 S., R.6 E., 831.0 feet east of section line running north-south, and 481.4 feet west of 80-foot line running north-south. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 2 inches above ground. Elevation: 1,327.528 feet.

A6-13-6E (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).-- About 6.8 miles southeast of Junction City Post Office, in SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 6, T.13 S., R.6 E., Blakely Township, on property of Central National Bank, 316.2 feet from north-south road, at a point about 0.9 mile south of east-west section line, east of Skiddy Road, 30.8 feet south and 33.5 feet east of east tree in line of prolongation of row of cedars, and 0.6 foot south of line of east-west lane. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 3 inches above ground. Elevation: 1,324.322 feet.

A14-13-6E (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).-- About 8.1 miles southeast along Skiddy Road, and 0.25 mile east of road from Junction City, in NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 18, T.13 S., R.6 E., Blakely Township, on property of Wm. Webster, 1,307.3 feet west of north-south section line, 553.0 feet north of east-west fence on 40-foot line, 554.4 feet north of cottonwood, and 1.2 feet west of north-south fence line. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 3 inches above ground. Elevation: 1,319.890 feet.

B13-13-6E (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).-- About 8.9 miles southeast of Junction City Post Office building, along Skiddy Road, 0.5 mile east of School District 20, 492.2 feet south (magnetic bearing taken on chimney of the J.B. Goggin house), 62.25 feet east of road intersection, in section line between NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 19, T.13 S., R.6 E., and SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 18, T.13 S., R.6 E., (the respective properties belonging to John Hoff and J.B. Goggin in Blakely Township). Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 3 inches above ground. Elevation: 1,325.755 feet.

A30-13-6E (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).-- About 10-1/4 miles southeast of Junction City Post Office along Skiddy Road, 2.6 miles northwest of Missouri-Kansas-Texas Railroad station in Skiddy, Morris County, in SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 30, T.13 S., R.6 E., Blakely Township, outside property line of Wm. Shaffer property east of road at edge of deserted farmhouse, 1,455.6 feet south of east-west section line between sections 19 and 30, 121.3 feet south and 9.5 feet west of first of seven cedars north of abandoned farmhouse, 75.0 feet N.75°W. (magnetic) of northwest corner of well curb, and 39.0 feet north and 4.2 feet west of northwest corner of stone fence south of farmhouse. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 2 inches above ground. Elevation: 1,345.404 feet.

A31-13-6E (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).-- About 11.0 miles south of Junction City Post Office along Skiddy Road, 2 miles northwest of Missouri-Kansas-Texas Railroad station in Skiddy, Morris County, in NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 31, T.13 S., R.6 E., Blakely Township, on property of Mrs. E.V. Pember, west of Skiddy Road and across road south of Pleasant View Cemetery, 1,318.6 feet east of east rail of track, 50.7 feet west of north-south property-line fence, 45.2 feet south and 50.7 feet west of rock corner post at southeast corner of cemetery, 37.6 feet south of east-west section-line fence. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 3 inches above ground. Elevation: 1,349.560 feet.

A29-13-6E (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).-- About 10.8 miles southeast along Skiddy Road and about 0.6 mile east from Junction City Post Office, in a field, about 1.2 miles north of church in northwest part of Skiddy, Morris County, in SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 29, T.13 S., R.6 E., Blakely Township, on property of Jellison Trust Company, in a pasture on second level above bottom of ravine leading southeast, 900 feet north of section line, and 244.9 feet east of north-south section line. The following bearings are from station: To steeple of Skiddy Church, S.10° (magnetic); corner post at intersection of sections 29, 30, 31, and 32, S.10°W. (magnetic); large tree in ravine, S.20°E. (magnetic). Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 3 inches above ground. Elevation: 1,344.844 feet.

B31-13-6E (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).-- About 11.0 miles south along Skiddy Road and 0.4 mile southeast from Junction City Post Office, 2.4 miles (along road) north of Missouri-Kansas-Texas Railroad station in Skiddy, Morris County, 0.4 mile S.61°E. of cemetery in SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 31, T.13 S., R.6 E., Blakely Township, in pasture on property of the Mahoney sisters, on ridge south of first ravine south of section line, due east of head of ravine bearing southwest, 1,329 feet south of section line between sections 31 and 30, and 807.8 feet west of north-south section-line fence. Following bearings are from station: To Skiddy Church spire, S.25°E. (magnetic); lone tree on east-west section line N.20°W. (magnetic). Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 3 inches above ground. Elevation: 1,345.639 feet.

A32-13-6E (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).-- About 0.75 mile north and about 0.4 mile east (on private road) from Skiddy, Morris County, in SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 32, T.13 S., R.6 E., on top of high rocky point east of the Zeigler farmhouse, 638.2 feet north of east-west half-section line fence, 121.8 feet south of east-west fence at the most westerly point of rock outcrop, 22.4 feet south of line of prolongation of south side of the Zeigler house, 22.0 feet east of west side of rock outcrop, 19.8 feet south and 2.4 feet west of small lone cedar. Bearing on southeast corner of house, N.82°W. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 3 inches above ground. Elevation: 1,298.909 feet.

B32-13-6E (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).-- About 0.6 mile northeast of Missouri-Kansas-Texas Railroad station at Skiddy, Morris County, in SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 32, T.13 S., R.6 E., Blakely Township, on the Robert Walker property, in a pasture north of road, near point of first rocky ridge north of line between Geary and Morris Counties, 917.4 feet west of north-south section-line fence, between sections 32 and 33, and 520.8 feet north of east-west section-line fence. Bearing on steeple of church in northwest part of Skiddy, S.70°W. (magnetic). Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 2 inches above ground. Elevation: 1,341.034 feet.

A10-14-6E (Kans.Geod.S.)(Morris County, L.E.Conrad, 1934).-- About 4.0 miles north and 0.1 mile west (thence 0.5 mile southeast in a field) from White City, on a high knoll in hayfield near southeast corner of the H.P. Johnson property, in SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 10, T.14 S., R.6 E., Rolling Prairie Township, 390.4 feet S.50° (magnetic) of lone cottonwood, 354.8 feet north of east-west half-section line fence, and 154.3 feet west of north-south half-section line fence. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, flush with ground. Elevation: 1,422.660 feet.

A15-14-SE (Kans. Geod. S.) (Morris County, L.E. Conrad, 1934).-- About 2.6 miles north of White City, in SW1/4 sec. 14, T.14 S., R.6 E., Rolling Prairie Township, on west side of highway, on the Robert Reid property, near the summit of a low ridge in hayfield, north of site of old farmhouse which is now leveled except for barn and windmill, 631.0 feet north of east-west half-section line fence, 124.4 feet west of north-south property line fence, 35.5 feet north and 127.8 feet west of utility pole to north of half-section line; bearing on chimney of the Robert Reid home N.20°E.; on the chimney of the Cedar & Iowa R.R. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, flush with ground. Elevation: 1,474.91 feet.

A26-14-SE (Kans. Geod. S.) (Morris County, L.E. Conrad, 1934).-- About 0.6 mile northeast of White City Post Office, 0.25 mile due north of high school building, in SW1/4 sec. 26, T.14 S., R.6 E., Rolling Prairie Township, on the Jennie A. Bacon property, about 708 feet north of centerline of section-line road between sections 25 and 26, about 208 feet east and 660 feet north of north-east corner of the Shepherd house in cattle lane, 11.8 feet west of west lane fence, 5.1 feet south of east-west fence, 1.3 feet west of east lane fence. Bearing to Chicago, Rock Island & Pacific Railway signal tower, 94° (magnetic). Station is a U.S.C. & G.S. and State Survey standard disk in concrete, flush with ground. Elevation: 1,478.23 feet.

B26-14-SE (Kans. Geod. S.) (Morris County, L.E. Conrad, 1934).-- About 1.0 mile northeast of White City Post Office, 0.6 mile north of high school building, in NE1/4 sec. 26, T.14 S., R.6 E., Rolling Prairie Township, on the Jennie A. Bacon property, 54.2 feet S.60°E. of east main track of Chicago, Rock Island & Pacific Railway at point near intersection of east-west half-section line, 6.5 feet east of east right-of-way fence of railroad, and 4.7 feet south of hedge fence on east-west half-section line. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, flush with ground. Elevation: 1,479.019 feet.

TT-STATION-NO. 83-M (U.S.C. & G.S., 1926) (Morris County, Kans. Geod. S., 1934; 1935).-- About 0.75 mile northeast of White City, 1,660 feet northeast of crossing of Missouri-Kansas-Texas Railroad and Chicago, Rock Island and Pacific Railroad, 30 feet south-east of centerline of side track, 23 feet northeast of center of iron gate to farm crossing, and 3 feet south of fence corner. Station is a U.S.C. & G.S. standard disk stamped "TT STA NO. 83 1926 M" in concrete. Elevation: 1,476.485 feet.

Plane coordinates: (N), $x = 2,351,711.52$ feet; $y = 173,784.01$ feet.

Wabunsee and Geary Counties

From A35-11-SE (on ZEAN DALE to HUMBOLDT line) to A11-13-SE (on HUMBOLDT to REINHARD line).

No coordinates have been established for stations in this line.

B2-12-SE (Kans. Geod. S.) (Wabunsee County, L.E. Conrad, 1934).-- About 12.2 miles southeast of the Manhattan Post Office building, Riley County, near southeast corner of NE1/4 sec. 2, T.12 S., R.8 E., on property of Malcolm Ave. Washington Township, near the east side of summit of prominent hill, 1,090 feet south of section fence line dividing Wabunsee County and Riley County, approximately 50 feet above road-bed and 174.6 feet west of fence on west side of road. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 2 inches above ground. Elevation: 1,456.552 feet.

C2-12-SE (Kans. Geod. S.) (Wabunsee County, L.E. Conrad, 1934).-- About 13.3 miles southeast of Manhattan Post Office building, Riley County, 12.2 miles northwest of Alma, in SW1/4 sec. 2, T.12 S., R.8 E., Washington Township, on the J.M. Aye property, about 1 mile south of Wabunsee-Riley County line, 50 feet northeast of stone corner post west of road, 49 feet north of east-west section line on one side of road, and 0.9 foot east of east fence line along north-south road. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 1 inch above ground. Elevation: 1,476.250 feet.

NOTE: The supposed east-west section line at west side of road is 3.2 feet farther south than east-west section line north of road. This road is 46.5 feet wide. Bearing on stone corner post 50 feet from tablet west of road is S.30°W. (magnetic).

A11-12-SE (Kans. Geod. S.) (Wabunsee County, L.E. Conrad, 1934).-- About 11.3 miles north-northwest of Alma, in NE1/4 sec. 11, T.12 S., R.8 E., Washington Township, on property of J.M. Aye, 539 feet N.10°W. (magnetic) of frame farmhouse, 449 paces from north fence line of the Alma-Junction City Road, and 0.9 foot west of east fence line on north-south road (47 feet wide from fence to fence). Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 1 inch above ground. Elevation: 1,462.083 feet.

B11-12-SE (Kans. Geod. S.) (Wabunsee County, L.E. Conrad, 1934).-- About 14.2 miles southeast of Manhattan, Riley County, 11.2 miles northwest of Alma, in SW1/4 sec. 11, T.12 S., R.8 E., Washington Township, on the J.M. Aye property south of west side of barn, 210° (magnetic) from southeast corner of farmhouse, 460 paces 90°S. (magnetic) of fence north of road, 1,373 feet 270° (magnetic) from northwest stone corner post at intersection of north-south road with Alma-Junction City Road, 1,384 feet 270° (magnetic) from fence at same corner, and 0.7 foot east of fence north of Alma-Junction City Road. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 2 inches above ground. Elevation: 1,475.580 feet.

A14-12-SE (Kans. Geod. S.) (Wabunsee County, L.E. Conrad, 1934).-- About 14.4 miles southeast of Manhattan, Riley County, 11.5 miles northwest of Alma, in NE1/4 sec. 14, T.12 S., R.8 E., Washington Township, on property of J.M. Aye, about 449 paces from north-south road (40 feet wide at point of bench mark), 266 feet

180° (magnetic) from southwest corner post at intersection of north-south road with Alma-Junction City Road (62.3 feet wide fence to fence), and 113.5 feet 130° (magnetic) from water tank in the J.M. Aye pasture, 190° true azimuth of B.M. A11-12-SE. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 1 inch above ground. Elevation: 1,469.861 feet.

