

DUBUQUE AND BELLE PLAINE LOOPS
SUPPLEMENTARY ADJUSTMENT

TA
610
.U6
D83
1940

SECOND ORDER LEVELS
IOWA GEODETIC SURVEY

Iowa

159074

526

c109

Iowa. Geodetic survey.

Dubuque and Belle Plaine loops

TRAVELING LIBRARY

OF THE STATE OF IOWA

To communities, and schools, books for reloaning are loaned for a three month's period. To individuals and to clubs for study use, books are loaned for two to four weeks.

Borrowers are requested to return the books as soon as the need for them is passed, and *always* when books are due. Where books are re-loaned, fines may be charged by the *local* library and *retained* when the books are returned.

DAMAGES. The pages of these books must not be marked and librarians are required to note the condition of books when loaned to borrowers and when returned by such borrowers and to report damages beyond reasonable wear to the State Traveling Library.

10M-5E-40

I O W A
LIBRARY
PROJECT

Des Moines, Iowa

WORK PROJECTS
ADMINISTRATION

APR 11 '52

Work Projects Administration

IOWA GEODETIC SURVEY

WPA Project No. 665-72-3-79

Des Moines, Iowa

1940

This report has been prepared by the Iowa Geodetic Survey, a state-wide project of the Work Projects Administration, under the sponsorship of the United States Coast and Geodetic Survey and the Engineering Experiment Station of Iowa State College.

All computations and results were prepared by WPA Project #4485, and were checked and approved by the United States Coast and Geodetic Survey.

IOWA GEODETIC SURVEY

State Director John S. Dodds
Asst. State Director Gerold F. Tigges
Chief of Computations Richard W. Wolff

Address all communications to:

Gerold F. Tigges
Asst. State Director
Iowa Geodetic Survey
223 Old Federal Building
Des Moines, Iowa

TRAVELER'S CHECKS
CASH ONLY

Leveling in Iowa

DUBUQUE & BELLE PLAINE LOOPS

CONTENTS

	Page
General Statement	2
Instruments and Field Methods	3
The 1929 General Adjustment	3
Orthometric Correction	3
Computations and Adjustments	4
Rail Elevations	4
Cooperation in the Preservation of Bench Marks	4
Descriptions and Elevations of Bench Marks:	
Line B (Part) Prairie du Chien, Wis. to Grafton, Ill., ...	7
Line L-144 " Minneapolis, Minn., to Glasgow, Mo.,	45
Line L-144-Spur Ottumwa to Muscatine, Iowa,	53
Line L-466 Haskins to Waterloo, Iowa,	63
Line L-4361 Elmira Junction to Dixon, Iowa,	82
Line L-4364 Linn Junction to Reinbeck, Iowa,	88
Line L-4367 Traer to Belle Plaine, Iowa,	97
Line L-4370 Marshalltown to Belle Plaine, Iowa,	102
Line L-4373 Belle Plaine to Cedar Rapids, Iowa,	108
Line L-4376 Fairfax to Rutledge, Iowa,	115
Line L-4379 Beacon to Marshalltown, Iowa,	128
Line L-4382 Prairie City, Ia. to Prairie du Chien, Wis..	136
Line L-4943 Davenport to Oneida, Iowa,	150
Line L-4946 Dubuque to Oneida, Iowa,	165
Line L-4949 Oneida to Oelwein, Iowa,	172
Line L-4952 Oelwein to Conesville, Iowa,	177
Line L-4955 Center Junction to Linn Junction, Iowa,	194
Line L-5419 Savanna, Ill., to Center Junction, Iowa, ...	200
Index.....	209

ILLUSTRATION

Index Map Showing Leveling in Dubuque-Belle Plaine Loops	2
--	---

Leveling in Iowa
DUBUQUE & BELLE PLAINE LOOPS

CONTENTS

	Page
General Statement	2
Instruments and Field Methods	3
The 1929 General Adjustment	3
Orthometric Correction	3
Computations and Adjustments	4
Rail Elevations	4
Cooperation in the Preservation of Bench Marks	4
 Descriptions and Elevations of Bench Marks:	
Line B (Part) Prairie du Chien, Wis. to Grafton, Ill., ...	7
Line L-144 " Minneapolis, Minn., to Glasgow, Mo.,	45
Line L-144-Spur Ottumwa to Muscatine, Iowa,	53
Line L-466 Haskins to Waterloo, Iowa,	63
Line L-4361 Elmira Junction to Dixon, Iowa,	82
Line L-4364 Linn Junction to Reinbeck, Iowa,	88
Line L-4367 Traer to Belle Plaine, Iowa,	97
Line L-4370 Marshalltown to Belle Plaine, Iowa,	102
Line L-4373 Belle Plaine to Cedar Rapids, Iowa,	108
Line L-4376 Fairfax to Rutledge, Iowa,	115
Line L-4379 Beacon to Marshalltown, Iowa,	128
Line L-4382 Prairie City, Ia. to Prairie du Chien, Wis..	136
Line L-4943 Davenport to Oneida, Iowa,	150
Line L-4946 Dubuque to Oneida, Iowa,	165
Line L-4949 Oneida to Oelwein, Iowa,	172
Line L-4952 Oelwein to Conesville, Iowa,	177
Line L-4955 Center Junction to Linn Junction, Iowa,	194
Line L-5419 Savanna, Ill., to Center Junction, Iowa, ...	200
 Index.....	 209

ILLUSTRATION

Index Map Showing Leveling in Dubuque-Belle Plaine Loops	2
--	---

This publication contains the descriptions and elevations of bench marks in the following counties of the State of Iowa:

Allamakee	Grundy	Mahaska
Benton	Iowa	Marion
Blackhawk	Jackson	Marshall
Buchanan	Jasper	Muscatine
Cedar	Jefferson	Poweshiek
Clayton	Johnson	Scott
Clinton	Jones	Tama
Delaware	Keokuk	Wapello
Dubuque	Linn	Washington
Fayette	Louisa	

The elevations have been determined by First- or Second-order Leveling by the U. S. Coast & Geodetic Survey. The elevations on Line B were determined by First-order Leveling run by the Corps of Engineers, U. S. Army. All of the necessary re-leveling in the Dubuque-Belle Plaine Loops were run by the Iowa Geodetic Survey under the direction of the U. S. Coast & Geodetic Survey.

The several lines are listed below, together with the years in which the original work was done.

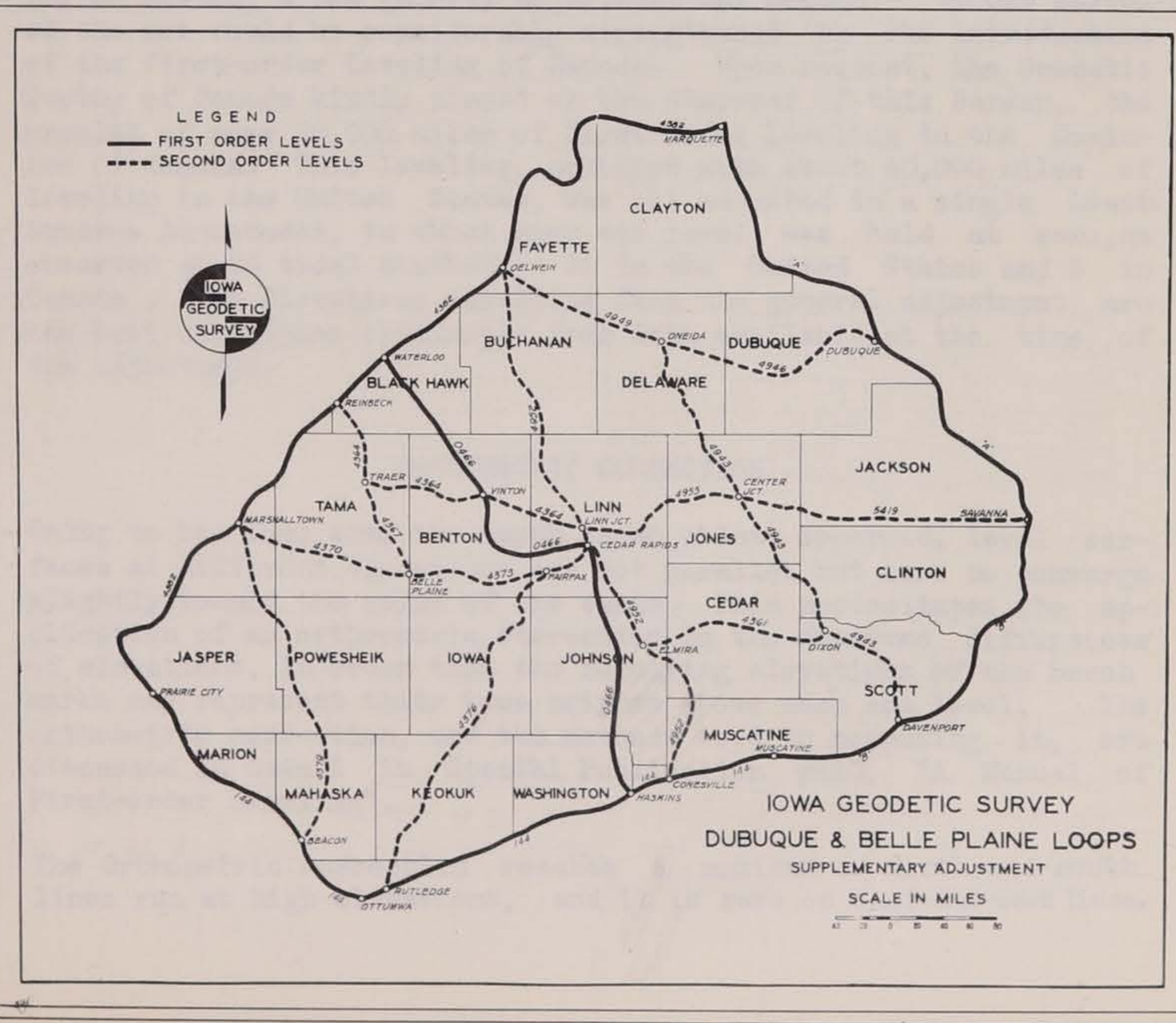
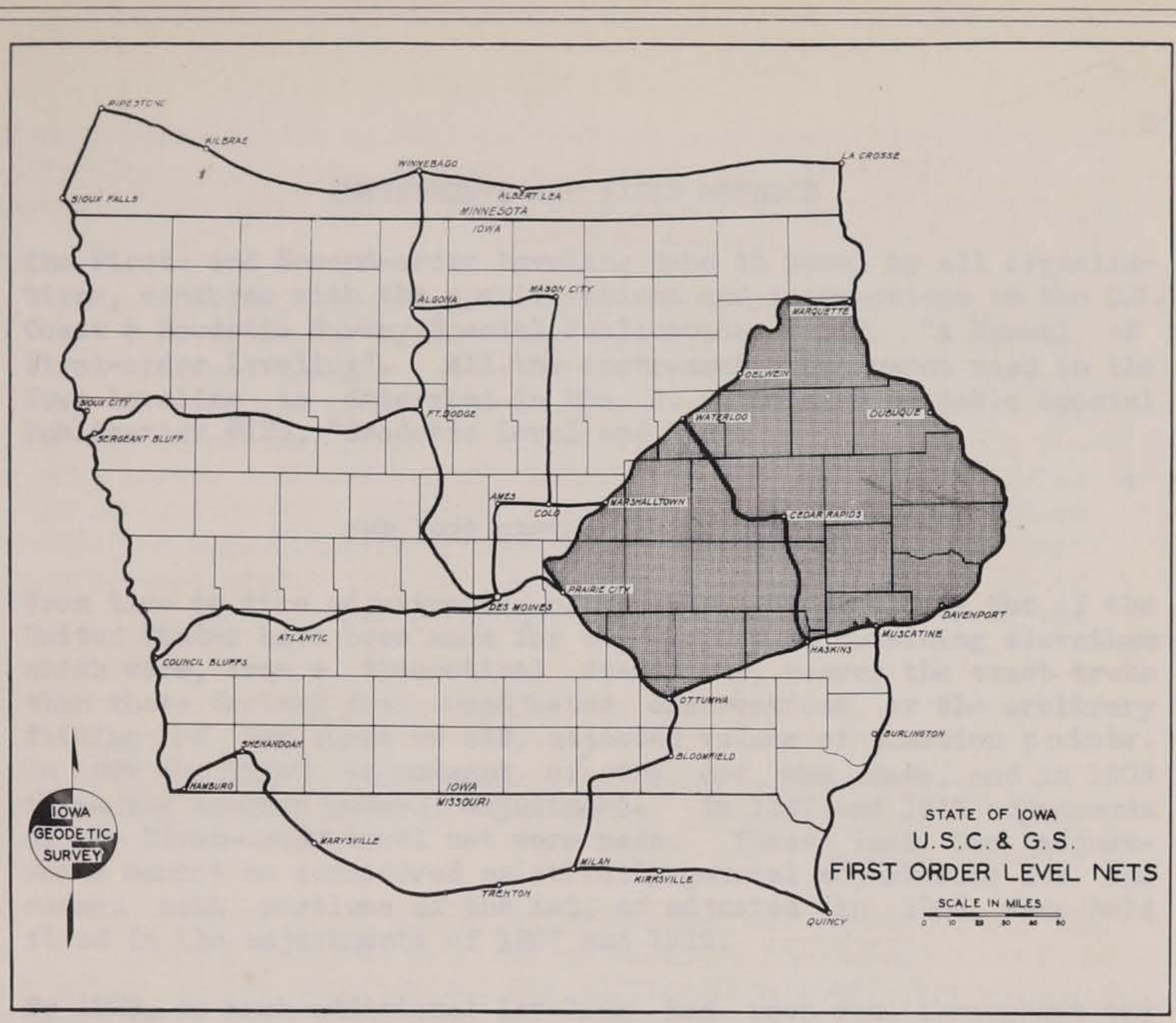
First-order Lines

Line L-B (Part)	Prairie du Chien, Wis. to Grafton, Ill., ..	1892
Line L-144 (Part)	Minneapolis, Minn., to Glasgow, Mo.,	1930
Line L-144 (Spur)	Ottumwa to Muscatine, Iowa,	1930
Line L-466	Haskins to Waterloo, Iowa,	1934
Line L-4382	Prairie City, Ia. to Prairie du Chien, Wis.	1934

Second-order Lines

Line L-4361	Elmira Junction to Dixon, Iowa,	1934
Line L-4364	Linn Junction to Reinbeck, Iowa,	1934
Line L-4367	Traer to Belle Plaine, Iowa,	1934
Line L-4370	Marshalltown to Belle Plaine, Iowa,	1934
Line L-4373	Belle Plaine to Cedar Rapids, Iowa,	1934
Line L-4376	Fairfax to Rutledge, Iowa,	1934
Line L-4379	Beacon to Marshalltown, Iowa,	1934
Line L-4943	Davenport to Oneida, Iowa,	1935
Line L-4946	Dubuque to Oneida, Iowa,	1935
Line L-4949	Oneida to Oelwein, Iowa,	1934
Line L-4952	Oelwein to Conesville, Iowa,	1934
Line L-4955	Center Junction to Linn Junction, Iowa, ...	1934
Line L-5419	Savanna, Ill., to Center Junction, Iowa, ..	1935

At the beginning of each line will be found a short description of the route followed, the Chief of Party, and the year in which the work was performed.



INSTRUMENTS AND FIELD METHODS

The First- and Second-order Leveling done in Iowa, by all organizations, conforms with the specifications and instructions in the U.S. Coast & Geodetic Survey Special Publication # 140, "A Manual of First-order Leveling". All the instrumental equipment used in the Iowa Leveling is described in the U. S. Coast & Geodetic Special Publication #129, "Geodetic Level and Rod".

THE 1929 GENERAL ADJUSTMENT

From time to time adjustments of the First-order Level Net of the United States have been made for the purpose of obtaining elevations which were, from a theoretical standpoint, nearer the exact truth than those derived from unadjusted observations, or the arbitrary fitting of new lines to old, adjusted values of junction points. In 1898 the first adjustment of the net was made, and in 1903 there was another general adjustment. In 1907 and 1912 adjustments of the First-order level net were made. These last two adjustments cannot be considered as strictly general adjustments for the reason that portions of the net, as adjusted in 1903, were held fixed in the adjustments of 1907 and 1912.

By 1929, so much additional leveling had been run throughout the United States, a new general adjustment was needed. It was believed the net would be considerably strengthened by the introduction of the First-order Leveling of Canada. Upon request, the Geodetic Survey of Canada kindly placed at the disposal of this Bureau, the results of some 20,000 miles of First-order Leveling in the Dominion of Canada. This leveling, combined with about 40,000 miles of leveling in the United States, was all adjusted in a single Least Squares Adjustment, in which mean sea level was held at zero, as observed at 26 tidal stations, 21 in the United States and 5 in Canada. The elevations resulting from the general adjustment are the best elevations obtainable from data available at the time of the adjustment.

ORTHOMETRIC CORRECTION

Owing to the fact that the earth is an oblate spheroid, level surfaces at different elevations are not parallel but tend to converge slightly toward the poles of the earth. This necessitates the application of an orthometric correction to the observed differences of elevations, in order that the resulting elevations of the bench marks may represent their true heights above mean sea level. The orthometric correction, and the methods used in computing it, are discussed in detail in Special Publication #140, "A Manual of First-order Leveling".

The Orthometric correction reaches a maximum on north-and-south lines run at high elevations, and it is zero on east-and-west lines.

The orthometric correction has been applied to the leveling included in this publication. In order that persons using this publication may form an idea as to the order of size of the orthometric correction, the following example is cited:

The difference in elevation between two bench marks, at about the latitude of Cedar Rapids, Ia., in such locations that the geographic latitudes would differ by two minutes (approximately 12,000 feet), and the average elevation of the line of levels connecting them would be 740 feet, would require an orthometric correction of 0.0023 foot. This correction varies directly with the average elevation, and with the difference in latitude between the marks, and depends slightly upon the latitude. Tables for use in computing the orthometric correction are given in the Special Publication No. 140.

COMPUTATIONS AND ADJUSTMENTS

The entire First-order Level Net covering the State of Iowa was included in the 1929 General Adjustment, as computed by the U.S. Coast & Geodetic Survey. (See Figure 1)

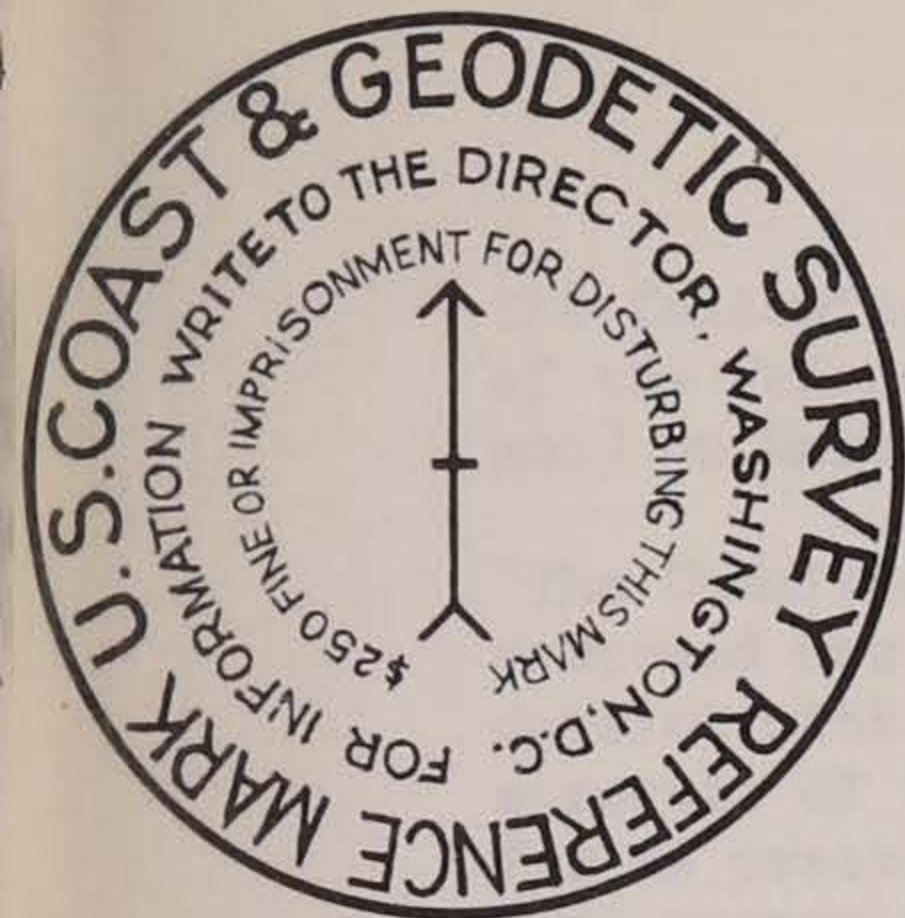
This report covers the Dubuque-Belle Plaine Loops (See Figure 2) and has been computed and adjusted by the Iowa Geodetic Survey, in accordance with the specifications and instructions set up in the U.S. Coast & Geodetic Survey, Special Publication #140. The elevations of the bench marks on the First-order Lines were fixed by the 1929 General Adjustment; the elevations of the bench marks of the Second-order Lines within the Dubuque-Belle Plaine Loops were computed by Least Square Adjustment. The computations and final elevations have been checked and approved by the Washington Office of the U. S. Coast & Geodetic Survey.

RAIL ELEVATIONS

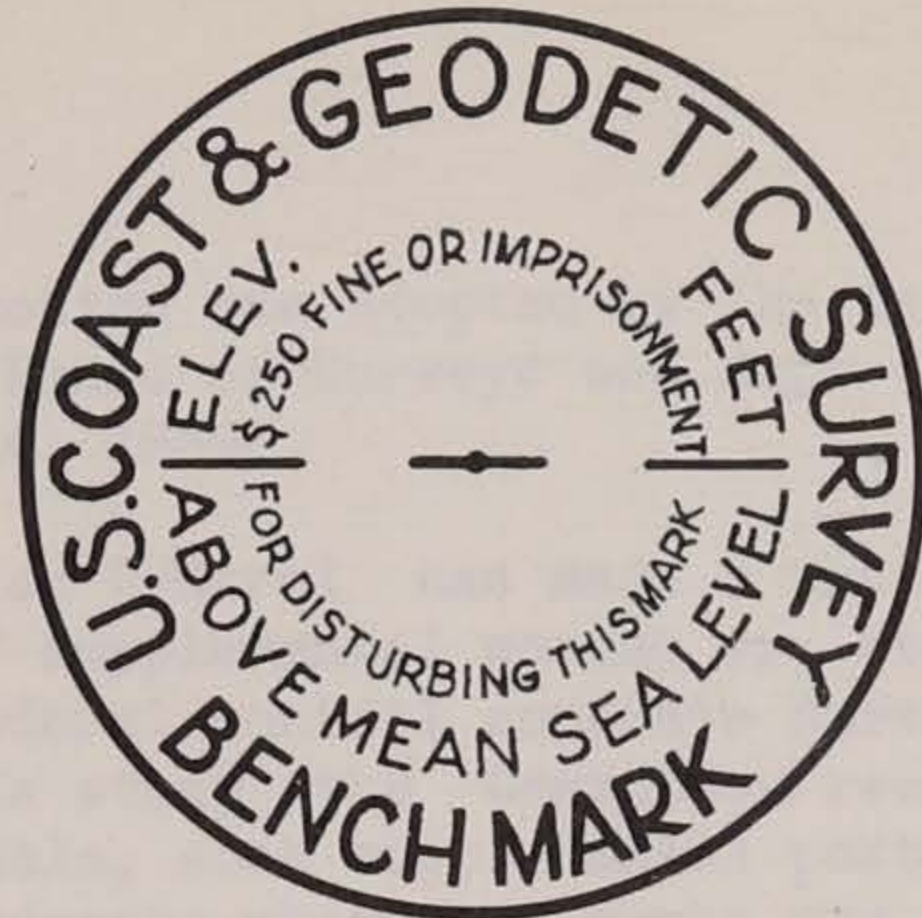
Interspersed throughout the descriptions and elevations of the bench marks will be found the descriptions and elevations, in tenths of feet, of tops of rails opposite railroad stations, or at railroad and highway crossings. These elevations are approximate only, since the track does not accurately maintain a constant elevation for any great length of time.

COOPERATION IN THE PRESERVATION OF BENCH MARKS

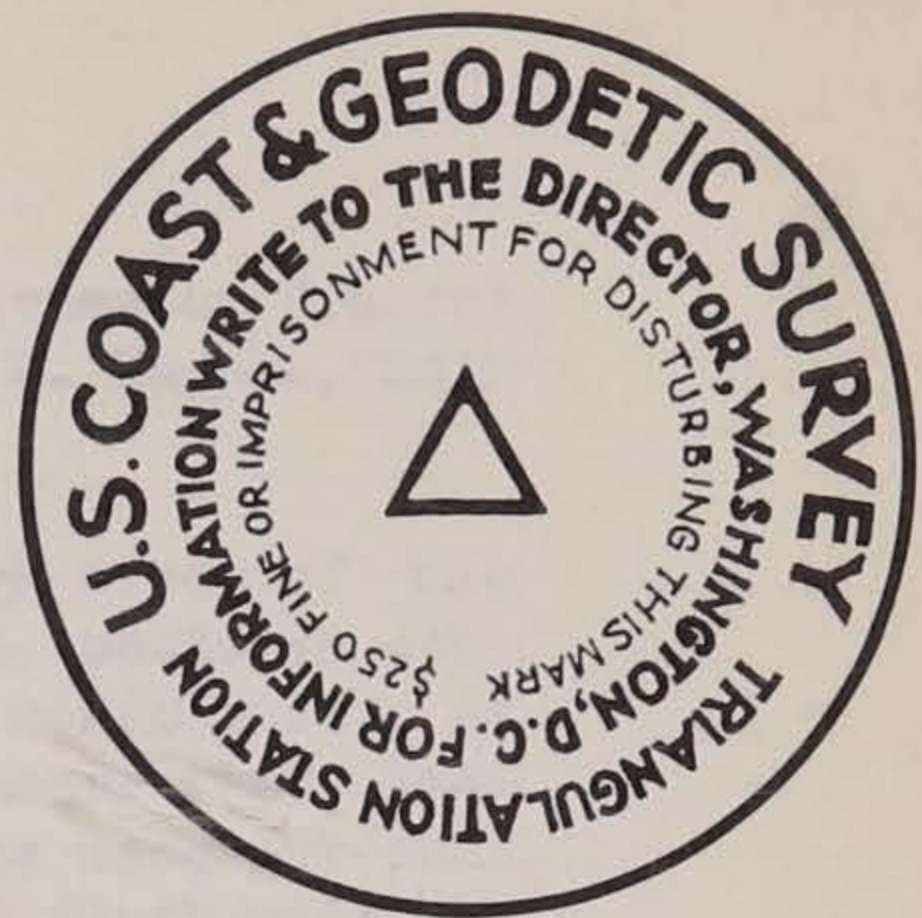
A bench mark is useful only as long as it is recoverable. When changes occur, as they often do, in the surrounding natural and cultural features with relation to which the mark is described, it becomes increasingly difficult to find the mark by means of the published description. Engineers, and others, who have occasion to visit any bench marks established by this Bureau or other Government organizations, will be doing a public service if they will report the condition of the marks and make suggestions as to needed changes in the descriptions.



A



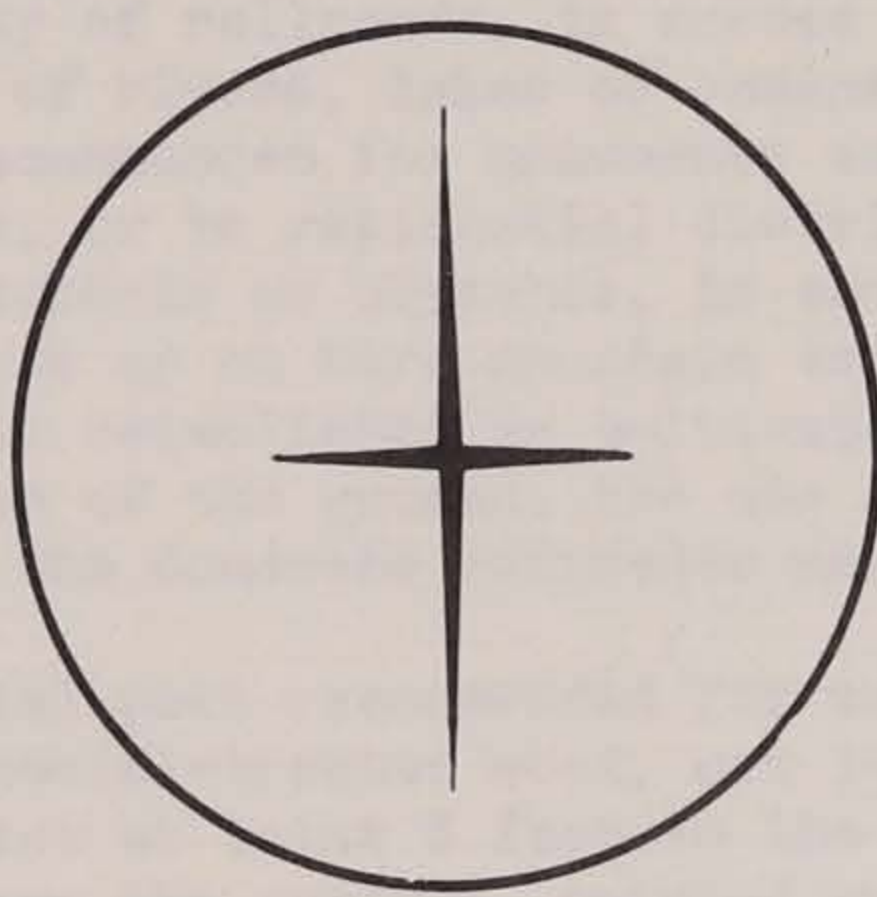
B



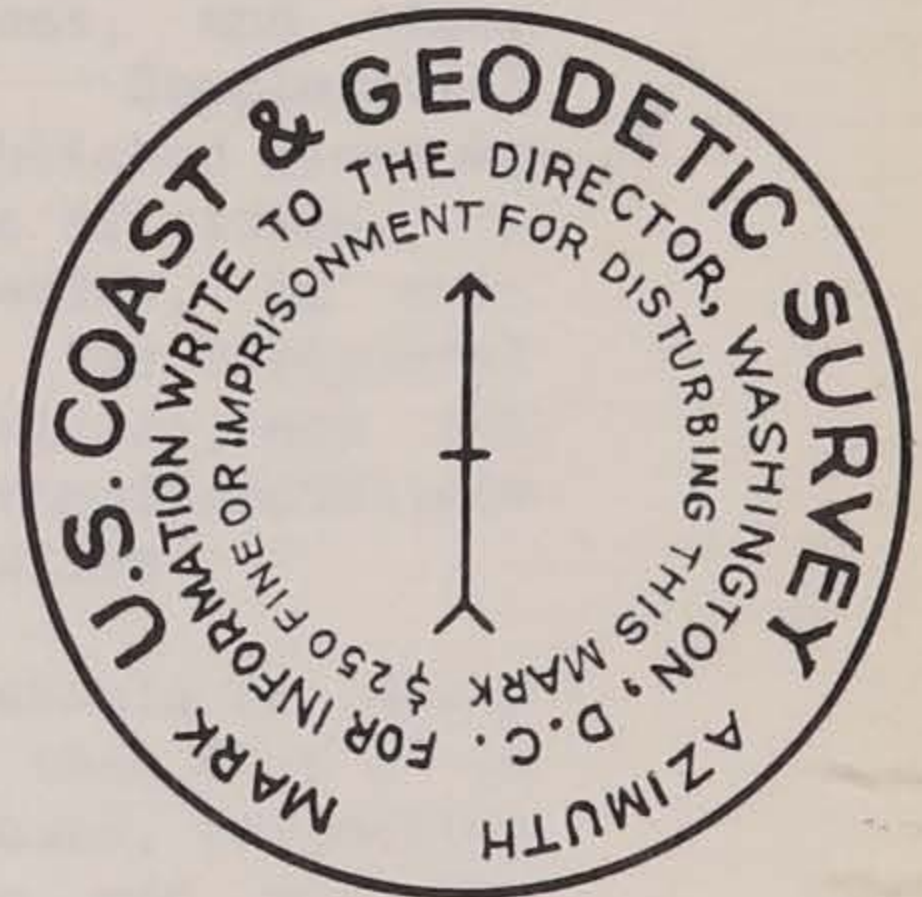
C



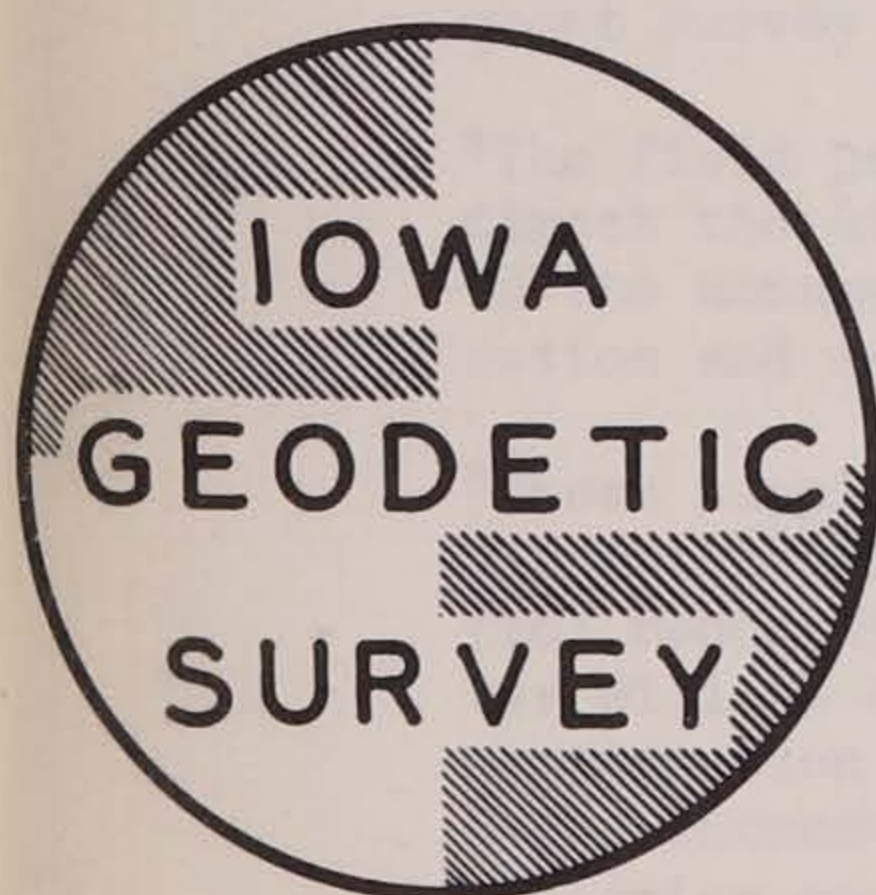
D



E



F



G


NOTE—

- A-U.S.C. & G.S. standard Reference Mark disc.
- B-U.S.C. & G.S. standard B. M. disc. (Used by precise level parties.)
- C-U.S.C. & G.S. standard Triangulation station disc.
- D-U.S.C. & G.S. and I.G.S. standard Traverse station disc.
- E-I.G.S. standard corner stone disc.
- F-U.S.C. & G.S. standard Azimuth mark disc.
- G-Standard symbol for I.G.S.

STANDARD MARKERS

The following motion was adopted by the Committee on Control, of the Federal Board of Surveys and Maps (H. W. Hemple, Chairman) on March 14, 1939:

"The Committee on Control has made a thorough study of the proposed use of supplemental wooden or steel posts in connection with federal control concrete survey monuments. As a result of this study the Committee recommends that, insofar as practicable, such supplemental posts be used for control survey monuments where the marks are set flush with the surface, or project but a few inches above the ground. The supplemental posts are especially recommended for monuments established along public highways in rural districts or along the rights-of-way of railroads, in wooded areas, and along the shore lines of rivers, lakes or oceans. Supplemental posts are not recommended for monuments established along any business streets, or in residential districts of cities, on the grounds of schools or churches, in cemeteries, in cultivated farm lands or on bare mountain tops. For horizontal control monuments established in cultivated fields, and set below the surface of the ground, the use of supplemental posts is advocated at the concrete reference mark sites.

"The supplemental post recommended for use should be decay resistant, or special-treated wood, not less than 4" x 4" in cross-section, set at least 3 feet in the ground, projecting at least 18" above the surface, painted white, and with the legend "U.S.B.M." or "U.S.  " stenciled thereon in black letters. It should be set at least three feet distant from the monument, in a location where it will not affect subsequent survey operations.

"The field parties establishing the supplemental posts should direct the attention of highway, county, and local engineers to the monuments and enlist their cooperation in the preservation and maintenance of the markers.

"These supplemental posts, where established along highways subject to improvement, will aid in the preservation of control monuments in that the attention of the highway contractor will be directed to the presence of the markers before construction operations disturb their location. Many control monuments will thus be protected and perpetuated which otherwise would be thoughtlessly disturbed and rendered useless. The supplemental posts will also be an aid to easy recovery of the station mark, resulting in a saving of time and money to many users."

LINE B. PRAIRIE DU CHIEN, WIS., to MUSCATINE, IOWA
(First-order Leveling)

This Line follows the Chicago, Milwaukee, St. Paul & Pacific Railroad from Prairie du Chien, Wisconsin, to a point 6 miles from Bellevue, Iowa; the Mississippi River from Bellevue, Iowa to Arnold Landing, Illinois; the Chicago, Burlington & Quincy Railroad from Arnold Landing to Savanna, Illinois; the Chicago, Milwaukee, St. Paul & Pacific Railroad from Savanna to Rock Island, Illinois; the Chicago, Rock Island & Pacific Railway from Rock Island, Illinois to Muscatine, Iowa.

Elevations are based on the 1929 General Adjustment of the First-order Level Net. These elevations supersede those previously published. The field work on this Line was done by the Corps of Engineers from the U. S. Army.