A10-12-SE (Kans. Geod. S.) (Wabunsee County, L.E. Conrad, 1934).-- About 16.6 miles (by speedometer) southeast of Manhattan, Riley County, in NE1/4 sec. 26, T.12 S., R.8 E., Washington Township, 1,222.9 feet west of north-south half-section line road, 18 feet south of centerline of road, and 0.8 foot north of fence line on east-west road, outside of the Lewis Wilson property. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 2 inches above ground. Elevation: 1,474.576 feet.

B10-12-SE (Kans. Geod. S.) (Wabunsee County, L.E. Conrad, 1934).-- About 17.15 miles (by speedometer) southeast of the Manhattan Post Office building, Riley County, in NW1/4 sec. 26, T.12 S., R.8 E., Washington Township, on property line of William Babb, 193.3 feet south of half-section line, 159.1 feet east and 110.4 feet south of northeast corner of the Isabel Horning Johnson house, and 17.75 feet east of centerline of road. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 2 inches above ground. Elevation: 1,482.855 feet.

TT-STATION-NO. 70-M (U.S.C. & G.S., 1926) (Wabunsee County, Kans. Geod. S., 1934).-- About 17.3/4 miles southeast of Manhattan, Riley County, 5 feet east of T-road north at southwest corner sec. 26, T.12 S., R.8 E., along Wabunsee-Geary County line, and 3 feet south of wire fence. Station is a U.S.C. & G.S. standard disk stamped "TT STA NO. 70 1926 M", in concrete. Elevation: 1,475.801 feet.

A27-12-SE (Kans. Geod. S.) (Geary County, L.E. Conrad, 1934).-- About 18.1 miles (speedometer) southeast of Manhattan Post Office building, Riley County, in SE1/4 sec. 27, T.12 S., R.8 E., Jackson Township, outside the Isabel Horning Johnson property line, 1,049.7 feet west of north-south section line, 118.8 feet east of the prolongation of east side of the Edgar Ransour house, 19.0 feet north of centerline of road, and on north side of east-west road. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 1 inch above ground. Elevation: 1,487.145 feet.

A14-12-SE (Kans. Geod. S.) (Geary County, L.E. Conrad, 1934).-- About 19.2 miles south of Manhattan Post Office building, Riley County, in NE1/4 sec. 14, T.12 S., R.8 E., 1,048.0 feet west of centerline of north-south road, on south side of east-west road, 910.5 feet west of prolongation of west side of School District 15, 20 feet south of centerline of east-west road, and outside of property line of Harry Say in Jackson Township. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 2 inches above ground. Elevation: 1,484.158 feet.

A14-12-SE (Kans. Geod. S.) (Geary County, L.E. Conrad, 1934).-- About 19.5 miles southeast of Manhattan Post Office building, Riley County, 0.6 mile south of School District 35, on property of People's State Bank of Alta Vista, just outside front yard, in NW1/4 sec. 14, T.12 S., R.8 E., Jackson Township, 50 feet west of southwest corner of farmhouse, and 12 feet north in line of prolongation of south side of farmhouse. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 2 inches above ground. Elevation: 1,501.902 feet.

B11-12-SE (Kans. Geod. S.) (Geary County, L.E. Conrad, 1934).-- About 19.9 miles (speedometer) southeast of Manhattan Post Office building, Riley County, in SE1/4 sec. 31, T.12 S., R.8 E., Jackson Township, on east side of Presbyterian Churchyard, near north end, 94.5 feet north of centerline of east-west road, 78.25 feet east of southeast corner of church, and 24 feet west of centerline of north-south road. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 2 inches above ground. Elevation: 1,495.620 feet.

A1-13-SE (Kans. Geod. S.) (Geary County, L.E. Conrad, 1934).-- About 20.4 miles (speedometer) southeast of Manhattan Post Office building, Riley County, in SW1/4 sec. 3, T.13 S., R.8 E., outside the Julius Falk property, Liberty Township, 428.1 feet south of the prolongation of south side of the Walter Campbell farmhouse, 19.3 feet east of centerline of north-south road, and 1.0 foot west of fence line east of road. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 2 inches above ground. Elevation: 1,497.106 feet.

A9-13-SE (Kans. Geod. S.) (Geary County, L.E. Conrad, 1934).-- About 6.75 miles (speedometer) northwest of Alta Vista, Wabunsee County, in NE1/4 sec. 9, T.13 S., R.8 E., Liberty Township, on property of C.C. Brown, 262.5 feet south of section line between sections 9 and 4, 21.6 feet west of centerline of road, 6.2 feet south and 2.8 feet west of lone elm. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 1 inch above ground. Elevation: 1,478.511 feet.

A10-13-SE (Kans. Geod. S.) (Geary County, L.E. Conrad, 1934).-- About 6.6 miles (speedometer) northwest of Alta Vista, Wabunsee County, in SW1/4 sec. 10, T.13 S., R.8 E., on property of Julius Falk, Liberty Township, 757 feet north of half-section line, 25.9 feet east of centerline of north-south road, and 8.3 feet east of property-line fence. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 1 inch above ground. Elevation: 1,484.588 feet.

A16-13-SE (Kans. Geod. S.) (Geary County, L.E. Conrad, 1934).-- About 5 miles northwest of Alta Vista, Wabunsee County, in SE1/4 sec. 16, T.13 S., R.8 E., Liberty Township, in northwest corner of District 16 schoolyard, 271.2 feet north of east-west property-line fence, 183.7 feet north and 137 feet west of northwest corner of schoolhouse, 26.3 feet east of west side of schoolyard, 0.7 foot south of north side of schoolyard. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 1 inch above ground. Elevation: 1,474.675 feet.

A21-13-SE (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).-- About 4.15 miles northwest of Alta Vista, Wabunsee County, by State Highway 11, in SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 21, T.13 S., R.6 E., Liberty Township, on property of C.P. Flah, at east edge of a hayfield, in line with row of telephone poles 1,000.0 feet north of east-west section-line fence, 196.1 feet east of fence on west side of field, and 45.0 feet west of north-south fence east of road. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 2 inches above ground. Elevation: 1,475.772 feet.

TT-Station-No.68-M (U.S.C. & G.S., 1926)(Geary County, Kans. Geod.S., 1934).--About 3 miles northwest of Alta Vista, Wabunsee County, 23 feet west of southeast corner sec. 24, T.13 S., R.6 E. and 4 feet northwest of corner fence post. Station is a U.S.C. & G.S. standard disk stamped TT STA. NO. 67 1926 M, in concrete. Elevation: 1,517.117 feet.

A27-13-SE (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).-- About 3.2 miles northwest of Alta Vista, Wabunsee County, in SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 27, T.13 S., R.6 E., Liberty Township, along State Highway 11, outside of the P.G.Morgan property line, 21 feet east of centerline of north-south road, 1,000.0 feet north of east-west section line, 45.5 feet east and 32.6 feet south of seventh pole (on west side of road), 0.75 feet west of present fence line, north of where highway turns south, and under telephone line on east side of road. Station is a U.S.C. & G.S. and State Survey standard disk set in concrete, projecting 1 inch above ground. Elevation: 1,517.291 feet.

A13-13-NE (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).-- About 3.2 miles northwest of Alta Vista, Wabunsee County, in NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 31, T.13 S., R.6 E., in fence line south of State Highway 11, 1,121.6 feet west of centerline of north-south road, 4.0 feet west of sixth telephone pole (west of where highway turns south), 27.9 feet south of centerline of road, and on property line of Walter Morgan in Liberty Township. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 3 inches above ground. Elevation: 1,528.669 feet.

A28-13-SE (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).-- About 3.6 miles northwest of Alta Vista, Wabunsee County, along State Highway 11, in SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 28, T.13 S., R.6 E., Liberty Township, on property of Walter Morgan, 1,914.5 feet east of west section line, 756.8 feet east of Moser Springs cemetery, on east fence, and 27.5 feet north of centerline of highway. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 2 inches above ground. Elevation: 1,530.637 feet.

A12-13-SE (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).-- About 21.8 miles southeast of Junction City, 5 miles northeast of Alta Vista, Wabunsee County, along State Highway 11, in NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 32, T.13 S., R.6 E., Liberty Township, on property of Marlow Crowell, 209.5 feet east of intersection of Humboldt Road and State Highway 11, 29.0 feet south of centerline of highway, 1.65 feet east of second pole from north-south road, and 0.5 feet inside fence line. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 3 inches above ground. Elevation: 1,481.319 feet.

Riley, Geary, Clay and Dickinson Counties

From U.S.C. & G.S. triangulation station ERICSSSEN (described elsewhere in this publication) to U.S.C. & G.S. triangulation station WILKER.

No coordinates have been established for stations in this line.

A12-10-6E (Kans.Geod.S.)(Riley County, L.E.Conrad, 1934).-- About 7.45 miles west of Manhattan, 2.6 miles southwest of Keata (along country roads), in SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 12, T.10 S., R.6 E., Seven Mile Township, on right-of-way adjacent to farm of Bill Ratliff, 226 feet 6" (magnetic) from northeast corner post of section 14, 199 feet north of intersection of sections 11, 12, 13, and 14, 13.7 feet west of west fence of north-south road, 2 feet west of wire fence of north-south road, and 8.80"E. of ERICSSSEN. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, 35 inches below ground. Elevation: 1,325.159 feet.

A14-10-6E (Kans.Geod.S.)(Riley County, L.E.Conrad, 1934).-- About 8.15 miles west of Manhattan, 3.2 miles southwest of Keata (along country roads), in NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 14, T.10 S., R.6 E., Seven Mile Township, 0.7 mile S. 10"W. (magnetic) of station A12-10-6E (by road) on land owned by M.L. Dineen, 167 steps N. 70"W. (magnetic) of southwest corner stone of farmhouse, 88.3 feet south of north fence of east-west road, 41.3 feet south of centerline of stone fence on south side of same road, and 3 feet west of west edge of north-south stone fence. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, 33 inches below ground. Elevation: 1,329.036 feet.

C11-10-6E (Kans.Geod.S.)(Riley County, L.E.Conrad, 1934).-- About 8.6 miles west of Manhattan, 3.65 miles southwest of Keata (along country roads), in SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 11, T.10 S., R.6 E., Seven Mile Township, 212.8 feet 157" (magnetic) from southwest corner of Community House, 99 feet 119" (magnetic) from telephone pole in northeast corner of SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 10, 38.8 feet 66" (magnetic) from tree along west fence, and 0.9 foot from east fence on north-south road. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, 33 inches below ground. Elevation: 1,322.847 feet.

AS-10-6E (Kans.Geod.S.)(Riley County, L.E.Conrad, 1934).-- About 10.85 miles west of Manhattan, 5.9 miles southwest of Keata, 8 miles northwest of Ogden (along country roads), in NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 2, T.10 S., R.6 E., Seven Mile Township, on south edge of plump thicket, east of red barn and cattle lane, on land of John Thomas,

100 feet south and 14 feet west of northeast corner post at intersection, 144.2 feet 3,302" (magnetic) of southeast corner of stone house, 0.4 feet west of east fence of north-south road, and 10.4 feet west of west fence of north-south road. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, 33 inches below ground. Elevation: 1,402.031 feet.

A14-10-6E (Kans.Geod.S.)(Riley County, L.E.Conrad, 1934).-- About 11.0 miles west of Manhattan, 9.15 miles northeast of Milford, Geary County, 3.75 miles northwest of Ogden, 6.25 miles southwest of Keata, (along country roads), in SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 8, T.10 S., R.6 E., on land owned by John Thomas, 0.35 mile (by aneroidometer) due south of RM A2-10-6E, 400 feet east of north-south road, 101 steps northwest of farmhouse, and 40 feet west of east fence of north-south road. (Station is at intersection fence). Station is a U.S.C. & G.S. and State Survey standard disk in concrete, 33 inches below ground. Elevation: 1,288.787 feet.

A20-10-6E (Kans.Geod.S.)(Riley County, L.E.Conrad, 1934).-- About 13.25 miles west of Manhattan, 8 miles southwest of Keata, 6.5 miles northwest of Ogden, (along country roads), in NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 20, T.10 S., R.6 E., Seven Mile Township, on land owned by Dan Brewer, approximately 1.8 miles from station B5-10-6E (by aneroidometer) 500.8 feet south of northeast corner of SE $\frac{1}{4}$ sec. 20, 190 steps north of southeast corner NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 20, north of white house on hill, and 2.45 feet west of stone fence. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, 32 inches below ground. Elevation: 1,291.108 feet.