For descriptions of additional bench marks in this vicinity, see page 149.

T.B.M. 227 In Clayton County, at North McGregor, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, 131 feet below the station, at a small bridge, 8 feet east of the southeast corner, at the river end of the south abutment, and 6 feet below the floor. The highest point in a square, flanked by the letters "U.S." cut in the masonry. Elevation Feet. 620.271

P.B.M. 233 In Clayton County, at North McGregor, at Mr. O. A. Bratsberg's brick store, on the north side of North Street, in the water table, and 1 foot east of the entrance. The top of a copper bolt leaded vertically, and surrounded by the letters "U.S. P. B. M." cut in the stone. 630.835

T.B.M. 228 In Clayton County, at South McGregor, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, at the northwest corner of the intersection of the railroad and Main Street, at the front entrance to the residence of Mr. Gregor McGregor, at the river end of the bottom step, and level with the sidewalk. The highest point in a square, flanked by the letters "U. S." cut in the stone. 628.381

P.B.M. 234 In Clayton County, at South McGregor, on the north side of Main Street, just above the Masonic block, in the brick building occupied by the Elbling Cigar Manufactory, 2 feet from the southwest corner of the building, in the stone doorsill, and 4.5 inches back from the front line. The top of a copper

- bolt leaded vertically, and surrounded by the letters "U.S.P.B.M." cut in the stone. El. Ft. 631.200
- P.B.M. 235 In Clayton County, at South McGregor, southwest of a small park in the center of the town, in the west end of the brick building owned by Mrs. J. Reynolds and occupied by the Huntington Grain Firm, 23 inches south of the northwest corner, and 58 inches above the ground. The center mark of a copper bolt leaded horizontally, and surrounded by the letters "U.S.P.B.M." cut in the brick. 632.348
- T.B.M. 230 In Clayton County, about 1-3/4 miles below South McGregor, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, 60 yards above Milepost #66; 15 feet toward the bluff from the center of the track, and on a large, prominent boulder. The highest point in a square, flanked by the letters "U.S." cut in the rock. 631.708
- T.B.M. 236 In Clayton County about 1-3/4 miles below South McGregor, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, directly opposite Picture Rock, 275 feet above milepost #66, and 35 feet east of the center of the track. The top of a copper bolt leaded in a tile, 18 inches square and set 3 feet under ground, access to which is had through an iron pipe bearing a Mississippi River Commission standard cap. 627.312
- T.B.M. 231 In Clayton County, about 3 1/4 miles above South McGregor, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, about 0.5 mile below the mouth of the Wisconsin River, on the south abutment of bridge #X-382, in the river end of the second course of stone from the top, and 1 foot from the northeast corner of stone. The highest point in a square, flanked by the letters "U.S." cut in the stone. 627.098
- P.B.M. 237 In Clayton County, about 1-3/4 miles below South McGregor, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, directly opposite Picture Rock, 275 feet above milepost #66, and 35 feet east of the center of the track. The top of the cap on the iron pipe set over P.B.M. 236. 631.314
- P.B.M. 238 In Clayton County, about 3 1/4 miles below South McGregor, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, about 1/2 mile below the mouth of the Wisconsin River, directly opposite the lower end of bridge #K-382, about 0.4 mile below milepost #67, in the steeply inclined face of a hard ledge of rock, and

45 feet west of the center of the track. The center of a copper bolt leaded horizontally, and surrounded by the letters "U.S.P.B.M." cut in the rock. El. Ft. 635.409

T.B.M. 232 In Clayton County, about 3-3/4 miles below South McGregor, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, at the head of Island #176; 482 feet above milepost #68, on bridge #378-K, in the east end of the south abutment, in the third course of stone from the top, about 3 feet west of the east end of the stone, and 3 inches back from the north face. The highest point in a square, flanked by the letters "U.S." cut in the stone. 624.359

P.B.M. 239 In Clayton County, about 3 miles above Clayton, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, behind Islands #176 and #178, about 0.25 mile below the lower switch block at Sny McGill, 50 feet below milepost #70; 30 feet west of the center of the track, and near the west right-of-way fence. The top of a copper bolt leaded in a tile, 18 inches square and set 3 feet under ground, access to which is had through an iron pipe bearing a Mississippi River Commission standard cap. 624.074

P.B.M. 240 In Clayton County, about 3 miles above Clayton, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, behind islands #176 and #178, about 1/4 mile below the lower switch block by Sny McGill; 50 feet below milepost #70; 30 feet west of the center of the track, and near the west right-of-way fence. The top of the cap on the iron pipe set over P.B.M. 239. 628.070

Old U.S.B.M. - Old P.B.M. 27 In Clayton County, at the station at Clayton, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, at the northeast corner of the platform, and in the top stone of the foundation pier. Back of the center of a circle cut in the stone. 625.668

Old B.M. "b" In Clayton County, at Clayton, upper end of the town, on the large stone mill west of the Chicago, Milwaukee, St. Paul & Pacific Railroad track, on the river front of the building, and in the lower end of the sill at the lower window. The top of a ring bolt, and 1 inch above the surface of the sill. 622.072

P.B.M. 241 In Clayton County, at Clayton, about 656 feet back from the river bank, at the southwest corner of the intersection of Main and Douglas Streets, on the brick building occupied by Frank Lier & Company, and on the east end of the doorstep of the entrance on Main Street. The top of a copper bolt leaded verti-

El. Ft.

cally, and surrounded by the letters "U.S.P.B.M." cut in the doorstep.

649.838

T.B.M. 239 In Clayton County, about 1 mile below Clayton, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, 866 feet below milepost #74; 230 feet above a wooden sand hopper, 19 feet west of the center of the track, on the more northerly of 2 large boulders, and 1 foot from the edge of the boulder. The highest point in a square, flanked by the letters "U.S." cut in the top face of the boulder.

631.583

T.B.M. 241 In Clayton County, about 3 miles below Clayton, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, opposite the lower part of Island #182, about in the center of a long side-hill rock cut, at a prominent point of bluff in the steeply-inclined face of rock, 41 feet above the highest point of heavy, rock-cut waste, 145 feet below milepost #76, and about 2 feet higher than the track. The highest point in a square, flanked by the letters "U.S." cut in the face of the ledge.

627.837

P.B.M. 242 In Clayton County, about 3 miles below Clayton, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, opposite the lower part of Island #182, about in the center of a long, side-hill rock cut, at a prominent point of bluff in the steeply-inclined face of rock, 45 feet above the highest point of heavy rock-cut waste, 141 feet below milepost #76, and $4\frac{1}{2}$ feet higher than the track. The center mark in a copper bolt leaded horizontally, and surrounded by the letters "U.S.P.B.M." cut in the rock.

630.202

P.B.M. 243 In Clayton County, about $\frac{1}{4}$ mile below Eckard, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, at the point where the railroad comes to the bluff, opposite the upper end of the curve, 215 feet above milepost #78-83, about 82 feet above a cluster of butternut trees, $96\frac{1}{2}$ feet west of the center of the track, between the fence and the highway which runs parallel to the railroad, and $4\frac{1}{4}$ feet from the corner of the fence. The top of a copper bolt leaded in a tile, 18 inches square and set 3 feet under ground, access to which is had through an iron pipe bearing a Mississippi River Commission standard cap.

619.533

P.B.M. 244 In Clayton County, about $\frac{1}{4}$ mile below Eckard, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, at the point where the railroad comes to the bluff, opposite the upper end of the curve, 215 feet

- above milepost #78-83, about 82 feet above a cluster of butternut trees, $96\frac{1}{2}$ feet west of the center of the track, between the fence and the highway which runs parallel to the railroad, and $4\frac{1}{2}$ feet from the corner of the fence. The top of the cap on the iron pipe set over P. B. M. 243. El. Ft. 623.539
- T.B.M. 245 In Clayton County, about 1 mile below Eckard, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, opposite the head of McMillan Island, about 0.3 mile above milepost #79; 722 feet above the first road crossing below Eckard, and 27 feet west of the center of the track, in an embedded rock. The highest point in a square, flanked by the letters "U.S." cut in the rock. 622.538
- P.B.M. 245 In Clayton County, about 2- $\frac{1}{3}$ miles above Guttenberg, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, at a light cut, midway between bridges #284 and #286, about 0.4 mile below milepost #80; 30 feet west of a blazed 14-inch hickory tree, 28.5 feet east of the center of the track, and 2 feet west of the right-of-way fence. The top of a copper bolt leaded in a tile 18 inches square, and set 3 feet under ground, access to which is had through an iron pipe bearing a Mississippi River Commission standard cap. 617.059
- P.B.M. 246 In Clayton County, about 2- $\frac{1}{3}$ miles above Guttenberg, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, at a light cut, midway between bridges #284 and #286, about 0.4 mile below Milepost #80; 30 feet west of a blazed 14-inch hickory tree, 28.5 feet east of the center of the track, and 2 feet west of the right-of-way fence. The top of the cap on the iron pipe set over P. B. M. 245. 621.052
- P.B.M. 247 In Clayton County, at Guttenberg, at the northeast corner of the intersection of Herder and First Streets, in the front doorstep of Mr. Joseph Huene's general store, 5.8 feet from the southwest corner of the building, $4\frac{1}{2}$ inches from the angle of the casing, and $3\frac{1}{2}$ inches back from the face of the stone. The top of a copper bolt leaded vertically and surrounded by the letters "U.S.P.B.M." cut in the stone. 631.114
- P.B.M. 248 In Clayton County, at Guttenberg, 72.7 feet above the northwest corner of the intersection of Front and Goethe Streets, in the Clayton County Bank Building on the west side of Front Street, $8\frac{1}{2}$ feet up-

12 PRAIRIE du CHIEN, WIS., TO MUSCATINE, IOWA
(Supplementary Adjustments)

- stream from the south side of the entrance, and 3.7 feet above the bottom step. The center mark in a copper bolt leaded horizontally, and surrounded by the letters "U.S.P.B.M." cut in the step. El. Ft. 637.722
- T.B.M. 250 In Clayton County, at Guttenberg, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, about 0.4 mile below the station, on bridge #274, on the upper abutment, on the river side of the track, and in the fourth course of stone from the top. The highest point in a square, flanked by the letters "U.S." cut in the stone. 615.819
- T.B.M. 252 In Clayton County, about $2\frac{1}{4}$ miles below the station at Guttenberg, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, at the lower end of a cut, 213 feet above bridge #258, and 17 feet east of the center of the track on an embedded boulder. The highest point of a square, flanked by the letters "U. S." cut in the rock. 622.505
- P.B.M. 249 In Clayton County, about 2.25 miles below Guttenberg, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, about $\frac{1}{2}$ mile below where the track comes to the bluff, 150 feet above bridge #258, at the place where a wagon road turns up into a coulee, 24.5 feet east of the center of the road, 18 feet west of the center of the track, and 1.5 feet east of the west right-of-way fence. The top of a copper bolt leaded in a tile, 18 inches square and set 3 feet under ground, access to which is had through an iron pipe bearing a Mississippi River Commission standard cap. 616.364
- P.B.M. 250 In Clayton County, about 2.25 miles below Guttenberg, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, about $\frac{1}{2}$ mile below where the track comes to the bluff, 150 feet above bridge #258, at the place where a wagon road turns up into a coulee, 24.5 feet east of the center of the road, 18 feet west of the center of the track, and 1.5 feet east of the west right-of-way fence. The top of the cap on the iron pipe set over P.B.M. 249. 620.356
- T.B.M. 253 In Clayton County, about 3 miles below Guttenberg, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, on the north abutment of bridge #236, 1 foot west of the east end of the abutment, and 6 inches north of the south face. The highest point in a square, flanked by the letters "U.S." cut in the abutment. 621.738

- T.B.M. 254 In Clayton County, about 4.5 miles below Guttenberg, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, about 1-3/4 miles above the point of the bluff at the railroad on the north side of Turkey River, 331 feet below Milepost #87, on a ledge of rock and 12 feet west of the center of the track. The highest point in a square, flanked by the letters "U. S." cut in the rock. El. Ft. 630.209
- T.B.M. 256 In Clayton County, about 738 feet above the switch at Turkey River Junction, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, about 0.3 mile above bridge #212 over Turkey River, on a natural ledge of rock, 8 feet west of the center of the track, and about 2 feet higher than the track. The highest point in a square, flanked by the letters "U.S." cut in the rock. 624.195
- P.B.M. 251 In Clayton County, about 715 feet above the switch at Turkey River Junction, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, about 0.3 mile above bridge #212 over Turkey River; 249 feet below the sign "Turkey River Junction, Stop"; 118 feet above the cattle guard, in a ledge of rock, 13 feet west of the center of the track, and 2 feet above the grade of the ties. The center mark in a copper bolt leaded horizontally, and surrounded by the letters "U.S.P.B.M" cut in the rock. 625.917
- T.B.M. 257 In Clayton County, at Turkey River Junction, on the Chicago, Milwaukee, St. Paul & Pacific Railroad at bridge #212, on the upper stone pier, on the west side of the track, 9 feet from the west end of the pier, and 7 inches back from its north face. The highest point in a square, flanked by the letters "U. S." cut in the stone. 615.999
- P.B.M. 252 In Clayton County, at Turkey River Junction, on the Chicago, Milwaukee, St. Paul & Pacific Railroad about 0.2 mile above the station, on bridge #212 over Turkey River, on the west end of the upper stone pier, and 14 inches east of the extreme point of the rounding capstone. The top of a copper bolt leaded vertically, and surrounded by the letters "U.S.P.B.M." cut in the stone. 616.013
- T.B.M. 258 In Clayton County, at Turkey River Junction, on the Chicago, Milwaukee, St. Paul & Pacific Railroad about 0.3 mile below the station, about 0.3 mile above milepost #90; 328 feet above the farmhouse at the point of woods on the river side of the track, 50 feet

14 PRAIRIE du CHIEN, WIS., TO MUSCATINE, IOWA
(Supplementary Adjustments)

- above the very large and prominent boulder on the west side of the track, on a ledge of rock, and 15 feet west of the center of the track. The highest point in a square, flanked by the letters "U.S." cut in the rock. El. Ft. 622.633
- P.B.M. 253 In Clayton County, about $2\frac{5}{8}$ miles above Buena Vista, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, at a fence on the bluff side, 53 feet below the center of bridge #204-K, and 36 feet from the center of the track. The top of a copper bolt leaded in a tile, 18 inches square and set 3 feet under ground, access to which is had through an iron pipe bearing a Mississippi River Commission standard cap. 616.626
- P.B.M. 254 In Clayton County, about $2\frac{5}{8}$ miles above Buena Vista, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, at a fence on the bluff side, 53 feet below the center of bridge #204-K, and 36 feet from the center of the track. The top of the cap on the iron pipe set over P. B. M. 253. 620.625
- T.B.M. 262 In Clayton County, about 1 mile above Buena Vista, on the Chicago, Milwaukee, St. Paul Pacific Railroad, opposite the foot of Island #196; about 0.6 mile above milepost #93, on the upper one of 3 large prominent rocks lying but a few feet apart, and 15 feet toward the bluff from the center of the track. The highest point in a square, flanked by the letters "U. S." cut in the rock. 625.192
- T.B.M. 264 In Clayton County, at Buena Vista, on the Chicago, Milwaukee, St. Paul & Pacific Railroad; 82 feet above the station, 35 feet above the road crossing, 9 feet toward the bluff from the center of the track, about $2\frac{1}{2}$ feet above the track, and on a hard ledge of rock. The highest point in a square, flanked by the letters "U.S." cut in the rock. 626.705
- P.B.M. 255 In Clayton County, at Buena Vista, at the southeast corner of R. & E. Meuth's general store; 4.3 feet above the ground, and 6 inches from the south face of the building. The center mark in a copper bolt leaded horizontally in the wall, surrounded by the letters "U.S.P.B.M." 627.026
- T.B.M. 265 In Clayton County, about $\frac{3}{4}$ mile below Buena Vista, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, about 0.4 mile below milepost #94-67; 590 feet below bridge #194; 15 feet toward the bluff from the center of the track, and in an embedded boul-

El. Ft.

der. The highest point in a square, flanked by the letters "U.S." cut in the rock.

627.669

T.B.M. 267 In Clayton County, about 2 miles below Buena Vista, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, about 0.3 mile below section post #11-12, about 0.25 mile below bridge #188-K; 775 feet above bridge #186-K over Dry Hollow, on the ledge of rock, and 10 feet south of the center of the track. The highest point in a square, flanked by the letters "U.S." cut in the rock.

627.200

P.B.M. 256 In Clayton County, about 1.5 miles above Waupeton, Dubuque County, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, about 0.3 mile above milepost #96-65; 122 feet above bridge #186-K over Dry Hollow; 16.5 feet toward the bluff from the center of the track, and just outside the right-of-way fence. The top of a copper bolt leaded in a tile, 18 inches square and set 3 feet under ground, access to which is had through an iron pipe bearing a Mississippi River Commission standard cap.

623.289

P.B.M. 257 In Clayton County, about 1.5 miles above Waupeton, Dubuque County, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, about 0.3 mile above milepost #96-65; 122 feet above bridge #186-K over Dry Hollow, 16.5 feet toward the bluff from the center of the track, and just outside the right-of-way fence. The top of the cap on the iron pipe set over P.B.M. 256.

627.289

T.B.M. 269 In Clayton County, about 1.25 miles above Waupeton, Dubuque County, on the Chicago, Milwaukee St. Paul & Pacific Railroad, just below a prominent ledge of white rock on the bluff side of the track; 593 feet below milepost #96-65; 480 feet below bridge #182; 377 feet above bridge #180-K, on a ledge of rock, 10 feet from the center of the track, and 2 feet higher than the track. The highest point in a square, flanked by the letters "U.S." cut in the rock.

628.942

T.B.M. 270 In Dubuque County, about 0.2 mile above the station at Waupeton, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, 420 feet below milepost #97-64; 262 feet above bridge #174, on a natural ledge of rock, 10 feet toward the bluff from the center of the track, and about level with the track. The highest point in a square, flanked by the letters "U.S." cut in the rock.

625.906

- P.B.M. 258 In Dubuque County, about 900 feet below the station at Waupeton, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, at the point where it begins to curve to the south, 612 feet below bridge #172, at the north face of the bluff, 36 feet south of the center of the track, and 2 feet south of the south right-of-way fence. The top of a copper bolt leaded in a tile, 18 inches square and set 3 feet under ground, access to which is had through an iron pipe bearing a Mississippi River Commission standard cap. El. Ft. 615.347
- P.B.M. 259 In Dubuque County, about 900 feet below the station at Waupeton, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, at the point where it begins to curve to the south, 612 feet below bridge #172, at the north face of the bluff, 36 feet south of the center of the track, and 2 feet south of the south right-of-way fence. The top of the cap on the iron pipe set over P.B.M. 258. 619.333
- T.B.M. 273 In Dubuque County, about 2-1/8 miles below Waupeton, 1 1/4 miles below Cameron, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, about 0.4 mile above milepost #100-61, about 100 feet below the very large, conspicuous piece of ledge covered with vines lying on the bluff side of the track, and in a boulder. The highest point in a square, flanked by the letters "U.S." cut in the rock. 625.950
- P.B.M. 260 In Dubuque County, at Finley Landing, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, 649 feet below milepost #101-60; 180 feet above bridge #162; 38 feet from the center of the track, and 2 feet from the south fence. The top of a copper bolt leaded in a tile, 18 inches square and set 3 feet under ground, access to which is had through an iron pipe bearing a Mississippi River Commission standard cap. 618.371
- P.B.M. 261 In Dubuque County, at Finley Landing, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, 649 feet below milepost #101-60; 180 feet above bridge #162; 38 feet from the center of the track, and 2 feet from the south fence. The top of the cap on the iron pipe set over P.B.M. 260. 622.371
- P.B.M. 262 In Dubuque County, across from Island #207, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, 919 feet above milepost #102-59; 79 feet above section post #10-11, at bridge #156, at the north end of west abutment, on the fourth stone step from the top, 9 inches back from the east face, and 3 inches from

the end face of the third step. The top of a copper-bolt leaded vertically, and surrounded by the letters "U.S.P.B.M." cut in the stone. El. Ft. 615.120

T B.M. 277 In Dubuque County, at Frenchtown Landing, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, about 0.25 mile above milepost #104-57; 115 feet below bridge #148; 25 feet above the end of the platform at the entrance to the picnic grounds, on a flat, embedded rock, and 20 feet south of the center of the track. The highest point in a square, flanked by the letters "U.S." cut in the rock. 613.496

P.B.M. 263 In Dubuque County, at Frenchtown Landing, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, about $\frac{1}{4}$ mile above milepost #104-57, on the east side of a coulee, 80 feet below bridge #148; 60 feet above the platform at the entrance to the picnic grounds, 38 feet south of the center of the track, under extreme northwest point of the tableland forming the picnic grounds, and 1.5 feet inside the south edge of the right-of-way. The top of a copper bolt leaded in a tile, 18 inches square and set 3 feet under ground, access to which is had through an iron pipe bearing a Mississippi River Commission standard cap. 610.376

P.B.M. 264 In Dubuque County, at Frenchtown Landing, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, about $\frac{1}{4}$ mile above milepost #104-57, on the east side of a coulee, 80 feet below bridge #148; 60 feet above the platform at the entrance to the picnic grounds, 38 feet south of the center of the track, under the extreme northwest point of the tableland forming the picnic grounds, and 1.5 feet inside the south edge of the right-of-way. The top of the cap on the iron pipe set over P.B.M. 263. 614.375

Old P.B.M. 30 In Dubuque County, at Specht's Ferry, at Specht's stone house, near downstream end of the upper stone doorstep, and on the front edge. The highest point in the upper portion of a circle cut in the stone. 614.946

Old U.S.B.M. a In Dubuque County, at Specht's Ferry, at the northeast corner of Specht's stone house, on the watertable, and a few inches above the corner. The highest point on the front segment of a circle, flanked by the letters "B.M." cut in the stone. 615.422

P.B.M. 265 In Dubuque County, at Specht's Ferry, on the Chicago, Milwaukee, St. Paul & Pacific Railroad; 354

feet below the center of the station, 164 feet below bridge #140; 174 feet below the lower side of a stone milk house, 37.4 feet toward the bluff from the center of the track, and 1 foot above the fence forming the west side of the railroad cattle pen. The top of a copper bolt leaded in a tile, 18 inches square and set about 3 feet under ground, access to which is gained through an iron pipe bearing a Mississippi River Commission standard cap. El. Ft.
610.904

P.B.M. 266 In Dubuque County, at Specht's Ferry, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, 354 feet below the center of the station, 164 feet below bridge #140; 174 feet below the lower side of a stone milk house, 37.4 feet toward the bluff from the center of the track, and 1 foot above the fence forming the west side of the railroad cattle pen. The top of the cap on the iron pipe set over P.B.M. 265. 614.904

T.B.M. 279 In Dubuque County, about $\frac{1}{3}$ mile below the station at Specht's Ferry, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, $\frac{1}{2}$ mile above milepost #106-55; 82 feet below a large bare ledge of rock inclining at an angle of about 45 degrees to the horizon, 10 feet toward the bluff from the center of the track, and on the natural ledge of rock. The highest point in a square, flanked by the letters "U.S." cut in the rock. 617.394

T.B.M. 280 In Dubuque County, about $\frac{1}{2}$ miles below Specht's Ferry, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, at Parsons Bar, in a cove or borrow pit at the lower end, at the base of a heavy side-hill cut, and about 300 feet above bridge #134, at the point where the railroad leaves the river bank and enters the woods, about 50 feet from the center of the track, and on a natural ledge of hard rock. The highest point in a square, flanked by the letters "U.S." cut in the rock. 618.060

P.B.M. 267 In Dubuque County, about $\frac{1}{2}$ miles below Specht's Ferry, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, at Parsons Bar, at the extreme point of the bluff, between the rock quarry and railroad bridge #134, and 25.5 feet south of the center of the track. The top of a copper bolt leaded in a tile, 18 inches square and set 3 feet under ground, access to which is had through an iron pipe bearing a Mississippi River Commission standard cap. 609.067

P.B.M. 268 In Dubuque County, about $\frac{1}{2}$ miles below

- Specht's Ferry, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, at Parsons Bar, at the extreme point of the bluff, between the rock quarry and railroad bridge #134, and 25.5 feet south of the center of the track. The top of the cap on the iron pipe set over P.B.M. 267. El. Ft. 613.076
- P.B.M. 269 In Dubuque County, about 3-1/8 miles below Specht's Ferry, about 2.25 miles above the Little Maquoketa River, on the right-of-way of the Chicago, Milwaukee, St. Paul & Pacific Railroad, 912 feet below milepost #108-53, opposite the lower end of bridge #128 over Leisures Creek, in the slope of the bluff, 49 feet east of the center of the track, and at the intersection of the main fence and the wing fence at bridge #128. The top of a copper bolt leaded in a tile, 18 inches square and set about 3 feet under ground, access to which is had through an iron pipe bearing a Mississippi River Commission standard cap. 617.584
- P.B.M. 270 In Dubuque County, about 3-1/8 miles below Specht's Ferry, about 2.25 miles above the Little Maquoketa River, on the right-of-way of the Chicago, Milwaukee, St. Paul & Pacific Railroad, 912 feet below milepost #108-53, opposite the lower end of bridge #128 over Leisures Creek, in the slope of the bluff, 49 feet east of the center of the track, and at the intersection of the main fence and the wing fence at bridge #128. The top of the cap on the iron pipe set over P.B.M. 269. 621.610
- T.B.M. 283 In Dubuque County, about 2 1/2 miles above Edmore, about 1.5 miles above the Little Maquoketa River bridge, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, about 0.2 mile above Milepost #109-52, on a large, flat rock in the bank inclining about 30 degrees to the horizon, and 12 feet west of the track. The highest point in a square, flanked by the letters "U.S." cut in the rock. 616.081
- P.B.M. 271 In Dubuque County, about 3/4 mile above Edmore, 6-3/4 miles above Dubuque, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, 531 feet below the south end of bridge #124-K over the Little Maquoketa River, almost in line with the east side of the bridge, on the west side of the track, opposite the center of the curve in the railroad, and about 2 feet from the fence. The top of a copper bolt leaded in a tile, 18 inches square and set 3 feet underground, access to which is had through an iron pipe bearing a Mississippi River Commission standard cap. 611.797

- P.B.M. 272 In Dubuque County, about 3/4 mile above Edmore, 6-3/4 miles above Dubuque, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, 531 feet below the south end of bridge #124-K over the Little Maquoketa River, almost in a line with the east side of the bridge, on the west side of the track, opposite the center of the curve in the railroad, and about 2 feet from the fence. The top of the cap on the iron pipe set over P.B.M. 271. El. Ft. 615.796
- T.B.M. 287 In Dubuque County, about 2.3 miles above Eagle Point, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, about 0.3 mile below milepost #112 -49, about 0.2 mile above bridge #120-K, 836 feet below the small railroad platform in front of Mr. Cushing's house, 377 feet below bridge #122-K, on the upper end of the capstone of a small stone culvert, and 6 feet west of the center of the track. The highest point in the square, flanked by the letters "U.S." cut in the stone. 610.891
- P.B.M. 273 In Dubuque County, about 2.3 miles above Eagle Point, on the right-of-way of the Chicago, Milwaukee, St. Paul & Pacific Railroad, 896 feet below the railroad platform in front of Mr. James Cushing's house, 436 feet below bridge #122-K; 58 feet south of a small stone culvert, and 23.3 feet from the center of the track. The top of a copper bolt leaded in a tile, 18 inches square and set 3 feet under ground, access to which is had through an iron pipe bearing a Mississippi River Commission standard cap. 607.771
- P.B.M. 274 In Dubuque County, about 2.3 miles above Eagle Point, on the right-of-way of the Chicago, Milwaukee, St. Paul & Pacific Railroad, 896 feet below the railroad platform in front of Mr. James Cushing's house, 436 feet below bridge #122-K, 58 feet south of a small stone culvert and 23.3 feet from the center of the track. The top of the cap on the iron pipe set over P.B.M. 273. 611.764
- T.B.M. 289 In Dubuque County, about 1.25 miles above Eagle Point, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, 0.25 mile below milepost #113-48, midway between 2 small, wooden-box culverts, 20 feet west of the center of the track, and on a natural ledge. The highest point in a square, flanked by the letters "U. S." cut in the rock. 617.833
- T.B.M. 291 In Dubuque County, at Eagle Point, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, east of the track at the drying house of the Dubuque Wood-

- enware Company, on top of the stone foundation on the lower side of the building, and 10 feet from the west side. The highest point in a square, flanked by the letters "U.S." cut in the stone. El. Ft. 608.345
- P.B.M. 275 In Dubuque County, at Eagle Point, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, in the main building of the Dubuque Woodenware Company which is on the river bank, in the foundation on the south side, 1.8 feet from the west corner, and 2.1 feet above the ground. The center mark in a copper bolt leaded horizontally, and surrounded by the letters "U.S.P.B.M." cut in the stone. 605.360
- P.B.M. 276 In Dubuque County, at Eagle Point, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, 1/5 mile below the works of the Dubuque Woodenware Company, about 0.4 mile above milepost #115-46; 394 feet above bridge #114; 267 feet below bridge #114 $\frac{1}{2}$ over a sewer, in the upper end of a mound built up from earth excavation from the opposite side of the track, 13.6 feet from the center of the track, and 1 $\frac{1}{2}$ feet west of the east fence. The top of a copper bolt leaded in a tile, 18 inches square and set 3 feet under ground, access to which is had through an iron pipe bearing a Mississippi River Commission standard cap. 607.499
- P.B.M. 277 In Dubuque County, at Eagle Point, along the Chicago, Milwaukee, St. Paul & Pacific Railroad, 1/5 mile below the works of the Dubuque Woodenware Company, about 0.4 mile above milepost #115-46; 394 feet above bridge #114; 267 feet below bridge #114 $\frac{1}{2}$ over a sewer, in the upper end of a mound built up from earth excavation from the opposite side of the track, 13.6 feet from the center of the track, and 1 $\frac{1}{2}$ feet west of the east fence. The top of the cap on the iron pipe set over P. B. M. 276. 611.495
- Old U.S. B.M. 23 In Dubuque County, at Eagle Point on the Chicago, Milwaukee, St. Paul & Pacific Railroad above the ferry landing, at a prominent point of the river bank covered with large rock, in a very large triangular-shaped rock lying at the water's edge, and in the southwest portion. The highest point in the bottom part of the letter "B" cut in the rock. 594.011
- T.B.M. 293 In Dubuque County, at Dubuque, in the upper part of town, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, at the northwest corner of the freight-car repair shop, and on the southwest corner of the foundation stone. The highest point in a square, flanked by the letters "U.S." cut in the stone. 610.566

- T.B.M. 294 In Dubuque County, at Dubuque, about $\frac{1}{2}$ mile below the repair shops of the Chicago, Milwaukee, St. Paul & Pacific Railroad at Fifteenth and Pine Streets, at the warehouse of the Iowa Coffin Company, at the southeast corner of the building, and in the top of the foundation stone. The highest point in a square, cut in the stone. El. Ft. 608.982
- P.B.M. 278 In Dubuque County, at Dubuque, at the northwest corner of Fifteenth and Pine Streets, on the south side of the warehouse of the Iowa Coffin Co. on the west end of the first doorstep from Pine St. The top of a copper bolt leaded vertically, and surrounded by the letters "U.S.P.B.M." cut in the stone. 609.106
- T.B.M. 295 In Dubuque County, at Dubuque, at the southwest corner of Elm and Ninth Streets, and on the end of the curb abutting against the northeast corner of the freight house of the Chicago & Great Western Railroad. The highest point in a square, flanked by the letters "U.S." cut in the curb. DESTROYED 607.030
- P.B.M. 279 In Dubuque County, at Dubuque, at the northeast corner of the post office building, south 10 inches from north corner, and 3 feet above the stone paving. The center mark in a copper bolt leaded horizontally, and surrounded by the letters "U.S.P.B.M." cut in the stone. 644.320
- P.B.M. 280 In Dubuque County, at Dubuque, on the Illinois Central Railroad Bridge across the Mississippi River, in the upper end of the first pier, near its west edge, and about in the center of the bridge-seat stone. The top of a copper bolt leaded vertically, and surrounded by the letters "U.S.P.B.M." cut in the stone. 617.587
- A spur line crosses the river into East Dubuque, in Jo Daviess County, Illinois.
- Old U.S.B.M. a. In Jo Daviess County, along the Illinois Central Railroad, at East Dubuque, Illinois, on the Jack Knife Draw over the Chicago, Burlington & Quincy Railroad, at the south end of the west abutment, and on the southeast corner of the top stone. The highest point in a square, within an old circle, flanked by the letters "B.M." cut in the stone. 614.720
- Old U.S.B.M. b In Jo Daviess County, at East Dubuque, Illinois, east of the Chicago, Burlington & Quincy Railroad track, at the end of the Dubuque Highway

bridge across the Mississippi, on the upstream foundation stone which supports the triangular truss of the bridge, and on the upstream corner of the stone. The highest point in a square, within an old circle, flanked by the letters "B.M." cut in the stone. El. Ft. 613.988

End of the spur line into Jo Daviess County, Illinois.

T.B.M. 296 In Dubuque County, at Dubuque, opposite the Chicago, Milwaukee, St. Paul & Pacific Railroad station, at the Page House on the north side of Fourth Street, $26\frac{1}{2}$ inches east of the southeast corner of the building, 6 inches in front of the west window, and in the water table. The highest point in a square, flanked by the letters "U.S." cut in the stone. 607.873

City B.M. In Dubuque County, at Dubuque, at the Julian House, on the north side of Second Street, about 32 feet west of Iowa Street, at the east door of the older part of the building, and on the east end of the doorstep. The highest point in a square, cut in the stone. 612.108

City B.M. In Dubuque County, at Dubuque, at the southwest corner of First and Main Streets, near the southeast corner of Jess's Store, and on the north end of the doorstep. The highest point in a square, cut in the step. 608.457

T.B.M. 297 In Dubuque County, at the Illinois Central Railroad Station at Dubuque, at the north end, about in the center of the east side of the tower, and in the water table. The highest point in a square, cut in the stone. 607.791

OLD U.S.B.M. a In Dubuque County, at Dubuque, at the river front below the harbor, at the Diamond Joe Store, on the upstream stone doorsill, and on the upstream end. The highest point of a circle in a square, cut in the stone. 606.931

OLD U.S.B.M. b In Dubuque County, at Dubuque, at the river front, below the harbor, at the southeast corner of Houser and Linnehan's Boat Store, $1\frac{1}{2}$ feet above the corner, in the center of the buttress, and on the water table. The highest point of a circle in a circle, cut in the stone. 605.793

P.B.M. 281 In Dubuque County, at Dubuque, in the southern extremity of the town, at the bluff, $1/8$ mile below a sawmill, directly opposite the end of the run-

- way to the mill, 305 feet above the head block of the sawmill siding, in a recess in the face of the rock bluff, and 26 feet west of the center of the siding. The center mark in a copper bolt leaded horizontally, and surrounded by the letters "U.S.P.B.M." cut in the rock. El. Ft. 611.941
- T.B.M. 299 In Dubuque County, about 1 mile below Dubuque, at the point of the bluff on the lower side of Rugdale Hollow through which the Illinois Central Railroad passes from the river, 623 feet below the bridge of the Chicago, Milwaukee, St. Paul & Pacific Railroad, 164 feet above the house owned by Mr. R. Smith, 98 feet west of the center of the Chicago, Milwaukee, St. Paul & Pacific Railroad track, and on the top of a large, flat rock. The highest point in a square, flanked by the letters "U.S." cut in the rock. 610.261
- P.B.M. 282 In Dubuque County, about 1 mile below Dubuque, at the point of the bluff on the lower side of Rugdale Hollow through which the Illinois Central Railroad passes from the river, 623 feet below the Chicago, Milwaukee, St. Paul & Pacific Railroad bridge, 180 feet above a house owned by Mr. R. Smith, 131 feet west of the center of the track, and 43 feet northwest of a blazed elm which is on the upstream side of a large, flat rock. The top of a copper bolt leaded in a tile, 18 inches square and set 3 feet under ground, access to which is had through an iron pipe bearing a Mississippi River Commission standard cap. 609.516
- P.B.M. 283 In Dubuque County, about 1 mile below Dubuque, at the point of the bluff on the lower side of Rugdale Hollow, through which the Illinois Central Railroad passes from the river, 623 feet below the Chicago, Milwaukee, St. Paul & Pacific Railroad Bridge, 180 feet above a house owned by Mr. R. Smith, 131 feet west of the center of the track, and 43 feet northwest of a blazed elm which is on the upstream side of the large, flat rock. The top of the cap on the iron pipe set over P.B.M. 282. 613.516
- T.B.M. 301 In Dubuque County, about $3\frac{1}{4}$ miles below Dubuque, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, 660 feet below Milepost #121-40; 370 feet above the upper head block at Cattes Siding, 295 feet below Creston Crossing, on the lower side of a coulee, 25 feet west of the center of the track, and on a natural ledge of rock. The highest point in a square, flanked by the letters "U.S." cut in the rock. 616.282

- P.B.M. 284 In Dubuque County, at Cattes Siding, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, on the upper side of a coulee, 669 feet above the upper head block of the switch, 344 feet below milepost #121-40; 43 feet toward the bluff from the center of the track, in a fence corner, and near a gate. The top of a copper bolt leaded in a tile, 18 inches square and set 3 feet under ground, access to which is had through an iron pipe bearing a Mississippi River Commission standard cap. El. Ft. 612.505
- P.B.M. 285 In Dubuque County, at Cattes Siding, along Chicago, Milwaukee, St. Paul & Pacific Railroad, on the upper side of a coulee, 669 feet above the upper head block of the switch, 344 feet below milepost #121-40; 43 feet toward the bluff from the center of the track, in a fence corner, and near a gate. The top of the cap on the iron pipe set over P.B.M. 284. 616.505
- T.B.M. 302 In Dubuque County, at Cattes Siding, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, opposite the foot of Island #228; 72 feet above the lower head block of the switch, 15 feet west of the center of the side track, and in a natural ledge of rock. The highest point in a square, flanked by the letters "U.S." cut in the rock. 616.702
- T.B.M. 303 In Dubuque County, about 1 mile below Cattes Siding, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, about 1-1/3 miles above the head of Ninemile Island, directly opposite milepost #122-39; 9 feet toward the bluff from the center of the track, and in a natural ledge of rock. The highest point in a square, flanked by the letters "U.S." cut in the rock. 614.533
- T.B.M. 304 In Dubuque County, near Cattes Siding, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, 0.5 mile above the head of Ninemile Island, on the south abutment of bridge #86, at the river end and at the northeast corner of the second course of stone below the bridge seat. The highest point in a square, flanked by the letters "U.S." cut in the stone. 606.790
- OLD U.S.B.M. 24 In Dubuque County, near Cattes Siding, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, 1/2 mile above Ninemile Island, on the south abutment of bridge #86, on the river end, and at the northeast corner of the step on the lowest course of stone. The highest point in a square, cut in the stone. 590.517
- P.B.M. 286 In Dubuque County, about 6 miles below Du-

- | | El. Ft. |
|---|---------|
| buque, on the Chicago, Milwaukee, St. Paul & Pacific-Railroad, at the Shawondassee Club Grounds Station, 76 feet below the south end of the platform, 86 feet above the boundary fence between the lands of Mr. Paul Eiffer and Mr. Frank Noel, and 47.1 feet west of the center of the track. The top of a copper bolt leaded in a tile, 18 inches square and set about 3 feet under ground, access to which is had through an iron pipe bearing a Mississippi River Commission standard cap. | 602.246 |
| <u>P.B.M. 287</u> In Dubuque County, about 6 miles below Dubuque, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, at the Shawondassee Club Grounds Station, 76 feet below the south end of the platform, 86 feet above the boundary fence between the lands of Mr. Paul Eiffer and Mr. Frank Noel, and 47.1 feet west of the center of the track. The top of the cap on the iron pipe set over P.B.M. 286. | 606.246 |
| <u>T.B.M. 307</u> In Dubuque County, about 0.5 mile below the station at Massey, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, behind Ninemile Island, about 0.4 mile below milepost #124-37; 449 feet above bridge #80-K; 170 feet below bridge #82-K, about 30 feet west of the center of the track, and in the base of a black oak tree. The top of a large spike. | 609.162 |
| <u>T.B.M. 308</u> In Dubuque County, about 1-3/8 miles below Massey, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, at Bridge #78-K, in the west end of the south abutment, and in the southwest corner of the second course of stone from the top. The highest point in a square, flanked by the letters "U.S." cut in the stone. | 606.554 |
| <u>P.B.M. 288</u> In Dubuque County, opposite the foot of Ninemile Island, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, at the wood yard, 20 feet below the road leading from the wood yard across the railroad and up the bluff, 36 feet east of the center of the track, and 2 feet west of the east right-of-way fence. The top of a copper bolt leaded in a tile, 18 inches square and set 3 feet under ground, access to which is had through an iron pipe bearing a Mississippi River Commission standard cap. | 603.244 |
| <u>P.B.M. 289</u> In Dubuque County, opposite the foot of Ninemile Island, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, at the wood yard, 20 feet below the road leading from the wood yard across the railroad and up the bluff, 36 feet east of the center of the | |

- track, and 2 feet west of the east right-of-way fence. El. Ft.
The top of the cap on the iron pipe set over P.B.M.
288. 607.243
- T.B.M. 311 In Dubuque County, about 1 mile below the
foot of Ninemile Island, on the Chicago, Milwaukee,
St. Paul & Pacific Railroad, at bridge #76, at the
west end of the south abutment, and on the second
course of stone from the top. The highest point in a
square, flanked by the letters "U.S." cut in the stone. 611.022
- T.B.M. 312 In Dubuque County, about 3 miles above Gor-
don's Ferry, Jackson County, on the Chicago, Milwaukee,
St. Paul & Pacific Railroad, at Snyder's wood yard,
opposite the head of Island #235, about $\frac{1}{4}$ mile above
milepost #128-33; 410 feet below bridge #72-K; 12 feet
west of the center of the track, and at the lower end
of a very large, inclined rock at a rocky point. The
highest point in a square, flanked by the letters
"U.S." cut in the rock. 610.957
- P.B.M. 290 In Dubuque County, about 3 miles above Gor-
don's Ferry, Jackson County, on the right-of-way of
the Chicago, Milwaukee, St. Paul & Pacific Railroad,
opposite the head of Island #235; 125 feet below the
center of bridge #72-K; 43 feet west of the center of
the track, and at the railroad fence. A copper bolt
leaded in a tile, 18 inches square and set 3 feet un-
der ground, access to which is had through an iron pipe
bearing a Mississippi River Commission standard cap. 603.883
- P.B.M. 291 In Dubuque County, about 3 miles above Gor-
don's Ferry, Jackson County, on the right-of-way of
the Chicago, Milwaukee, St. Paul & Pacific Railroad,
opposite the head of Island #235; 125 feet below the
center of bridge #72-K, 43 feet west of the center of
the track, and at the railroad fence. The top of the
cap on the iron pipe set over P.B.M. 290. 607.886
- T.B.M. 314 In Dubuque County, about 1 mile above Gor-
don's Ferry, Jackson County, on the Chicago, Milwaukee,
St. Paul & Pacific Railroad, 52 feet below the sign
"Gordon's Ferry, One Mile", just above the ruins of a
large stone house, at bridge #68-K, at the river end
of the south abutment, on the fourth course of stone
from the top, and on the center of the north end of
the inner stone. The highest point in a square,
flanked by the letters "U.S." cut in the stone. 598.654
- P.B.M. 292 In Dubuque County, about 1 mile above Gor-
don's Ferry, Jackson County, on the Chicago, Milwaukee,

- St. Paul & Pacific Railroad, 345 feet above Tete du Mort Creek, 215 feet below bridge #68-K, 75 feet below the ruins of a large stone house, and 27 feet west of the center of the track. The top of a copper bolt leaded in a tile, 18 inches square and set 3 feet underground, access to which is had through an iron pipe, and bearing a Mississippi River Commission Standard cap. El. Ft. 600.173
- P.B.M. 293 In Dubuque County, about 1 mile above Gordon's Ferry, Jackson County, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, 345 feet above Tete du Mort Creek, 215 feet below Bridge #68-K; 75 feet below the ruins of a large, stone house, and 27 feet west of the center of the track. The top of the cap on the iron pipe set over P.B.M. 292. 604.175
- The line continues into Jackson County, Iowa.
- T.B.M. 315 In Jackson County, about 0.5 mile above Gordon's Ferry, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, about 0.4 mile below bridge #66, about 0.25 mile above the water tank, midway between 2 projecting points of bluff, 12 feet west of the center of the track, on a natural ledge of rock, and 1.5 feet above the track. The highest point in a square, flanked by the letters "U.S." cut in the rock. 611.547
- P.B.M. 294 In Jackson County, at Gordon's Ferry, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, 215 feet below the station, 250 feet below bridge #64; 125 feet above the lower headblock of the siding, 45 feet below the lower side of the stockyard, and 34 feet toward the bluff from the center of the main track. The top of a copper bolt leaded in a tile, 18 inches square and set 3 feet under ground, access to which is had through an iron pipe bearing a Mississippi River Commission standard cap. 613.785
- P.B.M. 295 In Jackson County, at Gordon's Ferry, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, 215 feet below the station, 250 feet below bridge #64; 125 feet above the lower headblock of the siding, 45 feet below the lower side of the stockyard, and 34 feet toward the bluff from the center of the main track. The top of the cap on the iron pipe set over P.B.M. 294. 617.768
- T.B.M. 318 In Jackson County, about $1\frac{1}{4}$ miles below Gordon's Ferry, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, 396 feet below Milepost #132-29, on a flat rock, 18 feet west of the center of the track, and 0.5 foot above the surface of the ground. The

- highest point in a square, flanked by the letters-
"U.S." cut in the rock. El. Ft. 610.645
- P.B.M. 296 In Jackson County, about $1\frac{1}{2}$ miles below Gordon's Ferry, on the right-of-way of the Chicago, Milwaukee, St. Paul & Pacific Railroad, about $1/3$ mile below milepost #132-29, on a low ridge at the upper side of a coulee, 49 feet west of the center of the track, and at the fence. The top of a copper bolt leaded in a tile, 18 inches square and set 3 feet under ground, access to which is had through an iron pipe bearing a Mississippi River Commission standard cap. 606.669
- P.B.M. 297 In Jackson County, about $1\frac{1}{2}$ miles below Gordon's Ferry, on the right-of-way of the Chicago, Milwaukee, St. Paul & Pacific Railroad, about $1/3$ mile below milepost #132-29, on a low ridge at the upper side of a coulee, 49 feet west of the center of the track, and at the fence. The top of the cap on the iron pipe set over P. B. M. 296. 610.678
- T.B.M. 321 In Jackson County, about 0.75 mile above the station at Smiths, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, at the point of bluff at the head of Bellevue Slough, at the lower end of a cut, and 125 feet above bridge #56, in front of the house owned by Mr. A. M. Brown, 15 feet below the path running to this house, at the upper side of the cattle guard, 12 feet west of the center of the track, and on a natural ledge of rock. The highest point in a square, flanked by the letters "U.S." cut in the rock.. 607.069
- P.B.M. 298 In Jackson County, about 0.75 mile above the station at Smiths, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, at the head of Bellevue Slough, 110 feet above bridge #56; 55 feet below the lower line of the house owned by Mr. A. M. Brown, 12 feet below the cattle guard, 16 feet toward the river from the center of the track, and on small bench of ground between the cattle guard and a gate leading down to the river. The top of a copper bolt leaded in a tile, 18 inches square and set 3 feet underground, access to which is had through an iron pipe bearing a Mississippi River Commission standard cap. 601.606
- P.B.M. 299 In Jackson County, about 0.75 mile above the station at Smiths, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, at the head of Bellevue Slough, 110 feet above bridge #56; 55 feet below the lower line of the house owned by Mr. A. M. Brown, about 12 feet below the cattle guard, 16 feet toward the river

- from the center of the track, and on a small bench of ground between the cattle guard and a gate leading down to the river. The top of the cap on the iron pipe set over P.B.M. 298. El. Ft. 605.589
- T.B.M. 323 In Jackson County, about $1\frac{1}{4}$ miles below station at Smiths, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, behind Bellevue Slough, at the lower end of a long curve, about 0.4 mile above Bridge #50; 148 feet below a stone culvert which is about in the center of a short, heavy fill, 60 feet east of the center of the track, and on a 10-inch oak tree, several feet outside the right-of-way. A spike in the root of the tree. 608.257
- P.B.M. 300 In Jackson County, about $1\frac{1}{4}$ miles below Smiths, about 3 miles above North Bellevue, on the right-of-way of the Chicago, Milwaukee, St. Paul & Pacific Railroad, behind Bellevue Slough, about 0.4 mile above bridge #50-K, about 262 feet from the low-water edge, 150 feet below a stone culvert, and at the east fence. The top of a copper bolt, leaded in a tile, 18 inches square and set 3 feet under ground, access to which is had through an iron pipe bearing a Mississippi River Commission standard cap. 605.662
- P.B.M. 301 In Jackson County, about $1\frac{1}{4}$ miles below Smiths, about 3 miles above North Bellevue, on the right-of-way of the Chicago, Milwaukee, St. Paul & Pacific Railroad, behind Bellevue Slough, about 0.4 mile above bridge #50-K, about 262 feet from the low-water edge, 150 feet below a stone culvert, and at the east fence. The top of the cap on the iron pipe set over P.B.M. 300. 609.638
- P.B.M. 302 In Jackson County, about 1 mile above North Bellevue, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, about 0.25 mile below milepost #138-23, at bridge #48-K, at the east end of the north abutment, and on the third course of stone from the top. The center of a copper bolt leaded vertically, and surrounded by the letters "U.S.P.B.M." cut in the stone. 625.980
- P.B.M. 303 In Jackson County, about 1 mile above North Bellevue, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, about 980 feet from the railroad, and 410 feet below a large, stone arch culvert under a wagon road, 36 feet south of another wagon road winding around the south point of the bluff, 45 feet north of the bank of the creek crossed by bridge #48-K, and 40 feet back from the highwater line on the river bank. The top of a copper bolt leaded in a tile, 18

El. Ft.

inches square and set 3 feet under ground, access to which is had through an iron pipe bearing a Mississippi River Commission standard cap.

591.219

P.B.M. 304 In Jackson County, about 1 mile above North Bellevue, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, about 980 feet from the railroad, about 410 feet below a large, stone arch culvert under a wagon road, 35 feet south of another wagon road, winding around the south point of the bluff, 45 feet north of the bank of the creek crossed by bridge #48-K and 40 feet back from the high-water line on the river bank. The top of the cap on the iron pipe set over P.B.M. 303.

595.192

P.B.M. 305 In Jackson County, at Bellevue, in the upper part of the town, in the west line of Front Street and 2 feet south of the northeast corner of a corner lot owned by Mrs. Booth. A copper bolt leaded in a tile, 18 inches square and set 3 feet under ground, access to which is had through an iron pipe bearing a Mississippi River Commission standard cap.

618.358

P.B.M. 306 In Jackson County, at Bellevue, in the upper part of the town, in the west line of Front Street, and 2 feet south of the northeast corner of a corner lot owned by Mrs. Booth. The top of the cap on the iron pipe set over P.B.M. 305.

622.354

P.B.M. 307 In Jackson County, at Bellevue, at the south east corner of the intersection of Court and Second Streets, at the front of the store owned by Mr. John Baumann, at the lower end of the water table, and 2.5 feet above the south corner. The top of a copper bolt leaded vertically, and surrounded by the letters "U. S. P.B.M." cut in the stone.

618.752

Old U.S.B.M. In Jackson County, at Bellevue, at the river shore, at the warehouse of Killburn & Company, in the east end of the south wall, on a projecting stone, and just below the iron bolt plate. The highest point in a circle, cut in the stone.

596.488

T.B.M. 326 In Jackson County, at Bellevue, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, at the south end of the town, between the flour mill and sawmill, and at the east end of the north pier of bridge #44-K, over Mill Creek. The highest point in a square, flanked by the letters "U.S." cut in the pier.

607.810

P.B.M. 308 In Jackson County, at Bellevue, in the

lower end of the town, on the river bank, in the first building above the sawmill, on the west front of a two-story stone store owned by Mr. M. G. Heiler, and at the second door from the north end. The top of a copper bolt leaded vertically, and flanked by the letters "U.S." cut in the stone.

El. Ft.

610.314

P.B.M. 309 In Jackson County, about 2 miles below Bellevue, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, 558 feet above the center of bridge #42-K over Duck Creek, 148 feet above milepost #142-19, at the upper side of a highway crossing, at the south side of the fence running to a cattle guard, and 20 feet east of the center of the track. The top of a copper bolt leaded in a tile, 18 inches square and set 3 feet under ground, access to which is had through an iron pipe bearing a Mississippi River Commission standard cap.

604.618

P.B.M. 310 In Jackson County, about 2 miles below Bellevue, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, 558 feet above the center of bridge #42-K over Duck Creek, 148 feet above Milepost 142 19, at the upper side of a highway crossing, at the south side of the fence running to a cattle guard, and 20 feet east of the center of the track. The top of the cap on the iron pipe set over P.B.M. 309.

608.598

T.B.M. 329 In Jackson County, about $2\frac{1}{2}$ miles below Bellevue, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, 0.25 mile below bridge #42-K, $\frac{1}{3}$ mile below Milepost #142-19; 279 feet above a sluiceway under the track, on the west side of a ditch, 12 feet west of the center of the track, and in a natural-ledge of rock. The highest point in a square, flanked by the letters "U.S." cut in the rock.

605.173

T.B.M. 331 In Jackson County, about $3\frac{1}{2}$ miles below Bellevue, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, 250 feet above the house owned by Mr. C. A. Harrington, in the southwest corner of the stone culvert, 3 feet from the south side and 3 inches from the west end. The highest point in a square, and flanked by the letters "U.S." cut in the stone.

599.864

P.B.M. 311 In Jackson County, about $3\frac{1}{2}$ miles below Bellevue, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, 705 feet below a stone culvert, 177 feet below the lower side of Mr. C. A. Harrington's stone barn, 40 feet above the wooden drain under the track, at the lower end of a small cut, 33 feet east

of the center of the track, and $1\frac{1}{2}$ feet west of the right-of-way fence. A copper bolt leaded in a tile, 18 inches square and set about 3 feet under ground, access to which is had through an iron pipe, bearing a Mississippi River Commission standard cap. El. Ft. 595.087

P.B.M. 312 In Jackson County, about $3\frac{1}{2}$ miles below Bellevue, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, 705 feet below a stone culvert, 177 feet below the lower side of Mr. C. A. Harrington's stone barn, 40 feet above the wooden drain under the track, at the lower end of a small cut, 33 feet east of the center of the track, and 1.5 feet west of the east right-of-way fence. The top of the cap on the iron pipe set over P. B. M. 311. 599.080

P.B.M. 313 In Jackson County, about $5\frac{1}{2}$ miles below Bellevue, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, on the south side of the slough at the foot of Island #250, at the third tree from the river in a row of 4 ash trees, and 88 feet from the northwest corner of a log house owned by Mr. Golden. The top of a copper bolt leaded in a tile, 18 inches square and set about 3 feet under ground, access to which is had through an iron pipe bearing a Mississippi River Commission standard cap. 588.450

P.B.M. 314 In Jackson County, about $5\frac{1}{2}$ miles below Bellevue, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, on the south side of the slough at the foot of Island #250, at the third tree from river in a row of 4 ash trees, and 88 feet from the northwest corner of a log house owned by Mr. Golden. The top of the cap on the iron pipe set over a P.B.M. 313. 592.420

P.B.M. 315 In Jackson County, about 6 miles below Bellevue, opposite Island #253; $\frac{1}{3}$ mile below the log house at Golden's wood yard, 56 feet from the top of the bank, 2 feet below a fence on the lower side of a clearing and upper side of the woods which runs at about right angles to the river bank, and 8 feet above a 10-inch ash tree which is blazed on the side toward the mark. The top of a copper bolt leaded in a tile, 18 inches square and set 3 feet under ground, access to which is had through an iron pipe bearing a Mississippi River Commission stand cap. 587.171

P.B.M. 316 In Jackson County, about 6 miles below Bellevue, opposite Island # 253, $\frac{1}{3}$ mile below the

log house at Golden's woodyard, 56 feet from the top of the bank, 2 feet below a fence on the lower side of a clearing and upper side of the woods which runs at about right angles to the river bank, and 8 feet above a 10-inch ash tree which is blazed on the side toward the mark. The top of the cap on the iron pipe set over P.B.M. 315. El. Ft. 591.134

This line continues into Jo Daviess County, Illinois.

P.B.M. 317 In Jo Daviess County, at Harris Landing, on the east side of the highway on the top of the sand bluff, 184 feet above the house now occupied by Mr. L. T. Green, in the northwest corner of a small field owned by Mr. Jackson Harris, and very close to the roadside fence. The top of a copper bolt leaded in a tile, 18 inches square and set 3 feet under ground, access to which is had through an iron pipe bearing a Mississippi River Commission standard cap. 610.511

P.B.M. 318 In Jo Daviess County, at Harris Landing, on the east side of the highway on the top of the sand bluff, 184 feet above the house now occupied by Mr. L. T. Green, in the northwest corner of a small field owned by Mr. Jackson Harris, and very close to the roadside fence. The top of the cap on the iron pipe set over P. B. M. 317. 614.477

P.B.M. 319 In Jo Daviess County, at Harris Landing, - on the farm owned by Mr. Jackson Harris, at the roadside, very close to the east fence, 207 feet below the house occupied by Mr. L. T. Green, 3 feet below a fence at the south side of the dooryard, and at the north end of a lilac hedge. The top of a copper bolt leaded in a tile, 18 inches square and set 3 feet under ground, access to which is had through an iron pipe bearing a Mississippi River Commission standard cap. 611.639

P.B.M. 320 In Jo Daviess County, at Harris Landing, on the farm owned by Mr. Jackson Harris, at the roadside, very close to the east fence, 207 feet below the house occupied by Mr. L. T. Green, 3 feet below the fence at the south side of the dooryard, and at the north end of a lilac hedge. The top of the cap on the iron pipe set over P. B. M. 319. 615.635

P.B.M. 321 In Jo Daviess County, about 1.5 miles below Harris Landing, about $1\frac{1}{2}$ miles above Island #256, back from the top of the sand bluff, under the east fence of the highway, 31 feet southeast of the cattle pen,

under the wagon road leading from the pasture through the cattle chute to the river, and northeast of 2 large honey locust trees standing in the chute at the top of the bluff. The top of a copper bolt leaded in a tile, 18 inches square and set 3 feet under ground, access to which is had through an iron pipe bearing a Mississippi River Commission standard cap.

El. Ft.

619.438

P.B.M. 322 In Jo Daviess County, about 1.5 miles below Harris Landing, about $1\frac{1}{2}$ miles above Island #256, back from the top of the sand bluff, under the east fence of the highway, 31 feet southeast of the cattle pen, under the wagon road leading from the pasture through the cattle chute to the river, and northeast of 2 large honey locust trees standing in the chute at the top of the bluff. The top of the cap on the iron pipe set over P.B.M. 321.

623.437

The line continues into Carroll County, Illinois.

P.B.M. 323 In Carroll County, opposite the foot of Island #256, about $\frac{1}{2}$ mile south of the house of Mr. Benjamin Hatfield, about 574 feet back from the high-water line, beyond the top of the bluff, on the land of Mrs. McCabe, 68 yards south-of-west of a 3-foot oak tree which stands in a field, at a point of brush at the head of a small valley running east, on the south side of the field, and near the wire fence. The top of a copper bolt leaded in a tile, 18 inches square and set about 3 feet under ground, access to which is had through an iron pipe bearing a Mississippi River Commission standard cap.

623.618

P.B.M. 324 In Carroll County, opposite the foot of Island #256, about $\frac{1}{2}$ mile south of the house of Mr. Benjamin Hatfield, about 574 feet back from the high-water line, beyond the top of the bluff, on the land of Mrs. McCabe, 68 yards south-of-west of a 3-foot oak tree which stands in a field, at a point of brush at the head of a small valley running east, on south side of the field, and near the wire fence. The top of the cap on the iron pipe set over P.B.M. 323.

627.617

P.B.M. 325 In Carroll County, about $\frac{3}{4}$ mile above Arnold Landing, at the foot of the point of a sand bluff, on land owned by Mr. Eddy, about 950 feet south of the left bank of Apple River, at the corner of the cultivated land, just above high-water level, about 60 feet south of an oak tree. The top of a copper bolt leaded in a tile, 18 inches square and set 3 feet under ground, access to which is had through an iron pipe

- bearing a Mississippi River Commission standard cap. 585.786
- P.B.M. 326 In Carroll County, about $3/4$ mile above Arnold Landing, at the foot of the point of a sand bluff, on land owned by Mr. Eddy, about 950 feet south of the left bank of Apple River, at the corner of the cultivated land, just above high water level, and about 60 feet south of an oak tree. The top of the cap on the iron pipe set over P.B.M. 325. 589.776
- P.B.M. 327 In Carroll County, at Arnold Landing, on the large brick house of Mr. Eddy's, at the southeast corner of the main part, in the south face of the top foundation stone, 3 inches from the east end, and 2 inches from the top of the stone. The center mark in a copper bolt led horizontally, and surrounded by the letters "U.S.P.B.M." cut in the stone. 610.967
- P.B.M. 328 In Carroll County, about 0.5 mile below Arnold Landing, about 1 mile above the station at Marcus, on the Chicago, Burlington & Quincy Railroad, 148 feet below the lower end of a long cut, on the north side of the south right-of-way fence, and 45 feet south of the center of the track. The top of a copper bolt led in a tile, 18 inches square and set 3 feet under ground, access to which is had through an iron pipe bearing a Mississippi River Commission standard cap. 593.516
- P.B.M. 329 In Carroll County, about 0.5 mile below Arnold Landing, about 1 mile above the station at Marcus, on the Chicago, Burlington & Quincy Railroad, 148 feet below the lower end of a long cut, on the north side of the south right-of-way fence, and 45 feet south of the center of the track. The top of the cap on the iron pipe set over P.B.M. 328. 597.486
- P.B.M. 330 In Carroll County, about 0.2 mile below the station at Marcus, on the Chicago, Burlington & Quincy Railroad, 200 feet above the headblock at the lower end of the northeast siding, 18 feet above the headblock of the southwest siding, on the highest ridge of ground, 27 feet north of a blazed white-oak tree, 35 feet southwest of the center of the track and near a wire fence. The top of a copper bolt led in a tile, 18 inches square and set 3 feet under ground, access to which is had through an iron pipe bearing a Mississippi River Commission standard cap. 583.700
- P.B.M. 331 In Carroll County, about 0.2 mile below the

- station at Marcus, on the Chicago, Burlington & Quincy Railroad, 200 feet above the headblock at the lower end of the northeast siding, 18 feet above the head block of the southwest siding, on the highest ridge of ground, 27 feet north of a blazed white-oak tree, 35 feet southwest of the center of the track, and near a wire fence. The top of the cap on the iron pipe set over P.B.M. 330. El. Ft. 587.709
- P.B.M. 332 In Carroll County, about 2.5 miles above Savanna, on the Chicago, Burlington & Quincy Railroad, about 1-3/4 miles below Marcus, opposite the upper end of bridge #40; 48 feet toward the river from the center of the track and in the angle formed by the right-of-way fence and the wing fence to the bridge. The top of a copper bolt leaded in a tile, 18 inches square and set 3 feet under ground, access to which is had through an iron pipe bearing a Mississippi River Commission standard cap. 589.274
- P.B.M. 333 In Carroll County, about 2.5 miles above Savanna, on the Chicago, Burlington & Quincy Railroad, about 1-3/4 miles below Marcus, opposite the upper end of bridge #40; 48 feet from the center of the track toward the river, and in the angle formed by the right of way fence and the wing fence to the bridge. The top of the cap on the iron pipe set over PBM-332. 593.283
- P.B.M. 334 In Carroll County, about 1.5 miles above Savanna, on the Chicago, Burlington & Quincy Railroad, about 1/4 mile below the center of bridge #35; 318 feet above Milepost #284-147; 150 feet below the point of tangency at the lower end of the long curve, 90 feet below a small white house, opposite the north end of a prominent portion of a bare rock bluff, on the east side of the right-of-way, and 3 feet west of a high board fence. The top of a copper bolt leaded in a tile, 18 inches square and set 3 feet under ground, to which access is had through an iron pipe bearing a Mississippi River Commission standard cap. 591.495
- P.B.M. 335 In Carroll County, about 1.5 miles above Savanna, on the Chicago, Burlington & Quincy Railroad, about 1/4 mile below the center of bridge #35; 318 feet above milepost #284-147; 150 feet below the point of tangency at the lower end of the long curve, 90 feet below a small white house, opposite the north end of a prominent portion of a bare rock bluff, on the east side of the right-of-way, and 3 feet west of a high board fence. The top of the cap on the iron pipe set over P.B.M. 334. 595.484

- | | El. Ft. |
|--|---------|
| Old U.S.B.M. 18 In <u>Carroll County</u> , at <u>Savanna</u> , on the Chicago, Milwaukee, St. Paul & Pacific Railroad, on the south side of the elevator, about 12 feet from the west corner, and $1\frac{1}{2}$ feet above the ground. The top of a ring bolt leaded horizontally. | 579.674 |
| P.B.M. 62 In <u>Carroll County</u> , at <u>Savanna</u> , at the Chicago, Milwaukee, St. Paul & Pacific Railroad elevator on the bank of the river, on the east side of the engine room, and in the south end of the south doorsill. The top of a copper bolt leaded vertically, and surrounded by the letters "U.S.P.B.M." cut in the stone. | 591.757 |
| P.B.M. 336 In <u>Carroll County</u> , at <u>Savanna</u> , at the southeast corner of the intersection of Main & Murray Streets, on the Radke House which is owned by Mr. A. McRadke, and on the north end of the first doorstep from the north end of the building. The top of a copper bolt leaded vertically, and surrounded by the letters "U.S.P.B.M." cut in the stone. | 598.421 |
| P.B.M. 337 In <u>Carroll County</u> , at <u>Savanna</u> , on the Chicago, Burlington & Quincy Railroad to Fulton, 600 feet below the crossing with the Chicago, Milwaukee, St. Paul & Pacific Railroad to Sabula, on the land of Mr. A. Hershey, 12 feet from the top of the bank of a slough, and 15 feet below Jones & Jordan's Boathouse. The top of a copper bolt leaded in a tile, 18 inches square and set 3 feet under ground, access to which is had through an iron pipe bearing a Mississippi River Commission standard cap. | 585.438 |
| P.B.M. 338 In <u>Carroll County</u> , at <u>Savanna</u> , on the Chicago, Burlington & Quincy Railroad to Fulton, 600 feet below the crossing with the Chicago, Milwaukee, St. Paul & Pacific Railroad to Sabula, on the land of Mr. A. Hershey, 12 feet from the top of the bank of the slough, and 15 feet below Jones & Jordan's Boathouse. The top of the cap on the iron pipe set over P.B.M. 337. | 589.431 |
| P.B.M. 61 In <u>Carroll County</u> , about 1 mile south of <u>Savanna</u> , at railroad bridge #E-392, and in the middle pier. The top of a copper bolt leaded vertically, and surrounded by the letters "U.S.P.B.M." cut in the pier. | 586.593 |
| P.B.M. 60 In <u>Carroll County</u> , at <u>Thompson</u> , about 275 yards east of the Chicago, Milwaukee, St. Paul & Pacific Railroad, at the west end of the Christian Church, and in the foundation wall. The center mark of | |

El. Ft.

a copper bolt leaded horizontally, and surrounded by the letters "U.S.P.B.M." cut in the wall.

605.812

The line continues into Whiteside County, Illinois.

P.B.M. 59 In Whiteside County, about 3 miles north of Fulton Junction, at a railroad bridge, in the west end of the north abutment, and in the second course of stone from the top. The top of a copper bolt leaded vertically, and surrounded by the letters "U.S.P.B.M." cut in the stone.

589.303

P.B.M. 58 In Whiteside County, at Fulton Junction, about 0.6 mile north of the crossing of the Chicago, Milwaukee, St. Paul & Pacific Railroad and the Chicago & North Western Railway, in the southeast abutment of a railroad bridge, and in the bridge-seat stone. The top of a copper bolt leaded vertically, and surrounded by the letters "U.S.P.B.M." cut in the stone.

582.489

B.M. 35 (Mackenzie) In Whiteside County, at Fulton, at an elevator, at the southeast corner of the engine room, under the planking, and in the water table.

585.865

P.B.M. 57 In Whiteside County, at Fulton, at the northeast corner of Cherry and Bench Streets, in the south face of the stone foundation wall of the Northern Illinois College, 3.5 feet above the ground, and 14 inches from the southwest corner of the foundation. The center mark of a copper bolt leaded horizontally, and surrounded by the letters "U.S.P.B.M." cut in the stone.

597.049

P.B.M. 56 In Whiteside County, about 2 miles south of Fulton, about 220 yards south of the Chicago, Burlington & Quincy Railroad crossing, at the Chicago, Milwaukee, St. Paul & Pacific Railroad Bridge over Cat Tail Creek, and in the top of the east end of the north abutment. The top of a copper bolt set vertically.

582.243

P.B.M. 55 In Whiteside County, about 2 miles south of Fulton, just south of the Chicago, Burlington & Quincy Railroad, at the Chicago, Milwaukee, St. Paul & Pacific Railroad Bridge over Cat Tail Creek, and in the top of the east end of the south abutment. The top of a copper bolt set vertically.

580.983

P.B.M. 54 In Whiteside County, about 2.5 miles north of Albany, on a Chicago, Milwaukee, St. Paul & Pacific Railroad bridge, and in the west side of the

- south abutment. The top of a copper bolt set vertically, and surrounded by the letters "U.S.P.B.M." cut in the abutment. El. Ft. 577.722
- P.B.M. 53 In Whiteside County, about 1.25 miles north of Albany, about 100 yards east of the Chicago, Milwaukee, St. Paul & Pacific Railroad, 16 yards east of a wagon road, in the base of a large shoulder of rock projecting from the bluff, about 4 yards above the wagon road, and 1 foot above the ground. The center of a hole in a copper bolt leaded horizontally, and surrounded by the letters "U.S.P.B.M." cut in the rock. 598.394
- P.B.M. 52 In Whiteside County, at Albany, about 100 yards from the river, on the main business street, at the brick store building of Harper & Son, at the southwest corner, and in the west side of the foundation. The center of a hole in a copper bolt set horizontally, and surrounded by the letters "U.S.P.B.M." cut in the stone. 595.438
- The line continues into Rock Island County, Illinois.
- P.B.M. 51 In Rock Island County, at Cordova, near the Chicago, Milwaukee, St. Paul & Pacific Railroad station, near the northwest corner of Mr. William G. Marshall's brick elevator, in the north face, and in the third corner stone from the top of the foundation. The center of a hole in a copper bolt set horizontally, surrounded by the letters "U.S.P.B.M." cut in the stone. 594.835
- P.B.M. 50 In Rock Island County, at Cordova, at the edge of the water, in the south side of the stone warehouse of the Northern Line Packet Company, near the southwest corner, and about 6.5 feet below the high-water mark. The center of a hole in a copper bolt set horizontally, and surrounded by the letters "U.S.P.B.M." cut in the stone. DESTROYED. 573.641
- P.B.M. 49 In Rock Island County, at Port Byron, on the east side of Main Street, at the brick store building of Mr. A. H. Wandt, in the south doorstep on the east side of the building, and in the north bolthead of the front row of bolts. A cross cut through the center of the bolt head, and marked by the letters "U.S.P.B.M." on the brick below. 587.253
- P.B.M. 48 In Rock Island County, at Port Byron, between Main Street and the Chicago, Milwaukee, St. Paul & Pacific Railroad, about 75 feet from the river bank, at

- the brick store building of Mr. N. Dorrance, and in the west side of the southwest corner of the stone foundation. The center of a hole in a copper bolt leaded horizontally, and surrounded by the letters "U.S.P.B.M." cut in the stone. El. Ft. 581.341
- P.B.M. 47 In Rock Island County, about 3/4 mile south of Port Byron, on the Chicago, Milwaukee, St. Paul & Pacific Railroad bridge over Barbers Creek, and in the west end of the north abutment. The top of a copper bolt leaded vertically, and surrounded by the letters "U.S.P.B.M." cut in the stone. 579.864
- P.B.M. 46 In Rock Island County, at Rapids City, at Mr. H. M. Gilchrist's brick store building on the river bank, in the west side of the northwest corner of the stone foundation, and 4 feet above the ground. The center of a hole in a copper bolt leaded horizontally, and surrounded by the letters "U.S.P.B.M." cut in the stone. DESTROYED. 576.226
- P.B.M. 45 In Rock Island County, at Hampton, at Baker and Hayward's brick store building on the levee, in the north side of the northwest corner of the stone foundation, and at the high-water mark of 1880. The center of a hole in a copper bolt leaded horizontally, and surrounded by the letters "U.S.P.B.M." cut in the stone. 569.999
- P.B.M. 44 In Rock Island County, at Hampton, on the east side of the brick schoolhouse, near the southeast corner, and 1.6 feet from the ground. The center of a hole in a copper bolt set horizontally and surrounded by the letters "U.S.P.B.M." cut in the brick. 580.022
- P.B.M. 43 In Rock Island County at Watertown, about 55 yards southeast of the Chicago, Milwaukee, St. Paul & Pacific Railroad station, in the brick basement wall of the house of Mr. H. Smith, in the west side, and near the northwest corner. The center of a hole in a copper bolt leaded horizontally, and surrounded by the letters "U.S.P.B.M." cut in the brick. DESTROYED. 574.871
- P.B.M. 42 In Rock Island County, at Moline, at the wagon bridge crossing to the head of Rock Island, and in the east end of the south abutment. The top of a copper bolt set vertically, and surrounded by the letters "U.S.P.B.M." 568.775
- P.B.M. 41 In Rock Island County, at Rock Island, near

42 PRAIRIE du CHIEN, WIS., to MUSCATINE, IOWA
(Supplementary Adjustments)

the Chicago, Rock Island & Pacific Railway station, in El. Ft.
the north side of the Atlantic Brewery, at the north-
east corner of the foundation, and in the upper founda-
tion stone. The center of a hole in a copper bolt set
horizontally, and surrounded by the letters "U.S.
P.B.M." cut in the stone. 581.029

P.B.M. 40 In Rock Island County, near Rock Island, at
the lower end of Arsenal Island, in the base of the
stone tower of the United States Arsenal Building A,
1865, in the east side of the northeast corner, and
about 4 feet above the ground. The center of a hole
in a copper bolt leaded horizontally, and surrounded
by the letters "U.S.P.B.M." cut in the stone. 577.122

The line continues into Scott County, Iowa.

P.B.M. 39 In Scott County, at Davenport, at the rail
road bridge over the main channel of the Mississippi
River, in the coping of the east or upper side of the
north abutment, on a plane with the sidewalk, 13.5
feet from the river face, and 0.3 foot inside of the
railing. The top of a copper bolt leaded vertically,
and surrounded by the letters "U.S.P.B.M." cut in the
stone. 573.053

P.B.M. 38 In Scott County, at West Davenport, at the
lower end of the town, in the west side of the founda-
tion of the vinegar works, near the southwest corner,
and about 1.3 feet above the ground. The center of a
brass bolt set horizontally, and surrounded by the
letters "U.S.P.B.M." cut in the stone. 566.997

P.B.M. 37 In Scott County, about 0.5 mile east of Buf-
falo, about 110 yards north of the Chicago, Rock Is-
land & Pacific Railway, in the west side of the
foundation of the brick house of Eliza M. Dodge, near
the southwest corner, in the upper foundation stone,
and about 1 yard above the ground. The center of a
hole in a brass bolt set horizontally, and surrounded
by the letters "U.S.P.B.M." cut in the stone. 568.434

P.B.M. 36 In Scott County, at Buffalo, at the northwest
corner of Hecker and Second Streets, in the east side
of the brick store and post office building of Mr. Wm.
Karge, near the southeast corner, and 3 feet above the
foundation. The center of a hole in a brass bolt
leaded horizontally. 564.937

The line continues into Muscatine County, Iowa.