B20-10-6E (Kans.Geod.S.)(Riley County, L.E.Conrad, 1934).-- About 8.25 miles southwest of Keata, 8 miles east of Milford Post Office, Geary County, 6-1/4 miles northwest of Ogden, (along country roads), in SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 20, T.10 S., R.6 E., Seven Mile Township, on land owned by Dan Brewer, 486 steps southwest of station A20-10-6E, 236 steps south of north quarter-section line of SE $\frac{1}{4}$ SW $\frac{1}{4}$, 380.95 feet north of centerline of road, 289.9 feet 350" (magnetic) from northwest corner of wood barn, 288.7 feet 330" (magnetic) from northwest corner of wood house, 260.5 feet 340" (magnetic) from well, approximately 115 feet west of east section line of sec. 20, and 0.8 feet west of wire fence. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, 32 inches below ground. Elevation: 1,293.777 feet.

A29-10-6E (Kans.Geod.S.)(Riley County, L.E.Conrad, 1934).-- About 9.25 miles southwest of Keata, 7.1 miles east of Milford Post Office, Geary County, 7 miles northwest of Ogden, (along country roads), in NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 29, T.10 S., R.6 E., Seven Mile Township, on land owned by Robert Houseman, 1 mile west of station B20-10-6E (by aneroidometer), directly under wire fence, 515.3 feet 35" (magnetic) from northeast corner post of wood bridge, 432.2 feet due east of telephone pole in northeast corner of sec. 30, and 355.15 feet 100" (magnetic) from south end of galvanized pipe culvert. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, 36 inches below ground. Elevation: 1,307.407 feet.

A25-10-5E (Kans.Geod.S.)(Riley County, L.E.Conrad, 1934).-- About 10.1 miles southeast of Riley, 8-1/4 miles northwest of Ogden, in NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 25, T.10 S., R.5 E., Seven Mile Township, 385.2 feet 254" (magnetic) from telephone pole in northeast corner of sec. 25, 310" (magnetic) from schoolhouse, 43.1 feet south of centerline of east-west section-line road (45 feet wide), and 0.9 foot east of wire fence. Station is a U.S.C. & G.S. and State Survey standard disk in concrete. Elevation: 1,285.984 feet.

A24-10-5E (Kans.Geod.S.)(Riley County, L.E.Conrad, 1934).-- About 9.5 miles southeast of Riley, 8.75 miles northwest of Ogden, in SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 24, T.10 S., R.5 E., Seven Mile Township, 1/4 mile 210" (magnetic) from windmill, 64.8 feet north of centerline of 45-foot east-west section-line road, and 1.4 feet west of north-south half-section line wire fence. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, 36 inches below ground. Elevation: 1,314.563 feet.

B24-10-5E (Kans.Geod.S.)(Riley County, L.E.Conrad, 1934).-- About 9 miles south of Riley, on U.S. Highway 77, 4.95 miles east of Milford Post Office, Geary County, in SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 24, T.10 S., R.5 E., Seven Mile Township, on land of F.B. Younk, 72.8 feet north of intersection of sections 23, 24, 25, and 26, 310.4 feet 170" (magnetic) from southeast post of bridge, 90 steps south of outcrown, 1.8 feet east of east wire fence of road, and 1.7 feet south of wire fence. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, 33 inches below ground. Elevation: 1,302.200 feet.

A26-10-5E (Kans.Geod.S.)(Riley County, L.E.Conrad, 1934).-- About 9 miles south and 1 mile west of Riley, 3.9 miles east of Milford Post Office, Geary County, in NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 26, T.10 S., R.5 E., Seven Mile Township, on land of Mary Ott, 116.3 feet 304" (magnetic) from northwest corner of house, 104.6 feet 132" (magnetic) from southeast corner sec. 22, T.10 S., R.5 E., Geary County, 81.3 feet south of centerline of north fence on east-west road, 41.6 feet south of centerline of south fence on east-west road, 61 feet west of centerline of west fence on north-south road, and 2 feet east of wire fence. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, 34 inches below ground. Elevation: 1,303.582 feet.

A22-10-5E (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).-- About 9 miles south and 1-1/8 miles west of Riley, Riley County, 1.55 miles east of Milford Post Office, (along country roads), in SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 22, T.10 S., R.5 E., Milford Township, on property of Henry Miller, about 728 feet east of half-section line fence, 335.1 feet 190" (magnetic) from well, 170 feet 210" (magnetic) from northeast corner of wagon scales, 50.9 feet north of centerline of road, and 1.6 feet east of wire fence. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 2 inches above ground. No elevation has been determined for this station.

A27-10-4E (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).-- About 9 miles south and 2 miles west of Riley, Riley County, 2.9 miles east of Milford Post Office, (along country roads), in NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 27, T.10 S., R.5 E., Milford Township, on property

of A.B. Bens estate, 134.0 feet 260° (magnetic) from elm, 44.4 feet due south of centerline of north section-line road, 16.8 feet east of centerline of west section-line road, 34.4 feet south of east-west wire fence, and 1.1 feet east of another wire fence. Station is a U.S.C. & G.S. and State Survey standard disk in concrete. Elevation: 1,282.850 feet.

A21-10-5E (Kans. Geod. S.) (Geary County, L.E. Conrad, 1934).-- About 11.6 miles southwest of Riley, Riley County, 2.3 miles southeast of Milford Post Office, (along country roads), in SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 21, T.10 S., R.5 E., Milford Township, on property of Sylvia Sanders, 242.2 feet west of north-south half-section line wire fence, 59.4 feet north of south fence, and 19.4 feet north of north fence of east-west road, (width of road 40 feet). Station is a U.S.C. & G.S. and State Survey standard disk in concrete, flush with ground. Elevation: 1,266.700 feet.

A20-10-5E (Kans. Geod. S.) (Geary County, L.E. Conrad, 1934).-- About 12 miles southwest of Riley, Riley County, 1.65 miles east of Milford Post Office, in SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 20, T.10 S., R.5 E., Milford Township, on property of Bob Wilson, on hill in cattle lane, 264° (magnetic) from the Monroe farmhouse, 501.6 feet west of corner fence post at southwest of sec. 20, 8.2 feet north of section-line fence, and 2.1 feet south of north fence. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, flush with ground. Elevation: 1,210.781 feet.

A30-10-5E (Kans. Geod. S.) (Geary County, L.E. Conrad, 1934).-- About 10.2 miles northwest of Junction City, 0.35 mile south of Milford, in NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 10, T.10 S., R.5 E., Milford Township, on right-of-way of road adjacent to the Charles Chambers farm, 44.4 feet west of wire fence east of road, 30 feet due south of corner of hedgerow at southeast corner of sec. 19, and 1.6 feet due east of wire fence and gatopost near intersection of sections 19, 20, 29, and 30. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, flush with ground. Elevation: 1,176.008 feet.

B10-10-5E (Kans. Geod. S.) (Geary County, L.E. Conrad, 1934).-- About 13 miles southwest of Riley, Riley County, 0.4 mile south of Milford Post Office, (along country roads), in NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 30, T.10 S., R.5 E., on road right-of-way adjoining the Chambers farm, south of water tower, 42.7 feet 205° (magnetic) from power pole, 25.7 feet 142° (magnetic) from southeast post of concrete bridge, and 9.4 feet north of wire fence. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, flush with ground. Elevation: 1,125.610 feet.

A19-10-5E (Kans. Geod. S.) (Geary County, L.E. Conrad, 1934).-- In Milford, in north part of town, about 12.7 miles southwest of Riley, Riley County, (along country roads), in NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 19, T.10 S., R.5 E., under city tower on property belonging to the city, 40.5 feet due north of wire fence, 17.1 feet 10° (magnetic) from steel footing of southeast pole of water tower, and 10 feet 240° (magnetic) from a standpipe. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, flush with ground. Elevation: 1,206.484 feet.

B19-10-5E (Kans. Geod. S.) (Geary County, L.E. Conrad, 1934).-- In Milford, in north part of town, about 12.9 miles southwest of Riley, Riley County, (along country roads), in NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 19, T.10 S., R.5 E., in Milford Cemetery, 95.00 feet azimuth 345° (magnetic) from tombstone (McDowell), 89.1 feet azimuth 320° (magnetic) from tombstone (Martin), 75.5 feet due east of north-south fence, and 1.6 feet from east-west fence. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, 36 inches below ground. Elevation: 1,194.136 feet.

A24-10-4E (Kans. Geod. S.) (Geary County, L.E. Conrad, 1934).-- About 12 miles northwest of Junction City, 1.0 mile southwest of Milford, in NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 24, T.10 S., R.4 E., Milford Township, on Union Pacific Railroad right-of-way, 35.5 feet east of centerline of main track, 13.75 feet 92° (magnetic) from southwest corner and 5.4 feet 270° (magnetic) from southeast corner of depot, and 2.5 feet south of depot. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, flush with ground. Elevation: 1,113.136 feet.

A25-10-4E (Kans. Geod. S.) (Geary County, L.E. Conrad, 1934).-- About 13 miles northwest of Junction City, 1.6 miles southwest of post office in Milford, in NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 25, T.10 S., R.4 E., Milford Township, on property of A.W. Fawley, 529.1 feet east of southwest corner fence post of SE $\frac{1}{4}$ sec. 24, 25 feet south of north fence, and 0.8 feet north of south lane fence. The following bearing is from station: Milford water tower, 218° (magnetic). Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 1 inch above ground. Elevation: 1,193 feet.

B25-10-4E (Kans. Geod. S.) (Geary County, L.E. Conrad, 1934).-- About 13.25 miles northwest of Junction City, 1.7 miles southwest of post office in Milford, in NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 25, T.10 S., R.4 E., Milford Township, 789.1 feet west of southwest corner fence post of SE $\frac{1}{4}$ sec. 24, and 1.1 feet north of south wire fence of east-west road (width of road 60 feet). The following bearing is from station: to Milford water tower, 220° (magnetic). Station is a U.S.C. & G.S. and State Survey standard disk in concrete, flush with ground. Elevation: 1,200 feet.

A34-10-4E (Kans. Geod. S.) (Clay County, L.E. Conrad, 1934).-- About 14-3/4 miles northwest of Junction City, Geary County, 5 miles southwest of Milford, Geary County, in NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 34, T.10 S., R.4 E., on property of W. Reetz, 1,052 feet east of east fence of north-south section-line road, and 1.7 feet south of south fence along east-west road. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, flush with ground. Elevation: 1,253 feet.

B34-10-4E (Kans. Geod. S.) (Clay County, L.E. Conrad, 1934).-- About 14-3/4 miles northwest of Junction City, Geary County, 5.45 miles southwest of Milford, Geary County, in NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 34,

T.10 S., R.4 E., on road right-of-way, 152.6 feet 290° (magnetic) from northwest corner of the Haatz house, 110.7 feet from concrete culvert marked with crosses, and 2 feet west of centerline of hedge fence. The following azimuth is from station: To windmill 310° (magnetic). Station is a U.S.C. & G.S. and State Survey standard disk in concrete, flush with ground. Elevation: 1,218 feet.

A31-10-4E (Kans. Geod. S.) (Clay County, L.E. Conrad, 1934).-- About 16 miles northwest of Junction City, Geary County, 8.4 miles southwest of Milford, Geary County, in SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 31, T.10 S., R.4 E., 250 feet 70° (magnetic) from south wall, 228.1 feet 60° (magnetic) from northeast corner of farmhouse, 21.4 feet 100° (magnetic) from southeast corner of frame shed, and 5.1 feet west of telephone pole. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, flush with ground. Elevation: 1,291 feet.

A6-11-4E (Kans. Geod. S.) (Dickinson County, L.E. Conrad, 1934).-- About 2.2 miles north and 1 mile west of Upland, in SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 5, T.11 S., R.4 E., Fragrant Hill Township, on the Jake Altwick property, on hedgerow on east side of road leading to Wakefield, 750.4 feet east and 38.5 feet north of WILMER triangulation station, 1,280.1 feet north of east-west section line, 25.6 feet east of centerline of north-south road, 7 feet east and 22.4 feet south of eighth crosscut telephone pole north of east-west section line. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 1 inches above ground. Elevation: 1,304 feet.

B6-11-4E (Kans. Geod. S.) (Dickinson County, L.E. Conrad, 1934).-- About 15-3/4 miles northwest of Junction City Post Office, Geary County, 8.7 miles southwest of Milford Post Office, Geary County, in SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 6, T.11 S., R.4 E., 966.3 feet north of east-west half-section fence, 2.8 feet south of power pole, and 0.2 feet west of west wire fence of north-south road. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, flush with ground. No elevation has been determined for this station.