- P.B.M. 35a In Muscatine County, about 0.5 mile east of the station at Montpelier, at the Chicago, Rock Island & Pacific Railway bridge #45, and in the south end of the west abutment. The top of a brass bolt, leaded vertically, and surrounded by the letters "U.S.P.B.M." cut in the stone. El. Ft. 556.810
- P.B.M. 35 In Muscatine County, about 5/8 mile west of Montpelier, on the Chicago, Rock Island & Pacific Railway, at bridge #52, and in the north end of the west pier. The top of a brass bolt set vertically, and surrounded by the letters "U.S.P.B.M." cut in the pier. 564.313
- P.B.M. 34 In Muscatine County, about 3 miles west of Montpelier, on the Chicago, Rock Island & Pacific Railway, at bridge #60 over Pine Creek, and in the north end of the middle pier. The top of a brass bolt leaded vertically, and surrounded by the letters "U.S.P.B.M." cut in the pier. 554.106
- P.B.M. 33 In Muscatine County, at Fairport, near the river bank, about 380 yards above the Chicago, Rock Island & Pacific Railway station, in the west side of the pottery owned by Mr. John Feasted, and near the southwest corner of the stone foundation. The center of a hole in a copper bolt set horizontally, and surrounded by the letters "U.S.P.B.M." cut in the stone. (Probably destroyed) 555.055
- P.B.M. 32 In Muscatine County, about 6 miles above Muscatine, on the Chicago, Rock Island & Pacific Railway, 810 yards west of bridge #77; in the face of the rock where it has been blasted off for the railroad bed, 20 feet north of the center of the track, and 4 feet above the track. The center of a hole in a copper bolt set horizontally, and surrounded by the letters "U.S.P.B.M." cut in the rock. 560.957
- P.B.M. 31 In Muscatine County, about 5 miles above Muscatine, at the Chicago, Rock Island & Pacific Railway bridge over Sweetland Creek, and in the west end of the north abutment. The top of a copper bolt leaded vertically, and surrounded by the letters "U.S.P.B.M." cut in the stone. In 1930, reported destroyed. 552.315
- P.B.M. 30 In Muscatine County, about 3 miles above Muscatine, at a Chicago, Rock Island & Pacific bridge, at the south end of the west abutment, and in the top of the stone coping. The top of a copper bolt set verti-

PRAIRIE DU CHIEN, WIS., TO MUSCATINE, IOWA
(Supplementary Adjustments)

cally and surrounded by the letters "U.S.P.B.M." cut in the stone. In 1930, reported destroyed. El. Ft. 553.099

P.B.M. 29 In Muscatine County, at Muscatine, 55 yards north of the station, at a wagon bridge, and in the northeast corner of the north abutment. The top of a copper bolt set vertically, and surrounded by the letters "U.S.P.B.M." cut in the stone. In 1930, reported destroyed. 551.925

P.B.M. 28 In Muscatine County, at Muscatine, in the north face of the waterworks chimney, and about 4 feet above the ground. The center of a hole in a copper bolt set horizontally, and surrounded by the letters "U.S.P.B.M." Note: In 1930 it was reported that the waterworks have been moved, that the top of the chimney has been removed and the remaining portion roofed over. This part of the chimney was preserved to save the mark, which is now flush with the floor. 551.469

P.B.M. 27 In Muscatine County, at Muscatine, at Hershey's lower sawmill, in the middle of the east face of the brick chimney, and about 3 feet above the ground. The center of the hole in a copper bolt set horizontally, and surrounded by the letters "U.S.P.B.M." cut in the brick. In 1930 it was reported the chimney had been torn down and the mark destroyed. 549.963

For descriptions of additional bench marks in this vicinity, see pages 61 and 62.

[Faint, mirrored text bleed-through from the reverse side of the page, including the word "station" and "bridge"]

[Faint, mirrored text bleed-through from the reverse side of the page, including the words "chimney" and "mark"]

[Faint, mirrored text bleed-through from the reverse side of the page, including the words "bolt" and "surrounded"]

MINNEAPOLIS, MINN. TO GLASGOW, MO.
Supplementary Adjustments

	El. Ft.
Top of rail opposite Chicago, Rock Island & Pacific Railway station at Monroe.	921.9
<u>911 (I.S.H.D.)</u> In <u>Marion County</u> , about 1.5 mile southeast of <u>Monroe</u> , Jasper County, near Chicago, Rock Island & Pacific Railway Milepost #330, on Highway #163, and in the northeast end of a culvert. A bolt, set in concrete.	910.884
Top of rail opposite Chicago, Rock Island & Pacific Railway MP 330.	914.3
<u>D-5</u> In <u>Marion County</u> , about 3.2 miles southeast of <u>Monroe</u> , Jasper County, on the Chicago, Rock Island & Pacific Railway, at a place where the highway is about 40 yards from the railroad, near the crossing of a farm road, and about 7 yards south of the railroad. A standard disk, stamped "D-5,1930" and set in the top of a concrete monument.	902.360
<u>895 (?)</u> In <u>Marion County</u> , at <u>Otley</u> , about 200 yards northwest of the Chicago, Rock Island & Pacific Railway station, between the main track and a siding, and about 8 yards north of a crossroad. A large rock, set in the ground.	894.936
Top of rail opposite Chicago, Rock Island & Pacific Railway station at Otley.	896.1
<u>884-U.S.G.S.</u> In <u>Marion County</u> , at <u>Otley</u> , about $\frac{1}{4}$ mile northwest of the Chicago, Rock Island & Pacific Railway station, about 500 feet west of the railroad, west of the highway, just south of the northeast corner of the yard around a dwelling, and just outside the hedge. A United States Geological Survey standard cap, stamped "884-Iowa" and riveted on the top of a $3\frac{1}{2}$ inch iron pipe.	882.784
<u>E-5</u> In <u>Marion County</u> , about 1.9 miles south of the Chicago, Rock Island & Pacific Railway station, at <u>Otley</u> , about midway between the railroad and Highway #163, and about 4 yards north of a farm road crossing. A standard disk, stamped "E-5,1930" and set in the top of a concrete monument.	887.833
<u>F-5</u> In <u>Marion County</u> , about 3 miles northwest of <u>Pella</u> , on the Chicago, Rock Island & Pacific Railway, about 150 yards southwest of the crossing of Highway #163, about 14 yards southwest of a pole marked "Sec. 320" and about 13 yards west of the railroad. A standard disk, stamped "F-5, 1930" and set in the top	

- of a concrete monument. 877.452
- G-5 In Marion County, about 2.3 miles northwest of the water tank at Pella, on the Chicago, Rock Island & Pacific Railway, about 6 yards south of Milepost #320-25 and about 11 yards northwest of the railroad. A standard disk, stamped "G-5, 1930" and set in the top of a concrete monument. 872.820
- H-5 In Marion County, at Pella, on the east side of the foundation of the city water tank, and about 30 feet south of the Chicago, Rock Island & Pacific Railway. A standard disk, stamped "H-5, 1930" and set in concrete. 877.918
- 878 (U.S.G.S.) In Marion County, at Pella, near the southeast corner of the campus of Central College, near the intersection of the streets, and southeast of the girls' dormitory. A United States Geological Survey standard cap, stamped "878-Iowa" and riveted on the top of a $3\frac{1}{2}$ -inch iron pipe. 876.881
- J-5 In Marion County, about 2 miles south of Pella, on the Chicago, Rock Island & Pacific Railway, at an undergrade crossing for cattle, near transmission-line pole #227, and on the north side of the railroad. A standard disk, stamped "J-5, 1930" and set in concrete. 854.637
- K-5 In Mahaska County, about $3\frac{1}{2}$ miles south of Pella, Marion County, on the Chicago, Rock Island & Pacific Railway, 15 feet east of a grade crossing, about 100 feet west of transmission-line pole #241, and in the north end of a culvert. A standard disk, stamped "K-5, 1930". 876.583
- Top of rail opposite Chicago, Rock Island & Pacific Railway MP 313. 792.9
- L-5 In Mahaska County, about 2 miles west of Leighton, on the Chicago, Rock Island & Pacific Railway, about 5 poles east of Milepost #312, at the grade crossing of a T-road, 30 feet from the railroad, and 10 feet west of the road. A standard disk, stamped "L-5 1930" and set in the top of a concrete post. 778.417
- Top of rail opposite Chicago, Rock Island & Pacific Railway MP 312. 781.3
- Top of rail opposite Chicago, Rock Island & Pacific Railway MP 311. 774.5

Supplementary Adjustments

	El. Ft.
<u>M-5</u> In <u>Mahaska County</u> , at <u>Leighton</u> , in front of the Chicago, Rock Island & Pacific Railway station, 20 feet south of the track, near a pole. A standard disk, stamped "M-5, 1930" and set in the top of a concrete monument.	764.142
Top of rail opposite Chicago, Rock Island & Pacific Railway MP 310.	766.0
Top of rail opposite Chicago, Rock Island & Pacific Railway station at Leighton.	765.2
<u>760 (U.S.G.S.)</u> In <u>Mahaska County</u> , at <u>Leighton</u> , about 800 feet east of the Chicago, Rock Island & Pacific Railway station, between transmission-line poles #284 and #283, about 40 feet north of the railroad, and 15 feet west of the road which makes a curve at this place. A United States Geological Survey standard cap, stamped "760" and riveted on the top of a 3½-inch iron pipe.	759.854
<u>N-5</u> In <u>Mahaska County</u> , about 1½ miles west of <u>Evans</u> , on the Chicago, Rock Island & Pacific Railway, about 150 feet east of a grade crossing, across the track from transmission-line pole #307, and 30 feet west of the railroad. A standard disk, stamped "N-5, 1930" and set in the top of a concrete monument.	749.034
Top of rail opposite Chicago, Rock Island & Pacific Railway MP 307.	748.4
Top of rail opposite Chicago, Rock Island & Pacific Railway MP 306.	734.6
Top of rail opposite Chicago, Rock Island & Pacific Railway station at Evans.	733.9
<u>P-5</u> In <u>Mahaska County</u> , about ¾ mile east of <u>Evans</u> , on the Oskaloosa Branch of the Chicago, Rock Island & Pacific Railway, 75 feet south of transmission-tower #325, opposite pole #305-10, and 10 feet north of the railroad. A standard disk, stamped "P-5, 1930" and set in the top of a concrete monument.	730.320
Top of rail opposite Chicago, Rock Island & Pacific Railway MP 305.	729.1
Top of rail opposite Chicago, Rock Island & Pacific Railway MP 102.	723.8
Top of S rail of center line of crossing with State Highway #2.	723.1

Top of rail opposite Oskaloosa Branch of the Chicago, Rock Island & Pacific Railway MP 101. El. Ft. 720.1

For descriptions of additional bench marks in this vicinity, see page 128.

Q-5 In Mahaska County, at Beacon, about 700 feet west of the station, at the separate grade crossing of the Chicago, Rock Island & Pacific Railway and the Chicago, Burlington & Quincy Railroad, west of the former and south of the latter; and about 2 feet above the ground. A standard disk, stamped "Q-5, 1930" and set in the concrete. 732.512

Top of rail opposite depot at Beacon. 734.6

Top of rail opposite Chicago, Rock Island & Pacific Railway MP 100. 731.8

R-5 In Mahaska County, about $1\frac{1}{2}$ miles east of Beacon, on the Chicago, Rock Island & Pacific Railway, at Milepost #99, at a grade crossing, 35 feet north of the railroad, and 35 feet west of the road at the fence line. A standard disk, stamped "R-5, 1930" and set in the top of a concrete post. 704.198

Top of rail opposite Chicago, Rock Island & Pacific Railway MP 99. 707.9

Top of rail opposite Chicago, Rock Island & Pacific Railway MP 98. 704.4

S-5 In Mahaska County, about $1\frac{1}{2}$ miles west of Givin, at the Chicago, Rock Island & Pacific Railway Bridge #975, and on the north end of the west abutment. A standard disk, stamped "S-5, 1930". 702.328

Top of rail opposite Chicago, Rock Island & Pacific Railway MP 97. 697.5

Top of rail opposite Chicago, Rock Island & Pacific Railway MP 96. 688.1

Top of rail opposite depot at Givin. 697.1

T-5 In Mahaska County, about 1 mile east of Givin, at Chicago, Rock Island & Pacific Railway Bridge #957, and on the north end of the east abutment. A standard disk, stamped "T-5, 1930". 688.676

Top of rail opposite Chicago, Rock Island & Pacific

Railway MP 95.	688.4
Top of rail opposite Chicago, Rock Island & Pacific Railway MP 94.	684.7
<u>U-5</u> In <u>Mahaska County</u> , about 1 mile northwest of <u>Eddyville</u> , <u>Wapello County</u> , on the Chicago, Rock Island & Pacific Railway, about 150 feet east of the overhead crossing of the Chicago & North Western Railroad, about 150 feet south of Highway #137, at Chicago, Rock Island & Pacific Railway Bridge #932, and on the north end of the east abutment. A standard disk, stamped "U-5, 1930".	674.441
Top of rail opposite Chicago, Rock Island & Pacific Railway MP 93.	673.9
Top of rail opposite Chicago, Rock Island & Pacific Railway MP 92.	674.0
Top of rail opposite depot at Eddyville.	672.0
<u>V-5</u> In <u>Wapello County</u> , about $\frac{1}{2}$ mile southeast of <u>Eddyville</u> , at a grade crossing, about $\frac{1}{2}$ mile east of the Chicago, Rock Island & Pacific Railroad station, 30 feet west of the road, and 45 feet south of the railroad, at the fence line. A standard disk, stamped "V-5, 1930" and set in the top of a concrete monument.	668.368
Top of rail opposite Chicago, Rock Island & Pacific Railway MP 91.	671.2
Top of rail opposite Chicago, Rock Island & Pacific Railway MP 90.	670.4
<u>B.M. 52 (U.S.E.)</u> In <u>Wapello County</u> , about 3 miles southeast of <u>Eddyville</u> , on the Chicago, Rock Island & Pacific Railway, at Milepost #89, and 5 feet north of the railroad. A cross on the top of a section of rail, set vertically in the ground.	670.182
Top of rail opposite Chicago, Rock Island & Pacific Railway MP 89.	670.2
<u>B-M 51 (U.S.E.)</u> In <u>Wapello County</u> , about 4 miles southeast of <u>Eddyville</u> , on the Chicago, Rock Island & Pacific Railway, at Milepost #88, and 5 feet north of the railroad. A cross on the top of a section of rail, set vertically in the ground.	686.836
Top of rail opposite Chicago, Rock Island & Pacific Railway MP 88.	686.6

LEVELING IN IOWA

51

El. Ft.

Top of rail opposite Chicago, Rock Island & Pacific Railway MP 87.	704.1
<u>W-5</u> In <u>Wapello County</u> , about 2 miles west of <u>Kirkville</u> , at a Chicago, Rock Island & Pacific Railroad Bridge #858, and on the north end of the west abutment. A standard disk, stamped "W-5, 1930".	684.392
Top of rail opposite Chicago, Rock Island & Pacific Railway MP 86.	686.8
Top of rail opposite Chicago, Rock Island & Pacific Railway MP 85.	688.3
Top of rail opposite Chicago, Rock Island & Pacific Station at Kirkville.	696.8
<u>X-5</u> In <u>Wapello County</u> , about 1 mile southeast of <u>Kirkville</u> , on the Chicago, Rock Island & Pacific Railway, at the first grade crossing south of Kirkville, 45 feet north of the railroad, and 75 feet west of the road, at the fence line. A standard disk, stamped "X-5, 1930" and set in the top of a concrete monument.	661.846
Top of rail opposite Chicago, Rock Island & Pacific Railway MP 84.	670.0
Top of rail opposite Chicago, Rock Island & Pacific Railway MP 82.	658.3
<u>Y-5</u> In <u>Wapello County</u> , about 5 miles northwest of <u>Ottumwa</u> , on the Chicago, Rock Island & Pacific Railway, at transmission-line pole #166; 45 feet north of the railroad, and near a private road and gate. A standard disk, stamped "Y-5, 1930" and set in the top of a concrete monument.	658.453
Top of rail opposite Chicago, Rock Island & Pacific Railway MP 80.	654.1
<u>Z-5</u> In <u>Wapello County</u> , about 3 miles northwest of <u>Ottumwa</u> , on the Chicago, Rock Island & Pacific Railway, at transmission-line pole #210, and 45 feet north of the railroad, at the fence line. A standard disk, stamped "Z-5, 1930" and set in the top of a concrete monument.	647.988
Top of rail opposite Chicago, Rock Island & Pacific Railway MP 79.	649.8
Top of rail opposite Chicago, Rock Island & Pacific Railway MP 78.	648.3

MINNEAPOLIS, MINN. TO GLASGOW, MO.
Supplementary Adjustments

A-6 In Wapello County, at Ottumwa, in the railroad yards, about $1\frac{1}{2}$ blocks east of Lawler Tower and the intersection of the Chicago, Milwaukee, St. Paul & Pacific Railway and the Chicago, Burlington & Quincy Railroad, about 7 yards north of the Chicago, Burlington & Quincy Railroad, under the telephone line, and just west of a pole. A standard disk, stamped "A-6 1930" and set in the top of a concrete monument. 649.126

Top of rail opposite Union Station at Ottumwa. 643.7

A-7 In Wapello County, at Ottumwa, at the Wabash Railway Bridge over the Des Moines River, on the west end of the center pier, between the track and the bridge truss. A standard disk, stamped "A-7, 1930". 644.776

For descriptions of additional bench marks in this vicinity, see page 53.

[Faint, mirrored text bleed-through from the reverse side of the page, including descriptions of bench marks and numerical values.]

LINE 144. OTTUMWA TO MUSCATINE, IOWA (Spur Line)
(First-order Leveling)

53

This Line follows the Chicago, Milwaukee, St. Paul & Pacific Railroad from Ottumwa to Muscatine, Iowa. The field work was done during October, 1930, by a party in charge of J. D. Thurmond, Chief of Party, and H. G. Conerly, Observer on sub-party. Elevations are based on the 1929 General Adjustment of the First-order Level Net.

For descriptions of additional bench marks in this vicinity, see page

<u>B-6</u>	In <u>Wapello County</u> , near <u>Rutledge</u> , about $\frac{1}{4}$ mile west of the town, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, and about in the middle of a 20-foot terrace in the slope of a hill. A standard disk, stamped "B-6, 1930" and set in the top of a concrete monument.	El. Ft. 828.886
	Top of rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad depot at Rutledge.	833.2
<u>C-6</u>	In <u>Wapello County</u> , near <u>Rutledge</u> , about $1\frac{1}{4}$ miles east of the town, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, about 0.8 mile west of the County Home, and on the southwest corner of Bridge #I-1150, A standard disk, stamped "C-6, 1930".	808.775
	Top of rail opposite Chicago, Milwaukee, St. Paul & Pacific MP 104.	816.9
<u>D-6</u>	In <u>Wapello County</u> , near <u>Rutledge</u> , about 3 miles east of the town, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, about 1 mile east of the County Home, east of a crossing, and about 12 yards north of the railroad. A standard disk, stamped "D-6, 1930" and set in the top of a concrete monument.	802.000
	Top of rail opposite Chicago, Milwaukee, St. Paul & Pacific MP 101.	792.5
	Top of rail opposite Chicago, Milwaukee, St. Paul & Pacific MP 100.	754.0
<u>E-6</u>	In <u>Wapello County</u> , near <u>Farson</u> , about 3 miles west of the town, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, at Bridge #I-1138, on the west end of the north side of the bridge, and in the guard rail. A standard disk, stamped "E-6, 1930".	751.127
	Top of rail opposite Chicago, Milwaukee, St. Paul &	

OTTUMWA TO MUSCATINE, IOWA.
Supplementary Adjustments

	El. Ft.
Pacific MP 98.	771.6
Top of rail opposite Chicago, Milwaukee, St. Paul & Pacific MP 97.	776.3
<u>F-6</u> In <u>Wapello County</u> , near <u>Farson</u> , about 1.5 miles west of the town, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, at bridge #I-1134, on the north side of the bridge, and about 2 yards from the east end. A standard disk, stamped "F-6, 1930" and set in concrete.	771.659
Top of rail opposite Chicago, Milwaukee, St. Paul & Pacific MP 96.	786.4
<u>G-6</u> In <u>Wapello County</u> , near <u>Farson</u> , about 1.2 miles east of the Chicago, Milwaukee, St. Paul & Pacific Station at Farson, about 12 yards east of a crossing, about 13 yards north of the railroad, and at the fence line. A standard disk, stamped "G-6, 1930" and set in the top of a concrete monument.	783.706
Top of rail opposite Chicago, Milwaukee, St. Paul & Pacific MP 94.	780.5
<u>H-6</u> In <u>Wapello County</u> , near <u>Farson</u> , on the Chicago, Milwaukee, St. Paul & Pacific Railroad, about $2\frac{1}{2}$ miles east of Farson, at bridge #I-1126 over a road, on the south side of the bridge, and about 3 yards from the east end. A standard disk, stamped "H-6, 1930".	790.553
Top of rail opposite Chicago, Milwaukee, St. Paul & Pacific MP 93.	782.6
Top of rail opposite Chicago, Milwaukee, St. Paul & Pacific MP 92.	804.0
Top of rail opposite Chicago, Milwaukee, St. Paul & Pacific MP 91.	797.3
<u>L-6</u> In <u>Jefferson County</u> , near <u>Linby</u> , about $1\frac{1}{2}$ miles west of the town, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, about 200 yards east of a crossing, and about 20 yards east of a windmill, and about 45 feet north of the railroad, at the fence line. A standard disk, stamped "L-6, 1930" and set in the top of a concrete monument.	808.673
Top of rail opposite Chicago, Milwaukee, St. Paul & Pacific MP 90.	816.4

	El. Ft.
<u>J-6</u> In <u>Jefferson County</u> , at <u>Linby</u> , about 200 yards east of the Chicago, Milwaukee, St. Paul & Pacific Railroad Station, near the crossing of the Chicago, Milwaukee, St. Paul & Pacific Railroad and the Chicago, Burlington & Quincy Railroad, about 11 yards west of a crossing, and about 16 yards north of the railroad. A standard disk, stamped "J-6, 1930" and set in the top of a concrete monument.	812.698
Top of rail opposite intersection crossing of Chicago, Burlington & Quincy Railroad, with Chicago, Milwaukee St. Paul & Pacific Railroad at Linby.	816.7
Top of rail opposite Chicago, Milwaukee, St. Paul & Pacific Station at Linby.	816.8
<u>K-6</u> In <u>Jefferson County</u> , near <u>Linby</u> , about 1 mile east of the town, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, at bridge #I-1122, over a public road, and on the north end of the west abutment. A standard disk, stamped "K-6, 1930".	797.738
Top of rail opposite Chicago, Milwaukee, St. Paul & Pacific MP 87.	782.4
Top of rail opposite Chicago, Milwaukee, St. Paul & Pacific MP 86.	793.0
<u>M-6</u> In <u>Keokuk County</u> , near <u>Linby</u> , (Jefferson County), about 4 miles east of the town, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, at the east one of two crossings which are near each other, about 11 yards south of the railroad, about 4 yards west of the road, and $2\frac{1}{2}$ feet east of the crossing sign. The road crosses the tracks at an angle of about 45° . A standard disk, stamped "M-6, 1930" and set in the top of a concrete monument.	768.932
Top of rail opposite Chicago, Milwaukee, St. Paul & Pacific MP 85.	754.2
Top of rail opposite Chicago, Milwaukee, St. Paul & Pacific MP 84.	752.5
<u>N-6</u> In <u>Keokuk County</u> , near <u>Richland</u> , about $2\frac{1}{2}$ miles west of the town, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, about 75 yards west of the crossing of the Minneapolis & St. Louis Railroad, at bridge #I-1114, and on the north end of the east abutment. A standard disk, stamped "N - 6 1930".	714.940

OTTUMWA TO MUSCATINE, IOWA.
Supplementary Adjustments

	El. Ft.
Top of rail opposite Chicago, Milwaukee, St. Paul & Pacific MP 83.	721.6
Top of rail opposite Chicago, Milwaukee, St. Paul & Pacific MP 82.	683.7
<u>P-6</u> In <u>Keokuk County</u> , near <u>Richland</u> , about $\frac{1}{4}$ mile east of the town, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, and in the north end of the west abutment of a bridge. A standard disk, stamped "P-6 1930".	664.739
Top of rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad depot at Richland.	666.6
<u>Q-6</u> In <u>Keokuk County</u> , near <u>Richland</u> about 2 miles east of the town, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, about 75 yards northeast of a crossing, about 14 yards north of the railroad, by a gate in the fence. A standard disk, stamped "Q-6, 1930" and set in the top of a concrete monument.	657.951
Top of rail opposite Chicago, Milwaukee, St. Paul & Pacific MP 78.	646.0
Top of rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad depot at Rubio.	637.7
Top of rail opposite Chicago, Milwaukee, St. Paul & Pacific MP 77.	634.0
<u>R-6</u> In <u>Washington County</u> , near <u>Rubio</u> , about 0.8 mile east, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, about 100 yards west of a crossing, and on the south end of the west abutment of a railroad bridge. A standard disk, stamped "R-6, 1930".	631.682
Top of rail opposite Chicago, Milwaukee, St. Paul & Pacific MP 76.	634.2
Top of rail opposite Chicago, Milwaukee, St. Paul & Pacific MP 75.	637.1
<u>S-6</u> In <u>Washington County</u> , near <u>Rubio</u> , about $2\frac{1}{2}$ miles east, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, at a bridge over a county road, on the south side of the bridge and about 10 yards from the west end of the bridge. A standard disk, stamped "S-6, 1930"	655.323
Top of rail opposite Chicago, Milwaukee, St. Paul & Pacific MP 73.	704.7

- T-6 In Washington County, at Wellston, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, about 50 yards east of an overhead bridge, about 20 yards northwest of the station, about 13 yards north of the railroad, and in the bottom of a cut, near the east end. A standard disk, stamped "T-6, 1930" and set in the top of a concrete monument. El. Ft. 739.815
- Top of rail opposite Chicago, Milwaukee, St. Paul & Pacific MP 72. 736.5
- Top of rail opposite Chicago, Milwaukee, St. Paul & Pacific MP 71. 718.0
- U-6 In Washington County, near Wellston, about $1\frac{1}{2}$ miles east of the town, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, and on the south side of a concrete bridge #I-1082. A standard disk, stamped "U-6, 1930". 724.579
- Top of rail opposite Chicago, Milwaukee, St. Paul & Pacific MP 70. 739.7
- Top of rail opposite Chicago, Milwaukee, St. Paul & Pacific MP 69. 762.7
- V-6 In Washington County, at Titus, at the Chicago, Milwaukee, St. Paul & Pacific Railroad station, north of the station, about 25 yards north of main track, and near the fence line. A standard disk, stamped "V-6, 1930" and set in the top of a concrete monument. 764.634
- Top of rail opposite Chicago, Milwaukee, St. Paul & Pacific MP 68. 765.2
- Top of rail opposite Chicago, Milwaukee, St. Paul & Pacific MP 67. 757.0
- W-6 In Washington County, near Washington, about $3\frac{1}{2}$ miles west of the Chicago, Milwaukee, St. Paul & Pacific Railroad station, near the first crossing west of Highway #2, about 10 yards north of the railroad, 5 yards west of the road, and west of the fence constructed by the railroad. A standard disk, stamped "W-6, 1930" and set in the top of a concrete monument. 749.890
- Top of rail opposite Chicago, Milwaukee, St. Paul & Pacific MP 66. 745.4
- X-6 In Washington County, near Washington, about $2\frac{1}{4}$ miles west of the town, on the Chicago, Milwaukee, St.

OTTUMWA TO MUSCATINE, IOWA.
Supplementary Adjustments

Paul & Pacific Railroad, at bridge #I-1078 over Arterial Highway #2, and in the west end of the south side of the bridge. A standard disk, stamped "X-6, 1930".	El. Ft. 705.540
Top of rail opposite Chicago, Milwaukee, St. Paul & Pacific MP 65.	709.1
Top of rail opposite Chicago, Milwaukee, St. Paul & Pacific MP 64.	730.2
<u>Y-6</u> In <u>Washington County</u> , at <u>Washington</u> , at the east door of the post office, north of the steps, and on the banister. A standard disk, stamped "Y-6, 1930".	761.537
Top of rail opposite Chicago, Milwaukee, St. Paul & Pacific depot at Washington.	759.7
Top of rail opposite Chicago, Milwaukee, St. Paul & Pacific MP 62.	760.7
Top of rail opposite Chicago, Milwaukee, St. Paul & Pacific MP 61.	759.9
<u>Z-6</u> In <u>Washington County</u> , near <u>Washington</u> , about 3 miles east of the town, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, about $\frac{1}{4}$ mile west of Milepost #60 at a grade crossing, 45 feet north of the railroad and 15 feet south of the road. A standard disk, stamped "Z-6, 1930" and set in the top of a concrete monument.	739.874
Top of rail opposite Chicago, Milwaukee, St. Paul & Pacific MP 60.	734.1
Top of rail opposite Chicago, Milwaukee, St. Paul & Pacific MP 59.	754.2
Top of rail opposite Chicago, Milwaukee, St. Paul & Pacific MP 58.	729.5
<u>A-8</u> In <u>Washington County</u> , near <u>Washington</u> , about 5 miles east of the town, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, about 800 feet east of Milepost #58, and on the north end of culvert #I-1070. A standard disk, stamped "A-8, 1930".	718.122
<u>B-8</u> In <u>Washington County</u> , near <u>Haskins</u> , about $1\frac{1}{2}$ miles west of the town, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, about 40 feet east of Milepost #56, at a grade crossing, 25 feet south of the railroad, 30 feet west of the road, and inside the	

fence line. A standard disk, stamped "B-8, 1930" and set in the top of a concrete monument.	El. Ft. 753.312
Top of rail opposite Chicago, Milwaukee, St. Paul & Pacific MP 56.	755.3
<u>C-8</u> In <u>Washington County</u> , at <u>Haskins</u> , on the Chicago Milwaukee, St. Paul & Pacific Railroad, about $\frac{3}{16}$ mile west of the station, about 1 pole east of Milepost #55, at bridge No. 1064, and on the south end of the east abutment. A standard disk, stamped "C-8, 1930".	752.728
For descriptions of additional bench marks in this vicinity, see page	
Top of rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad depot at Haskins.	757.8
Top of rail opposite Chicago, Milwaukee, St. Paul & Pacific MP 53.	742.0
Top of rail opposite Chicago, Milwaukee, St. Paul & Pacific MP 52.	707.4
<u>D-8</u> In <u>Washington County</u> , about 3.5 miles east of <u>Haskins</u> , on the Chicago, Milwaukee, St. Paul & Pacific Railroad, at a grade crossing, about 0.5 mile east of Milepost #52; 30 feet west of the road, and 20 feet south of the railroad. A standard disk, stamped "D-8 1930, and set in the top of a concrete monument.	683.575
Top of rail opposite Chicago, Milwaukee, St. Paul & Pacific MP 51.	669.0
<u>E-8</u> In <u>Louisa County</u> , at <u>Gladwin</u> , on the Chicago, Milwaukee, St. Paul & Pacific Railroad, about 500 feet west of the station, on bridge #1052, on the east end of the revetment wall on the north side of the railroad, and near a post supporting the railing. A standard disk, stamped "E-8, 1930" and set in concrete.	599.100
Top of rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad depot at Gladwin.	599.9
<u>F-8</u> In <u>Louisa County</u> , about 2.75 miles west of <u>Cone</u> , Muscatine County, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, at a grade crossing near Milepost #47, about 150 feet west of the crossing, 20 feet from the road, 35 feet north of the railroad, and in a fence corner. A standard disk, stamped "F-8, 1930" and set in the top of a concrete monument.	612.354

OTTUMWA TO MUSCATINE, IOWA
Supplementary Adjustments.

Top of rail opposite Chicago, Milwaukee, St. Paul & Pacific MP 47.	El. Ft. 614.5
Top of rail opposite Chicago, Milwaukee, St. Paul & Pacific MP 46.	615.8
<u>G-8</u> In <u>Muscatine County</u> , about 0.75 mile west of <u>Cone</u> , on the Chicago, Milwaukee, St. Paul & Pacific Railroad, at bridge #I-1048, on the north side of the bridge, and 20 feet from the east end of the concrete. A standard disk, stamped "G-8, 1930".	614.385
Top of rail opposite Chicago, Milwaukee, St. Paul & Pacific MP 45.	614.6
Top of rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad depot at Cone.	615.4
Top of rail opposite Chicago, Milwaukee, St. Paul & Pacific MP 44.	615.2
For descriptions of additional bench marks in this vicinity, see page 193.	
<u>H-8</u> In <u>Muscatine County</u> , about 1.3 miles east of <u>Cone</u> , on the Chicago, Milwaukee, St. Paul & Pacific Railroad, at the bridge across Cone Lake, and on the south end of the west abutment. A standard disk, stamped "H-8, 1930".	599.169
<u>J-8</u> In <u>Muscatine County</u> , about 1.75 miles west of <u>Cranston</u> , on the Chicago, Milwaukee, St. Paul & Pacific Railroad, and on the south side of the bridge which is 17 rails west of bridge #I-1040. A standard disk, stamped "J-8, 1930".	631.721
Top of rail opposite Chicago, Milwaukee, St. Paul & Pacific MP 41.	640.2
<u>K-8</u> In <u>Muscatine County</u> , at <u>Cranston</u> , on the Chicago, Milwaukee, St. Paul & Pacific Railroad, about 50 yards east of the station, about 13 yards east of a crossroad, about 19 yards north of the railroad, and about 3 yards west of a large tree. A standard disk, stamped "K-8, 1930" and set in the top of a concrete monument.	662.696
Top of rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad depot at Cranston.	664.2
Top of rail opposite Chicago, Milwaukee, St. Paul & Pacific MP 38.	711.4

- L-8 In Muscatine County, about 0.6 mile west of Ardon, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, about 0.25 mile west of an overhead bridge, east of the crossing of a farm road, about 14 yards north of the railroad, at the fence, and about halfway down a hill which slopes westward. A standard disk, stamped "L-8, 1930" and set in the top of a concrete monument. 748.598
- Top of rail opposite Chicago, Milwaukee, St. Paul & Pacific MP 36. 754.8
- Top of rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad depot at Ardon. 749.1
- Top of rail opposite Chicago, Milwaukee, St. Paul & Pacific MP 34. 695.2
- M-8 In Muscatine County, about 5.5 miles west of Muscatine, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, about 0.5 mile west of milepost #32, on a viaduct over a dirt road, and on the north end of the east abutment. A standard disk, stamped "M-8, 1930". 633.765
- Top of rail opposite Chicago, Milwaukee, St. Paul & Pacific MP 32. 615.3
- Top of rail opposite Chicago, Milwaukee, St. Paul & Pacific MP 31. 581.2
- N-8 In Muscatine County, about 3 miles west of Muscatine, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, about 0.5 mile west of milepost #30, and on the south side of bridge #I-1004. A standard disk, stamped "N-8, 1930". 560.288
- P-8 In Muscatine County, about 1 mile west of Culver Junction, at Muscatine, on the Chicago, Milwaukee, St. Paul & Pacific Railroad, at bridge #1000, across a dredged ditch, and on the west end of the north side of the bridge. A standard disk, stamped "P - 8, 1930". 546.439
- Top of rail opposite Chicago, Milwaukee, St. Paul & Pacific MP 30. 546.3
- Q-8 In Muscatine County, at Muscatine, in the northwest corner of Musser Park, 100 feet south of the Chicago, Milwaukee, St. Paul & Pacific Railroad, 54 feet east of Oregon Street, and 40 feet southeast of the watchman's shack at Culver Junction. A standard disk, stamped "Q-8, 1930" and set in the top of a concrete monument. 543.926

LINE 0466. HASKINS TO WATERLOO, IOWA
(First-order Leveling)

63

This Line follows U. S. Highway #161, from Haskins to Cedar Rapids, Iowa; U. S. Highway #30 from Cedar Rapids to Fairfax, Iowa; Benton County Road "A" from Fairfax to Newhall, Iowa; and U. S. Highway #218 from Newhall to Waterloo, Iowa. The field work was done during October, November, and December of 1934, and January of 1935, by a party in charge of George Havens. Elevations are based on the 1938 Adjustment of First-order Levels in Northeast Iowa.

For descriptions of additional bench marks in this vicinity, see page 58.