WILMER (U.S.C. & G.S.) (Dickinson County, F.D. Granger, 1889; Kans. Geod. S., 1914).-- About 10 miles north and 1 mile west of Chapman, 8 miles south-southwest of Wakefield, Clay County, 10 miles west-southwest of Milford, Geary County, in SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 1, T.11 S., R.3 E., on land owned (1889) by Rudolph Wilmer, who lived 3/4 mile to the southwest, and in 1934 by Clara Tomi. Station was originally marked as described in notes 1, 2, and 3. In 1922 no surface marks were found. The underground mark is probably in position. The azimuth and distances to certain points are: bench mark A1-11-3E, 1,051 feet 14°14'16"83; A6-11-4E, 750 feet, 267°18'26"; Wakefield water tower, 190°29'; dipole of schoolhouse, District 79, Clay County, 255°17'26"; bench mark B6-11-4E, 245°15'. Elevation: 1,335 feet.

Plane coordinates: (N), $x = 2,272,551.46$ feet; $y = 285,388.33$ feet.

Riley and Geary Counties

From U.S.C. & G.S. triangulation station ERRICUSSEN (described elsewhere in this publication) to A19-12-6E (on HUMBOLDT to ROBBINS line).

No coordinates have been established for stations in this line.

A24-10-6E (Kans. Geod. S.) (Riley County, L.E. Conrad, 1934).-- About 8.5 miles west of Manhattan, 4.55 miles south of Keats, 4 miles north of Ogden (along country roads), approximately 1.5 miles west from ERRICUSSEN, near range of hills on west and east, in NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 24, T.10 S., R.6 E., Ogden Township, on land owned by A. Lundquist, 295.3 feet due west of east wire-and-rock fence of north-south road, 253.3 feet due west of southeast corner of rock fence, 1.5 feet due south of rock fence, 2.5 feet due east of wire fence, and 2.95 feet (magnetic) from vertical stone at intersection of sections 13, 14, 23, and 24. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, 3 feet in ground. Elevation: 1,199.472 feet.

B24-10-6E (Kans. Geod. S.) (Riley County, L.E. Conrad, 1934).-- About 9 miles west of Manhattan, 5.1 miles south of Keats, 3.5 miles north of Ogden (along country roads), in NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 24, T.10 S., R.6 E., Ogden Township, on land owned by John Miller, 400 feet north (magnetic) and 206.9 feet east (magnetic) of northeast corner of the C.E. Dobson house, 180 feet east of post at northwest corner of SW $\frac{1}{4}$ sec. 24, 30° (magnetic) from windmill which is 48.4 feet from northeast corner of house, 92.2 feet west of post at intersection of wire fence east of road, and 0.5 feet south of centerline of fence. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, 32 inches below ground. Elevation: 1,197.248 feet.

A23-10-6E (Kans. Geod. S.) (Riley County, L.E. Conrad, 1934).-- About 9.3 miles west of Manhattan, 5.4 miles south of Keats, 3.2 miles north of Ogden (along country roads), in SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 23, T.10 S., R.6 E., Ogden Township, on land owned by J.E. Marks, 465.3 feet 220° (magnetic) from stone which is 212.3 feet east of corner fence post, at northeast corner SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 23, 333.4 feet 192° (magnetic) from corner fence post at intersection of road fence and quarter-section fence, 143.5 feet east (magnetic) of rock fence, 17 feet east (magnetic) of fence on west side of road, 64 steps 20° (magnetic) from northeast post of wood bridge, 2.7 feet east (magnetic) of wire fence, and about 0.27 mile from station B24-10-6E. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, 34 inches below ground. No elevation has been determined for this station.

B23-10-6E (Kans. Geod. S.) (Riley County, L.E. Conrad, 1934).-- About 9.5 miles west of Manhattan, 5.6 miles south of Keats, 3 miles north of Ogden (along country roads), in SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 23, T.10 S., R.6 E., Ogden Township, on land owned by J.E. Marks, 637

feet east (magnetic) of rock fence west of section 21, and 110 steps 125° (magnetic) from southeast corner of the Hake farmhouse, 3.1 feet northwest of pile of stone near intersection of sections 21, 24, 25, and 26, and 0.5 feet east of wire fence. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, 15 inches below ground. Elevation: 1,354.518 feet.

A2-11-6E (Kans.Geod.S.) (Riley County, L.E. Conrad, 1934).--About 12.3 miles southwest of Manhattan, 2.4 miles southwest of Keats, 1.8 miles northwest of Ogden Post Office (along country roads), in NE1/4 sec. 2, T.11 S., R.6 E., on land owned by Rose Weichelbaum, 1,503.7 feet due south of fence on north side of east-west road, 422 steps due north of fence on south side of east-west road, 258 steps 60° (magnetic) from wall with windmill, 135.8 feet due north of east-west division fence, 76° (magnetic) from Ogden Catholic Church, 7.6 feet due south of three-trunk hackberry tree, and 0.5 feet due west of north-south fence. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, 15 inches below ground. Elevation: 1,354.518 feet.

B2-11-6E (Kans.Geod.S.) (Riley County, L.E. Conrad, 1934).--About 12.5 miles southwest of Manhattan, 2.6 miles southwest of Keats, 2 miles northwest of Ogden (along country roads), in lot 1, NE1/4 sec. 2, T.11 S., R.6 E., Ogden Township, on land owned by Rose Weichelbaum, 1,503.7 feet due south of fence on north side of east-west road, 422 steps due north of fence on south side of east-west road, 258 steps 60° (magnetic) from wall with windmill, 135.8 feet due north of east-west division fence, 76° (magnetic) from Ogden Catholic Church, 7.6 feet due south of three-trunk hackberry tree, and 0.5 feet due west of north-south fence. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, 15 inches below ground. Elevation: 1,354.518 feet.

1 (Kans.Geod.S.) (Riley County, L.E. Conrad, 1934).--About 11 miles southwest of city limits of Manhattan, 2.9 miles west of Ogden Post Office (along country roads), on Fort Riley Military Reservation, in T.11 S., R.6 E., 1417.81 feet 198° (magnetic) from stone on reservation line, 1,016 steps 144° (magnetic) from northeast corner stone of reservation, 138.6 feet east of fence, 16° (magnetic) from battery butte, and 2.66 feet south of reference stone which projects 1.6 feet above ground, marked with "U.S." and "U.S." Station is a U.S.C. & G.S. and State Survey standard disk in concrete, 32 inches below ground. No elevation has been determined for this station.

2 (Kans.Geod.S.) (Riley County, L.E. Conrad, 1934).--About 7.75 miles northeast of Junction City, Geary County, along U.S. Highway 408, about 1.6 miles southwest of Ogden, on Summer Hill (Fort Riley Military Reservation) in T.11 S., R.6 E., 322 steps 346° (magnetic) from 29th Division monument, 214 steps 146° (magnetic) from centerline of highway, 271 feet 138° (magnetic) from northeast corner of northeast foundation of old Camp Funston water tank (measured from mark "+"), 58.7 feet 126° (magnetic) from reference stone marked "+", and 16° (magnetic) from ruins of the General Wood home. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, 34 inches below ground. No elevation has been determined for this station.

3 (Kans.Geod.S.) (Riley County, L.E. Conrad, 1934).--About 7.75 miles northeast of Junction City, Geary County, 1.6 miles southwest of Ogden, on U.S. Highway 408, on old Camp Funston grounds, on Fort Riley Military Reservation, T.11 S., R.6 E., 521.3 feet 130° (magnetic) from powder magazine, 511 feet 287° (magnetic) from 29th Division monument, 77.5 feet 72° (magnetic) from southeast end of concrete culvert, and 31 feet 148° (magnetic) from centerline of pavement of highway. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, 15 inches under ground. No elevation has been determined for this station.

4 (Kans.Geod.S.) (Riley County, L.E. Conrad, 1934).--About 2 miles southwest of Ogden Post Office, northeast of Junction City Post Office, Geary County, (along country roads), on Fort Riley Military Reservation, and on Camp Funston grounds. Distance, direction, and azimuth to centerline of main track of Union Pacific Railroad are 120.6 feet 150° (magnetic); from point on track to bolt at northeast corner of base of semaphore 1322, 956.6 feet 60° (magnetic); 29th Division monument 230° (magnetic). Station is a U.S.C. & G.S. and State Survey standard disk in concrete. No elevation has been determined for this station.

A22-11-6E (Kans.Geod.S.) (Geary County, L.E. Conrad, 1934).--About 7 miles southwest of Ogden, Riley County, 6.4 miles northeast of Junction City Post Office, (along country roads), in NW1/4 sec. 22, T.11 S., R.6 E., on land owned by Russell Bailey, 904.5 feet north of east-west quarter-mile fence, 147 steps from north-south section line on west side of section 22, 105 feet west of elm tree, 0° (magnetic) from Fort Riley Air Beacon, and 14.4 feet west of cross "+" on reference stone on north bank of old river bed. Station is a U.S.C. & G.S. and State Survey standard disk in concrete. Elevation: 1,062.956 feet.

B22-11-6E (Kans.Geod.S.) (Geary County, L.E. Conrad, 1934).--About 7 miles southwest of Ogden Post Office, Riley County, 6.4 miles northeast of Junction City Post Office, (along country roads), in SW1/4 sec. 22, T.11 S., R.6 E., on property of Russell Bailey, east-west quarter-section fence line, 106 feet east of north-south wire fence between sections 21 and 22, and 4.5 feet west of box-elder tree. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, flush with ground. Elevation: 1,055.410 feet.

X (U.S.C. & G.S.) (Geary County, Kans.Geod.S., 1934).--In Fort Riley, at Union Pacific Railroad station, at east side of south-east corner on only smoothly dressed portion of stone water table. Station is a chiseled cross flanked by the letters "UBRM." U.S.C. & G.S. elevation: 1,069.768 feet.

5 (Kans.Geod.S.) (Riley County, L.E. Conrad, 1934).--About 7.75 miles southwest of Ogden Post Office, 5.4 miles northeast of Junction City Post Office, Geary County, (along country roads), on Fort Riley Military Reservation, (Marshall Field), 2,716.8

feet 347° (magnetic) from southeast corner of airplane hangar 2, 111.1 feet 277° (magnetic) from airway beacon, and 1.6 feet south of reservation line wire fence. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, 16 inches below ground. No elevation has been determined for this station.

6 (Kans.Geod.S.) (Geary County, L.E. Conrad, 1934).--About 8.2 miles southwest of Ogden Post Office, Riley County, 5 miles northeast of Junction City Post Office, (along country roads), on Fort Riley Military Reservation (Marshall Field), 133 feet 150° (magnetic) from northeast corner and 21.6 feet 80° (magnetic) from southeast corner of airplane hangar 2. Station is a U.S.C. & G.S. and State Survey standard disk in concrete. No elevation has been determined for this station.

7 (Kans.Geod.S.) (Geary County, L.E. Conrad, 1934).--About 9.95 miles southwest of Ogden Post Office, Riley County, 3.7 miles northeast of Junction City Post Office, (along country roads), on the south line of Marshall Field, on Fort Riley Military Reservation, in T.12 S., R.6 E., 1,402.7 feet 270° (magnetic) from northwest corner stone of farmhouse, 0.2 foot south of east-west wire fence north of road, and bearing 185° (magnetic) from southwest corner of the Marshall Field hangar 1. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, flush with ground. No elevation has been determined for this station.

A4-12-6E (Kans.Geod.S.) (Geary County, L.E. Conrad, 1934).--About 10.6 miles southwest of Ogden, Riley County, 3 miles northeast of Junction City Post Office, (along country roads), in SW1/4 sec. 4, T.12 S., R.6 E., on property of Lichtenham, 196 feet 240° (magnetic) from wall, 150.9 feet 260° (magnetic) from southwest corner of the Lichtenham house, and 0.5 feet east of north-south fence. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, flush with ground. Elevation: 1,074.559 feet.

A17-12-6E (Kans.Geod.S.) (Geary County, L.E. Conrad, 1934).--About 11.5 miles southwest of Ogden Post Office, Riley County, 2.25 miles southeast of Junction City Post Office, (along country roads), in NW1/4 sec. 17, T.12 S., R.6 E., on property owned by Paul Kremer, 351.2 feet east of corner stone at center of section 17 (marked line 1), 2.6 feet 50° (magnetic) from east wire fence along road, 2.5 feet south of east-west half-section wire fence, and 130° (magnetic) from District 18 schoolhouse. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, flush with ground. Elevation: 1,244.504 feet.