- 92-1 In Washington County, about 3/16 mile west of the depot at Haskins, on the west head wall of a 2- by 3-foot concrete box-culvert, 15 feet north of the Chicago, Milwaukee, St. Paul & Pacific Railroad underpass, on U. S. Highway #161. A standard disk. El. Ft. 740.425
- I. H. C.-B.M. #1 In Washington County, 1 mile north of Haskins, on the west head wall of a 2- by 2-foot concrete box-culvert, at pavement station #704, and on U. S. Highway #161. An Iowa Highway Commission bronze plug. 669.625
- I. H. C.-B.M. #2 In Washington County, 2 miles north of Haskins, on the west head wall of a 3- by 3-foot concrete box-culvert on U. S. Highway #161, and at pavement station #751+50. An Iowa Highway Commission bronze plug. 721.393
- 92-2 In Washington County, about 8 miles south of Riverside, on U. S. Highway #161, at pavement station #830, and in the southwest abutment of the Pratt Truss bridge. A standard disk. 654.664
- I. H. C.-B.M. #3 In Washington County, about 6 miles south of Riverside, along U. S. Highway #161, at pavement station #892+50, and on the west head wall of a 4- by 5 1/2-foot concrete box-culvert. An Iowa Highway Commission bronze plug. 714.378
- I. H. C.-B.M. #4 In Washington County, about 5.8 miles south of Riverside, along U. S. Highway #161, at pavement station #915+50, and on the west head wall of a 3- by 3-foot concrete box-culvert. An Iowa Highway Commission bronze plug. 744.874
- 92-3 In Washington County, about 5 miles south of

- Riverside, along U. S. Highway #161, at pavement station #971 +80, and on the west head wall of a 3- by 5-foot concrete box-culvert. A standard disk. El. Ft. 708.053
- I.H. C.-B.M. #5 In Washington County, about 4 miles south of Riverside, on the west head wall of an 8 $\frac{1}{2}$ - by 4-foot double culvert on U. S. Highway #161, and at pavement station #1029. An Iowa Highway Commission bronze plug. 651.380
- I.H. C.-B.M. #6 In Washington County, about 2 miles south of Riverside, on the east head wall of a 4 $\frac{1}{2}$ - by 5-foot concrete box-culvert, on U. S. Highway #161, and at pavement station #1132 +48. An Iowa Highway Commission bronze plug. 652.997
- 92-4 In Washington County, about 0.7 mile south of Riverside, on the southwest pier under the bridge truss spanning the English River, and on U. S. Highway #161. A standard disk. 626.154
- I.H. C. -B.M. #7 In Johnson County, near Lone Tree about 0.5 mile north of Washington County Line, in the center line of head wall of an 18-inch tile-culvert, 22 feet east of the center line of U. S. Highway #161, and at pavement station #1343 +29. An Iowa Highway Commission bolt. 713.942
- 52-200 In Johnson County, near Lone Tree, about 0.8 mile north of Washington County Line, on the southwest abutment of a concrete bridge, on U. S. Highway #161, at pavement station #1365 +27, and in the northeast corner of Section 33, T-78-N, R-6-W. A standard disk. 635.681
- I.H. C.-B.M. #8 In Johnson County, near Lone Tree, on U. S. Highway #161, at pavement station #1396 +19, on the north end of west hand rail of the 13-foot twin box concrete bridge, 14 feet west of the center line of pavement, and in Section 28, T-78-N, R-6-W. An Iowa Highway Commission bolt. 639.021
- 52-201 In Johnson County, near Lone Tree, on southwest abutment of a concrete bridge, on U. S. Highway #161, at pavement station #1504 +31, and in the NE $\frac{1}{4}$ of Section 16, T-78-N, R-6-W. A standard disk of U.S. Coast & Geodetic & State Survey. 636.488
- 52-202 In Johnson County, near Hills, on the west head wall of a 24-inch tile-culvert on U. S. Highway #161 at pavement station #1587 +24, approximately $\frac{1}{4}$ mile north of the SE corner of Section 4, T-78-N, R-6-W. A standard disk. 693.555

- I.H.C.-B.M. #9 In Johnson County, near Iowa City, in the west head wall of a 3- by $3\frac{1}{2}$ -foot concrete box culvert on U. S. Highway #161, at pavement station #152 +51, and in the NE corner of $SE\frac{1}{4}$ of Section 33, T-79-N, R-6-W. An Iowa Highway Commission Monometal Rivet. El. Ft. 643.558
- I.H.C.-B.M. #10 In Johnson County, near Iowa City. A reinforcing bar in the west head wall of a 3- by 2-foot concrete box-culvert, 21 feet west of the center line of the pavement on U. S. Highway #161, at pavement station #116 +55, and 0.2 mile north of SE corner of Section 28, T-79-N, R-6-W. An Iowa Highway Commission bench mark. 646.738
- I.H.C.-B.M. #11 In Johnson County, near Iowa City. A reinforcing bar in west head wall of a 5- by 6-foot concrete box-culvert, 28 feet west of the center line of the pavement on U. S. Highway #161, at pavement station #77 +0, and at the NE corner of Section 28 T-79-N, R-6-W. An Iowa Highway Commission bench mark. 645.222
- I.H.C.-B.M. #12 In Johnson County, near Iowa City. A reinforcing bar in west head wall of a concrete culvert 12 feet wide, on U. S. Highway #161, at pavement station #51 +34, and at the northeast corner of the southeast quarter of Section 21, T-79-N, R-6-W. An Iowa Highway Commission bench mark. 649.372
- I.H.C.-B.M. #13 In Johnson County, at Iowa City, near the northeast corner of the airport. A reinforcing bar in the west head wall of a 2- by 2-foot concrete box-culvert on U. S. Highway #161, opposite pavement station #9 +70, and 18 feet west of the center line of pavement. An Iowa Highway Commission bench mark. 644.900
- S.U.I.-P.B.M. 53 In Johnson County, in Iowa City, at a wye formed by intersection of U.S. Highway #161 with Iowa Primary Road #1, in the southwest part of the city, 29.5 feet west of the center line of pavement on U.S. Highway #161, and 1 foot south of the center line of pavement on Road I. A bronze tablet marked "University of Iowa B.M." and set in a concrete monument. 647.909
- S.U.I.-P.B.M. 51 In Johnson County, in Iowa City, at the intersection of Riverside Drive and Benton Street, 19 feet west of the center line of pavement on River-

- side Drive, and 18.4 feet north of the center line of pavement on Benton Street. A bronze tablet, marked "University of Iowa B.M." and set in a concrete monument. El. Ft. 647.768
- S.U.I.-P.B.M. 49 In Johnson County, in Iowa City, at Riverside Drive and Myrtle Avenue, 28.2 feet southeast of intersection of the center lines and 24 feet southeast of the center of a manhole northeast of the intersection. A bronze tablet, marked "University of Iowa B.M." and set in a concrete monument. 648.827
- S.U.I.-P.B.M. 40 In Johnson County, in Iowa City, west of the Iowa River, in the northwest corner of Grand Avenue and Templin Road, 52.3 feet northeast of a manhole in the center of Grand Avenue and 53.5 feet west of the west end of a handrail on the Burlington Street Bridge. A bronze tablet, marked "University of Iowa B.M." and set in a concrete monument. 656.764
- S.U.I.-P.B.M. 9 In Johnson County, in Iowa City, at the Burlington Street Bridge over the Iowa River, on the south concrete handrail, and just west of the east end. A bronze tablet, marked "University of Iowa B.M." 656.370
- S.U.I.-P.B.M. 10 In Johnson County, in Iowa City, at the State University of Iowa, in the southeast corner of Washington and Madison Streets, in the top of step at the south side of west entrance to the Mechanical-Laboratory. A bronze tablet, marked "University of Iowa B.M." 655.163
- S.U.I.-P.B.M. 1 In Johnson County, in Iowa City, at the Old Capitol, on top of a granite block at the northwest corner of the step, and at the west entrance. A bronze tablet, marked "University of Iowa B.M." 698.371
- S.U.I. -11 In Johnson County, in Iowa City, on Iowa Avenue, in SE $\frac{1}{4}$ Section 9, T-79-N, R-6-W, near the west end of bridge over the Iowa River, 11.2 feet north of the north end of a handrail, and 26 feet east of the east curb of Templin Road. A bronze tablet, marked "University of Iowa B.M." and set in a concrete monument. 656.564
- S.U.I.-P.B.M. 3 In Johnson County, in Iowa City, at the State University of Iowa General Hospital, on top of step and at the west side of main entrance. A

bronze tablet, marked "University of Iowa B.M." 724.205

S.U.I.-47 In Johnson County, in Iowa City, at inter--
section of Newton Road and Lincoln Avenue, 280 feet
east of the east side of a concrete culvert west of
Valley Avenue, 29.1 feet south of the center line of
Newton Road, and in the $SW\frac{1}{4}$ of Section 9, T-79-N, R6W.
A bronze tablet, marked "University of Iowa B.M." and
set in a concrete monument. 716.790

S.U.I.-48 In Johnson County, in Iowa City, on Newton
Road across the street from 1022 Newton Road, south of
fence around golf course, 14.8 feet east of the end of
a 20-foot pavement, where curb ends, 31.4 feet south
of the center line of pavement, and in the $SW\frac{1}{4}$ of Sec-
tion 9, T-79-N, R-6-W. A bronze tablet, marked "Uni-
versity of Iowa B.M." and set in a concrete monument. 715.409

S.U.I.-36 In Johnson County, in Iowa City, at the in-
tersection of the Newton Road, and U. S. Highway #6,
east of Black Springs, 37 feet south of the center
line of U. S. Highway #6, 133 feet east of the point
where pavements separate, and in the $NW\frac{1}{4}$ of Section 9,
T-79-N, R-6-W. A bronze tablet, marked "University of
Iowa B.M." and set in a concrete monument. 675.465

S.U.I.-27 In Johnson County, west of Iowa City, at the
Finkbine Field, 33.5 feet south of the center line of
the pavement on U. S. Highway #6; 12 feet west of the
center line of Rocky Shore Drive extended, 138.75 feet
southeast of the southeast corner of the "Casino" and
in the $NE\frac{1}{4}$ of Section 8, T-79-N, R-6-W. A bronze tab-
let, marked "University of Iowa B.M." and set in a
concrete monument. 648.519

S.U.I.-28 In Johnson County, west of Iowa City, at the
Finkbine Field, 78 feet south of the center line of
the pavement on U. S. Highway #6; 44 feet east of the
center line of the road on the west side of the Fink-
bine Field, 25 feet southeast of the north end of the
concrete head wall of the culvert in the southeast
corner of the road intersection, 139.55 feet south of
the southwest corner of the filling station in the
northeast corner of the intersection, and in the $NE\frac{1}{4}$
of Section 8, T-79-N, R-6-W. A bronze tablet, stamped
"University of Iowa B.M." and set in a concrete monu-
ment. 650.947

52-10 In Johnson County, at Coralville, 290 feet north
and 50 feet east of the intersection of County Road "N"
and U. S. Highway #6; 7.7 feet south and 60° east of

a nail on the south side of a 36-inch elm tree, 75.2 feet east of a fire hydrant, 24.8 feet north and 50° east of a nail on the north side of a 30-inch locust tree, 59.2 feet north and 55° west of a nail on the northwest side of a 36-inch elm tree, and 118.2 feet north and 60° west of the end handrail of the concrete retaining wall, and in T-79-N, R-6-W. A standard disk, set in a concrete monument flush with the ground.

El. Ft.

656.547

52-9 In Johnson County, in Coralville, $\frac{3}{8}$ -mile west, $\frac{1}{4}$ mile south of corner of Sections 4, 5, 32 and 33, in Townships 79-80 North, R-6-W, at the Coralville corporation line, 30 feet west of the center of road, 14 inches underground, 7.5 feet south and 30° west of reinforcing rod in a concrete post 26 feet west of center of road, 7.9 feet north and 30° west of a reinforcing rod in a concrete post 26 feet west of the center of road, 48.8 feet south and 85° west of a nail in blaze on the west side of a 48-inch cottonwood tree 20 feet east of the center of road, and 93.25 feet north and 15° east of the northeast corner of the foundation of the L. K. Conklin residence. A standard disk, set in a concrete monument.

700.048

52.8 In Johnson County, about 0.5 mile north of Coralville, $\frac{1}{4}$ mile west and 600 feet north of the corner of Sections 4, 5, 32 and 33, Townships 79 - 80 North, R-6 West, 250 feet south of the Coralville Cemetery, about 65 feet west of the center of road, 49.9 feet south and 60° west of the reinforcing rod in concrete post 23 feet west of center of road, 50.5 feet north and 50° west of the reinforcing rod in concrete post 23 feet west of road, 293 feet south and 20° west of the southwest corner of J. H. Clark's tombstone 40 feet east of center of the road, 151.5 feet north and 100° west of the fence corner post 25 feet west of center of road. A standard disk, set in a concrete monument 10 inches underground.

776.481

52.7 In Johnson County, about 1 mile north of Coralville, near the center of Section 32, T-80-N, R-6-W, 31 feet west and 61 feet north of T-road west, 6.9 feet south and 85° west of a 14-inch cherry tree, 12.2 feet north and 30° west of a 12-inch pear tree, 33 feet west of the center line of road, 111.3 feet south and 55° east of the southeast foundation corner of the Thomas Kile farmhouse, near the center of Section 32, T-80-N, R-6-W. A standard disk, set in a concrete monument flush with the ground.

783.725

52-6 In Johnson County, about 1 mile north of Coral-

- ville, 1000 feet east and 1000 feet north of the center of Section 32, T-80-N, R-6-W, 40 feet southwest of driveway of the Thomas Eggenberg farm 29 feet west of center of road, 5.9 feet north and 65° west of a reinforcing rod in a concrete post 23 feet west of the center of road, 27.4 feet south and 30° west of reinforcing rod in a concrete post 23 feet west of center of road, 59.9 feet south and 75° east of a nail in the blaze on east side of east tree of twin, 10-inch boxelders, 442.5 feet south and 10° east of southeast corner of the Thomas Eggenberg farmhouse, and 265.9 feet south and 5° west of a nail in blaze on the south side of a 30-inch elm tree. A standard disk, set in a concrete monument 8 inches underground. El. Ft. 784.483
- 52.5 In Johnson County, about $1\frac{1}{4}$ miles north of Coralville, 640 feet west, $\frac{1}{4}$ mile south of corner of Sections 28, 29, 32 and 33, T-80-N, R-6-W, at a point 69 feet north of fence line running east, 24 feet east of center of road, 42.8 feet north and 60° west of tablet (a nail in blaze on southeast side of a 26-inch oak tree), 20 feet west of center of road, 83.7 feet north and 30° east of iron pipe driven in ground 6 inches northeast of corner post, 20 feet east of the center of road, 72.7 feet north and 20° east of reinforcing rod in a concrete post in line fence running east, and 68.5 feet north and 10° west of reinforcing rod in a concrete post in line fence running east. A standard disk set in a concrete monument 14 inches underground. 731.081
- 52-4 In Johnson County, about 2 miles north of Coralville, about 500 feet west and 600 feet south of $\frac{1}{4}$ corner between Sections 28 and 29, T-80-N, R-6-W, 160 feet east of the John Weno farmhouse, 31 feet southwest of center of road, 9.4 feet south and 30° west of a reinforcing rod in a concrete post 21 feet southwest of center of road, 25.2 feet south and 35° east of a reinforcing rod in a concrete post 21 feet southwest of center of road, 96.2 feet south and 40° east of the southeast gatepost 22 feet southwest of center of road, 185.2 feet north and 85° west of south corner of foundation in the John Weno farmhouse and 184.2 feet south and 80° west of the north corner of foundation in the John Weno farmhouse. A standard disk, set in a concrete monument, 14 inches underground. 791.301
- 52-3 In Johnson County, about $2\frac{1}{4}$ miles north of Coralville, 640 feet west and $\frac{1}{4}$ mile south of corner of Sections 20, 21, 28 and 29 in T-80-N, R-6-W, 40 feet north of line fence running east, 29 feet west of center of road, at a point 122 feet south and 20° west of

a nail in blaze on south side of a 30-inch oak tree 20 feet west of center of road, 75.9 feet north and 30° west of a nail in the northwest side of a corner post in line fence running east, 20 feet east of the center of road, 228 feet north and 40° west of northeast corner of the Vaughn farmhouse, and 45.3 feet north and 65° west of southeast corner of the barn. A standard disk set in a concrete monument flush with the ground. El. Ft. 822.236

52.2 In Johnson County, about 2-3/4 miles north of Coralville, 640 feet west and 1100 feet north of Section corner of Sections 20, 21, 28 and 29, in T-80-N, R-6-W, 90 feet south and 30 feet west of a road junction, at a point 8.3 feet south and 75° west of a reinforcing rod in a concrete post 20 feet west of the center of road, 24.4 feet north and 30° west of a reinforcing rod in concrete post 20 feet west of center of road, 314.4 feet south and 25° east of a nail in blaze on south side of a 36-inch oak tree, 359.1 feet north and 35° east of the northeast corner of foundation in the Besdek farmhouse. A standard disk, set in a concrete monument 12 inches underground. 811.199

52-1 In Johnson County, about 3 miles north of Coralville, 800 feet east of center of Section 20, T-80-N, R-6-W, 34 feet east of T-road west, 75.5 feet north and 20° east of a nail in blaze on northeast side of a 10-inch hickory tree 32 feet southwest of center of road, 78.2 feet north and 50° east of a nail in blaze on east side of a 14-inch hickory tree 46 feet southwest of center of road, 115.2 feet south and 40° east of a nail in blaze on south side of a 30-inch oak tree 20 feet east of center of road. A standard disk, set in a concrete monument. 837.593

T.T.-45 S-1929 In Johnson County, about 1-3/4 miles southeast of North Liberty, in the SW $\frac{1}{4}$ of Section 17, T-80-N, R-6-W, about 0.25 mile north and 0.25 mile east of Sections 17, 18, 19 and 20; 50 feet north and 50 feet east of crossroads. 768.803, 3rd-order, USGS 1930. Reference mark 78 feet south and 25° west of tablet, in southeast corner of crossroads, at the top of south heading of a concrete culvert, a chiseled square. Elevation 768.97. Recovered January 11, 1934 by Richard Myers. Record of Recovery: Bench mark and reference mark found in good condition. Description good. U.S.G.S. A standard tablet, set in a concrete monument. 768.876

52-47 In Johnson County, about 1 mile southeast of North Liberty, 0.25 mile west of $\frac{1}{4}$ corner between Sec-

- tions 17 and 18, T-80-N, R-6-W, 22.5 feet northeast of center of U. S. Highway #161, at station #284 +36 (the station numbers are marked along the east edge of the slab), 120 feet south and 80° east of a spike in blaze of base of a 36-inch Linden tree, 166.8 feet north and 86° east of the northeast corner of foundation of the Jacob George farmhouse, 138.5 feet north and 12° east of NE corner of foundation of the barn. . A standard disk set in a concrete monument. El. Ft. 779.260
- 52-46 In Johnson County, in North Liberty, 0.5 mile north and 660 feet east of corner of Sections 7, 12 13 and 18, T-80-N, R-6 and 7-W; 30 feet south and 75 feet east of intersection of Main Street and U.S. Highway #161; 36 feet northeast of Station #335 +72 on US Highway #161; 4 feet east of tablet 8-inch fence corner post, 101.1 feet north and 84° east of northeast corner of foundation of the Koser store building, 208.2 feet south and 71° east of southeast corner of foundation of the Black and White Garage building. A standard disk, set in a concrete monument flush with ground. 782.649
- I.H.C.-B.M. #14 In Johnson County, at the north edge of North Liberty, in the east head wall of a 24-inch tile culvert on U. S. Highway #161, at pavement station #373 +45; 16 feet east of center line of pavement, and in the NE $\frac{1}{4}$ of Section 12, T-80-N, R-6-W. A reinforcing bar. 772.694
- I.H.C.-B.M. #15 In Johnson County, $1\frac{1}{2}$ miles north of North Liberty, in the east head wall of a 36-inch tile culvert on U. S. Highway #161, at pavement station 439, 15 feet east of the center line of pavement, and in the southeast corner of NE $\frac{1}{4}$ of Section 2, T-80-N, R-7-W. An Iowa Highway Commission reinforcing bar. 781.928
- I.H.C.-B.M. #16 In Johnson County, $2\frac{1}{2}$ miles north of North Liberty, along U. S. Highway #161, at a pavement station #482 +23, in east head wall of a 3- by 3-foot concrete box-culvert, 15 feet east of center line of pavement, and in the southeast corner of SW $\frac{1}{4}$ of Section 35, T-81-N, R-7-W. An Iowa Highway Commission, Reinforcing bar. 754.418
- I.H.C.-B.M. #17 In Johnson County, $2\frac{3}{4}$ miles north of North Liberty, along U. S. Highway #161, at pavement station #502 +17, in east head wall of a 24-inch tile-culvert, 15 feet east of center line of pavement, and in the NW $\frac{1}{4}$ of Section 35, T-81-N, R-7-W. An Iowa Highway Commission reinforcing bar. 748.404

- I.H.C.-B.M. #18 In Johnson County, 3-3/4 miles north of North Liberty, along U. S. Highway #161, at pavement station #550 +36, in east head wall of a 24-inch tile-culvert, 17 feet east of the center line of pavement, and in the NW $\frac{1}{4}$ of Section 35, T-81-N, R-7-W. An Iowa Highway Commission bolt. El. Ft. 698.145
- I.H.C.-B.M. #19 In Johnson County, about 4 $\frac{1}{4}$ miles north of North Liberty, along U. S. Highway #161, at pavement station #577, in west head wall of a 24-inch tile-culvert, 17 feet west of center line of pavement, and in the NE $\frac{1}{4}$ of Section 27, T-81-N, R-7-W. An Iowa Highway Commission reinforcing bar. 730.418
- I.H.C.-B.M. #20 In Johnson County, 0.3 mile south of the Iowa River Bridge at Curtis, in east head wall of a 2-foot tile-culvert on Highway #161, at pavement station #591 +96, and 21 feet east of center line of pavement. An Iowa Highway Commission reinforcing bar. 766.960
- I.H.C.-B.M. #21 In Johnson County, about 0.5 mile north of the bridge over the Iowa River at Curtis, at the south end of east handrail of a 40-foot concrete bridge on U.S. Highway #161, and at pavement station #633-30. An Iowa Highway Commission reinforcing rod. 687.800
- I.H.C.-B.M. #22 In Johnson County, about 1.3 miles north of Curtis, in the head wall of an 18-inch culvert, 16 feet south of the center line of pavement on U. S. Highway #161, and at pavement station #674 +89. An Iowa Highway Commission Bench Mark. 836.872
- I.H.C.-B.M. #23 In Johnson County, about 2 miles north of the Iowa River Bridge at Curtis, in the east head wall of a 24-inch tile-culvert on U. S. Highway #161 at pavement station #708 +48. An Iowa Highway Commission reinforcing bolt. 842.899
- I.H.C.-B.M. #24 In Johnson County, about 2.4 miles N. of the Iowa River Bridge at Curtis, in east head wall of a 24-inch tile-culvert on U. S. Highway #161, and at pavement station #725 +99. An Iowa Highway Commission reinforcing rod. 860.172
- I.H.C.-B.M. #25 In Johnson County, about 2.9 miles north of the Iowa River at Curtis, in the east headwall of a 24-inch tile-culvert on U. S. Highway #161, and at pavement station #753 +30. An Iowa Highway Commission reinforcing bar. 862.134
- I.H.C.-B.M. #26 In Johnson County, at Shueyville, in

- center of handrail of a 10-foot concrete bridge on U.S. Highway #161; 14 feet east of the center line of pavement, and at pavement station #786. An Iowa Highway Commission monometal rivet. El. Ft. 791.311
- 52-86 In Johnson County, about $\frac{1}{2}$ mile north of Shuey - ville, $\frac{1}{2}$ mile north of $\frac{1}{4}$ corner between Sections 3 and 10, T-81-N, R-7-W, 27 feet east of the center line of U. S. Highway #161, at Station #808 +85. (Station numbers are stamped in east edge of slab). A standard tablet, set in a concrete monument, reinforced with steel. 822.662
- 57-29 In Linn County, about $\frac{1}{4}$ mile north of the Johnson County Line at Western, in Section 34, T-82-N, R-7 West, in back slope of west side of U. S. Highway #161, 25 feet north of northwest corner of road intersection and 30.5 feet west of the center line of pavement. A standard disk, set in a concrete monument. 839.516
- 57-28 In Linn County, about $\frac{1}{2}$ mile north of the Johnson County Line at Western, in Section 34, T-82-N, R-7-W in the back slope on the west side of U. S. Highway 161, 50 feet north of $\frac{1}{2}$ section corner post, $25\frac{1}{2}$ feet west of center line of pavement, and 61 feet south of concrete sidewalk leading to house of F. Povlis. A standard disk, set in a concrete monument. 832.298
- 57-27 In Linn County, about 1 mile north of Western, in Section 27, T-82-N, R-7-W, in the back slope 3 feet inside right-of-way line on west side of U. S. Highway #161, 64 feet north of east-and-west $\frac{1}{2}$ section line of Section 27, and 3 miles south and $\frac{1}{2}$ mile east of the airport. A standard disk, set in a concrete marker. 810.805
- 57-26 In Linn County, about 1-3/4 miles north of Western, Section 27, T-82-N, R-7-W, on east side of U.S. Highway #161 on the shoulder 17 feet from the center line of pavement, 196 feet north-of-south end of curve on U. S. Highway #161, $2\frac{1}{2}$ miles south and $\frac{1}{2}$ mile east of Cedar Rapids airport, and 372 feet south of $\frac{1}{2}$ Section ^{corner} post of Section 22. A standard disk, set in a concrete marker. 838.843
- 57-25 In Linn County, about 1 mile west and 1.7 miles north of Western, in Section 27, T-82-N, R-7-W, on the south side of U. S. Highway #161 on top of rise, 2 feet inside of right-of-way line and 2 feet north of $\frac{1}{4}$ section corner post. This is the middle point of the $\frac{1}{2}$ -mile stretch where U. S. Highway #161 runs east and

west and it is $2\frac{1}{2}$ miles south of the airport. A standard disk, set in a concrete marker.

El. Ft.
843.729

57-24 In Linn County, 1 mile west and $1\frac{3}{4}$ miles north of Western, in Section 28, T-82-N, R-7-W, on the south side of road which is on the east-and-west section lines of Sections 21, 22, 27 and 28, which is $2\frac{1}{2}$ miles south of the airport, 5 feet north of section corner post on line with U. S. Highway #161 extended. A standard disk, set in a concrete marker.

830.822

57-23 In Linn County, 3 miles south of Cedar Rapids - in Section 22, T-82-N, R-7-W, on the east side of U.S. Highway #161 approximately $2\frac{1}{2}$ miles south of the airport, in back slope, 24.5 feet from the center line of pavement and 228.5 feet north-of-north end of curve in Highway #161. A standard disk, set in a concrete marker.

843.994

57-22 In Linn County, about $3\frac{1}{2}$ miles south of Cedar Rapids, on the east side of U. S. Highway #161, approximately $1\frac{1}{2}$ miles south of the Cedar Rapids Airport on the south property line of rural school, 207 feet S. of center line of east-and-west road which is on line between Sections 15 and 22; 79 feet southwest of southwest corner of stone foundation of schoolhouse and across the road from the house of T. P. Kohrab. A standard disk, set in a concrete marker.

815.874

57-21 In Linn County, about $1\frac{1}{2}$ miles south of Cedar Rapids, in Section 15, T-82-N, R-7-W, on the east side of U. S. Highway #161, approximately 1.2 miles south of the airport in a deep cut, 495 feet south of east-and-west $\frac{1}{2}$ section line of Section 15, approximately 85 feet north of maximum depth of cut, and 18 feet east of center line of paving in back slope about $1\frac{1}{2}$ feet above crown of paving. A standard disk, set in a concrete marker.

872.160

57-20 In Linn County, about $1\frac{1}{2}$ miles south of the city limits of Cedar Rapids, on the east side of U.S. Highway #161, in the back slope 6 feet from the right-of-way line, approximately $\frac{1}{2}$ mile south of the Airport, 171 feet north of Section line between Sections 10 and 15, and across the road from the H. A. Stoner residence. A standard disk set in a concrete monument.

788.693

57-18 In Linn County, about $\frac{1}{2}$ mile south of city limits of Cedar Rapids, in Section 10, T-82-N, R-7-W, 129.8 feet northeast of intersection of U. S. Highway #161 and a County Road "X", 70 feet east-of-east wing

- wall of culvert across U. S. Highway #161 which is at the southeast corner of the Cedar Rapids airport. A standard disk, set in a concrete monument. El. Ft. 745.146
- 57-200 In Linn County, about 1.3 miles south of Cedar Rapids. A standard disk, set on the southeast abutment of a steel truss bridge on U. S. Highway #161. 720.133
- E-76 In Linn County, 1 mile south of Cedar Rapids, a U. S. C. & G. S. tablet set in the stone underpass of the Chicago, Rock Island & Pacific Railway. 740.123
- D-76 In Linn County, at Cedar Rapids, on southwest corner of the Chicago, Rock Island & Pacific Railway Bridge spanning the Cedar River, and 500 feet west of the new sewage plant. A U.S.C. & G.S. tablet. 729.178
- For descriptions of additional bench marks in this vicinity, see pages 114 and 185.
- B-76 In Linn County, at Cedar Rapids, set in the wall on east side of the Union Depot. A U.S.C. & G.S. tablet. 735.222
- C-76 In Linn County, at Cedar Rapids, set in the south entrance to Post Office. A U.S.C. & G.S. tablet. 726.665
- CEDAR RAPIDS In Linn County, at Cedar Rapids, set in south entrance to Municipal Building. A U.S.C. & G.S. tablet. 728.932
- 57-54 In Linn County, at Cedar Rapids, in Section 35, T-83-N, R-7-W, 175 feet inside of west city limits of Cedar Rapids, on U. S. Highway #30; 35.8 feet north of the center line of pavement, 1.5 feet south of the fence line, 162.6 feet east of center line of north end of a 2- by 2-foot concrete box-culvert, 22.5 feet east of the second telephone pole from corner, and approximately 210 feet east of Dixie Inn. A standard disk, set in a concrete monument. 781.298
- 57-55 In Linn County, about 1.5 miles west of Cedar Rapids city limits on U. S. Highway #30; 32.1 feet north of the center line of pavement, 1.5 feet south of the fence line, 65.6 feet northwest of fence corner post in southeast corner of intersection, 94.7 feet north of fence corner post in southwest corner of intersection, and in Section 26, T-83-N, R-8-W. A standard disk, set in a concrete monument. 850.221
- 57-56 In Linn County, about 2.3 miles west of Cedar

- Rapids city limits, on U. S. Highway #30, in Section 27, T-83-N, R-8-W, 31 feet north of the center line of pavement, 2 feet south of fence line beside corner post, 200.6 feet northwest of steel fence post in the northwest corner of farm yard, 167 feet east of the face of a 2-foot oak tree, approximately 160 feet west of the center line of the county road, and near a farm on the south side of the pavement. A standard disk set in a concrete monument. El. Ft. 862.941
- 57-57 In Linn County, 3.3 miles west of the city limits of Cedar Rapids, in Section 27, T-83-N, R-8-W, and 190.8 feet northeast of section corner, 2.5 feet southwest of gate post, entrance to farmyard of C. P. Wieneke and 29.5 feet north of the center line of pavement. A first-order level station. A standard disk, set in a concrete monument. 836.288
- 57-58 In Linn County, 4.3 miles west of city limits at Cedar Rapids, in Section 28, T-83-N, R-8-W, on U.S. Highway #30; 97.7 feet west of corner post in northwest corner of intersection, 107.7 feet northwest of corner post in southwest corner of intersection, 32 feet north of center line of pavement, and 2.5 feet south of fence line. A first-order level station. A standard disk, set in a concrete monument. 803.082
- 57-59 In Linn County, about 5.3 miles west of Cedar Rapids, in Section 32, T-83-N, R-8-W, 1 mile east of Benton County line on U. S. Highway #30; 27.4 feet south of center line of pavement, 1.5 feet north of fence line, 174.7 feet east of a concrete gate post on south side of pavement, 228.7 feet east of intersection of U.S. Highway #30 with north-south county road, 153.6 feet southeast of corner post in northeast corner of intersection. A first-order level station. A state survey disk, set in a concrete monument. 832.958
- 57-60 In Linn County, about $2\frac{1}{2}$ miles north and about $2\frac{1}{2}$ miles west of Fairfax, in Section 30, T-83-N, R-8W, 403 feet east of Benton County Line on U. S. Highway #30; 372 feet east of corner post in northeast corner of intersection, 33 feet north of center line of pavement, 1.7 feet south of fence line, and 8.6 feet east of second telephone pole from corner on north side of the Highway. A state survey disk, set in a concrete monument. 889.877
- 6-84 In Benton County, about 1 mile south of Atkins, in Sections 26 and 25, T-83-N, R-10-W, on County Road "A" in ditch on west side of the road, north 159 feet to

- corner post at northeast corner of Section 26, and 11 feet east from west property line fence. A standard disk, set in a concrete monument. El. Ft. 891.560
- 6-83 In Benton County, about $\frac{1}{2}$ mile south of Atkins, in Sections 23 - 24, T-83-N, R-9-W, on County Road "A" on west side of road at toe of back slope, north 255 feet to $\frac{1}{2}$ section line fence west side of road, and 11 feet from west fence. A standard disk, set in a concrete monument. 904.880
- 6-81 In Benton County, in south corporation limits of Atkins, in Sections 14 - 23, T-83-N, R-9-W, on south side of road in front of farm yard, 105 feet to east cement block monument on the south end of Second St. and 4 feet north of the south fence. A standard disk, set in a concrete monument. 868.505
- 6-79 In Benton County, 0.5 mile west of Atkins, in Sections 14 - 23, T-83-N, R-9-W, on the south side of the road on bank, on County Road "A", 4 feet to south fence, and east 433 feet to corner post on northwest corner of Section 14. A standard disk, set in a concrete monument. 874.063
- 6-77 In Benton County, about 3.4 miles east of Newhall, in Section 21, T-83-N, R-9-W, 0.4 mile east of west section line on County Road "A", on south side of road at foot of back slope, 7.0 feet north of south right-of-way fence, 8.7 feet east of fence line south which is west side of garden, and approximately 100 feet west of grove on the south. A standard disk set in a concrete monument. 848.328
- 6-76 In Benton County, about 1.65 miles east of County Road "N" in Newhall, in Sections 18-19, T-83-N, R-9-W, on County Road "A", on the south side of road at foot of back slope, 9.0 feet north of south right-of-way fence, 68 feet west of telephone pole nearest top of hill, and 219 feet east of center line of field entrance on the south. A standard disk, set in a concrete monument. 906.685
- 6-75 In Benton County, 1 mile east of County Road "N" in Newhall, in the northwest corner of Section 19, T-83-N, R-9-W, on County Road "A", on the south side at foot of back slope, 5.7 feet north of south right-of-way fence, 45 feet east of fence corner, and 78 feet east of road intersection. A standard disk, set in a concrete monument. 899.900

- 6-60 In Benton County, in Newhall, in Sections 23-24, T-83-N, R-10-W, on County Road "N", 80 feet south of intersection with County Road "A", on the east side of road on top of bank in school yard, 20.5 feet northeast to southwest brace of steel swing frame, and 19.8 feet south to 14-inch black oak tree that is used as a guy for telephone pole. A standard disk, set in a concrete monument. El. Ft. 889.253
- 6-59 In Benton County, about 2.35 miles north of Newhall, in Section 1, T-83-N, R-10-W, on County Road "N" 0.35 mile north of south section line, on top of last hill in mile (houses on both sides of road at this point) 2.35 mile north of County Road "A" in Newhall, at foot of back slope on east side of road, 8.1 feet west of east right-of-way fence directly on line of a row of hedge trees on the east, and 8.7 feet south of fence on the east. A standard disk set in a concrete monument. 935.136
- 6-58 In Benton County, about 2-3/4 miles north of the intersection of County Roads "N" and "A" in Section 1, T-83-N, R-10-W, 1/4 mile south of north section line of County Road "N" on top of first hill, on east side of road at foot of back slope, 7.3 feet west of the east right-of-way fence, at north side of the field entrance and 117 feet north of 1/4 fence line. A standard disk, set in a concrete monument. 919.119
- 6-55 In Benton County, 3 miles north and 1-3/4 miles west of Newhall, in Section 34, T-84-N, R-10-W, 4 1/4 miles east of County Road "V", 1 1/4 miles east of U. S. Highway #218; 90 feet east-of-east end of 16-foot plank bridge, on the north side of road, 2.8 feet south of a north right-of-way fence, and 6.1 feet east of a fence line on the north. A standard disk, set in a concrete monument. 885.608
- 6-54 In Benton County, about 3 miles north and 2 1/2 miles west of Newhall, in Section 33, T-84-N, R-10-W, and in Section 4, T-83-N, R-10-W; 0.65 mile east of U.S. Highway #218, on top of the only hill in the mile, on top of the south bank, 1.4 feet north-of-south right-of-way fence, 165 feet east of fence south-at-west end of the willow grove on south side, 174 feet west of the center line of drive to house on the south. A standard disk, set in a concrete monument. 916.314
- 6-146 In Benton County, about 3 miles north and 3 miles east of Van Horne, in Section 28, T-84-N, R-10-W, in the southwest corner of section, 6.1 miles north of U. S. Highway #30, on U.S. Highway #218, 515 feet north of

- southwest corner of Section, 30.3 feet east of center line of pavement, and 1.5 feet west of the fence. A standard disk, set in a concrete monument. El. Ft. 900.871
- 6-147 In Benton County, about $3\frac{1}{2}$ miles north, 3 miles east of Van Horne, in the northeast corner of Section 29, T-84-N, R-10-W, $6\frac{3}{4}$ miles north of U. S. Highway #30, on U. S. Highway #218, $\frac{1}{4}$ mile south of northeast corner of Section 29; 31 feet west of the center line of highway, 2 feet east of fence, at pavement station #356 +96, and on line with $\frac{11}{4}$ fence. A standard disk, set in a concrete monument. 947.547
- 6-148 In Benton County, about $4\frac{1}{2}$ miles south of Vinton, at the northwest corner of Section 16; T-84-N, R-10-W, $\frac{1}{4}$ mile south of northwest corner of pavement station #456 +67; 27.3 feet east of center line of pavement on U. S. Highway #218; 5.5 feet west of fence and 21.9 feet south of telephone pole #855. A standard disk, set in a concrete monument. 894.529
- 6-149 In Benton County, about 4 miles south of Vinton at southeast corner of Section 8, T-84-N, R-10-W, about 0.3 mile north of southeast corner of Section 8, on U. S. Highway #218, across from the E. A. Narber farm, at pavement station #492 +16; 30.7 feet west of the center line of pavement, 2 feet east of the fence, 68.4 feet west and south of telephone pole #880; 63.3 feet west of south concrete hitching post. A standard disk, set in a concrete monument. 925.690
- 6-150 In Benton County, about 0.2 mile north of Norway at SE $\frac{1}{4}$ of Section 18, T-82-N, R-9-W, approximately 850 feet north of southeast corner of Section 18, and nearly 300 feet south of where the road turns west; 1.3 feet east-of-west fence, 46.2 feet west-of-east fence, 20.5 feet south of telephone pole, 59.4 feet southwest of a 24-inch double, wild, cherry tree, 211.3 feet north west of corner power pole of line going east-and-south, and 131.2 feet north of a 24-inch wild cherry tree. A standard disk, set in a concrete monument. 842.528
- 6-151 In Benton County, about $1\frac{1}{2}$ miles south of Vinton in the northwest corner of Section 33, T-85-N, R-10-W, $\frac{1}{4}$ mile south of northwest corner, on U. S. Highway 218; 82.9 feet south-and-east of corner post in northwest corner of intersection, 78 feet east-and-north of telephone pole #979; 30.6 feet east of center line of the pavement, and 2 feet west of fence line. A standard disk, set in a concrete monument. 803.975