B17-12-6E (Kans.Geod.S.) (Geary County, L.E. Conrad, 1934).--About 11.5 miles southwest of Ogden Post Office, Riley County, 2.6 miles southeast of Junction City Post Office, (along country roads), in SW1/4 sec. 17, T.12 S., R.6 E., on road right-of-way, 967.8 feet 340° (magnetic) from intersection of east-west section line (wire fence) and north-south quarter-section line (wire fence), and 0.4 foot 70° (magnetic) from west fence along road. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 2 inches above ground. Elevation: 1,310.331 feet.

Riley and Pottawatomie Counties

From U.S.C. & G.S. triangulation station ERRICSEN (described elsewhere in this publication) to U.S.C. & G.S. triangulation station ZEAN DALE (described elsewhere in this publication).

No coordinates have been established for stations in this line.

A11-10-6E (Kans.Geod.S.) (Riley County, L.E. Conrad, 1934).--About 7.72 miles west of Manhattan, 5.7 miles north of Ogden, 2.35 miles south of Keats, (along country roads), in NE1/4 sec. 11, T.10 S., R.6 E., Seven Mile Township, 0.27 mile north of 0.45 mile west of ERRICSEN, whose azimuth is 282° (magnetic), 15.4 feet west of centerline of north-south road, 1,124.6 feet south of northwest corner of SW1/4 of sec. 12, 479 steps north of southeast corner of SW1/4 of sec. 11, 35.8 feet west of east fence, and 2 feet east of west fence of road. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, 30 inches below ground. Elevation: 1,441.823 feet.

B11-10-6E (Kans.Geod.S.) (Riley County, L.E. Conrad, 1934).--About 8 miles west of Manhattan, 6 miles north of Ogden, 2 miles south of Keats, (along country roads), in SE1/4 sec. 11, T.10 S., R.6 E., Wildcat Township, 0.3 mile south of east-west section line, between sections 2 and 11, 0.3 mile due north of station line, 486.3 feet north of north line of SW1/4 of section 12, 167 steps northwest of northwest corner of stone house (in ruins), 1.15 feet east of west wire fence along north-south road, and N 40° W. (magnetic) of ERRICSEN. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, 30 inches below ground. Elevation: 1,317.357 feet.

A16-9-6E (Kans.Geod.S.) (Riley County, L.E. Conrad, 1934).--About 15 miles northeast of Millford, Geary County, 8.1 miles north of Ogden, 7.4 miles northwest of Manhattan, (along country roads), in SE1/4 sec. 16, T.9 S., R.6 E., Wildcat Township, on land owned by Chicago, Rock Island & Pacific Railroad, 191.5 feet N 74° W. of northwest corner of Keats railroad station, 120 steps N 84° W. of southwest corner of elevator (Hulse Lumber Company), 59.2 feet north of centerline of north rail of main line of railroad, 70.36 feet N 70° E. of center foundation bolt on north side of mill crane, 44.3 feet west of milepost 152.15, 0.75 foot west of west edge of north-south sidewalk and S 16° E. of station B36-9-6E. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, 38 inches below ground. (Tablet is 2 inches below ground.) Elevation: 1,125.543 feet.

B36-9-6E (Kans.Geod.S.)(Riley County, L.E.Conrad, 1934).-- In the village of Keats, about 15-3/4 miles northeast of Milford, Geary County, 8.35 miles north of Ogden, about 7.4 miles northwest of Manhattan, (along U.S.Highway 40N), in NW1/4 sec. 36, T.9 S., R.6 E., Wildcat Township, in northeast corner stone of entrance of Keats Public Schoolhouse (brick schoolhouse), 194.4 feet S.10°W. (magnetic) of station C36-9-6E, 70.65 feet west of east sidewalk (sidewalk on west side of north-south road), 21.95 feet from northeast corner of building, 1.85 feet up from walk, and 0.9 foot from north edge of stone. Station is a U.S.C. & G.S. and State Survey standard disk in concrete. Elevation: 1,151.573 feet.

C36-9-6E (Kans.Geod.S.)(Riley County, L.E.Conrad, 1934).-- In Keats, about 15-3/4 miles northeast of Milford, Geary County, 8.4 miles north of Ogden, 7.4 miles northwest of Manhattan, along U.S.Highway 40N, in NW1/4 sec. 36, T.9 S., R.6 E., Wildcat Township, near land owned by W.D.Ayres, 137 feet N.28°W. (magnetic) of northwest corner of stone house, 64 steps N.85°E. (magnetic) of filling station pump, 0.53 foot south of wire fence on north side of U.S.Highway 40N at intersection of north-south road through Keats, and N.10°E. of BM 1-4. Station is a U.S.C. & G.S. and State Survey standard disk in concrete. Elevation: 1,137.795 feet.

D36-9-6E (Kans.Geod.S.)(Riley County, L.E.Conrad, 1934).-- About 16 miles northeast of Milford, Geary County, (along country road), 7.1 miles northwest of Manhattan, (along U.S.Highway 40N), about 0.3 mile southeast of Keats, in NE1/4 sec. 36, T.9 S., R.6 E., Wildcat Township, south of land owned by Bill Craven, 0.25 mile N.60°W. (magnetic) of intersection of road with section line, between sections 31 and 36, 694.35 feet S.60°E. (magnetic) of northeast corner post of bridge railing (256 steps southeast of C36-9-6E), 76.5 feet north of south fence, S.60°W. of peak of hill, and 1.1 feet south of north fence of road. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, 32 inches below ground. Elevation: 1,144.011 feet.

A5-10-7E (Kans.Geod.S.)(Riley County, L.E.Conrad, 1934).-- About 5.5 miles northwest of Manhattan along U.S.Highway 40N, 1.9 miles southeast of Keats, in NW1/4 sec. 5, T.10 S., R.7 E., Wildcat Township, on land of M.A.Goff (who owns land on both sides of road), 0.25 mile north of white house (green roof), N.80°E. (magnetic) of southeast wing of bridge, at intersection of road, 15.1 feet southeast of northeast corner of east post of bridge slab, 1.1 feet northwest of northeast corner of east wingpost, 1.1 feet northeast of northwest corner of wingpost and 0.85 foot north of north center of wingpost. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, 4 inches below ground. Elevation: 1,112.751 feet.

B5-10-7E (Kans.Geod.S.)(Riley County, L.E.Conrad, 1934).-- About 5.0 miles northwest of Manhattan, 2.4 miles southeast of Keats, along U.S.Highway 40N, in SW1/4 sec. 5, T.10 S., R.7 E., Wildcat Township, on the Bruch Wilson farm, 790.5 feet north of centerline of Chicago, Rock Island & Pacific Railroad tracks, 25.8 feet north of power line poles, and 15 steps from half-mile line (road from fence to fence 62 feet wide). Station is a U.S.C. & G.S. and State Survey standard disk in concrete, 32 inches below ground. Elevation: 1,138.988 feet.

1-1 (Kans.Geod.S.)(Riley County, L.E.Conrad, 1934).--About 4.85 miles northwest of Manhattan, 2.55 miles southeast of Keats (by speedometer), along U.S.Highway 40N, 0.15 mile from B5-10-7E, between B5-10-7E and C5-10-7E, in SW1/4 sec. 5, T.10 S., R.7 E., Wildcat Township, in north curb of bridge, and 10.1 feet west of end of bridge. Station is a monel metal rivet. Elevation: 1,105.016 feet.

C5-10-7E (Kans.Geod.S.)(Riley County, L.E.Conrad, 1934).-- About 3.8 miles northwest of Manhattan, 3.6 miles southeast of Keats (by speedometer), along U.S.Highway 40N, in SW1/4 sec. 5, T.10 S., R.7 E., Wildcat Township, on grounds of School District 17, 182.7 feet 100° (magnetic) from southwest corner of house, 78 feet 120° (magnetic) from southeast corner of schoolhouse, 76.3 feet 140° (magnetic) from northeast corner of schoolhouse, and 4.9 feet north of north fence along road (68.8 feet wide between fences). Station is a U.S.C. & G.S. and State Survey standard disk in concrete, 34 inches below ground. Elevation: 1,132.849 feet.

A9-10-7E (Kans.Geod.S.)(Riley County, L.E.Conrad, 1934).-- About 3.7 miles northwest of Manhattan, 3.7 miles southeast of Keats (by speedometer), along U.S.Highway 40N, in NW1/4 sec. 9, T.10 S., R.7 E., Wildcat Township, on land owned by R.L.Ellis, 341 feet 120° (magnetic) from the Ellis barn, 204 steps 110° (magnetic) from BM C5-10-7E, and 30 feet due north of north fence along road. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, 33 inches below ground. Elevation: 1,136.679 feet.

B9-10-7E (Kans.Geod.S.)(Riley County, L.E.Conrad, 1934).-- About 3.45 miles northwest of Manhattan, 3.95 miles southeast of Keats (by speedometer), along U.S.Highway 40N, in NE1/4 sec. 9, T.10 S., R.7 E., Wildcat Township, 688 feet due north of centerline of Chicago, Rock Island & Pacific Railroad tracks, 58 feet south of power pole, 54.5 feet 110° (magnetic) from telephone pole, and 3.7 feet northwest of southwest corner post of bridge, in line with posts on south side of bridge. Roadway over bridge is 31 feet, span of bridge is 6 feet, and road runs W.20°N. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, 40 inches below ground. Elevation: 1,110.755 feet.

1-2 (Kans.Geod.S.)(Riley County, L.E.Conrad, 1934).--About 4.25 miles southeast of Keats, 2.15 miles northwest of Manhattan, (by speedometer), along U.S.Highway 40N, in SE1/4 sec. 10, T.10 S., R.7 E., Manhattan Township, and 17.3 feet east of west end post on north side of bridge. Station is a monel metal rivet. Elevation: 1,061.077 feet.

A14-10-7E (Kans.Geod.S.)(Riley County, L.E.Conrad, 1934).-- About 5.9 miles southeast of Keats, 1.5 miles west of Manhattan, (by speedometer), along U.S.Highway 40N, on highway right-of-way, in NE1/4 sec. 14, T.10 S., R.7 E., Manhattan Township, 487.7 feet due north of centerline of Chicago, Rock Island & Pacific Railroad track, 247.9 feet 46° (magnetic) from northeast corner of frame farmhouse, 158.5 feet 135° (magnetic) from southeast corner of frame farmhouse across road, 31.2 feet south of centerline of pavement with 60-foot right-of-way, 4.9 feet west of power pole in line with north-south fence, between NE1/4 sec. 14, and 1.8 feet north of north fence along highway. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, 38 inches below ground. Elevation: 1,054.624 feet.

A11-10-7E (Kans.Geod.S.)(Riley County, L.E.Conrad, 1934).-- About 6.15 miles southeast of Keats Post Office, 1.25 miles west of Manhattan city limits, (speedometer), along U.S.Highway 40N, in SE1/4 sec. 11, T.10 S., R.7 E., 226.6 feet 40° (magnetic) from northeast corner of the Ed. Haid house, 64 feet south of north fence on highway, 15.7 feet north of south wire fence on highway, 16.95 feet south of centerline of slab, and 2.45 feet 206° (magnetic) from drainage warning post south of road. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, 38 inches below ground. Elevation: 1,049.468 feet.

A7-10-8E (Kans.Geod.S.)(Riley County, L.E.Conrad, 1934).-- About 2 miles northwest of Manhattan Post Office, on south side of Kansas State College baseball field, in Manhattan, near intersection of College Heights Road and first road west of Engineering Building, on college campus, in lot 22, sec. 7, T.10 S., R.8 E., 239.1 feet 322° (magnetic) from northwest corner of Engineering Building, 71.7 feet north of north fence of College Heights Road, 63.9 feet due west (outside edge) of southeast corner of baseball field, and 3.4 feet south of wire fence on north side of College Heights Road. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, 38 inches below ground. Elevation: 1,081.580 feet.

B7-10-8E (Kans.Geod.S.)(Riley County, L.E.Conrad, 1934).-- About 2.9 miles northwest of Manhattan Post Office, 0.8 mile north of college power plant stack, in lot 5, sec. 7, T.10 S., R.8 E., on land owned by Kansas State College, 1,013.9 feet east of west fence of north-south road, 961.7 feet east of east fence of north-south road, between lots 5 and 6, 323 steps south of north fence of lot 5, 132° (magnetic) from house, 177 feet west of north-south fence, and 178.7 feet south of east-west fence. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, flush with ground. Elevation: 1,130.655 feet.

A18-10-8E (Kans.Geod.S.)(Riley County, L.E.Conrad, 1934).--About 2 miles northwest of Manhattan Post Office, south of Engraving Building on campus of Kansas State College, in lot 4, sec. 18, T.10 S., R.8 E., 25 feet south of north curb of east-west road in front of building, 5 feet south of south curb of paved east-west road in front of building, 191.15 feet, 95° (magnetic) from southwest corner of building, 192.8 feet, 230° (magnetic) from southeast corner of building, and 41.55 feet south of center of main entrance of building (first step). Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 1 inch above ground. U.S.C. & G.S. elevation: 1,073.227 feet.

B18-10-8E (Kans.Geod.S.)(Riley County, L.E.Conrad, 1934).-- About 1.75 miles northwest of Manhattan Post Office, on campus of Kansas State College in Manhattan, in lot 3, sec. 18, T.10 S., R.8 E., 511.8 feet 140° (magnetic) from southwest corner of the president's house, 284.8 feet west of curb on west side of Manhattan Avenue (width of avenue is 50.2 feet), 227.7 feet west of stone wall on west side of Manhattan Avenue, 39.4 feet south of east-west road, and 15.2 feet south of south curb of east-west road at Vattier entrance. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, 16-1/2 inches below ground. Elevation: 1,026.873 feet.

C18-10-8E (Kans.Geod.S.)(Riley County, L.E.Conrad, 1934).-- About 0.9 mile northwest of Manhattan Post Office, on parking of Blumont Avenue school grounds, in sec. 18, T.10 S., R.8 E., 215.6 feet 50° (magnetic) from northeast corner of Blumont Avenue schoolhouse, 17.5 feet west of west curb of Juliette Avenue (34.7 feet wide), 8.9 feet south of south curb of Vattier Street (30.1 feet wide, measured from inside of curb), and 0.45 foot north of north edge of east-west sidewalk. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, 4 inches below ground. Elevation: 1,013.330 feet.

D18-10-8E (Kans.Geod.S.)(Riley County, L.E.Conrad, 1934).-- In Manhattan, in lot 203, sec. 18, T.10 S., R.8 E., 1 block west and 1 block north of Manhattan Post Office, near intersection of Poyntz Avenue and 5th Street, in cornerstone of Riley County Courthouse, 0.97 foot east of southwest corner of building, 4.55 feet down from cornerstone marked "1906," and 3 feet up from level of sidewalk. Station is a U.S.C. & G.S. and State Survey standard disk in concrete. Elevation: 1,018.779 feet.

A9-10-9E (Kans.Geod.S.)(Pottawatomie County, L.E.Conrad, 1934).--About 2 miles east of Manhattan Post Office, Riley County, in NE1/4 sec. 9, T.10 S., R.8 E., on the J.L.Johns property, 35.3 feet south of centerline of slab of U.S.Highway 40N, 681.2 feet 64° (magnetic) from east line of Blue River Bridge (measured along centerline of highway), and 239.0 feet 342° (magnetic) from northwest corner post of the Johns residence. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 1 inch above ground. Elevation: 1,008.601 feet.

B9-10-9E (Kans.Geod.S.)(Pottawatomie County, L.E.Conrad, 1934).--About 5.8 miles east of Saint George Post Office, 2.4 miles east of Manhattan Post Office, Riley County, along U.S.Highway 40, in NW1/4 sec. 9, T.10 S., R.8 E., on property of Dave Carlson, 422.5 feet 70° (magnetic) from southwest corner of concrete culvert, 44.1 feet south of centerline of concrete slab of highway, (width of road 67.5 feet), 11.5 feet south of east-west wire fence on south side of highway, and 1.45 feet east of

north-south wire fence. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 1 inch above ground. Elevation: 1,014.775 feet.

A10-10-SE (Kans.Geod.S.)(Pottawatomie County, L.E.Conrad, 1934).--About 4.9 miles west of Saint George Post Office, 1.35 miles east of Manhattan Post Office, Riley County, along U.S. Highway 40, in NW¼ sec. 10, T.10 S., R.8 E., on property of F.C.Oleann, 181.2 feet south-southeast of southeast corner post of concrete culvert on north-south road, 160° (magnetic) from southeast corner post of concrete culvert on north-south road, 113.4 feet south of north highway fence, 79.5 feet south of centerline of slab on highway, 51 feet west-northwest of northeast corner, 27.4 feet 140° (magnetic) from northwest corner of foundation of the Glenn house, and 2 feet east of east fence line of north-south road. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, flush with ground. Elevation: 1,014.527 feet.

A11-10-SE (Kans.Geod.S.)(Pottawatomie County, L.E.Conrad, 1934).--About 4.4 miles west of Saint George Post Office, 1.85 miles east of Manhattan Post Office, Riley County, on U.S. Highway 40, in southeast corner of curb of concrete culvert in NW¼ sec. 11, T.10 S., R.8 E., (culvert between sections 10 and 11). Distance, direction, and azimuth to certain points are: centerline of Union Pacific Railroad tracks, 745.1 feet south; centerline of slab on U.S. Highway 40, 103.4 feet north; south side of south rail post of culvert, 0.7 foot north. Station is a U.S.C. & G.S. and State Survey standard disk in concrete. Elevation: 1,002.689 feet.

B11-10-SE (Kans.Geod.S.)(Pottawatomie County, L.E.Conrad, 1934).--About 4.65 miles east of Manhattan Post Office, Riley County, 1.4 miles west of Saint George Post Office, in NE¼ sec. 11, T.10 S., R.8 E., on land owned by D.B.Walker, 38.2 feet south of centerline of U.S. Highway 40, 73.5 feet south of fence along highway, 225.6 feet 160° (magnetic) from northeast corner of the Walker house, and 110° (magnetic) from schoolhouse. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 1 inch above ground. Elevation: 999.117 feet.

A12-10-SE (Kans.Geod.S.)(Pottawatomie County, L.E.Conrad, 1934).--About 5 miles east of Manhattan Post Office, Riley County, 1.35 miles from Saint George Post Office, along U.S. Highway 40, in NW¼ sec. 12, T.10 S., R.8 E., on property of G.B. White, 49.7 feet south of centerline of highway, 24.4 feet 300° (magnetic) from northwest corner of the G.A. White house, 19.6 feet south of north yard fence, and 1.4 feet east of west yard fence. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, flush with ground. Elevation: 1,005.230 feet.

A7-10-9E (Kans.Geod.S.)(Pottawatomie County, L.E.Conrad, 1934).--About 6.65 miles east of Manhattan Post Office, Riley County, 1.4 miles west of Saint George Post Office, along U.S. Highway 40, in lot 7, NE¼ sec. 7, T.10 S., R.9 E., on the W.H. Bush property, 110.6 feet south of centerline of slab of highway, 74 feet 110° (magnetic) from northeast corner and 68.15 feet north of northwest corner of the Bush house, and 61.4 feet west of yard fence. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, flush with ground. Elevation: 1,055.162 feet.

A8-10-9E (Kans.Geod.S.)(Pottawatomie County, L.E.Conrad, 1934).--About 7.1 miles east of Manhattan Post Office, 1.15 miles west of Saint George Post Office, in SE¼ sec. 8, T.10 S., R.9 E., on right-of-way, at intersection of U.S. Highway 40 and County Highway 917, 183.3 feet 300° (magnetic) from a cross marked on concrete culvert on Highway 40, 162.1 feet north of centerline of slab on Highway 40, and 64.5 feet 350° (magnetic) of large mulberry trees. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, flush with ground. Elevation: 1,070.562 feet.

A9-10-9E (Kans.Geod.S.)(Pottawatomie County, L.E.Conrad, 1934).--About 8.1 miles east of Manhattan Post Office, Riley County, 0.15 mile west of Saint George Post Office, along U.S. Highway 40, on west bank of Black Jack Creek, in NW¼ sec. 9, T.10 S., R.9 E., on the John H. Cary property, 75.4 feet south of southwest corner of concrete barn foundation, 63 feet 260° (magnetic) from mark "X" on southwest corner of bridge, 36.1 feet south of centerline of slab on highway, 26 feet 300° (magnetic) from fence on west side of creek, and 1.5 feet south of south fence along road. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, flush with ground. Elevation: 1,004.656 feet.

U (U.S.C. & G.S.)(Pottawatomie County, Kans.Geod.S., 1934).--In Saint George, at brick store owned by J.D.Robertson, at east window in front of south side of building, to right of entrance and on stone window sill. Station is bottom of a square hole, surrounded by the letters "UBM." U.S.C. & G.S. elevation: 1,003.102 feet.

B9-10-9E (Kans.Geod.S.)(Pottawatomie County, L.E.Conrad, 1934).--In Saint George, about 8.3 miles east of Manhattan Post Office, Riley County, in SE¼ sec. 9, T.10 S., R.9 E., about 2 blocks east of post office, on U.S. Highway 40, on the John Rowe property, 63.9 feet west-southwest of southeast corner and 35.6 feet 160° (magnetic) from southwest corner of the Rowhouse foundation, 50.6 feet 200° (magnetic) from wire fence on west side of lot, 15.6 feet 190° (magnetic) from centerline of retaining wall on south side of lot. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, 2 inches below ground. Elevation: 1,027.214 feet.

U.S.C. & G.S. (Pottawatomie County, Kans.Geod.S., 1934).--Just southeast of Saint George, and on southwest corner of old stone abutment on north end of bridge 5. Station is a U.S.C. & G.S. standard disk. No elevation has been determined for this station.

A28-10-9E (Kans.Geod.S.)(Riley County, L.E.Conrad, 1934).--About 11.4 miles southeast of Manhattan Post Office, 3.25 miles

southeast of Saint George Post Office, Pottawatomie County, in NE¼ sec. 28, T.10 S., R.9 E., on land owned by Bennett of Manhattan, 110.3 feet from north wire fence on north-south eighth-mile line, 142.8 feet 270° (magnetic) west of corner post at intersection of north-south eighth-mile fence with east-west quarter-mile fence, 583.6 feet west of wire fence along north-south road (width of road 41.3 feet), 210° (magnetic) from rock house across highway, and 100° (magnetic) from frame house. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, flush with ground. Elevation: 1,108.437 feet.

B28-10-9E (Kans.Geod.S.)(Riley County, L.E.Conrad, 1934).--About 12 miles southeast of Manhattan, 3.9 miles south of Saint George Post Office, Pottawatomie County, (along country roads), on land owned by Kilgore, in NE¼ sec. 28, T.10 S., R.9 E., 1,718.5 feet north and 251.1 feet west of southeast corner of sec. 28, and 1.2 feet west of west wire fence on side of 32-foot road. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, 34 inches below ground. Elevation: 1,130.570 feet.

A1-11-9E (Kans.Geod.S.)(Riley County, L.E.Conrad, 1934).--About 11.4 miles southeast of Manhattan, 5.3 miles south of Saint George Post Office, Pottawatomie County, (along country roads), in NW¼ sec. 1, T.11 S., R.9 E., on land owned by Hayden, 871.3 feet west of north-south quarter-mile fence of section 3, 200° (magnetic) from abandoned farmhouse, 37 feet east of centerline of hedge fence on west side of section 34, and 3.2 feet south of centerline of stone-and-wire fence on south side of section 34. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 2 inches above ground. Elevation: 1,108.442 feet.

B1-11-9E (Kans.Geod.S.)(Riley County, L.E.Conrad, 1934).--About 13.7 miles southeast of Manhattan, about 5.6 miles south of Saint George Post Office, Pottawatomie County, (along country roads), in ground in NW¼ sec. 1, T.11 S., R.9 E., on land owned by Hayden of Topeka, 1,222.4 feet south of wire fence on north line of sec. 3, and 1.1 feet west of north-south quarter-mile line of sec. 1. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, 15 inches below ground. Elevation: 1,138.554 feet.

A29-10-9E (Kans.Geod.S.)(Riley County, L.E.Conrad, 1934).--In Zeandale, in NE¼ sec. 29, T.10 S., R.9 E., Zeandale Township, in District 42 schoolyard, 55.5 feet west and 4.5 feet north of southeast corner of schoolhouse in line with south wall, 0.8 foot inside of schoolyard, and 18.3 feet south of south edge of sidewalk leading to schoolhouse. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 2 inches above ground. No elevation has been determined for this station.