6-152 In Benton County, in Vinton, Section 21, T-85-N, R-10-W, on U.S. Highway #218, at southeast corner of 10th Street and W & C Avenue, 19.9 feet east of the center line of U. S. Highway #218; 52.9 feet south of west hand rail of east entrance to underground street crossing sidewalk, 59.2 feet southeast of hydrant, 6 feet north-of-north edge of east-and-west sidewalk, and 9 feet east-of-west edge of north-and-south sidewalk. A standard disk, set in a concrete monument. El. Ft. 814.191

For descriptions of additional bench marks in this vicinity, see page

6-153 In Benton County, in Vinton, in Section 17, T85N, R-10-W, on U. S. Highway #218, just north of railroad crossing, 22.3 feet north of inside of flange on north rail of the Chicago, Rock Island & Pacific Railway; 6.1 feet east-of-east handrail along sidewalk on west side of highway; 9.6 feet north of railroad crossing post on north side of tracks, 4.3 feet west-of-west curb, -- and 59.6 feet northwest of switch stand. A standard disk, set in a concrete monument. 796.468

6-154 In Benton County, about 1 mile north of Vinton city limits, in east end of an 8-foot concrete culvert on County Road "B", approximately $\frac{1}{2}$ mile north of U.S. Highway #218 where it turns west, north of Vinton, 115 feet north-of-north gatepost on west side of the road, and in the northeast corner of the $SE\frac{1}{4}$ of Section 7, in T-85-N, R-10-W. A standard disk, 777.453

6-155 In Benton County, about $1\frac{1}{2}$ miles west- 3 miles north of Vinton, in the northeast corner of the $SE\frac{1}{4}$ of Section 36, T-86-N, R-11-W, on the northwest head wall of a concrete, double-span bridge, 0.1 mile south of the Chicago, Rock Island & Pacific Railway, on the dirt road. A standard disk. 781.806

6-156 In Benton County, in Mt. Auburn, in Section 14, T-86-N, R-11-W, and in the concrete wall in a scale pit of the Home Lumber Company. A standard disk. 875.635

6-157 In Benton County, about $1\frac{1}{2}$ miles west and $2-1\frac{1}{8}$ miles north of Mt. Auburn, about 2 miles east of County Road "B" and $\frac{7}{8}$ mile south of the Black Hawk County line, $\frac{1}{8}$ mile north of the SE corner of Section 4, T-86-N, R-11-W, on the southwest corner of an 8-foot concrete-culvert on the Chicago, Rock Island & Pacific Railway, approximately $\frac{1}{8}$ mile north of a schoolhouse (country), 135 feet northwest of the southwest corner fence post. A standard disk set 200 feet northwest of northeast fence corner post. 817.367

- 7-1 In Black Hawk County, in La Porte City, set on top of a concrete wall of the basement window grill at the Chicago, Rock Island & Pacific Railway Depot. It is in front of the office window. A standard disk. El. Ft. 818.939
- 7-2 In Black Hawk County, about 2 miles north of La Porte City, in the east head wall of a 2- by 2 foot concrete box-culvert on U. S. Highway #218; 0.2 mile south of a crossroad, and 400 feet south of the "Drag 'Em Inn". A standard disk. 816.855
- I.H.C.-B.M. #27 In Black Hawk County, about 4.3 miles north of La Porte City, set in the center of the west head wall of a 5-foot concrete-culvert under U.S. Highway #218, at the intersection of Highway #218 with a County Road, 10.3 feet southeast of telephone pole 1985, and 21 feet east of the corner post in northwest corner of the intersection. An Iowa Highway Commission bolt. 829.322
- 7-4 In Black Hawk County, 2-1/4 miles north of Washburn, in the south end of the west head wall of a 5-foot culvert on the Chicago, Rock Island & Pacific RR, and opposite the first telegraph pole south of pole 145-30. A standard tablet. 839.411
- 7-5 In Black Hawk County, about 0.3 mile north of a "Yard Limit" sign at Waterloo, in the south wing wall on the west end of a limestone culvert on the Chicago, Rock Island & Pacific Railway. The culvert is an 8-by 10-foot arch, built in 1886, and located 900 feet south of telegraph pole #147-10, opposite an 8-foot askew concrete box-culvert on U. S. Highway #218, and nearly 1/4 miles south of the coal chutes. A standard disk. 839.578
- 7-6 In Black Hawk County, in Waterloo, on the south head wall of a limestone-culvert on the Chicago, Rock Island & Pacific Railway, at Milepost #149 +507; 400 feet northwest of Russel's Service Station which is on U. S. Highway #218. A standard disk. 853.496
- For additional descriptions of bench marks in this vicinity, see page 142.
- I.H.C. - B.M. #28 In Black Hawk County, 5.6 miles north of La Porte City, in west head wall of a 3-foot concrete box culvert on U.S. Highway #218; 159 feet south of corner post, in southwest corner of intersection. An Iowa Highway Commission bolt. 838.463
- 7-3 In Black Hawk County, 0.5 mile north of Washburn on east end of south abutment of bridge #1439, on Chicago, Rock Island & Pacific Railway. A standard tablet. 831.822

LINE 4361. ELMIRA JUNCTION TO DIXON, IOWA
(Second-order Leveling)

This Line follows the Chicago, Rock Island & Pacific Railway from Elmira Junction to Dixon, Iowa. The field work was done by a party in charge of E.E. Stohsner, Chief of Party, during October, 1934. Elevations are based on the 1929 General Adjustment of the First-order Level Net.

For descriptions of additional bench marks in this vicinity, see page 189.

- | | | |
|------|---|--------------------|
| M-77 | In <u>Johnson County</u> , 1.2 miles east of the Railroad Water Tank at <u>Elmira Junction</u> , on the Chicago, Rock Island & Pacific Railway, 43 feet east of Milepost #24, in the northwest corner of the north head wall of a 4- by 6-foot stone box culvert, 11 feet north of the center line of track, and 1 foot below rail level. A standard disk, stamped "M-77, 1934". | El. Ft.
760.829 |
| N-77 | In <u>Johnson County</u> , 2.7 miles east of the Railroad Water Tank at <u>Elmira Junction</u> , on the Chicago, Rock Island & Pacific Railway, 16 poles east of Milepost #25, in the center of the south end of the east abutment of a 30-foot steel bridge #255, about 15 inches west of the back wall, 3.5 feet south of girder; 8 feet south of center line of track, and 3 feet below rail level. A standard disk, stamped "N-77, 1934". | 748.194 |
| | Top of S rail opposite Chicago, Rock Island & Pacific Railway MP 25. | 777.9 |
| | Top of S rail opposite Chicago, Rock Island & Pacific Railway MP 26. | 743.5 |
| P-77 | In <u>Cedar County</u> , 2.1 miles southwest of the depot at <u>Plato</u> , on the Chicago, Rock Island & Pacific Railway, 24 poles east of Milepost #26, in the southeast corner of the south abutment of a steel bridge #268; 12 feet south of the center line of track, and 3 feet below rail level. A standard disk, stamped "P-77, 1934". | 728.847 |
| | Top of S rail opposite Chicago, Rock Island & Pacific Railway MP 27. | 728.51 |
| Q-77 | In <u>Cedar County</u> , at <u>Plato</u> , on the Chicago, Rock Island & Pacific Railway, 26 poles northeast of Milepost #28, in the southwest corner of the south head wall of a 3- by 7-foot stone box culvert, 10 feet south of the center line of track, and 170 feet east | |

of the depot, at rail level. A standard disk, stamped "Q-77, 1934".	El. Ft. 705.756
Top of N rail opposite Chicago, Rock Island & Pacific Railway depot at Plato.	705.4
Top of S rail opposite Chicago, Rock Island & Pacific Railway MP 30.	680.8
<u>R-77</u> In Cedar County, 1.7 miles southwest of the depot at Buchanan, on the Chicago, Rock Island & Pacific Railway, 6 poles east of milepost #31, at the steel bridge #312 over the Cedar River, in the center of the north end of the first concrete pier on the east side of the river, 8 feet north of the center line of the tracks, and 5 feet below rail level. A standard disk stamped "R-77, 1934".	672.797
Top of S rail opposite Chicago, Rock Island & Pacific Railway MP 32.	713.9
<u>S-77</u> In Cedar County, at Buchanan, on the Chicago, Rock Island & Pacific Railway, 100 feet west of milepost #33; 350 feet east of the depot in the northeast corner of the north head wall of a 2- by 2-foot stone box-culvert 35 feet north of the center line of the track, and 3.5 feet below rail level. A standard disk, stamped "S-77, 1934".	744.533
Top of S rail opposite Chicago, Rock Island & Pacific Railway station at Buchanan.	751.0
<u>T-77</u> In Cedar County, 1.6 miles east of the depot at Buchanan, on the Chicago, Rock Island & Pacific Railway, 18 poles northeast of milepost #34, in the southeast end of the back wall of the southwest abutment of a 60-foot steel bridge #346; 8 feet southeast of the center line of track, and 0.5 foot below rail level. A standard disk, stamped "T-77, 1934".	767.997
Top of S rail opposite Chicago, Rock Island & Pacific Railway MP 34.	779.2
<u>U-77</u> In Cedar County, 3.2 miles west of the Tipton Water Tank, on the Chicago, Rock Island & Pacific Railway, 6 poles east of milepost #36, at a steel bridge and overpass #362, in the west end of the south head wall of a 20-foot arch bridge at the east abutment, 6 feet south of the center line of the track, and at rail level. A standard disk, stamped "U-77, 1934".	774.401

- V-77 In Cedar County, 1.2 miles west of the Tipton Water Tank, on the Chicago, Rock Island & Pacific Railway, 6 poles east of Milepost #38, at a 10- by 10-foot stone box-culvert and cattle pass, in the east end of the north head wall, 9 feet north of the center line of the track, and 0.5 foot below rail level. A standard disk, stamped "V-77, 1934". El. Ft. 809.752
- Top of S rail opposite Chicago, Rock Island & Pacific Railway MP 38. 819.7
- TIPTON - 1934 In Cedar County, at Tipton, in the center of the northeast side of northeast leg foundation of City Water Tower. A standard disk, stamped "Tipton - 1934". 815.655
- W-77 In Cedar County, at Tipton, in the Civil War Monument in front of the Public Library, in the center of the west side of the second step of the base. A standard disk, stamped "W-77, 1934". 816.432
- Top of N rail opposite Chicago, Rock Island & Pacific Railway depot at Tipton. 807.2
- X-77 In Cedar County, 1.3 miles southeast of the Tipton Water Tower, on the Chicago, Rock Island & Pacific Railway, $3\frac{1}{2}$ poles east of Milepost #40, in the east end of the north head wall of a 6- by 10-foot stone box culvert, 10 feet north of the center line of the track and 1 foot below rail level. A standard disk, stamped "X-77, 1934". 766.140
- Top of S rail opposite Chicago, Rock Island & Pacific MP 40. 772.3
- Top of S rail opposite Chicago, Rock Island & Pacific MP 41. 745.1
- Y-77 In Cedar County, 3.2 miles southeast of the Tipton Water Tower, on the Chicago, Rock Island & Pacific Railway, $1\frac{1}{2}$ poles west of Milepost #42, in the southeast corner of the south head wall of a 4- by 5-foot stone box-culvert, 20 feet south of the center line of the track, and 4.5 feet below rail level. A standard disk, stamped "Y-77, 1934". 757.039
- Top of S rail opposite Chicago, Rock Island & Pacific Railway depot at Witmer. 797.9
- Z-77 In Cedar County, 4 miles northwest of the Bennett Public School, on the Chicago, Rock Island & Pacific

Railway, $2\frac{1}{2}$ poles east of Milepost #44, in the northwest end of the northeast head wall of a 2-foot cast-iron pipe-culvert, 12 feet northeast of the center line of track, 130 feet northwest of the center line of a public road crossing, and 2 feet below rail level. A standard disk, stamped "Z-77, 1934".

El. Ft.

777.915

Top of S rail opposite Chicago, Rock Island & Pacific Railway MP 44.

775.6

A-78 In Cedar County, 2.3 miles northwest of the Bennett Public School, on the Chicago, Rock Island & Pacific Railway, $21\frac{1}{2}$ poles southeast of Milepost #45, in the center of the southeast end of the northeast head wall of a 10- by 10-foot stone box-culvert, 10 feet northeast of the center line of the track, and 1 foot below the rail level. A standard disk, stamped "A-78 1934".

746.839

Top of S rail opposite Chicago, Rock Island & Pacific Railway MP 45.

774.7

B-78 In Cedar County, 0.44 mile west of the Bennett Public School, on the Chicago, Rock Island & Pacific Railway, 16 poles southeast of Milepost #47, in the east end of the north head wall of a 4-foot cast-iron pipe-culvert, 18 feet north of the center line of the track, 38 feet west of the center line of the crossing and 2 feet below rail level. A standard disk, stamped "B-78, 1934".

745.215

Top of S rail opposite Chicago, Rock Island & Pacific Railway MP 47.

751.9

C-78 In Cedar County, at Bennett, in the east side of the north entrance to the Bennett Public School, in the northeast corner of the top step to entrance. A standard disk, stamped "C-78, 1934".

756.757

Top of N rail opposite Chicago, Rock Island & Pacific Railway depot at Bennett.

742.9

D-78 In Cedar County, 2.6 miles southeast of the Bennett Public School, on the Chicago, Rock Island & Pacific Railway, 27 poles southeast of Milepost #49, in the center of the southeast end of the southwest head wall of a twin 5- by 6-foot stone culvert, 12 feet southwest of the center line of the track, and 0.5 feet below rail level. A standard disk, stamped "D-78 1934".

763.627

- Top of S rail opposite Chicago, Rock Island & Pacific Railway MP 49. El. Ft. 750.8
- E-78 In Scott County, 0.9 mile northwest of Liberty Trust & Savings Bank at New Liberty, on the Chicago, Rock Island & Pacific Railway, 6 poles east of Milepost #52, in the east end of the north head wall of a 2-foot pipe-culvert, 11 feet north of the center line of the track, and 3 feet below rail level. A standard disk, stamped "E-78, 1934". 799.877
- Top of S rail opposite Chicago, Rock Island & Pacific MP 51. 800.1
- F-78 In Scott County, at New Liberty, 16 inches west of the front door of the Liberty Trust & Savings Bank, between the thirteenth and fourteenth courses of brick above the water table, and about 4 feet above the sidewalk. A standard disk, set vertically in the brick wall, and stamped "F-78, 1934". 804.900
- Top of N rail opposite Chicago, Rock Island & Pacific Railway depot at New Liberty. 799.3
- G-78 In Scott County, 0.32 mile east of the Liberty Trust & Savings Bank at New Liberty, on the Chicago, Rock Island & Pacific Railway, $5\frac{1}{2}$ poles east of Milepost #53, at a public road crossing of State Highway #74; 45 feet west of the center line of the highway, in the west end of the north head wall of a 3-foot pipe-culvert, 10 feet north of the center line of the track, and at rail level. A standard disk, stamped "G-78, 1934". 790.425
- Top of N rail at the Chicago, Rock Island & Pacific Railway X-ing with Highway #74. 790.7
- H-78 In Scott County, 1.4 miles northeast of the Liberty Trust & Savings Bank at New Liberty, on the Chicago, Rock Island & Pacific Railway, 8 poles northeast of Milepost #54, in the southeast end of the back wall of the northeast abutment of the 35-foot steel bridge #543, 10 feet southeast of the center line of the track, and 1 foot below rail level. A standard disk, stamped "H-78, 1934". 749.726
- Top of S rail opposite Chicago, Rock Island & Pacific Railway MP 54. 757.9
- J-78 In Scott County, 2.8 miles northeast of the Liberty Trust & Savings Bank at New Liberty, on the Chi-

<p>Chicago, Rock Island & Pacific Railway, 20 poles east of Milepost #55, at a public road crossing, 75 feet west of center line of road at a 30-inch cast-iron pipe culvert, 10 feet south of center line of track, and at rail level. A standard disk, stamped "J-78, 1934" and set in the east end of the south head wall.</p>	<p>El. Ft. 721.731</p>
<p>Top of S rail opposite Chicago, Rock Island & Pacific Railway MP 55.</p>	<p>734.7</p>
<p>K-78 In <u>Scott County</u>, 1.4 miles southwest of the depot at <u>Dixon</u>, on the Chicago, Rock Island & Pacific Railway, 17 poles east of milepost #57, at a 70-foot steel bridge #576; 175 feet east of the center line of a public road crossing, in the south of the center line of the track, and 1 foot below rail level. A standard disk, stamped "K-78, 1934".</p>	<p>687.846</p>
<p>Top of S rail opposite Chicago, Rock Island & Pacific Railway MP 57.</p>	<p>696.8</p>
<p>Top of S rail opposite Chicago, Rock Island & Pacific Railway MP 58.</p>	<p>695.1</p>
<p>L-78 In <u>Scott County</u>, at <u>Dixon</u>, on the Chicago, Rock Island & Pacific Railway, 20 poles east of Milepost #58; 100 feet northeast of the northeast corner of the depot, in the center of the east side of the scale foundation at the office of the Dixon Co-operative Elevator Co., 130 feet north of the center line of the track. A standard disk, stamped "L-78, 1934".</p>	<p>677.905</p>
<p>Top of N rail opposite Chicago, Rock Island & Pacific Railway depot at Dixon.</p>	<p>676.6</p>
<p>For descriptions of additional bench marks in this vicinity, see page 153.</p>	

#1072; 11 feet southwest of the center line of the tracks, 7 poles southeast of the depot, 1.5 feet below rail level. A standard disk, stamped "C-81, 1934".	El. Ft. 746.347
Top of N rail opposite Chicago, Rock Island & Pacific Railway depot at Palo.	749.5
Top of N rail opposite Chicago, Rock Island & Pacific Railway MP 108.	760.7
Top of N rail opposite Chicago, Rock Island & Pacific Railway MP 109.	783.4
<u>D-81</u> In <u>Benton County</u> , 2 miles southeast of the depot at <u>Shellsburg</u> , along the Chicago, Rock Island & Pacific Railway, 19 poles northwest of Milepost #109, at an 80-foot steel bridge #1095, in the northeast end of the back wall of the southeast abutment, 10 feet north east of the center line of the track, and 8 inches below rail level. A standard disk stamped "D-81, 1934".	771.350
Top of N rail opposite Chicago, Rock Island & Pacific Railway MP 110.	792.3
Top of N rail opposite Chicago, Rock Island & Pacific Railway MP 111.	774.9
<u>E-81</u> In <u>Benton County</u> , at <u>Shellsburg</u> , along the Chicago, Rock Island & Pacific Railway, 9 poles northwest of Milepost #111 at a steel bridge #1112, in the southwest end of the northwest abutment, 6 poles southeast of the depot, 50 feet southeast of a public road crossing, 25 feet southwest of the center line of the track, and 2.5 feet below rail level. A standard disk stamped "E-81, 1934".	774.496
Top of N rail opposite Chicago, Rock Island & Pacific Railway depot at Shellsburg.	777.7
<u>F-81</u> In <u>Benton County</u> , at <u>Shellsburg</u> , along the Chicago, Rock Island & Pacific Railway, 20 poles northwest of Milepost #111, 5 poles northwest of the depot, in the northeast end of the back wall of the northwest abutment, 8 feet northeast of the center line of the track, and 1 foot below rail level. A standard disk, stamped "F-81, 1934".	779.779
Top of N rail opposite Chicago, Rock Island & Pacific Railway MP 112.	809.7
Top of E rail opposite Chicago, Rock Island & Pacific Railway MP 113.	804.6

- Top of E rail opposite Chicago, Rock Island & Pacific Railway MP 114. El. Ft. 814.9
- G-81 In Benton County, 1.7 miles southeast of Greasers, along the Chicago, Rock Island & Pacific Railway 6 poles northwest of Milepost #114, in the southwest end of the back wall of the southeast abutment of a 120-foot steel bridge #1142; 10 feet southwest of the center line of the track, and 1 foot below rail level. A standard disk, stamped "G-81, 1934". 811.583
- Top of E rail opposite Chicago, Rock Island & Pacific Railway MP 115. 820.6
- H-81 In Benton County, at Greasers, along the Chicago Rock Island & Pacific Railway, 31 poles northwest of Milepost #115; 150 feet northwest of Station Sign, at a 30-inch cast-iron pipe culvert, in the southeast end of the southwest head wall, 14 feet southwest of the center line of the track, and 1 foot below rail level. A standard disk, stamped "H-81, 1934". 850.714
- Top of S rail opposite Chicago, Rock Island & Pacific Railway depot at Greasers. 852.0
- J-81 In Benton County, 1.7 miles northwest of Greasers, along the Chicago, Rock Island & Pacific Railway 20 poles northwest of Milepost #117, at a public road crossing, 55 feet southeast of the center line of the crossing, 24 feet northeast of the center line of the track, 15 feet south of a telegraph pole, and 2.5 feet below rail level. A standard disk, stamped "J-81, 1934". 859.906
- Top of N rail opposite Chicago, Rock Island & Pacific Railway MP 117. 877.9
- Top of N rail opposite Chicago, Rock Island & Pacific Railway MP 118. 861.9
- Top of E rail opposite Chicago, Rock Island & Pacific Railway MP 119. 836.4
- K-81 In Benton County, 1.6 miles southeast of the depot at Vinton, along the Chicago, Rock Island & Pacific Railway, 6 poles northwest of Milepost #119, at a public road crossing, 35 feet southeast of the center line of the crossing, 30 feet southwest of the center line of the track, 20 feet north of the right-of-way fence corner, and at rail level. A standard disk stamped "K-81, 1934". 828.561

- Top of E rail opposite Chicago, Rock Island & Pacific Railway MP 120. El. Ft. 808.7
- L-81 In Benton County, at Vinton, along the Chicago, Rock Island & Pacific Railway at Milepost #121, at the depot, 10 inches east of the southwest corner of the building facing the tracks, and about 4.5 feet high in the limestone coping. A standard disk, stamped "L-81, 1934", and set vertically. 809.769
- Top of N rail opposite Chicago, Rock Island & Pacific Railway depot at Vinton. 805.0
- M-81 In Benton County, at Vinton, in the northeast corner of the front (south) entrance to the Benton County Court House. A standard disk, stamped "M-81 1934" and set in the sandstone step. 794.670
- Top of N rail opposite Chicago, Rock Island & Pacific Railway MP 121. 804.8
- VINTON-1934 In Benton County, at Vinton, in the Iowa Savings Bank Building (proposed City Hall), two bricks beneath the center of the plaque in the southeast corner of the building. A standard disk, stamped "Vinton 1934" and set vertically. 793.328
- N-81 In Benton County, 1.1 miles southwest of the depot at Vinton, along the Chicago, Rock Island & Pacific Railway, 28 poles west of Milepost #23, at the State School Power Plant, in the north end of the east side of the hexagon base of the smoke stack, and 90 feet south of the center line of the track. A standard disk, stamped "N-81, 1934". 797.433
- P-81 In Benton County, 3.2 miles southwest of the depot at Vinton, along the Chicago, Rock Island & Pacific Railway, 26 poles west of Milepost #25, in the south end of back wall of the east abutment of a 25-foot steel bridge #258; 10 feet south of the center line of the track, and 1 foot below rail level. A standard disk, stamped "P-81, 1934". 814.706
- Top of N rail opposite Chicago, Rock Island & Pacific Railway MP 25. 803.3
- Q-81 In Benton County, 2.1 miles northeast of the depot at Garrison, along the Chicago, Rock Island & Pacific Railway, 26 poles southwest of Milepost #27, in the southeast end of the back wall of the northeast abutment of a 50-foot steel bridge #277; 345 feet

- southwest of a public road crossing, 8 feet southeast of the center line of the track, and 1 foot below rail level. A standard disk, stamped "Q-81, 1934". El. Ft. 829.736
- Top of N rail opposite Chicago, Rock Island & Pacific Railway MP 27. 821.2
- R-81 In Benton County, at Garrison, along the Chicago Rock Island & Pacific Railway, 28 poles west of Milepost #29, at the depot, in the southwest corner of the ticket office, and 5 feet above the rail level. A standard disk, stamped "R-81, 1934" and set vertically in the brick wall. 867.587
- Top of N rail opposite Chicago, Rock Island & Pacific Railway MP 29. 850.7
- S-81 In Benton County, 0.37 mile west of the depot at Garrison, along the Chicago, Rock Island & Pacific Railway, 5 poles northwest of Milepost #30, in the southeast end of the southwest head wall of a twin 8- by 8-foot stone box-culvert, 10 feet southwest of the center line of the track, and 1 foot below rail level. A standard disk, stamped "S-81, 1934". 868.528
- T-81 In Benton County, 1.8 miles west of the depot at Garrison, along the Chicago, Rock Island & Pacific Railway, 19 poles northwest of Milepost #31, in the northwest end of the southwest head wall of a 3- by 4-foot stone box-culvert, 12 feet west-by-south of the center line of the track, and 4 feet below rail level. A standard disk, stamped "T-81, 1934". 901.603
- Top of N rail opposite Chicago, Rock Island & Pacific Railway MP 31. 886.8
- Top of N rail opposite Chicago, Rock Island & Pacific Railway MP 32. 927.0
- U-81 In Benton County, 3.6 miles west of the depot at Garrison, along the Chicago, Rock Island & Pacific Railway, 10 poles northwest of Milepost #33, in the southwest end of the back wall of the northwest abutment of a steel bridge #333; 10 feet southwest of the center line of the track, and 1 foot below rail level. A standard disk, stamped "U-81, 1934". 875.277
- V-81 In Tama County, 3.3 miles east of the Dysart National Bank, along the Chicago, Rock Island & Pacific Railway, 20 poles northwest of Milepost #35, in the southeast corner of the southwest head wall of a 10-

- by 10-foot stone box-culvert, 10 feet southwest of the center line of the track, and 1.5 feet below rail level. A standard disk, stamped "V-81, 1934". El. Ft. 939.030
- Top of N rail opposite Chicago, Rock Island & Pacific Railway MP 35. 913.1
- Top of N rail opposite Chicago, Rock Island & Pacific Railway MP 36. 962.6
- W-81 In Tama County, 0.7 mile east of the Dysart National Bank, along the Chicago, Rock Island & Pacific Railway, 3 poles west of Milepost #38, in the east end of the north head wall of a 4-by 6-foot stone box culvert, 18 feet north of the center line of the track and 4 feet below rail level. A standard disk, stamped "W-81, 1934". 960.969
- X-81 In Tama County, at Dysart, in the north end of the limestone facing of the Dysart National Bank, 1 foot south of the corner, about 4 feet above the level of the sidewalk. A standard disk, stamped "X-81, 1934" and set vertically. 980.982
- CITY OF DYSART P.B.M. In Tama County, at Dysart, at the First National Bank Building, 1 foot east of north west corner in the top stone about 3.5 feet above the level of the ground. A copper bolt leaded horizontally in the stone wall. 978.991
- Y-81 In Tama County, at Dysart, in the north corner of the northeast leg foundation of the City Water Tower. A standard disk, stamped "Y-81, 1934". 971.622
- Top of S rail opposite Chicago, Rock Island & Pacific Railway depot at Dysart. 973.3
- Z-81 In Tama County, 1.3 miles west of the Dysart National Bank, along the Chicago, Rock Island & Pacific Railway, $23\frac{1}{2}$ poles west of Milepost #39, in the east end of the south head wall of a stone box-culvert 9 feet south of the center line of the track, and 0.5 foot below rail level. A standard disk, stamped-- "Z-81, 1934". 940.667
- A-82 In Tama County, 4 miles west of the Dysart National Bank, along the Chicago, Rock Island & Pacific Railway, $12\frac{1}{2}$ poles west of Milepost #42, in the west end of the north head wall of a 1-foot cast-iron pipe-culvert, 12 feet north of center line of track, 65 feet east of a private road crossing, and 1 foot be-

- low road level. A standard disk, stamped "A-82, 1934". 975.438
- Top of N rail opposite Chicago, Rock Island & Pacific Railway MP 41. 972.2
- Top of N rail opposite Chicago, Rock Island & Pacific Railway MP 43. 976.6
- For descriptions of additional bench marks in this vicinity, see page 97.
- B-82 In Tama County, 2.8 miles east of the First National Bank at Traer, along the Chicago, Rock Island & Pacific Railway, 22½ poles west of Milepost #44, in the east end of the south head wall of a double 3-foot cast-iron pipe culvert, 12 feet south of the center line of track, and 3 feet below rail level. A standard disk, stamped "B-82, 1934". 944.250
- C-82 In Tama County, 1 mile east of the First National Bank at Traer, along the Chicago, Rock Island & Pacific Railway, 17 poles northwest of Milepost #46, at a 60-foot steel overhead bridge #465 over the Chicago North Western Railway, in the northeast end of the northwest abutment, 22 feet northeast of the center line of the track, and 4 feet below rail level. A standard disk, stamped "C-82, 1934". 910.677
- Top of N rail opposite Chicago, Rock Island & Pacific Railway MP 46. 923.2
- D-82 In Tama County, at Traer, in the First National Bank Building in the east end of the east front window sill, and at the southeast corner of the building. A standard disk, stamped "D-82, 1934" and set in a limestone building block. 912.580
- Top of S rail opposite Chicago, Rock Island & Pacific Railway depot at Traer. 920.7
- Top of E rail opposite Chicago, Rock Island & Pacific Railway MP 48. 905.1
- TRAER-1934 In Tama County, at Traer, in Taylor Park 36 feet north of the north side of the Band Pagoda, 18 feet southeast of the center line of the sidewalk, 54 feet southwest of the children's merry-go-round, and 20 feet north of a 20-inch elm tree. A standard disk, stamped "Traer-1934" and set in a concrete monument. 962.810
- E-82 In Tama County, 2.3 miles northwest of the First

National Bank at <u>Traer</u> , along the Chicago, Rock Island & Pacific Railway, 12 $\frac{1}{2}$ poles northwest of Milepost #49 at a public road crossing, 70 feet southeast of the center of the crossing, 25 feet northeast of the center line of the track, 16 feet southeast of the crossing sign, 35 feet west of the right-of-way fence corner, and 2 feet above the rail level. A standard disk stamped "E-82, 1934" and set in a concrete monument.	El. Ft. 952.039
Top of E rail opposite Chicago, Rock Island & Pacific Railway MP 50.	923.2
<u>F-82</u> In <u>Tama County</u> , 2.1 miles southeast of the depot at <u>Dinsdale</u> , along the Chicago, Rock Island & Pacific Railway, 24 poles northwest of Milepost #51, in the southeast end of the northeast head wall of a 5- by 6-foot stone box-culvert, 10 feet northeast of the center line of the track, and 1 foot below rail level. A standard disk, stamped "F-82, 1934".	913.620
<u>G-82</u> In <u>Tama County</u> , at <u>Dinsdale</u> , along the Chicago - Rock Island & Pacific Railway, 29 poles north of Milepost #53 at the depot, 18 feet north of the northeast corner of the depot, 20 feet south of the public road crossing, 15 feet west of the center line of the track and at rail level. A standard disk, stamped "G-82, 1934" and set in a concrete monument.	933.860
Top of E rail opposite Chicago, Rock Island & Pacific Railway MP 53.	927.5
Top of W rail opposite Chicago, Rock Island & Pacific Railway station at Dinsdale.	933.3
Top of E rail opposite Chicago, Rock Island & Pacific Railway MP 54.	934.5
<u>H-82</u> In <u>Tama County</u> , 1.8 miles northwest of the depot at <u>Dinsdale</u> , along the Chicago, Rock Island & Pacific Railway, 19 poles northwest of Milepost #55, in the southeast end of the southwest head wall of a 20-foot arch cattle pass, 12 feet southwest of the center line of the track, and 1 foot below rail level. A standard disk, stamped "H-82, 1934".	958.121
Top of NE rail opposite Chicago, Rock Island & Pacific Railway MP 56.	963.5
<u>J-82</u> In <u>Grundy County</u> , 2.2 miles southeast of the Chicago & North Western Railway depot at <u>Reinbeck</u> ,	

along the Chicago, Rock Island & Pacific Railway, 7 poles northwest of Milepost #57, in the northeast end of the southeast abutment of a 30-foot steel bridge #572, 11 feet northeast of the center line of the track, and 1 foot below rail level. A standard disk, stamped "J-82, 1934". El. Ft. 950.461

K-82 In Grundy County, 0.46 mile southeast of the Chicago & North Western Railway depot at Reinbeck, along the Chicago, Rock Island & Pacific Railway, 34 poles northwest of Milepost #58, in the southwest corner of the northwest abutment of a 20-foot steel bridge #589; 8 feet southwest of the center line of the track, 150 feet southeast of a public road crossing, and 1 foot below rail level. A standard disk, stamped "K-82 1934". 940.257

H-30 USC & GS & State In Grundy County, at Reinbeck along the Chicago, Rock Island & Pacific Railway Milepost #59 +12; 30 feet south of the center line of the tracks and 25 feet north of center line of Highway #58. A bronze tablet set in a concrete monument. 932.531

Top of N rail opposite Chicago, Rock Island & Pacific Railway with Highway Crossing. 933.0

For descriptions of additional bench marks in this vicinity, see page 141.

LINE 4367. TRAER TO BELLE PLAINE, IOWA
(Second-order Leveling)

97

This Line follows the Chicago & North Western Railway from Traer to Belle Plaine, Iowa. The field work was done in October, 1934, by a party in charge of E. E. Stohsner. Elevations are based on the 1929 General Adjustment of the First-order Level Net.

For descriptions of additional bench marks in this vicinity, see page 94.

L-82 In Tama County, at Traer, along the Chicago & North Western Railway, 500 feet west of the center line of a public road crossing, southeast of the depot, in the northeast corner of the concrete walk in the north side of the floor of a 90-foot concrete bridge, on State Highway #8. A standard disk, stamped "L-82, 1934". El. Ft. 894.086

Top of W rail opposite Chicago & North Western Railway Highway Crossing. 891.2

RR BM #1 In Tama County, at Traer, along the Chicago-North Western Railway, at the Chicago, Rock Island & Pacific overhead bridge, and in the bottom step of the northwest abutment. A monel metal rivet set in the stone abutment. 888.282

RR BM #2 In Tama County, 1.4 miles southeast of the depot at Traer, along the Chicago & North Western Railway, $10\frac{1}{2}$ poles southeast of Milepost #23, in the southeast corner of the northeast head wall of a 4- by 4-foot R C B culvert #60; 18 feet northeast of the center line of the track, 330 feet northwest of the center line of a public road crossing, and 3 feet below rail level. An iron rivet. 904.578

Top of E rail opposite Chicago & North Western Railway MP 23. 905.3

M-82 In Tama County, 1.6 miles southeast of the depot at Traer, along the Chicago & North Western Railway, 16 poles southeast of Milepost #23; 450 feet southeast of the center line of a public road crossing, in the northwest end of the southwest head wall of a 4- by 4-foot R C B culvert #59; 18 feet southwest of the center line of the track, and 3.5 feet below rail level. A standard disk, stamped "M-82, 1934". 904.926

N-82 In Tama County, 3.5 miles southeast of the depot at Traer, along the Chicago & North Western Railway, 13 poles southeast of Milepost #21, in the southeast

	El. Ft.
end of the southwest head wall of a 4- by 4-foot R C B culvert #55; 18 feet southwest of the center line of the track, 7 poles southeast of a public road crossing and 2.5 feet below rail level. A standard disk, stamped "N-82, 1934".	935.874
Top of E rail opposite Chicago & North Western Railway MP 21.	930.0
Top of E rail opposite Chicago & North Western Railway MP 20.	937.8
<u>P-82</u> In <u>Tama County</u> , 3.3 miles northwest of the depot at <u>Clutier</u> , along the Chicago & North Western Railway, 13 poles south of Milepost #19; 28 feet south of a public road crossing, 42 feet west of the center line of the track, 6 feet east and 1 foot south of the right-of-way fence corner, 2 feet below rail level. A standard disk, stamped "P-82, 1934".	892.413
<u>Q-82</u> In <u>Tama County</u> , 1.2 miles northwest of the depot at <u>Clutier</u> , along the Chicago & North Western Railway, 16 poles southeast of Milepost #17; 22 feet north of the center line of the public road crossing, 45 feet west of the center line of track, 5 feet east and 1 foot south of the right-of-way fence corner, and 1 foot below rail level. A standard disk, stamped "Q-82, 1934".	865.261
Top of E rail opposite Chicago & North Western Railway MP 17.	871.0
<u>RR BM #3</u> In <u>Tama County</u> , 0.9 mile northwest of the depot at <u>Clutier</u> , along the Chicago & North Western Railway, 7 poles north of Milepost #16, in the north end of the west head wall of a 4- by 4-foot R C B culvert, #45, and 2.5 feet below rail level. A monel rivet.	864.188
<u>R-82</u> In <u>Tama County</u> , at <u>Clutier</u> , along the Chicago & North Western Railway, 140 feet northwest of the depot, in the southeast corner of the engine room of a concrete elevator, 55 feet north of the crossing, 70 feet west of the center line of the track, and about 5 feet high. A standard disk, stamped "R-82, 1934" and set vertically.	861.202
Top of E rail opposite Chicago & North Western Railway depot at Clutier.	856.2
<u>S-82</u> In <u>Tama County</u> , 2.1 miles southeast of the depot at <u>Clutier</u> , along the Chicago & North Western Railway,	

9 poles northwest of Milepost #13; 60 feet southeast of the center line of the public road crossing, 41 feet southwest of the center line of the track, 33 feet southeast of a concrete pipe culvert #35 $\frac{1}{2}$; 6 feet northeast of the right-of-way fence corner, and 3 feet below rail level. A standard disk, stamped "S-82, 1934".