A8-11-9E (Kans.Geod.S.)(Riley County, L.E.Conrad, 1934).--About 4.1 miles (auto) south of Zeandale, in northeast corner NE¼ sec. 8, T.11 S., R.9 E., in schoolyard of District 44, 58.8 feet east and 4.3 feet south of northeast corner of schoolhouse, in line with north wall, 51.8 feet north and 25.7 feet east of flagpole, 6.9 feet north of sidewalk leading to schoolhouse, and 0.25 foot inside present fence line. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 3 inches above ground. Elevation: 1,102.700 feet.

A9-11-9E (Kans.Geod.S.)(Riley County, L.E.Conrad, 1934).--About 14.9 miles southeast of Manhattan, 6.8 miles southeast of Saint George Post Office, Pottawatomie County, (along country roads), in NE¼ sec. 9, T.11 S., R.9 E., on road right-of-way, 22 feet west of wire fence between sections 9 and 10, 0.8 foot north of wire fence on south side of east-west road, and due east of stone at schoolhouse, District 44. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 2 inches above ground. Elevation: 1,214.260 feet.

A10-11-9E (Kans.Geod.S.)(Riley County, L.E.Conrad, 1934).--About 15.4 miles southeast of Manhattan, 7.3 miles southeast of Saint George Post Office, in SW¼ sec. 10, T.11 S., R.9 E., on land owned by R.R.Perry of Manhattan, 1.7 feet west of north-south quarter-mile line, 1,568.7 feet south of east-west half-mile road (south fence) (width of road 40.6 feet), and 100° (magnetic) from District 44 schoolhouse. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 2 inches above ground. Elevation: 1,346.386 feet.

Dickinson County

From U.S.C. & G.S. triangulation station WILMER (described elsewhere in this publication) to U.S.C. & G.S. triangulation station TAYLOR.

No coordinates have been established for stations in this line.

A1-11-3E (Kans.Geod.S.)(Dickinson County, L.E.Conrad, 1934).--About 2 miles north and 1.2 miles west (highway) of Upland, in SE¼ sec. 1, T.11 S., R.3 E., Sherman Township, on the property of Clara Toml, 1,021.6 feet south and 280.2 feet west of WILMER, 1,010.5 feet west of north-south section line, and 3.25 feet west of eighth telephone pole west of section line. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 3 inches above ground. Elevation: 1,331 feet.

A7-11-4E (Kans.Geod.S.)(Dickinson County, L.E.Conrad, 1934).--About 1.0 mile west and 1.75 miles north (highway) of Upland, in SW¼ sec. 7, T.11 S., R.4 E., Prager Hill Township, on property of W.R.Cookson, about 162 feet west and 135 feet north of northwest corner of barn and in a prolongation of north side of barn, 75.4 feet west of west face of foundation of the Cookson house measured from point 24.7 feet south of northwest corner of house. Station is a U.S.C. & G.S. and State Survey standard disk

in concrete, projecting 2 inches above ground. Elevation: 1,310 feet.

A12-11-3E (Kans.Geod.S.)(Dickinson County, L.E.Conrad, 1934).--About 1 mile west and 1.3 miles (highway) north of Kansas Farmers Mutual Insurance Association building at Upland, in NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 12, T.12 S., R.3 E., Sherman Township, on property of Lewis Frohart, 0.3 mile north of east-west section line, 91.3 feet west of north-south section-line fence, and 35.7 feet east of lone hedge tree in east-west fence line. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 3 inches above ground. Elevation: 1,326 feet.

A13-11-4E (Kans.Geod.S.)(Dickinson County, L.E.Conrad, 1934).--About 0.5 mile (highway) west of Upland, in SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 18, T.11 S., R.4 E., Fragrant Hill Township, in Liberty Cemetery, between lot 26 (Crosby) and lot 27 (Reed), 118.8 feet north of east-west section-line fence, 65.4 feet east of north-south half-section line fence, and 1.5 feet south of marker at south-west corner of lot 27. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, flush with ground. Elevation: 1,256 feet.

A19-11-4E (Kans.Geod.S.)(Dickinson County, L.E.Conrad, 1934).--In Upland, near northeast corner of NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 19, T.11 S., R.4 E., Fragrant Hill Township, on property of the Kansas Farmers Mutual Insurance Association, 18.4 feet east and 0.85 foot south of northeast corner of building, 16.6 feet north of sidewalk leading to main entrance, 2.2 feet west and 2.6 feet south of nearest point on curb property to the bench mark. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 1 inch above ground. Elevation: 1,260.695 feet.

A29-11-4E (Kans.Geod.S.)(Dickinson County, L.E.Conrad, 1934).--About 1.7 miles (highway) south of Upland, in NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 29, T.11 S., R.4 E., Fragrant Hill Township, on property of Adolf Gfeller, east of highway on a prominent knoll, 208.5 feet east and 140.4 feet south of southeast corner of Marvin Gfeller house in a line of prolongation of south side of house, 113 feet east of west section-line fence, 18.2 feet west and 3.8 feet south of southwest corner of granary and in a line of prolongation of the south side of granary. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 3 inches above ground. Elevation: 1,260.478 feet.

A32-11-4E (Kans.Geod.S.)(Dickinson County, L.E.Conrad, 1934).--About 2.2 miles (highway) south of Upland, in NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 32, T.11 S., R.4 E., Fragrant Hill Township, on the Charles Gfeller property, about 366 feet east of north-south section-line fence, 55.2 feet north of east-west fence north of lane, and 47.9 feet west and 2.7 feet north of northwest corner of farmhouse, in a line of prolongation of north side of house. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 3 inches above ground. Elevation: 1,260.747 feet.

A6-12-4E (Kans.Geod.S.)(Dickinson County, L.E.Conrad, 1934).--About 4.2 miles (highway) north of Chapman, in SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 6, T.12 S., R.4 E., Noble Township, on property of W.H.Chamberlin, 1,029.7 feet north of east-west section line, at first rock outcrop north of Blue Line Road, 96.8 feet west of east property line fence, 33.3 feet north and 96.8 feet west of fourth high-line pole north from corner. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 3 inches above ground. Elevation: 1,229.399 feet.

A7-12-4E (Kans.Geod.S.)(Dickinson County, L.E.Conrad, 1934).--About 3.3 miles (highway) north of Chapman, in NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 7, T.12 S., R.4 E., Noble Township, on the F.A.Holland property, 1,610.5 feet north of east-west section line, 50.8 feet south and 5.3 feet west of seventh high-line pole north of section line, 40.3 feet east and 163.8 feet north of northeast corner of the Holland farmhouse, and 2.4 feet west of north-south fence. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 2 inches above ground. Elevation: 1,224.701 feet.

A20-12-4E (Kans.Geod.S.)(Dickinson County, L.E.Conrad, 1934).--About 2.3 miles (highway) north of Chapman, in NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 20, T.12 S., R.4 E., Noble Township, on the William Lantz property, under first high-line tower east of north-south road, 150.25 feet south of centerline of east-west section line, 51.25 feet east of fence line, and 3.3 feet east of west leg of tower. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 1 inch above ground. Elevation: 1,114.680 feet.

A19-12-4E (Kans.Geod.S.)(Dickinson County, L.E.Conrad, 1934).--About 1.5 miles (highway) north of Chapman, at south end of bridge over Chapman Creek, at about the south end of line between sections 20 and 21, T.12 S., R.4 E., Noble Township, 1.8 feet east of west side of concrete abut., and 0.95 foot south of concrete slab over bridge. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, 15 inches below ground. Elevation: 1,115.532 feet.

C31-12-4E (Kans.Geod.S.)(Dickinson County, L.E.Conrad, 1934).--In Chapman, in sec. 31, T.12 S., R.4 E., and in northwest corner of high school grounds. Station is a U.S.C. & G.S. and State Survey standard disk in concrete. Elevation: 1,116.627 feet.

B31-12-4E (Kans.Geod.S.)(Dickinson County, L.E.Conrad, 1934).--In Chapman, in NE $\frac{1}{4}$ sec. 31, T.12 S., R.4 E., Noble Township, near northwest corner of the Dickinson County Community High School grounds, 76.5 feet west and 61.8 feet north of northwest corner of shops building and in a line of prolongation of the north side of building, 100.7 feet east and 1.5 feet north of northeast corner of the Drenner house on North Logan Street and in a line of prolongation of the north side of house, and 3.5 feet south of West Fifth Street sidewalk. Station is a U.S.C. & G.S.

and State Survey standard disk in concrete, projecting 2 inches above ground. Elevation: 1,112.663 feet.

A31-12-4E (Kans.Geod.S.)(Dickinson County, L.E.Conrad, 1934).--In Chapman, in NE $\frac{1}{4}$ sec. 31, T.12 S., R.4 E., Noble Township, at parking area at school District 80, 69.9 feet north and 51.7 feet west of northwest corner of the Chapman State Bank and in a line of prolongation of the west side of bank, 44.4 feet south and 28.4 feet east of southeast corner of schoolhouse and in a line of prolongation of the east side of building, 13.3 feet north of West Fifth Street sidewalk, and 3.6 feet west of North Marshall Street curb. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 1 inch above ground. Elevation: 1,110.066 feet.

B6-13-4E (Kans.Geod.S.)(Dickinson County, L.E.Conrad, 1934).--About 1.0 mile (along main highway) south of Chapman, in NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 6, T.13 S., R.4 E., Rinehart Township, on property of J.T. Cregan, on section line between sections 6 and 31, 49.3 feet south and 62.5 feet west of first telephone pole east of road and north of section line, and 10.3 feet west of north-south property-line fence. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 2 inches above ground. No elevation has been determined for this station.

A6-13-4E (Kans.Geod.S.)(Dickinson County, L.E.Conrad, 1934).--About 1.5 miles (highway) south of Chapman, in NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 6, T.13 S., R.4 E., Rinehart Township, on the J.T.Cregan property, 216.6 feet east and 39.3 feet south of southeast corner of farm-house and in a line of prolongation of south side of house, 147.3 feet west and 55.1 feet north of northwest corner of the Paul Scanlan house and in a line of prolongation of north side of house, 29.5 feet west of east section-line fence, and 1.3 feet north of fence line. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 3 inches above ground. Elevation: 1,128.091 feet.

A8-13-4E (Kans.Geod.S.)(Dickinson County, L.E.Conrad, 1934).--About 2.55 miles (highway) south of Chapman, in NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 8, T.13 S., R.4 E., Rinehart Township, on the Mary and John O'Brien property, under telephone line, 249.5 paces south of half-section line, 28.8 feet south of fifth telephone pole south of half-section line, and 28.2 feet west of present fence line. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 2 inches above ground. Elevation: 1,203.663 feet.

NOTE.--See end of this list.

A18-13-4E (Kans.Geod.S.)(Dickinson County, L.E.Conrad, 1934).--About 2.95 miles (highway) south of Chapman, in NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 18, T.13 S., R.4 E., Rinehart Township, on the Sam P. Harris property, 193.8 feet south of road intersection, 10 feet south and 49.4 feet west of second pole south of section line. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 2 inches above ground. Elevation: 1,215.952 feet.

NOTE.--See end of this list.

A20-13-4E (Kans.Geod.S.)(Dickinson County, L.E.Conrad, 1934).--About 4.6 miles (highway) south of Chapman, in NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 20, T.13 S., R.4 E., Rinehart Township, on the G.C.Buher property, 611.5 feet south of half-section line, 0.9 foot east and 15.2 feet south of fourth telephone pole south of half-section line. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 2 inches above ground. Elevation: 1,265.680 feet.

A29-13-4E (Kans.Geod.S.)(Dickinson County, L.E.Conrad, 1934).--About 5.0 miles south and 0.1 mile east (highway) of Chapman, in NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 29, T.13 S., R.4 E., Rinehart Township, on the William Sigg property, 0.6 foot outside of present fence line, 647.25 feet east of centerline of road intersection, and 131.9 feet east and 56.1 feet south of third high-line pole east of line intersection. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 2 inches above ground. Elevation: 1,279.210 feet.

TT-47-M (U.S.G.S., 1926)(Dickinson County, Kans.Geod.S., 1934).--About 5.8 miles south and 1 mile east of Chapman, and 936.5 feet north of TAYLOR. Station is a U.S.G.S. standard disk in concrete. Elevation: 1,315.602 feet.

TAYLOR (U.S.C. & G.S.)(Dickinson County, F.D.Granger, 1889; 1922; Kans.Geod.S., 1934).--About 6 miles south and 1 mile east of Chapman, in NE $\frac{1}{4}$ sec. 32, T.13 S., R.4 E., on land owned (1922) by Clarence Taylor. The underground, station, and witness marks are described in notes 1 and 2, except that the marble post does not contain the standard bronze tablet. The underground mark is 4 feet below the surface, and the station and witness marks 1 foot below the surface. The following distances were measured: north hedge, 282.09 meters (925.0 feet); line of east hedge, 14.3 meters (47 feet); west face of stone coal house, 41.79 meters (137.1 feet); northeast corner of section 32, 639.14 meters (2096.9 feet). Elevation: 1,311.873 feet.

Plane coordinates: (N), $x = 2,282,597.59$ feet; $y = 201,710.17$ feet.

Geary and Dickinson Counties

From U.S.C. & G.S. triangulation station ROBBINS (described elsewhere in this publication) to A19-13-4E (on WILMER to TAYLOR line).

No coordinates have been established for stations in this line.

B30-12-6E (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).--About 4.7 miles southeast of Junction City Post Office building, in NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 30, T.12 S., R.6 E., Jefferson Township, on property of O.C.Strauss, about 1,000 feet west of north-south section-

line fence, 706.7 feet south of east-west section-line fence, 316 feet north of east-west fence line, and 1.6 feet east of north-south fence line. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 2 inches above ground. Elevation: 1,327.475 feet.

B19-12-5E (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).-- About 3.8 miles southeast of Junction City Post Office building, in SE $\frac{1}{4}$ sec. 19, T.12 S., R.5 E., Jefferson Township, on property of V.G.Ward, on high rocky bluff overlooking Smoky Hill River, about 800 feet west of north fence line, 460 feet south of rocky outcrop, and 116 feet east of north-south fence line. Azimuth to peak of the V.G.Ward farmhouse 176°. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 3 inches above ground. Elevation: 1,294.050 feet.

A7-12-5E (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).-- About 2.1 miles (along highway) southeast of Junction City Post Office building, in SW $\frac{1}{4}$ sec. 7, T.12 S., R.5 E., on grounds of School District 13, Jefferson Township, 115.7 feet north and 52.2 feet east in line of prolongation of north side of coal-house, beginning at northeast corner of coal-house, 115.7 feet north and 16.3 feet west of northwest corner of schoolhouse in line of prolongation of north side of schoolhouse, 10 paces east of point where bluff breaks into west slope, and 3 paces south of old Indian burial mound. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, 1 inch above ground. Elevation: 1,295.386 feet.

A11-12-5E (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).-- About 1.6 miles south of Junction City Post Office building, in SE $\frac{1}{4}$ sec. 13, T.12 S., R.5 E., Smoky Hill Township, on Missouri-Kansas-Texas Railroad, about 1,600 feet north of railroad bridge, 46.1 feet east of east rail of railroad, 1.7 feet inside of right-of-way fence. Azimuth from station to Union Pacific Railroad tower 442, 150°; to Geary County Courthouse, 170°; and to School District 18, 220°. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, 6 inches below ground. Elevation: 1,078.734 feet.

B13-12-5E (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).-- About 1.4 miles south of Junction City Post Office building, in NE $\frac{1}{4}$ sec. 13, T.12 S., R.5 E., by cross on end of rail set in ground between Missouri-Kansas-Texas Railroad and Union Pacific Railroad tracks, 476 feet east of east rail of Union Pacific Railroad, 236 feet south of semaphore 1406, 15.8 feet west of west rail of Missouri-Kansas-Texas Railroad, 250° (magnetic) west of School District 18, and 355° (magnetic) from Union Pacific Railroad tower 442. Station is a railroad rail set in ground, projecting 12 inches above ground. Elevation: 1,076.526 feet.

A12-12-5E (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).-- In Junction City, about 0.85 mile south of post office on Jefferson Street, in SW $\frac{1}{4}$ sec. 12, T.12 S., R.5 E., 13.65 feet east and 135.9 feet north of northeast corner of city hospital, 62.85 feet south of south curb of West Ash Street, and 6.1 feet west of west curb of Jefferson Street. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, 7 inches under ground (covered by a meter manhole cover). Elevation: 1,111.591 feet.

B12-12-5E (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).-- In Junction City, in NW $\frac{1}{4}$ sec. 12, T.12 S., R.5 E., Smoky Hill Township, at northwest corner of city park, 96.95 feet south and 18 feet west of southwest corner of post office, 17.75 feet south of south curb of West 6th Street, 10.05 feet east of east curb of Jefferson Street. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 5 inches above ground. Elevation: 1,106.689 feet.

A1-12-5E (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).-- In Junction City, about 0.6 mile north on Jefferson Street from post office, in lot 6, SW $\frac{1}{4}$ sec. 1, T.12 S., R.5 E., Smoky Hill Township, on Washington Public School grounds, 97.7 feet west and 46.7 feet south of southwest corner of building, 25 feet north of north curb of West 15th Street, and 22.4 feet east of east curb of Jefferson Street. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, 5 inches below ground, (covered by a meter manhole cover). Elevation: 1,058.060 feet.

A2-12-5E (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).-- About 0.9 mile north and 0.2 mile west of Junction City Post Office, in NE $\frac{1}{4}$ sec. 2, T.12 S., R.5 E., Smoky Hill Township, on parking area near the I.F. d'Mersseman property, at intersection of Madison and 18th Street, 41.2 feet west of street light pole, 34.6 feet west of woven wire fence west of Madison Street, about 33.9 feet west of centerline of Madison Street, 32.6 feet south of centerline of 18th Street, 2.85 feet north of woven wire fence on north property line, and 2.2 feet east and 65.2 feet north of northeast corner of the d'Mersseman house porch. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 2 inches above ground. Elevation: 1,088.025 feet.

A14-11-5E (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).-- About 3 miles northwest of Junction City Post Office building, in lot 12, sec. 14, T.11 S., R.5 E., Smoky Hill Township, on south side of Alida Road, near gateway of the J.M.Nolan property, about 540 feet along track southeast of Union Pacific Railroad milepost 1, 89.5 feet S.26°E. (magnetic) of centerline of track, about 163 feet southeast of centerline of drainage ditch, and 10 feet N.35°W. (magnetic) of lone evergreen tree, and 2.7 feet N.26°E. (magnetic) of property line fence east of road. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, 3 inches below ground. Elevation: 1,075.044 feet.

A28-11-5E (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).-- About 3.55 miles northwest of Junction City, along Alida Road, in NE $\frac{1}{4}$ sec. 24, T.11 S., R.5 E., Smoky Hill Township, on top of sand dune south of road right-of-way, about 507 feet along Union Pacific Railroad tracks northwest from west edge of bridge marked "138," thence 88.5 feet S.30°W., of centerline of track, at

south side of Alida Road, 432.2 feet northwest along fence from east of sec. 24, 353.5 feet northwest along fence from lone elm, 88.5 feet southwest of north fence, and 3 feet N.30°E. (magnetic) of north fence. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, flush with ground. Elevation: 1,084.492 feet.

A20-11-5E (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).-- About 4.7 miles northwest of Junction City, in SE $\frac{1}{4}$ sec. 20, T.11 S., R.5 E., on north side of Alida Road right-of-way, north-east of steep high hill, 58.3 feet N.12°E. of south road fence, 14.1 feet S.12°W. of centerline of Union Pacific Railroad track, about 4 feet northwest of intersection of tracks with section line, and 1.2 feet S.12°W. of north road fence. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 1 inch above ground. Elevation: 1,082.643 feet.

B20-11-5E (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).-- About 5.3 miles northwest of Junction City Post Office, along Alida Road, in NW $\frac{1}{4}$ sec. 20, T.11 S., R.5 E., on road right-of-way, near concrete bridge, about 216 feet east of north-south section line between sections 19 and 20, west of bridge and where section line intersects highway at centerline of bridge, 2.7 feet east and 0.7 feet south of southwest corner, and 1.5 feet east and 0.7 foot south of southeast corner of bridge post. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, 1 inch below ground. Elevation: 1,093.676 feet.

A19-11-5E (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).-- About 6.3 miles northwest of Junction City Post Office, along Alida Road, on road right-of-way, in NW $\frac{1}{4}$ sec. 19, T.11 S., R.5 E., adjoining the John Spurlock property, 384.4 feet southeast of intersection of highway and north-south half-section line, and 1.4 feet north of south road fence line (road is 56.4 feet wide). Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 3 inches above ground. Elevation: 1,130.420 feet.

A24-11-4E (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).-- About 7.55 miles northwest of Junction City Post Office, 1 mile south and east of Alida Post Office, along Alida Road, in NE $\frac{1}{4}$ sec. 24, T.11 S., R.4 E., on property of M.J.Green, on a pronounced hill in northeast corner of cultivated field, about 2,055 feet east and 526 feet south of northwest corner of sec. 24, about 1,095 feet southeast along highway at intersection of Upland and Alida Highways, 218.5 feet south of centerline of Alida Highway, 72 paces north of east-west wire fence, and 3.2 feet south of corner post. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 3 inches above ground. Elevation: 1,169.969 feet.

A14-11-4E (Kans.Geod.S.)(Geary County, L.E.Conrad, 1934).-- About 8.1 miles northwest of Junction City Post Office, along Alida and Upland Roads, 3.75 miles east of Upland, Dickinson County, in SE $\frac{1}{4}$ sec. 14, T.11 S., R.4 E., on property of W.R. Reice, on high pasture land, 424 paces west of northwest section line, 64.2 feet east of hedge fence at north-south quarter-section line, (width of road 60.2 feet), and 2.5 feet north of north road fence. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 2 inches above ground. Elevation: 1,198.066 feet.

A15-11-4E (Kans.Geod.S.)(Dickinson County, L.E.Conrad, 1934).-- About 9.72 miles northwest of Junction City Post Office, Geary County, 2.15 miles east of Upland, in SW $\frac{1}{4}$ sec. 15, T.11 S., R.6 E., on the Davis G. Duncan property, 900 feet east of centerline of north-south section-line road, 75 feet north of north fence of Upland Road (width of road 49.5 feet), and at point where road goes over high hill near fence line of tillable field. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 3 inches above ground. Elevation: 1,221.110 feet.

A16-11-4E (Kans.Geod.S.)(Dickinson County, L.E.Conrad, 1934).-- About 10.3 miles northwest of Junction City Post Office, Geary County, 1.6 miles east of Upland, along Upland Road, in SW $\frac{1}{4}$ sec. 16, T.11 S., R.4 E., on the E.A. Schmutz property, 4.35 feet north of north fence of Upland Road (width of road 45.2 feet), 1.15 feet west of west fence of the Schmutz north-south private road (width of private road 31 feet), and 240 steps (36-inch steps) east of north-south half-section fence line. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, projecting 1 inch above ground. Elevation: 1,228.756 feet.

NOTE: The azimuth to Schmutz' windmill, 170° (magnetic); to Duncan's windmill, 333° (magnetic).

A17-11-4E (Kans.Geod.S.)(Dickinson County, L.E.Conrad, 1934).-- About 11.45 miles (along Alida and Upland Roads) northwest of Junction City Post Office, Geary County, 0.45 mile east of Upland, in SE $\frac{1}{4}$ sec. 17, T.11 S., R.4 E., on southwest corner of District 41 school grounds, 54 paces west of half-section line, 40 feet north of centerline of Upland Road, 11 feet west and 2.25 feet north of centerline of well pump, and 3.15 feet east of west school property line. Station is a U.S.C. & G.S. and State Survey standard disk in concrete, flush with ground. Elevation: 1,262.140 feet.

April 21, 1953

Additions and Corrections

A15-11-7E (Kans.Geod.S.).--Destroyed prior to January 1953.

A22-12-10E (Kans.Geod.S.).--Destroyed prior to October 1950.

A8-13-4E RESET (Kans.Geod.S.).--2.55 miles (highway) south of Chapman, Rhinehart Township, 3405.1 feet south and 50 feet east of the northwest corner of section 8, T 13 S, R 4 E. A State Survey standard disk, stamped "A8 13 4E RESET 1948" and set in the top of a concrete post. Elevation: 1,201.502 feet.

NOTE.--This bench mark was established and its elevation determined by engineers of the State Highway Commission in the summer of 1948.

A18-13-4E RESET (Kans.Geod.S.).--2.95 miles (highway) south of Chapman, Rhinehart Township, 109.1 feet south and 35 feet east of the northwest corner of section 17, T 13 S, R 4 E. A State Survey standard disk, stamped "A18 13 4E RESET 1948" and set in the top of a concrete post. Elevation: 1,215.004 feet.

NOTE.--This bench mark was established and its elevation determined by engineers of the State Highway Commission in the summer of 1948.