El. Ft.

831.557

Top of E rail opposite Chicago & North Western Railway MP 14.

847.2

RR BM #4 In Tama County, 2.5 miles southeast of the depot at Clutier, along the Chicago & North Western Railway, 3 poles northwest of Milepost #13, in the northwest end of the southwest head wall of a 4- by 4-foot R C B culvert #35; 16 feet southwest of the center line of the track, and 3.5 feet below rail level. A monel metal rivet.

830.897

RR BM #5 In Tama County, 2.8 miles north of the depot at Elberon, along the Chicago & North Western Railway, 4 poles south of Milepost #12, in the north end of the west head wall of a 5- by 6-foot concrete box-culvert #31, and 2 feet below rail level. A monel metal rivet.

824.122

T-82 In Tama County, 1.5 miles north of the depot at Elberon, along the Chicago & North Western Railway, 13 poles south of Milepost #11 at a public road crossing, 35 feet south of the center line of the crossing, 20 feet east of the center line of track, 1 foot south of the right-of-way fence, and 1 foot below rail level. A standard disk, stamped "T-82, 1934".

839.365

Top of E rail opposite Chicago & North Western Railway MP 11.

831.4

Top of E rail opposite Chicago & North Western Railway MP 10.

828.0

U-82 In Tama County, at Elberon, along the Chicago & North Western Railway, 4 poles south of Milepost #9, 6 poles south of the station, in the northwest corner of the switch block, 170 feet north of the Chicago, Milwaukee, St. Paul & Pacific Railroad crossing, 10 feet west of the center line of the track, and at rail level. A standard disk, stamped "U-82, 1934".

821.373

RR BM #6 In Tama County, at Elberon, along the Chicago & North Western Railway, 2 poles south of Milepost #9; 4 poles south of depot, at signal, in the northwest corner of a concrete signal base, 12 feet west of

center line of track, and level with track. A monel metal rivet.	El. Ft. 821.527
Top of W rail opposite Chicago & North Western Railway depot at Elberon.	822.0
Top of E rail opposite Chicago & North Western Railway Crossing.	821.9
<u>RR BM #7</u> In <u>Tama County</u> , 0.56 mile south of the depot at <u>Elberon</u> , along the Chicago & North Western Railway, in the northeast corner of the concrete base opposite the north-bound distant signal to the Chicago, St. Paul & Pacific Railroad crossing. A monel metal rivet.	816.373
<u>RR BM #8</u> In <u>Tama County</u> , 1 mile south of the depot at <u>Elberon</u> , along the Chicago & North Western Railway, 4 poles north of Milepost #8, in the north end of the east head wall of bridge #22, and 2 feet below rail level. A monel metal rivet.	814.805
<u>V-82</u> In <u>Tama County</u> , 2 miles north of the depot at <u>Irving</u> , along the Chicago & North Western Railway, 15 poles north of Milepost #6, at private road crossing - 20 feet south of the center line of the gate, 42 feet west of the center line of the track, 3 feet east of the right-of-way fence, and 3 feet below rail level. A standard disk, stamped "V-82, 1934".	805.691
Top of E rail opposite Chicago & North Western Railway MP 7.	813.3
<u>RR BM #9</u> In <u>Tama County</u> , 1.3 miles north of the depot at <u>Irving</u> , along the Chicago & North Western Railway, 8 poles south of Milepost #6, in the north end of the west head wall of a 4- by 4-foot R C B culvert #15, and 1.5 feet below rail level. A monel metal rivet.	800.740
Top of E rail opposite Chicago & North Western Railway MP 6.	803.6
<u>W-82</u> In <u>Tama County</u> , at <u>Irving</u> , along the Chicago & North Western Railway, 15 poles north of Milepost #4; 54 feet south, thence 15 feet west of the southwest corner of the depot, 48 feet west of the center line of the track, and 4 feet east of right-of-way fence. A standard disk, stamped "W-82, 1934".	798.230
Top of W rail opposite Chicago & North Western Railway depot at Irving.	799.4

- RR BM #10 In Tama County, 1.2 miles south of the depot at Irving, along the Chicago & North Western Railway, 12 poles north of Milepost #3, in the north end of the west head wall of a 6- by 7-foot R C B Culvert #8, and 5 feet below rail level. A monel metal rivet. El. Ft. 794.884
- X-82 In Tama County, 1.7 miles south of the depot at Irving, along the Chicago & North Western Railway, 8 poles south of Milepost #3, at private road crossing, 60 feet south of the center line of the gate, 45 feet west of the center line of the track, 3 feet east of the right-of-way fence, 10 feet west of a telegraph pole, and 2 feet below rail level. A standard disk stamped "X-82, 1934". 789.329
- Top of E rail opposite Chicago & North Western Railway MP 3. 793.1
- RR BM #11 In Tama County, 2 miles south of the depot at Irving, along the Chicago & North Western Railway, 21 poles north of Milepost #2 at bridge #5 $\frac{1}{2}$, in the west head wall, and 1 foot below rail level. A monel metal rivet. 787.338
- Y-82 In Benton County, 1.6 miles northwest of the depot at Belle Plaine, along the Chicago & North Western Railway, 14 poles south of Milepost #2, in the east end of the south head wall of a 3- by 3-foot R C B highway-culvert, 38 feet southwest of the center line of U. S. Highway #30 crossing, 12 feet north of the right-of-way fence, and 6 feet below rail level. A standard disk, stamped "Y-82, 1934". 777.918
- Top of E rail opposite Chicago & North Western Railway MP 2. 784.6
- Top of E rail opposite Chicago & North Western Railway Crossing. 783.6
- Z-82 In Benton County, at Belle Plaine, along the Chicago & North Western Railway at the interlocking signal on Seventh Avenue, in the southwest corner of the northeast leg foundation, and 30 feet west of the center line of Seventh Avenue. A standard disk stamped "Z-82, 1934". 818.056
- A-83 In Benton County, at Belle Plaine, along the Chicago & North Western Railway at the depot, in the northwest corner of building facing tracks, 5 feet above the platform. A standard disk, stamped "A-83 1934". 825.714

For further descriptions BM this vicinity, see page 107

- Top of N rail opposite Chicago & North Western Railway MP #147. El. Ft. 859.6
- D-83 In Marshall County, about 0.5 mile northwest of the depot at Quarry, along the Chicago & North Western Railway, 35 feet west of Milepost #146, at the north end of the back wall of the east abutment of a 75-foot steel bridge #445; 7 feet north of the center line of the track, and 2 feet below rail level. A standard disk, stamped "D-83, 1934". 864.254
- E-83 In Marshall County, at Quarry, along the Chicago & North Western Railway, 5 poles west of Milepost #145; 10 poles east of the depot at Quarry, in the north end of the west abutment of a 150-foot steel bridge #439; 10 feet north of the center line of the north main track, and 1 foot below rail level. A standard disk, stamped "E-83, 1934". 872.872
- Top of N rail opposite Chicago & North Western Railway station at Quarry. 873.8
- Top of N rail opposite Chicago & North Western Railway Highway Crossing #135, 1 mile west of Le Grand. 893.8
- F-83 In Marshall County, at Le Grand, along the Chicago & North Western Railway, 9 poles west of milepost #143; 138 feet east of the depot, 54 feet north of the center line of the north main track, nearly 20 feet south of the right-of-way fence, 1 foot above rail level. A standard disk, stamped "F-83, 1934" and set in the top of a concrete monument. 938.968
- Top of N rail opposite Chicago & North Western Railway station at Le Grand. 937.9
- G-83 In Tama County, about 1.6 miles northwest of the depot at Montour, along the Chicago & North Western Railway, 18 poles southeast of milepost #142, in the southwest end of the southeast abutment of a 25-foot steel bridge #422; 10 feet southwest of the center line of the south track, and 4 feet below rail level. A standard disk, stamped "G-83, 1934". 905.034
- Top of N rail opposite Chicago & North Western Railway MP #142. 923.9
- Top of N rail opposite Chicago & North Western Railway MP #141. 886.8
- H-83 In Tama County, at Montour, along the Chicago &

North Western Railway, at milepost #140; 100 feet west of the depot, 38 feet west of the center line of a public road crossing, in the center of the south side of the concrete foundation of the signal instrument box, and 10 feet north of the center line of the north track. A standard disk, stamped "H-83, 1934".	El. Ft. 853.542
Top of N rail opposite Chicago & North Western Railway station at Montour.	853.0
<u>J-83</u> In <u>Tama County</u> , about 1.4 miles east of the depot at <u>Montour</u> , along the Chicago & North Western Railway, 16 poles east of milepost #139, in the south end of the west abutment of the Iowa River bridge #414; 13 feet south of the center line of the track, and 2 feet below rail level. A standard disk stamped "J-83, 1934".	834.857
Top of N rail opposite Chicago & North Western Railway MP #139.	835.8
Top of N rail opposite Chicago & North Western Railway MP #138.	836.4
<u>RR BM #4</u> In <u>Tama County</u> , about 3 miles east of the depot at <u>Montour</u> , along the Chicago & North Western Railway, 5 poles west of milepost #137, in the north end of the east abutment of a 75-foot steel bridge #410; 12 feet north of the center line of the north main track, and 2 feet below rail level. An iron rivet.	831.156
<u>K-83</u> In <u>Tama County</u> , 3.2 miles east of the depot at <u>Montour</u> , along the Chicago & North Western Railway, 3 poles east of milepost #137, in the south end of the west abutment of a 75-foot steel bridge #409, and 12 feet south of the center line of the track. A standard disk, stamped "K-83, 1934" and set 3 feet below rail level.	829.598
<u>RR BM #5</u> In <u>Tama County</u> , about 3.2 miles east of the depot at <u>Montour</u> . An iron rivet.	832.023
<u>RR BM #6</u> In <u>Tama County</u> , 2.3 miles west of the depot at <u>Tama</u> , along the Chicago & North Western Railway, 6 poles west of milepost #135, in the north end of the east abutment of a 15-foot steel bridge #400; 9 feet north of the center line of the north track, and 1 foot below rail level. An iron rivet.	824.447
Top of N rail opposite Chicago & North Western Railway MP #136.	832.4

- L-83 In Tama County, 1.8 miles west of the depot at Tama, along the Chicago & North Western Railway, 16 poles east of milepost #135, in the south end of the west abutment of a 25-foot steel bridge #399; 11 feet south of the center line of the south track, 5 poles west of Highway #30 overhead bridge, and 1 foot below rail level. A standard disk, stamped "L-83, 1934". El. Ft. 820.861
- M-83 In Tama County, at Tama, along the Chicago and North Western Railway, at the depot, in the center of the ticket office window, and 4 feet above the level of the platform. A standard disk, stamped "M-83, 1934". 822.810
- Top of N rail opposite Chicago & North Western Railway Crossing with Chicago, Milwaukee & St. Paul Railway at Tama. 818.2
- N-83 In Tama County, at Tama, along the Chicago & North Western Railway, at the interlocking signal east of the depot, in the east side of the southeast leg foundation, and 35 feet south of the center line of the south main track. A standard disk, stamped "N-83, 1934". 816.665
- P-83 In Tama County, about 1 mile east of the depot Tama, along the Chicago & North Western Railway, 100 feet west of a coal chute, in the south end of the east abutment of a 15-foot steel bridge #386; 35 feet south of the center line of the south main track, and 1 foot below rail level. A standard disk, stamped "P-83, 1934". 814.660
- Q-83 In Tama County, 2.5 miles east of the depot, at Tama, along the Chicago & North Western Railway, 21 poles west of milepost #130, at a 30-foot steel bridge #379, in the south end of the east abutment, 10 feet south of the center line of the south track, 55 feet east of the center line of a public road crossing, and 1 foot below rail level. A standard disk, stamped "Q-83, 1934". 810.986
- R-83 In Tama County, about 5.1 miles east of the depot at Tama, along the Chicago & North Western Railway, 3 poles east of milepost #128; 235 feet west of a public road crossing, at a 6- by 8-foot R C B culvert- #370, in the west end of the south head wall, 36 feet south of the center line of the south track, and 3 feet below rail level. A standard disk, stamped "R-83, 1934". 801.347
- Top of N rail opposite Chicago & North Western Railway MP 129. 805.6

- S-83 In Tama County, 3.6 miles west of the depot at Chelsea, along the Chicago & North Western Railway, 17 poles west of milepost #126, in the southwest corner of the south head wall of a 6- by 17-foot R C B Culvert #368; 12 feet south of the center line of the track, and 2 feet below rail level. A standard disk, stamped "S-83, 1934". El. Ft. 797.521
- Top of N rail opposite Chicago & North Western Railway MP 127. 802.6
- Top of N rail opposite Chicago & North Western Railway MP 126. 798.2
- T-83 In Tama County, 2.1 miles west of the depot at Chelsea, along the Chicago & North Western Railway, 11 $\frac{1}{2}$ poles east of milepost #125, at a 3-foot cast-iron pipe culvert #366, in the east end of the north head wall, 18 feet north of the center line of the north main track, and 4 feet below rail level. A standard disk, stamped "T-83, 1934". 790.596
- U-83 In Tama County, 0.4 mile west of the depot, at Chelsea, along the Chicago & North Western Railway, 9 poles west of milepost #123, in the south end of the east abutment of a 100-foot steel bridge #364; 12 feet south of the center line of the south track, and 2 feet below rail level. A standard disk, stamped "U-83, 1934". 786.980
- Top of N rail opposite Chicago & North Western Railway MP #124. 791.0
- V-83 In Tama County, at Chelsea, along the Chicago & North Western Railway, 100 feet east of the depot, at the First National Bank Building, 35 feet south of the center line of the south track, and in the east side of the northeast corner of the building. A standard disk, stamped "V-83, 1934". 791.531
- Top of N rail opposite Chicago & North Western Railway station at Chelsea. 787.7
- W-83 In Tama County, about 1.2 miles southeast of the depot at Chelsea, along the Chicago & North Western Railway, 12 poles east of milepost #122, in the north corner of the north wing wall of the east abutment of a 160-foot steel bridge #361; 22 feet north of the center line of the track, and about 5 feet below rail level. A standard disk, stamped "W-83, 1934". 780.313

Top of N rail opposite Chicago & North Western Railway MP 122. El. Ft. 786.2

X-83 In Tama County, 3 miles southeast of the depot at Chelsea, along the Chicago & North Western Railway, 3 poles east of milepost #120, in the north end of the west abutment of a 15-foot concrete bridge #356; 10 feet north of the center line of the north track, and 2 feet below rail level. A standard disk, stamped "X-83, 1934". 789.372

Y-83 In Tama County, near Belle Plaine, Benton County, about 1.3 miles west of the Belle Plaine Public Library, along the Chicago & North Western Railway, 6 poles west of milepost #118, in the north end of the east abutment of a 200-foot steel bridge #349, 15 feet north of the center line of the north track, 100 feet west of the Chicago & North Western Railway pump station, and 1 foot below rail level. A standard disk, stamped "Y-83, 1934". 783.355

Z-83 In Benton County, 1.1 mile west of the Belle Plaine Public Library, along the Chicago & North Western Railway, 3 poles east of milepost #118, at an interlocking signal, 200 feet west of the Junction, in the southwest corner of the northwest leg foundation, 10 feet north of the center line of the north track, and at rail level. A standard disk, stamped "Z-83 1934". 784.821

For descriptions of additional bench marks in this vicinity, see page 101.

108 LINE 4373. BELLE PLAINE TO CEDAR RAPIDS, IOWA
(Second-order Leveling)

This Line follows the Chicago & North Western Railway from Belle Plaine to Cedar Rapids, Iowa. The field work was done in October, 1934, by a party in charge of E. E. Stohsner. Elevations are based on the 1929 General Adjustment of the First-order Level Net.

For descriptions of additional bench marks in this vicinity, see page 101.

- | | El. Ft. |
|---|---------|
| <u>A-84</u> In <u>Benton County</u> , at <u>Belle Plaine</u> , at the Public Library, at the corner of 9th Avenue and 13th Street, 20 inches south of the northeast corner of the building, between the 14th and 15th courses of brick above the water table, and about 3.5 feet above the level of the ground. A standard disk, stamped "A-84, 1934". | 843.725 |
| <u>B-84</u> In <u>Benton County</u> , about 0.41 mile east of the Public Library at <u>Belle Plaine</u> , along the Chicago & North Western Railway, 2 poles west of Milepost #116, at overhead bridge #342, in the southeast corner of the southwest wing of the west abutment, 14 feet south of the center line of the track, and 2 feet above rail level. A standard disk, stamped "B-84, 1934". | 830.087 |
| <u>C-84</u> In <u>Benton County</u> , about 2.6 miles east of the <u>Belle Plaine Public Library</u> , along the Chicago & North Western Railway, 4 poles east of Milepost #114, at the overhead bridge #337, in the north end of the east abutment, 11 feet north of the center line of the north track, and 2 feet below rail level. A standard disk, stamped "C-84, 1934". | 821.793 |
| Top of N rail opposite Chicago & North Western Railway MP 115. | 857.3 |
| <u>D-84</u> In <u>Benton County</u> , about 1.8 miles west of the depot at <u>Luzerne</u> , along the Chicago & North Western Railway, 8 poles west of Milepost #113, at the 35-foot steel overhead bridge #334, in the south end of the west abutment, 15 feet south of the center line of the south track, and 3 feet below rail level. A standard disk, stamped "D-84, 1934". | 825.782 |
| <u>E-84</u> In <u>Benton County</u> , at <u>Luzerne</u> , along the Chicago & North Western Railway, 15 poles west of Milepost #111, at the 3- by 3-foot stone box-culvert, in the southwest corner of the south head wall, 35 feet west of the southwest corner of the depot, 25 feet south of the center line of the south track, and 3 feet below rail | |

- level. A standard disk, stamped "E-84, 1934". 890.933
- Top of N rail opposite Chicago & North Western Railway MP 112. 837.2
- Top of N rail opposite Chicago & North Western Railway station at Luzerne. 894.1
- RR BM #1 In Benton County, about 0.53 mile east of the depot at Luzerne, along the Chicago & North Western Railway, in the east end of the north head wall of bridge #326. An iron rivet. 882.685
- F-84 In Benton County, about 2.2 miles east of the depot at Luzerne, along the Chicago & North Western Railway, 5 poles west of Milepost #109, at 12-foot steel bridge #320, in the south end of the west abutment, 9 feet south of the center line of the south track, and 2 feet below the rail level. A standard disk, stamped "F-84, 1934". 839.421
- G-84 In Benton County, about 1.1 mile west of the depot at Blairstown, along the Chicago & North Western Railway, $10\frac{1}{2}$ poles west of Milepost #107, at 6-foot concrete culvert #313, in the northwest corner of the north head wall, 25 feet north of the center line of the north track, and 5.5 feet below rail level. A standard disk, stamped "G-84, 1934". 834.821
- Top of N rail opposite Chicago & North Western Railway MP 108. 841.4
- RR BM #2 In Benton County, 1.1 mile west of the depot at Blairstown, along the Chicago & North Western Railway, $10\frac{1}{2}$ poles west of Milepost #107, at 6-foot concrete culvert #313, in the northeast corner of the north head wall, 25 feet north of the center line of the north track, and 5.5 feet below rail level. An iron rivet. 834.818
- H-84 In Benton County, at Blairstown, along the Chicago & North Western Railway, 135 feet northeast of the depot at the Main Street crossing, in the south side of the concrete foundation of the north crossing signal, 12 feet north of the center line of the north track, and 1 foot above rail level. A standard disk, stamped "H-84, 1934". 839.263
- Top of N rail opposite Chicago & North Western Railway station at Blairstown. 839.0

- J-84 In Benton County, at Blairstown, in the north corner of the northeast leg foundation of city water tank. A standard disk, stamped "J-84, 1934". El. Ft. 875.051
- RR BM #3 In Benton County, about 1.1 miles east of Blairstown, along the Chicago & North Western Railway, in the north end of the east abutment of bridge #303. An iron rivet. 822.846
- K-84 In Benton County, about 2 miles east of the depot at Blairstown, along the Chicago & North Western Railway, 7 poles west of Milepost #104, at a 180-foot steel bridge #300, in the south end of the west abutment, at the southwest corner of steel girder, 10 feet south of the center line of the south track, and 3 feet below rail level. A standard disk, stamped "K 84, 1934". 817.879
- RR BM #4 In Benton County, about 4.1 miles east of the depot at Blairstown, along the Chicago & North Western Railway, and in the north end of the east abutment of bridge #294. An iron rivet. 811.698
- Top of N rail opposite Chicago & North Western Railway MP 104. 820.6
- L-84 In Benton County, about 1.5 miles west of the depot at Watkins, along the Chicago & North Western Railway, 15 poles west of Milepost #102, at a 15-foot steel bridge #292, in the south end of the back wall of the west abutment, 12 feet south of the center line of the track, and 2 feet below rail level. A standard disk, stamped "L-84, 1934". 811.160
- M-84 In Benton County, at Watkins, along the Chicago & North Western Railway, at the depot, in a small park, 39 feet north of the center line of the track, 155 feet east of the center line of Main Street, and 3 feet south of the name "Watkins". A standard disk, stamped "M-84, 1934" and set in the top of a concrete monument. 817.062
- Top of N rail opposite Chicago & North Western Railway MP 102. 813.0
- RR BM #5 In Benton County, about 1 mile east of depot at Watkins, along the Chicago & North Western Railway, and in the north end of the east abutment of a bridge. An iron rivet. 798.686
- N-84 In Benton County, about 1.4 miles east of the de-

pot at <u>Watkins</u> , along the Chicago & North Western Railway, 16 poles west of Milepost #99, at the 45-foot steel bridge #284, in the south end of the east abutment, 10 feet south of the center line of the track, and 1 foot below rail level. A standard disk, stamped "N-84, 1934".	El. Ft. 799.139
Top of N rail opposite Chicago & North Western Railway MP 100.	800.0
Top of N rail opposite Chicago & North Western Railway MP 99.	799.8
<u>P-84</u> In <u>Benton County</u> , at <u>Norway</u> , along the Chicago & North Western Railway, 110 feet southwest of the depot, 48 feet east of the center line of the crossing - 16 feet south of the center line of the track, at the old water tank foundation. A standard disk, stamped "P-84, 1934" and set in the north end of the east foundation block.	795.855
Top of N rail opposite Chicago & North Western Railway station at Norway.	795.8
<u>Q-84</u> In <u>Benton County</u> , at <u>Norway</u> , at the Benton County Savings Bank, in the coping of the southeast corner of the building, and about 4 feet above the sidewalk. A standard disk, stamped "Q-84, 1934" and set vertically in the brick wall.	806.809
Top of N rail opposite Chicago & North Western Railway MP 97.	790.9
<u>RR BM #6</u> In <u>Benton County</u> , about 2.5 miles east of the depot at <u>Norway</u> , along the Chicago & North Western Railway, 2 poles east of Milepost #95, at the 12-foot steel bridge #267, in the northeast corner of the east abutment, 22 feet west of the center line of the crossing, 12 feet north of the center line of track, and 2 feet below rail level. An iron rivet.	775.632
<u>R-84</u> In <u>Benton County</u> , 3 miles east of the depot at <u>Norway</u> , along the Chicago & North Western Railway, 25 poles east of Milepost #95, at the 60-foot steel bridge #265, in the south end of the back wall of the west abutment, 11 feet south of the center line of the south track, and 1 foot below rail level. A standard disk, stamped "R-84, 1934".	775.720
Top of N rail opposite Chicago & North Western Railway MP 94.	774.6

- | | El. Ft. |
|--|---------|
| <p><u>RR BM #7</u> In <u>Linn County</u>, about 4.9 miles northeast of the depot at <u>Norway</u>, Benton County, along the Chicago & North Western Railway, 15 poles east of milepost #93, at the 25-foot steel bridge #258, in the northeast corner of the east abutment, 10 feet north of the center line of the north track, 21 feet west of the center line of the road crossing, and 1 foot below rail level. An iron rivet.</p> | 770.143 |
| <p>Top of N rail opposite Chicago & North Western Railway MP 92.</p> | 768.9 |
| <p><u>S-84</u> In <u>Linn County</u>, about 1.8 miles southwest of the depot at <u>Fairfax</u>, along the Chicago & North Western Railway, 12 poles east of milepost #92, at the 15-foot steel bridge #254, in the east end of the east abutment, 430 feet west of private crossing, 10 feet south of the center line of the track, and 3 feet below rail level. A standard disk, stamped "S-84, 1934".</p> | 765.934 |
| <p><u>T-84</u> In <u>Linn County</u>, at <u>Fairfax</u>, along the Chicago, North Western Railway, 5 poles west of milepost #90; 6 poles west of the depot, at State Highway #149, overhead bridge, in the center of the east leg on the south side of the track, and about 4 feet above rail level. A standard disk, stamped "T-84, 1934".</p> | 769.483 |
| <p><u>RR BM #8</u> In <u>Linn County</u>, about 1.8 miles west of the depot at <u>Fairfax</u>, along the Chicago & North Western Railway, 12 poles east of milepost #92; 430 feet west of private road crossing, at the 15-foot steel bridge #254, in the north end of the east abutment, 15 feet north of the center line of the track, and 3 feet below rail level. An iron rivet.</p> | 768.227 |
| <p><u>RR BM #9</u> In <u>Linn County</u>, 1.6 miles west of the depot at <u>Fairfax</u>, along the Chicago & North Western Railway, in the north end of the east abutment of bridge #253. An iron rivet.</p> | 770.668 |
| <p>Top of N rail opposite Chicago & North Western Railway MP 91.</p> | 765.5 |
| <p><u>U-84</u> In <u>Linn County</u>, at <u>Fairfax</u>, along the Chicago & North Western Railway, 25 feet east of milepost #90; 174 feet west of the depot, at the Main Street crossing, in the south side of the north signal base, 15 feet west of the center line of the street, and 14 feet north of the center line of the north track. A standard disk, stamped "U-84, 1934".</p> | 767.886 |
| <p>Top of N rail opposite Chicago & North Western Railway station at <u>Fairfax</u>.</p> | 766.7 |

- RR BM #10 In Linn County, about 2 miles east of the depot at Fairfax, along the Chicago & North Western Railway, 2 poles west of milepost #88, at steel bridge #245, in the north end of the east abutment, 14 feet north of the center line of the track, and 2 feet below rail level. An iron rivet. El. Ft. 747.912
- Top of N rail opposite Chicago & North Western Railway MP 89. 751.2
- For descriptions of additional bench marks in this vicinity, see pages 76 and 115.
- V-84 In Linn County, about 1.4 miles west of the coal chute at Beverly, along the Chicago & North Western Railway, 11 poles east of milepost #88, at the 40-foot steel bridge #244, in the south end of the east abutment, 14 feet south of the center line of the track, and 1 foot below rail level. A standard disk, stamped "V-84, 1934". 749.867
- W-84 In Linn County, at Beverly, along the Chicago & North Western Railway, at the coal chute, in the north east corner of the south concrete foundation between the tracks, and 7 feet south of the center line of the south main tracks. A standard disk, stamped "W- 84, 1934". 734.611
- RR BM #11 In Linn County, about 1.4 miles west of the coal chute at Beverly, along the Chicago & North Western Railway, 11 poles east of milepost #88, at 40-foot steel bridge #244, in the north end of the east abutment, 12 feet north of the center line of the north track, and 2 feet below rail level. An iron rivet. 749.949
- ,RR BM #12 In Linn County, about 0.9 mile west of the coal chute at Beverly, along the Chicago & North Western Railway, and in the north end of the east abutment of bridge #241. An iron rivet. 745.448
- X-84 In Linn County, 0.55 mile east of the coal chute at Beverly, along the Chicago & North Western Railway, 5 poles east of milepost #86, at the crossing of the Chicago, Milwaukee, St. Paul & Pacific Railroad and the Linn County Cut-off, in the northwest corner of the signal base tower, and about 4 feet above the ground. A standard disk, stamped "X-84, 1934" and set vertically. 739.739
- Top of N rail opposite Chicago & North Western Railway MP 85. 754.8

Y-84 In Linn County, 0.9 mile southwest of the 2d Avenue crossing at Cedar Rapids, along the Chicago & North Western Railway, 9 poles north of Milepost #84, in 4-foot arch highway culvert, 95 feet south of the West Rapids sign, in the south end of the east head-wall, 35 feet west of the center line of the west-track, and 3 feet below rail level. A standard disk stamped "Y-84, 1934". El. Ft. 761.642

Z-84 In Linn County, at Cedar Rapids, along the Chicago & North Western Railway, 2 poles northeast of Milepost #83, at the Second Avenue crossing, and in the east side of the east crossing of concrete signal foundation. A standard disk, stamped "Z-84, 1934". El. Ft. 733.083

For descriptions of additional bench marks in this vicinity, see pages 74 and 185.

LINE 4376. FAIRFAX TO RUTLEDGE, IOWA
(Second-order Leveling)

115

This Line follows the Chicago, Milwaukee, St. Paul & Pacific Railroad from Fairfax to Rutledge, Iowa. The field work was done by a party in charge of E. E. Stohsner during October and November, 1934, and was re-leveled by a party in charge of George Havens in 1936 and 1938.

For descriptions of additional bench marks in this vicinity, see pages 76 and 112.

	El. Ft.
<u>A-85</u> In <u>Linn County</u> , at <u>Fairfax</u> , along the Chicago, Milwaukee, St. Paul & Pacific Railroad, 12 poles east of Milepost #77; 150 feet east of the northeast corner of the depot, 100 feet north of the center line of the track, at a 2- by 2-foot R C B highway culvert on the State Highway (#149), in the east end of the south head wall, and 6 feet above rail level. A standard disk, stamped "A-85, 1934".	794.086
Top of S rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad station at Fairfax.	788.9
Top of rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 115.	811.0
<u>B-85</u> In <u>Linn County</u> , about 1.2 miles northeast of depot at <u>Walford</u> , Benton County, along the Chicago, Milwaukee, St. Paul & Pacific Railroad, at Milepost #75; 80 feet north of the center line of the track, at a 100-foot wooden trestle bridge #I- 88, in the west end of the south head wall of an 8- by 10-foot R C B culvert on State Highway #149, and 6 feet below rail level. A standard disk, stamped "B-85, 1934".	828.351
<u>C-85</u> In <u>Benton County</u> , at <u>Walford</u> , along the Chicago, Milwaukee, St. Paul & Pacific Railroad, 5 poles west of Milepost #74; 22 feet east of the northeast corner of the depot, 20 feet south of the center line of the track, and at rail level. A standard disk, stamped "C-85, 1934" and set in top of a concrete monument.	799.506
Top of S rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad station at Walford.	800.0
Top of E rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 73.	812.1
Top of E rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 72.	866.8

- D-85 In Benton County, 2 miles southwest of the depot at Walford, along the Chicago, Milwaukee, St. Paul & Pacific Railroad, 4 poles south of Milepost #72, at a private road crossing, 24 feet north of the center line of the gate, 24 feet east of the center line of the track, 25 feet west of the right-of-way fence, and 2 feet above rail level. A standard disk, stamped "D-85, 1934" and set in top of a concrete monument. El. Ft. 868.958
- E-85 In Benton County, about 1.9 miles north of the station sign at East Amana, 5 poles north of Milepost #70, along the Chicago, Milwaukee, St. Paul & Pacific Railroad, at a public road crossing, 27 feet north of the center line of the crossing, 42 feet east of the center line of the track, 6 feet west and 1 foot south of the right-of-way fence corner, and at rail level. A standard disk, stamped "E-85, 1934" and set in the top of a concrete monument. 791.117
- Top of E rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 71. 818.6
- F-85 In Iowa County, at East Amana, along the Chicago Milwaukee, St. Paul & Pacific Railroad, 10 poles northeast of Milepost #68; 132 feet south of the station sign, 32 feet south of the center line of the public road crossing, 45 feet west of the center line of the track, 3 feet east and 1 foot north of the right-of-way fence corner and 3 feet below rail level. A standard disk, stamped "F-85, 1934" and set in the top of a concrete post. 735.947
- Top of E rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 69. 759.8
- Top of E rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 68. 729.3
- G-85 In Iowa County, 0.33 mile north of the depot at Amana, along the Chicago, Milwaukee, St. Paul & Pacific Railroad, 10 poles northeast of Milepost #67, at a 60-foot steel bridge #126, in the southeast end of the southwest abutment, 8 feet southeast of the center-line of the track, and 0.5 feet below rail level. A standard disk, stamped "G-85, 1934" 715.261
- H-85 In Iowa County, at Amana, along the Chicago, Milwaukee, St. Paul & Pacific Railroad, at Milepost #67, at a point 85 feet west of the southwest corner of the depot, 12 feet north of the center line of the track, and at rail level. A standard disk, stamped "H - 85,

- 1934" and set in the top of a concrete monument 715.254
- Top of N rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad station at Amana. 715.3
- Top of N rail ~~at the~~ Chicago, Milwaukee, St. Paul & Pacific Railroad Crossing with Highway #149. 715.2
- J-85 In Iowa County, at Middle Amana, along the Chicago, Milwaukee, St. Paul & Pacific Railroad, 9 poles north of Milepost #65, at a concrete bridge, in the east end of the south abutment, 7 feet east of the center line of the track, and at rail level. A standard disk, stamped "J-85, 1934". 718.004
- Top of S rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 66. 715.2
- Top of E rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 65. 719.6
- K-85 In Iowa County, about 1.5 miles south of Middle Amana, along the Chicago, Milwaukee, St. Paul & Pacific Railroad, 4 poles southwest of Milepost #64, at the Chicago, Rock Island & Pacific Railroad overhead bridge, at the south end of the base of the east abutment at an angle with the wing wall at the east end of the north abutment of steel bridge #N-50; 8 feet east of the center line of the track, and 2 feet below rail level. A standard disk, stamped "K-85, 1934". 745.261
- Top of S rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 63. 767.8
- L-85 In Iowa County, about 1.5 miles east of the depot at South Amana, along the Chicago, Milwaukee, St. Paul & Pacific Railroad, at Milepost #62; 21 feet east of the center line of the public road crossing, 42 feet north of the center line of the track, 3 feet east and 3 feet south of the right-of-way fence corner, and 1 foot below rail level. A standard disk, stamped "L-85 1934". 818.965
- M-85 In Iowa County, at South Amana, along the Chicago, Milwaukee, St. Paul & Pacific Railroad, 17 poles east of Milepost #60; 165 feet east of the depot, 58 feet north of the center line of the track, 5 feet west of the east end of the brick wall of elevator, and 5 feet above rail level. A standard disk, stamped "M - 85 1934" and set vertically in the brick wall. 878.975

- Top of N rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad station at South Amana. El. Ft. 877.2
- Top of S rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 61. 873.9
- Top of S rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 60. 877.6
- N-85 In Iowa County, about 0.9 mile northeast of the Conroy Post Office, along the Chicago, Milwaukee, St. Paul & Pacific Railroad, 16 poles southwest of Milepost #59; 30 feet south of the center line of a private road crossing, 47 feet east of the center line of the track, 36 feet west of the center line of county road, 8 feet south and 3 feet west of the right of-way fence corner, and 1 foot below rail level. A standard disk, stamped "N-85, 1934". 877.462
- P-85 In Iowa County, at Conroy, at the Post Office and People's Supply Company Store, in the center of a limestone block, at the southwest corner of the building, and about 1 foot above the porch level. A standard disk, stamped "P-85, 1934". 881.012
- Top of N rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad station at Conroy. 878.1
- Top of S rail at the Chicago, Milwaukee, St. Paul & Pacific Railroad crossing with Highway #209. 879.1
- Top of S rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 57. 878.9
- Q-85 In Iowa County, 1.5 miles southwest of the Conroy Post Office, along the Chicago, Milwaukee, St. Paul & Pacific Railroad, $3\frac{1}{2}$ poles north of Milepost #56, at a 2- by 3-foot R C B culvert on Highway, in the north end of the east head wall, 60 feet north of a private road crossing, 60 feet west of the center line of the track, and at rail level. A standard disk stamped "Q-85, 1934". 887.236
- Top of W rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 55. 855.2
- R-85 In Iowa County, about 2.8 miles south of the Post Office at Conroy, along the Chicago, Milwaukee, St. Paul & Pacific Railroad, $6\frac{1}{2}$ poles south of Milepost #55, at a 2- by 2-foot R C B Highway Culvert, in the south end of the east head wall, $2\frac{1}{2}$ poles south of the

public road crossing, 70 feet west of the center line of the track, and 7 feet below rail level. A standard disk, stamped "R-85, 1934".	El. Ft. 834.063
Top of E rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 54.	791.4
Top of W rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 53.	768.9
<u>S-85</u> In <u>Iowa County</u> , at <u>Williamsburg</u> , along the Chicago, Milwaukee, St. Paul & Pacific Railroad, 9 poles northeast of Milepost #52, 6 poles northeast of the depot, in the northwest end of the southwest abutment, 9 feet northwest of the center line of the track, 2 feet below rail level, and at a 100-foot steel bridge #188. A standard disk, stamped "S-85, 1934".	763.214
Top of N rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad station at Williamsburg.	760.7
<u>T-85</u> In <u>Iowa County</u> , at <u>Williamsburg</u> at the City High School, 20 inches east of the northwest corner of the building, and about 4 feet above the ground, A standard disk, stamped "T-85, 1934" and set vertically in the brick wall.	820.399
<u>U-85</u> In <u>Iowa County</u> , about 1.4 miles south of the <u>Williamsburg High School</u> , along the Chicago, Milwaukee, St. Paul & Pacific Railroad, 1 pole north of Milepost #51, at a 180-foot concrete bridge, at the southwest corner of the concrete deck, 6 feet west of the center line of the track, and at rail level. A standard disk, stamped "U-85, 1934".	757.653
Top of E rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 50.	753.3
Top of E rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 49.	753.9
<u>V-85</u> In <u>Iowa County</u> , about 1.8 miles north of the depot at <u>Parnell</u> , along the Chicago, Milwaukee, St. Paul & Pacific Railroad, $8\frac{1}{2}$ poles north of Milepost #48, at a private road crossing, 18 feet north of the center line of the gate, 47 feet west of the center line of the track, 3 feet east of the right-of-way fence, and 3 feet above rail level. A standard disk, stamped "V-85, 1934" and set in the top of a concrete monument.	792.246

	Top of E rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 48.	El. Ft. 804.7
<u>W-85</u>	In <u>Iowa County</u> , at <u>Parnell</u> , at the M. P. Lawler store building, 300 feet southwest of the depot, in a concrete pillar at the front (north) entrance to the building, and about 4 feet above the sidewalk. A standard disk, stamped "W-85, 1934" and set vertically.	864.257
	Top of E rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 47.	847.8
	Top of W rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad station at Parnell.	855.1
	Top of E rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 46.	831.0
<u>X-85</u>	In <u>Iowa County</u> , about 2.5 miles southwest of the depot at <u>Parnell</u> , along the Chicago, Milwaukee, St. Paul & Pacific Railroad, $4\frac{1}{2}$ poles northeast of Milepost #44; 24 feet north of the center line of the public road crossing, 27 feet east of the center line of the track, 18 feet west of the right-of-way fence, 9 feet west of the power line pole, and at rail level. A standard disk, stamped "X-85, 1934" and set in the top of a concrete monument.	732.705
<u>Y-85</u>	In <u>Iowa County</u> , about 3 miles northeast of the City Hall at <u>North English</u> , along the Chicago, Milwaukee, St. Paul & Pacific Railroad, 10 poles southwest of Milepost #43, in the northeast corner of the southwest abutment of a 165-foot concrete bridge #I-212, and 9 feet southeast of the center line of the track. A standard disk, stamped "Y-85, 1934".	725.645
	Top of E rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 43.	714.2
	Top of E rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 42.	772.1
<u>Z-85</u>	In <u>Iowa County</u> , 0.43 mile east of the <u>North English City Hall</u> , along the Chicago, Milwaukee, St. Paul & Pacific Railroad, 4 poles northeast of Milepost #40, at a 15-foot concrete deck highway bridge, 80 feet north of a 45-foot wooden trestle bridge, 170 feet west of a public road crossing, in the southwest end of the northeast wing wall, and 1 foot below rail level. A standard disk, stamped "Z-85, 1934".	776.747

- Top of E rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 41. El. Ft. 775.3
- A-86 In Iowa County, at North English, at the City Hall, in the northeast corner of the building facing the street, 8 inches north of the door, and about 4 feet above the level of the sidewalk. A standard disk, stamped "A-86, 1934" and set vertically in the wall. 814.998
- Top of N rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad station at North English. 784.8
- B-86 In Keokuk County, about 1.6 miles southwest of the North English City Hall, along the Chicago, Milwaukee, St. Paul & Pacific Railroad, 20 poles southwest of Milepost #39, at a concrete highway overhead bridge on State Highway #149, in the south leg on the northwest side of the track, 12 feet northwest of the center line of the track, and about 5 feet above rail level. A standard disk, stamped "B-86, 1934". 835.930
- Top of S rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 39. 829.4
- Top of E rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 38. 808.0
- Top of E rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 37. 749.3
- C-86 In Keokuk County, about 3.3 miles southwest of the City Hall at North English, along the Chicago, Milwaukee, St. Paul & Pacific Railroad, 11 poles southwest of Milepost #37; 4 poles southwest of a public road crossing, near the end of a curve, 44 feet east of the center line of the track, 9 feet east of a telegraph pole, 1 foot west of the right-of-way fence, at rail level. A standard disk, stamped "C-86, 1934" and set in the top of a concrete monument. 743.512
- Top of E rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 36. 739.7
- D-86 In Keokuk County, about 3.3 miles northeast of the Webster Consolidated School, along the Chicago, Milwaukee, St. Paul & Pacific Railroad, 7 poles northeast of Milepost #35, at a 100-foot steel bridge # I-230, in the southeast end of the southwest abutment, 8 feet southeast of the center line of the track, and 2 feet below rail level. A standard disk stamped "D-86 1934". 746.212

- Top of S rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 34. El. Ft. 809.3
- Top of E rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 33. 852.4
- E-86 In Keokuk County, at Webster, along the Chicago, Milwaukee, St. Paul & Pacific Railroad, 7 poles southwest of milepost #33; 44 feet southeast of the center line of the Chicago, Rock Island & Pacific Railroad crossing, 72 feet northeast of the crossing signal and stop gate, 57 feet southwest of State Highway #149, and 6 feet southwest of the right-of-way fence. A standard disk, stamped "E-86, 1934". 854.749
- F-86 In Keokuk County, at Webster, at the Webster Consolidated School, at the northwest corner of building, 8 inches west of the front entrance on the west side of the building, and 4 feet above sidewalk level. A standard disk, stamped "F-86, 1934" and set vertically in the brick wall. 860.451
- Top of E rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad station at Webster. 863.7
- Top of E rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 32. 853.0
- Top of N rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 31. 797.5
- G-86 In Keokuk County, about 2.4 miles south of the Webster Consolidated School, along the Chicago, Milwaukee, St. Paul & Pacific Railroad, 1 pole southwest of milepost #30; 20 feet northeast of the center line of the public road crossing, 21 feet east of the center line of the track, 25 feet west of the right-of-way fence corner, and 1 foot south of right-of-way fence. A standard disk, stamped "G-86, 1934" and set in the top of a concrete monument. 750.773
- Top of E rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 29. 734.2
- H-86 In Keokuk County, about 2.8 miles north of depot at Sigourney, along the Chicago, Milwaukee, St. Paul & Pacific Railroad, 3 poles northeast of milepost #27, at the 75-foot steel bridge #L-268, in the southeast end of the northeast abutment, 10 feet southeast of the center line of the track, and 1.5 feet below rail level. A standard disk, stamped "H-86, 1934". 711.419

Top of E rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 28.	El. Ft. 723.8
<u>J-86</u> In Keokuk County, 0.92 mile north of the depot at Sigourney, along the Chicago, Milwaukee, St. Paul & Pacific Railroad, $7\frac{1}{2}$ poles northwest of milepost #25, near the top of the north slope, 210 feet southeast of the 2-foot V S P Culvert #221; 44 feet east of the center line of the track, 1 foot west of the right-of-way fence and at rail level. A standard disk, stamped "J-86, 1934" and set in the top of a concrete monument.	742.528
Top of E rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 26.	703.1
Top of E rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 25.	758.4
<u>K-86</u> In Keokuk County, at Sigourney, along the Chicago, Milwaukee, St. Paul & Pacific Railroad, at the depot, 15 feet west of the center line of the track, in front of the ticket office, in a small park, and at rail level. A standard disk, stamped "K-86, 1934" and set in the top of a concrete monument.	787.689
Top of E rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad station at Sigourney.	788.0
<u>L-86</u> In Keokuk County, at Sigourney, at the Keokuk County Court House, at the northwest corner of building, in the west side, 8 inches south of the corner and 3 feet above the level of the ground. A standard disk, stamped "L-86, 1934" and set vertically in limestone block.	797.997
<u>M-86</u> In Keokuk County, at Sigourney, at the City Water Tower, and in the south corner of the southeast leg foundation. A standard disk, stamped "M-86, 1934".	785.819
Top of E rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 23.	740.3
Top of W rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 22.	693.3
<u>N-86</u> In Keokuk County, about 2.8 miles southwest of the depot at Sigourney, along the Chicago, Milwaukee, St. Paul & Pacific Railroad, 12 poles south of milepost #22, at the steel bridge #L-284 over the North Skunk River, in the west end of the north pier between banister and girder in a limestone block, 5 feet west of the center line of the track, and 4 feet below rail level. A standard disk, stamped "N-86, 1934".	674.425

- P-86 In Keokuk County, about 1.4 miles northeast of the depot at Hayesville, along the Chicago, Milwaukee, St. Paul & Pacific Railroad, 8 poles northeast of Milepost #19, at a public road crossing, 27 feet northeast of the center line of the crossing, 40 feet north of the center line of the track, 2 feet east and 10 feet south of the right-of-way fence corner, and 2 feet below rail level. A standard disk, stamped "P-86, 1934" and set in the top of a concrete monument. El. Ft. 761.724
- Top of E rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 21. 698.8
- Top of E rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 20. 716.8
- Top of E rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 19. 775.7
- Q-86 In Keokuk County, at Hayesville, along the Chicago Milwaukee, St. Paul & Pacific Railroad, at the depot, 75 feet south of the semaphore signal, 15 feet west of the center line of the track, 5 poles south of Milepost #18, and at rail level. A standard disk, stamped "Q-86, 1934" and set in top of a concrete monument. 796.534
- Top of W rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad station at Hayesville. 796.3
- Top of S rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 17. 754.3
- R-86 In Keokuk County, about 1.8 miles southwest of Hayesville, along the Chicago, Milwaukee, St. Paul & Pacific Railroad, at Milepost #16; 39 feet southeast of the center line of the public road crossing, 15 feet south of the center line of the road, 8 feet west and 1 foot north of the right-of-way fence corner, and at rail level. A standard disk, stamped "R-86, 1934" and set in the top of a concrete monument. 691.160
- S-86 In Keokuk County, about 3.3 miles southwest of the depot at Hayesville, along the Chicago, Milwaukee, St. Paul & Pacific Railroad, at a steel bridge over the South Skunk River bridge #I-310, in the south side of the west end of the south pier, 8 feet west of the center line of the track, and 5 feet below rail level. A standard disk, stamped "S-86, 1934". 672.987
- Top of S rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 15. 671.2

- Top of S rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 14. El. Ft. 676.1
- T-86 In Keokuk County, about 2.5 miles northeast of the depot at Hedrick, along the Chicago, Milwaukee, St. Paul & Pacific Railroad, 1 pole south of milepost #12, at a steel bridge #I-332, in the east end of the north abutment, 7 feet east of the center line of the track and 1 foot below rail level. A standard disk, stamped "T-86, 1934". 716.219
- Top of S rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 13. 685.4
- Top of E rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 11. 757.8
- U-86 In Keokuk County, at Hedrick, along the Chicago, Milwaukee, St. Paul & Pacific Railroad, at the City Water Tower, and in the west corner of the northwest leg foundation. A standard disk stamped "U-86, 1934". 822.472
- Top of E rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 10. 805.1
- Top of rail at the Chicago, Milwaukee, St. Paul and Pacific Railroad Crossing with Highway #149. 804.9
- V-86 In Keokuk County, at Hedrick, along the Chicago, Milwaukee, St. Paul & Pacific Railroad, at the depot, 45 feet south of the center line of the Minneapolis & St. Louis Railroad crossing, 24 feet east of the center line of the track, and 0.5 foot below rail level. A standard disk, stamped "V-86, 1934" and set in the top of a concrete monument. 823.420
- Top of E rail at the Chicago, Milwaukee, St. Paul and Pacific Railroad Crossing with Minneapolis & St. Louis Railroad at Hedrick. 824.2
- Top of E rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 9. 825.8
- W-86 In Wapello County, about 1.9 miles southwest of the depot at Hedrick, Keokuk County, along the Chicago, Milwaukee, St. Paul & Pacific Railroad, $11\frac{1}{2}$ poles southwest of milepost #8, at a public road crossing, 18 feet northwest of the center line of the track, 5 feet southeast of the right-of-way fence corner, and 2 feet below rail level. A standard disk, stamped "W-86, 1934" and set in the top of a concrete monument. 808.850

Top of W rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 8.	El. Ft. 811.6
Top of E rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 7.	789.7
<u>X-86</u> In <u>Wapello County</u> , at <u>Highland</u> , along the Chicago, Milwaukee, St. Paul & Pacific Railroad, 7 poles SW of Milepost #6; 75 feet north of the northwest corner of the depot, 18 feet east of the center line of the track, 5 feet south of the telephone pole, and at rail level. A standard disk, stamped "X-86, 1934" and set in the top of a concrete monument.	777.154
Top of rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad station at Highland.	777.4
Top of E rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 6.	777.3
Top of E rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 5.	768.1
<u>Y-86</u> In <u>Wapello County</u> , about 1.7 miles southwest of the depot at <u>Highland</u> , along the Chicago, Milwaukee, St. Paul & Pacific Railroad, 4 poles north of milepost #4, at a private road crossing, 150 feet south of a public road crossing, 12 feet east of the center line of the track, and at rail level. A standard disk, stamped "Y-86, 1934" and set in the top of a concrete monument.	755.474
<u>Z-86</u> In <u>Wapello County</u> , about 2.5 miles northeast of <u>Rutledge</u> , along the Chicago, Milwaukee, St. Paul & Pacific Railroad, 15 poles southwest of milepost #3, 63 feet southwest of the center line of a public road crossing, 20 feet northwest of the center line of the track, 12 feet southwest and 1 foot southeast of the right-of-way fence corner, 1 foot below rail level. A standard disk, stamped "Z-86, 1934" and set in the top of a concrete monument.	827.774
Top of E rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 4.	754.4
Top of E rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 3.	811.3
Top of E rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 2.	834.6

A-87 In Wapello County, about 0.8 mile northeast of Rutledge, along the Chicago, Milwaukee, St. Paul & Pacific Railroad, $5\frac{1}{2}$ poles south of milepost #1, in the south end of the east head wall of an 8- by 8-foot R C B cattle pass and culvert #I-364; 20 feet east of the center line of the tracks, and 5 feet below rail level. A standard disk, stamped "A-87, 1934". El. Ft. 798.857

Top of E rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 1. 799.0

For descriptions of additional bench marks in this vicinity, see page 53.

This Line follows the Minneapolis & St. Louis Railroad from Beacon to Marshalltown, Iowa. The field work was done in November, 1934, by a party in charge of Mr. E. E. Stohsner. Elevations are based on the 1929 General Adjustment of the First-order Level Net.

For descriptions of additional bench marks in this vicinity, see page 49.

- B-87 In Mahaska County, at Oskaloosa, 0.46 mile south of the depot, along the Minneapolis & St. Louis Railroad, at the Chicago, Rock Island & Pacific Railroad overpass, at the south end of the south yard, in the southeast end of the southwest abutment, 8 feet southeast of the center line of the track, 0.3 feet below rail level, and 3 feet northwest of the southeast edge. A standard disk, stamped "B-87, 1934". El. Ft. 834.801
- C-87 In Mahaska County, at Oskaloosa, along the Minneapolis & St. Louis Railroad, at the depot, in the north west corner of the building facing track, and about 5 feet above the level of the platform. A standard disk, stamped "C-87, 1934" and set vertically in the brick wall. 845.438
- OSKALOOSA-1934 In Mahaska County, at Oskaloosa, at the City Square Park, and in the northwest corner of the granite base of the Mahaska Monument, A standard disk, stamped "Oskaloosa 1934". 846.340
- D-87 In Mahaska County, at Oskaloosa, the U. S. Post Office, and in the center of the west banister at the south entrance. A standard disk, stamped "D-87, 1934". 845.205
- E-87 In Mahaska County, near Oskaloosa, about 2.7 miles north of the depot, along the Minneapolis & St. Louis Railroad, $8\frac{1}{2}$ poles south of milepost #299, at public road crossing, 17 feet south of the center line of the crossing, 43 feet east of the center line of the track, 2 feet south and 2 feet west of the right-of-way fence corner, and 1 foot above rail level. A standard disk, stamped "E-87, 1934" and set in the top of a concrete monument. 824.378
- Top of E rail opposite Minneapolis & St. Louis Railroad MP 300. 824.8
- F-87 In Mahaska County, about 3.5 miles southeast of the Lacey School, along the Minneapolis & St. Louis Railroad, $8\frac{1}{2}$ poles south of milepost #297, at public

- road crossing, 35 feet south of the center line of the road, 44 feet west of the center line of the track, 5 feet southwest of the iron gate post, 2 feet east of the right-of-way fence, and 3 feet below rail level. A standard disk, stamped "F-87, 1934" and set in the top of a concrete monument. El. Ft. 751.721
- Top of E rail opposite Minneapolis & St. Louis Railroad MP 298. 787.2
- G-87 In Mahaska County, about 1.7 miles south of the Lacey School, along the Minneapolis & St. Louis Railroad, 16 poles north of milepost #296; 40 feet south of the center line of a public road crossing, 41 feet west of the center line of the track, 4 feet east of the right-of-way fence, and 1 foot above rail level. A standard disk, stamped "G-87, 1934" and set in the top of a concrete monument. 744.149
- Top of E rail opposite Minneapolis & St. Louis Railroad MP 296. 724.8
- H-87 In Mahaska County, at the Lacey School, in the southwest corner of the building, and about 3.5 feet above the sidewalk. A standard disk, stamped "H-87, 1934" and set vertically in the brick wall. 842.200
- Top of E rail opposite Minneapolis & St. Louis Railroad station at Lacey. 807.1
- J-87 In Mahaska County, about 2 miles north of the Lacey School, along the Minneapolis & St. Louis Railroad, $1\frac{1}{2}$ poles north of milepost #292; 20 feet south and 15 feet west of the center line of private road crossing, about 6 poles north of overhead bridge over the public road, 1 pole south of wooden trestle overhead bridge #474, and 2 feet below rail level. A standard disk, stamped "J-87, 1934" and set in the top of a concrete monument. 818.463
- Top of E rail opposite Minneapolis & St. Louis Railroad MP 293. 805.4
- K-87 In Mahaska County, about 0.8 mile south of the depot at New Sharon, along the Minneapolis & St. Louis Railroad, $4\frac{1}{2}$ poles south of milepost #290; 21 feet north of the center line of the public road crossing, 44 feet west of the center line of the track, 7 feet north and 1 foot east of the right-of-way fence corner, and 3.5 feet below rail level. A standard disk, stamped "K-87, 1934" and set in the top of a concrete post. 864.355

Top of E rail opposite Minneapolis & St. Louis Railroad MP 291.	El. Ft. 857.8
<u>L-87</u> In <u>Mahaska County</u> , at <u>New Sharon</u> , 375 feet south of the depot, along the Minneapolis & St. Louis Railroad, in the center of the southeast concrete pedestal of abandoned water tank, 13 feet west of the center line of the track, and 1 foot below rail level. A standard disk, stamped "L-87, 1934".	864.132
Top of W rail opposite Minneapolis & St. Louis Railroad station at New Sharon.	864.7
Top of E rail opposite Minneapolis & St. Louis Railroad MP 289.	859.3
<u>M-87</u> In <u>Mahaska County</u> , about 1.3 miles north of the depot at <u>New Sharon</u> , along the Minneapolis & St. Louis Railroad, 42 feet south of milepost #288, at a 12-foot arch cattle-pass, in the north end of the east headwall, 15 feet east of the center line of the track; 4 feet below rail level. A standard disk stamped "M-87, 1934".	814.047
Top of E rail opposite Minneapolis & St. Louis Railroad MP 287.	781.4
<u>N-87</u> In <u>Poweshiek County</u> , about 1.3 miles southeast of the station at <u>Moore</u> , along the Minneapolis & St. Louis Railroad, $1\frac{1}{2}$ poles south of milepost #286, in the east end of the pier of steel bridge #452 over the North Skunk River, and 5.5 feet below rail level. A standard disk, stamped "N-87, 1934".	770.113
<u>P-87</u> In <u>Poweshiek County</u> , at <u>Moore</u> , along the Minneapolis & St. Louis Railroad, 15 poles northwest of milepost #285; $7\frac{1}{2}$ poles northwest of Station Sign at a 10- by 10-foot R C B culvert and cattle pass, in the southeast end of the southwest headwall, 18 feet south west of the center line of the track, and 5 feet below rail level. A standard disk, stamped "P-87, 1934".	783.886
Top of E rail opposite Minneapolis & St. Louis Railroad MP 285.	781.2
Top of W rail opposite Minneapolis & St. Louis Railroad station at Moore.	786.1
Top of E rail opposite Minneapolis & St. Louis Railroad MP 284.	788.2
<u>Q-87</u> In <u>Poweshiek County</u> , about 1.8 miles northwest of	

the depot at Moore, along the Minneapolis & St. Louis-Railroad, a 3 poles north of milepost #283, in a 30-foot concrete highway bridge, 114 feet west of the center line of the track, at a public road crossing, 2 poles south of railroad bridge #446, in the east end of the south guard rail, and 6 feet below rail level. A standard disk, stamped "Q-87, 1934". El. Ft. 778.388

R-87 In Poweshiek County, about 1.1 miles south of the depot at Searsboro, along the Minneapolis & St. Louis Railroad, 13 poles south of milepost #281; 108 feet southwest of the center line of the track, at a public road crossing, at a 40-foot skew box concrete highway bridge, in the north end of the northwest wing wall, at rail level. A standard disk, stamped "R-87, 1934". 797.662

Top of E rail opposite Minneapolis & St. Louis Railroad MP 282. 793.4

Top of E rail opposite Minneapolis & St. Louis Railroad MP 281. 800.0

S-87 In Poweshiek County, at Searsboro, along the Minneapolis & St. Louis Railroad, 7 poles south of milepost #280; 95 feet north of the depot, at the Bowen-Elevator Company elevator, in the northwest corner of the foundation, 50 feet east of the center line of the track, and about 5 feet above rail level. A standard disk, stamped "S-87, 1934". and set vertically. 812.548

Top of E rail opposite Minneapolis & St. Louis Railroad station at Searsboro. 807.5

Top of E rail opposite Minneapolis & St. Louis Railroad MP 280. 814.1

T-87 In Poweshiek County, about 1.8 miles north of the depot at Searsboro, along the Minneapolis & St. Louis Railroad, 17 poles south of milepost #278; $2\frac{1}{2}$ poles north of highway overhead bridge, at rail rest, 10 feet north of the north post of the rail rest, 44 feet west of the center line of the track, 2 feet east of a right-of-way fence on the side of a hill, and 2 feet above rail level. A standard disk, stamped "T-87, 1934" and set in the top of a concrete monument. 864.014

Top of E rail opposite Minneapolis & St. Louis Railroad MP 278. 877.5

U-87 In Poweshiek County, about 3.8 miles north of the depot at Searsboro, along the Minneapolis & St. Louis

Railroad, $11\frac{1}{2}$ poles south of milepost #276, at a cut 160 feet north of highway overhead bridge #421; 15 feet north of point of switch to the derail east of pipe line pumping station, 39 feet east of the center line of the track, 6 feet west of the right-of-way fence, and 1 foot above the rail level on the side of a hill. A standard disk, stamped "U-87, 1934" and set in the top of a concrete monument.	El. Ft. 913.909
Top of E rail opposite Minneapolis & St. Louis Railroad MP 276.	932.4
<u>V-87</u> In Poweshiek County, about 5.7 miles south of the depot at <u>Grinnell</u> , along the Minneapolis & St. Louis Railroad, $14\frac{1}{2}$ poles south of milepost #274; 39 feet south of the center line of county road east, at public road crossing, 44 feet west of the center line of the track, 2 feet east and 3 feet south of the right-of-way fence corner, and 4 feet above rail level. A standard disk, stamped "V-87, 1934" and set in the top of a concrete monument.	976.816
Top of E rail opposite Minneapolis & St. Louis Railroad MP 274.	988.3
Top of W rail opposite Minneapolis & St. Louis Railroad station at Oak Grove.	991.7
<u>W-87</u> In Poweshiek County, about 3.3 miles south of the depot at <u>Grinnell</u> , along the Minneapolis & St. Louis Railroad, at milepost #272; 7 poles north of the G & M junction, at rail rest, 43 feet west of the center line of the track at the milepost, and 3 feet below rail level. A standard disk, stamped "W-87, 1934" and set in the top of a concrete monument.	988.886
<u>X-87</u> In Poweshiek County, 1.2 miles south of the depot at <u>Grinnell</u> , along the Minneapolis & St. Louis Railroad, 63 feet north of milepost #270; 24 feet south of the center line of a public road crossing, 44 feet east of the center line of the track, 1 foot west and 5 feet south of the right-of-way fence corner, and 1 foot below rail level. A standard disk, stamped "X-87, 1934" and set in the top of a concrete monument.	1007.938
Top of E rail opposite Minneapolis & St. Louis Railroad MP 271.	981.0
<u>Y-87</u> In Poweshiek County, at <u>Grinnell</u> , at the depot, along the Minneapolis & St. Louis Railroad, in the southeast side of the ticket office facing the railroad	

crossing, and 5 feet above rail level. A standard disk, stamped "Y-87, 1934" and set vertically in brick wall. El. Ft. 1016.724

Top of E rail at the Minneapolis & St. Louis Railroad Crossing with Chicago, Rock Island & Pacific Railroad at Grinnell. 1011.6

Z-87 In Poweshiek County, at Grinnell, at the Physics Building (Grinnell College) and in the northeast corner of the front entrance. A standard disk, stamped "Z-87, 1934" and set in the limestone porch floor. 1025.077

A-88 In Poweshiek County, about 2.8 miles northwest of the depot at Grinnell, along the Minneapolis & St. Louis Railroad, 1 pole northwest of milepost #266, at steel overhead bridge #382 over State Highway #146, in the east corner of the southeast abutment, 10 feet northeast of the center line of the track, and 3 feet below rail level. A standard disk stamped "A-88, 1934". 1019.985

Top of E rail opposite Minneapolis & St. Louis Railroad MP 267. 1001.0

B-88 In Poweshiek County, about 2.1 miles southeast of the depot at Newburg, Jasper County, 9 poles southeast of milepost #264, along the Minneapolis & St. Louis Railroad, at a public road crossing, 30 feet northwest of the center line of the road, 43 feet southwest of center line of the track, 6 feet northwest of the corner post, and 2 feet northeast of right-of-way fence line. A standard disk, stamped "B-88, 1934" and set in the top of a concrete monument. 1027.682

Top of E rail opposite Minneapolis & St. Louis Railroad MP 265. 1027.2

C-88 In Jasper County, at Newburg, along the Minneapolis & St. Louis Railroad, at the Newburg Elevator Company office east of the depot, in the northwest corner of the building, and about 3 feet above the ground. A standard disk, stamped "C-88, 1934" and set vertically in the brick wall. 1035.569

Top of E rail opposite Minneapolis & St. Louis Railroad MP 263. 1030.8

Top of E rail opposite Minneapolis & St. Louis Railroad station at Newburg. 1029.9

D-88 In Jasper County, about 2.2 miles south of the depot at Gilman, Marshall County, along the Minneapolis & St. Louis Railroad, $2\frac{1}{2}$ poles south of milepost

- #260; 21 feet north of the center line of the public road crossing, 40 feet east of the center line of the track, 5 feet west and 1 foot north of right-of-way fence corner, and 1 foot below rail level. A standard disk, stamped "D-88, 1934" and set in the top of a concrete monument. El. Ft. 1030.336
- Top of E rail opposite Minneapolis & St. Louis Railroad MP 261. 1013.2
- Top of E rail opposite Minneapolis & St. Louis Railroad MP 260. 1032.3
- E-88 In Marshall County, at Gilman, along the Minneapolis & St. Louis Railroad, 1 pole northwest of milepost #258, at the City Water Tower 300 feet south of the depot, and in the east corner of the standpipe foundation. A standard disk, stamped "E-88, 1934". 1030.362
- Top of E rail opposite Minneapolis & St. Louis Railroad station at Gilman. 1030.8
- F-88 In Marshall County, about 1.8 miles north of the depot at Gilman, along the Minneapolis & St. Louis Railroad, $3\frac{1}{2}$ poles southeast of milepost #256, at public road crossing, 43 feet west of the center line of the track, at the crossing, 15 feet northwest of the gatepost, 2 feet northeast of the right-of-way fence, and 1 foot above rail level. A standard disk, stamped "F-88, 1934" and set in the top of a concrete monument. 1029.617
- Top of E rail opposite Minneapolis & St. Louis Railroad MP 257. 1029.4
- U.S.C. & G.S. #34 In Marshall County, 0.4 mile south of the depot at Pickering, along the Minneapolis & St. Louis Railroad, at public road crossing, at grain elevator, $14\frac{1}{2}$ poles south of the station, 24 feet south of the center line of crossing, 45 feet west of center line of track, 4 feet north of right-of-way fence corner, and 2 feet above the rail level. A bronze disk stamped "USC & GS #34" and set in the top of a concrete monument. 1007.961
- Top of E rail opposite Minneapolis & St. Louis Railroad MP 254. 1000.5
- G-88 In Marshall County, 0.4 mile south of the depot at Pickering, along the Minneapolis & St. Louis Railroad, 13 poles south of the station at grain elevator, 90 feet north of the center line of the public road

- crossing, 43 feet east of the center line of the track, 2 feet west of the right-of-way fence, and 1 foot below rail level. A standard disk, stamped "G-88, 1934" and set in the top of a concrete monument. El. Ft. 1006.884
- H-88 In Marshall County, at Pickering, along the Minneapolis & St. Louis Railroad, at the depot, in the west end of the north abutment of the Chicago, Milwaukee, St. Paul & Pacific Railroad underpass, 25 feet west of the center line of the track, and 35 feet below rail level. A standard disk, stamped "H-88, 1934". 1009.302
- J-88 In Marshall County, at Dillon, along the Minneapolis & St. Louis Railroad, $5\frac{1}{2}$ poles north of milepost #251; 78 feet south of the depot, 18 feet west of the center line of the track, and at rail level. A standard disk, stamped "J-88, 1934" and set in the top of a concrete monument. 977.656
- Top of E rail opposite Minneapolis & St. Louis Railroad MP 252. 986.2
- Top of W rail opposite Minneapolis & St. Louis Railroad station at Dillon. 977.5
- K-88 In Marshall County, about 2.4 miles northwest of the depot at Dillon, along the Minneapolis & St. Louis Railroad, 14 poles south of milepost #248, at US Highway #30 overhead bridge, in the east side of the south leg, 17 feet west of the center line of the track, and 5 feet above the rail level. A standard disk, stamped "K-88, 1934" and set vertically in a concrete pier. 891.104
- Top of E rail opposite Minneapolis & St. Louis Railroad MP 249. 911.8
- L-88 In Marshall County, about 5.8 miles southeast of the Marshalltown City Hall, along the Minneapolis & St. Louis Railroad, 9 poles south of milepost #247, at a public road crossing, 42 feet northwest of the center line of the crossing, 18 feet east of the center line of the track, and 2 feet below rail level. A standard disk, stamped "L-88, 1934" and set in the top of a concrete monument. 870.005
- Top of E rail opposite Minneapolis & St. Louis Railroad MP 248. 872.9
- Top of E rail opposite Minneapolis & St. Louis Railroad MP 247. 871.9
- For further descriptions, this vicinity, see pp 102, 139.

east corner of the Clark Brown Grain Company Bldg. A standard disk, set in a concrete monument.	El. Ft. 827.328
<u>F-10</u> In <u>Jasper County</u> , at <u>Mingo</u> , on right-of-way of Chicago-Great Western Railroad, 260 yards east of station, 25 feet west of center line of Highway #64; 114 feet north of center line of Railroad Street, 15 feet north west of Milepost #351-10; 156 feet north of northwest corner of Mobilegas Filling Station owned by A. H. Hutson, and $37\frac{1}{2}$ feet south of center line of main track.. A standard disk, set in a concrete monument.	819.155
Top of N rail opposite Chicago- Great Western Railroad MP 351.	817.9
Top of N rail opposite Chicago-Great Western Railroad MP 348.	833.4
<u>H-10</u> In <u>Jasper County</u> , at <u>Ira</u> , about 120 feet east of the Chicago-Great Western Railroad Station, 33 feet north of the center line of the main track, 22.3 feet west of the west side of water tank, and at Milepost #347-5. A standard disk, set in a concrete monument.	832.971
Top of S rail opposite Chicago-Great Western Railroad MP 346.	854.1
Top of E rail opposite Chicago-Great Western Railroad MP 345.	869.1
Top of W rail opposite Chicago-Great Western Railroad MP 343.	972.4
<u>J-10</u> In <u>Jasper County</u> , at <u>Baxter</u> , about 30 feet north of the center line of main track of the Chicago-Great Western Railroad, 59 feet west of center line of street crossing railroad, 12 feet south of Milepost #342-15, and 8 feet west of west edge of sidewalk. A standard disk, set in a concrete monument.	1003.823
Top of W rail opposite Chicago-Great Western Railroad station at Baxter.	1004.0
Top of W rail opposite Chicago-Great Western Railroad MP 342.	1004.6
<u>K-10</u> In <u>Marshall County</u> , about 3 miles northeast, by rail, of <u>Baxter</u> , Jasper County, on the right-of-way of the Chicago-Great Western Railroad, 70 yards west of Semaphore #339.4: 27 feet north of the center line of the track, and 27 feet west of the center line of a	

- dirt road. A standard disk, set in a concrete monument. El. Ft. 933.463
- Top of E rail opposite Chicago-Great Western Railroad MP 340. 949.0
- Top of E rail opposite Chicago-Great Western Railroad MP 338. 966.1
- L-10 In Marshall County, about 3 miles south, by rail, of Melbourne, on the right-of-way of the Chicago-Great Western Railroad, 1.5 rails south of Milepost #336-5; 24 feet, 5 inches west of center line of track, and 37 feet northwest of center line of farm road crossing. A standard disk, set in a concrete monument. 1007.144
- M-10 In Marshall County, at Melbourne, on the right-of-way of the Chicago-Great Western Railroad, 124 feet northeast of the northeast corner of the station, 44 feet north of center line of road crossing, 16 feet east of the center line of track, and 31 feet south of milepost #333-02. A standard disk, set in a concrete monument. 1044.926
- N-10 In Marshall County, at Melbourne, in the northwest corner of Melbourne School yard, 78 feet northwest of northwest corner of school building, 44 feet south of the center line of street, and 141 yards west of northeast corner of the Chicago-Great Western Station. A standard disk, set in a concrete monument. 1038.604
- P-10 In Marshall County, about 0.5 mile north, by rail, of Melbourne, on the right-of-way of the Chicago-Great Western Railroad, 57 feet west of Milepost #332-15; 20 feet west of center line of track, and 27 feet south of the center line of the road crossing. A standard disk, set in a concrete monument. 1042.593
- Q-10 In Marshall County, about 2.5 miles northeast, by rail, of Melbourne, on the right-of-way of the Chicago Great Western Railroad, 59 feet southwest of southwest fence corner of Maple Grove Cemetery, 13 feet east of the center line of track, 26 feet south of the center line of the road crossing, and 33 feet northwest of the Milepost #330-15. A standard disk, set in a concrete monument. 1034.604
- Top of E rail opposite Chicago-Great Western Railroad MP 330. 1013.9
- R-10 In Marshall County, about 6 miles southwest, by

- rail, of Marshalltown, on the right-of-way of the Chicago-Great Western Railroad, 165 feet east of the station at Luray flag stop; 57 feet northeast of Milepost #326-09; 22 feet south of the center line of the track and 24 feet east of the center line of the road crossing. A standard disk, set in a concrete monument. El. Ft.
940.241
- S-10 In Marshall County, about 3 miles southwest, by rail, of Marshalltown, on the right-of-way of the Chicago-Great Western Railroad, 21 feet north of milepost #323-12; 17 feet south of the center line of the track, and 9 feet east of the center line of the road crossing. A standard disk, set in a concrete monument. 934.624
- Top of NE rail opposite Chicago-Great Western Railroad MP 322. 900.6
- Top of E rail opposite Chicago-Great Western Railroad MP 321. 891.7
- T-10 In Marshall County, at Marshalltown, on the right-of-way of the Chicago-Great Western Railroad, 123 feet northwest of the northwest corner of the interlocking tower in Marshalltown yards, 31 feet and 6 inches north of the center line of the east bound track of the Chicago & North Western Railway, 49 feet west of the center line of South Third Street, and 109 feet southwest of the southeast corner of the Empire Sand & Gravel Company office on South Third Street. A standard disk, set in a concrete monument. 894.293
- For descriptions of additional bench marks in this vicinity, see page 102 and 135.
- MARSHALLTOWN. In Marshall County, at Marshalltown City Hall on Center Street, 13.7 feet north of the center of the east entrance, 40 feet west of the center line of Center Street, and 4.3 feet west of the west edge of the sidewalk. Mark set by city officials. A standard disk, set in a concrete monument. 938.345
- Top of N rail opposite Chicago-Great Western Railroad station at Marshalltown. 898.2
- U-10 In Marshall County, about 1.0 mile north of Marshalltown, 118 feet southwest of Milepost #318-25; 87 feet east of the center line of the main track, 30 feet north of the center line of 12th Avenue South, 3 feet north of north edge of sidewalk along 12th Avenue, and 50 feet south of the south entrance of the Lennox Furnace Company. A standard disk, set in a concrete monument. 874.765

- Top of E rail opposite Chicago-Great Western Railroad
MP 316. El. Ft.
864.7
- V-10 In Marshall County, about 3 miles south of Green Mountain, at Milepost #314 +17 of the Chicago - Great Western Railroad, 56 feet north of the center line of the road crossing, and 40 feet east of the center line of the track. A standard disk, set in a concrete monument. 885.874
- W-10 In Marshall County, at Green Mountain, 375 feet north of the north end of the Chicago-Great Western station, at milepost #311+28; 26 feet east of the center line of the main track, 72 feet east of the east end of the Farmers' Elevator Company building, and 35 feet south of the road crossing. A standard disk, set in a concrete monument. 999.358
- Top of E rail opposite Chicago-Great Western Railroad station at Green Mountain. 997.8
- X-10 In Tama County, about 3 miles, by rail, south of Gladbrook, at milepost #306+22 on the Chicago - Great Western Railroad, 19 feet north of the center line of the road crossing, 28 feet east of the center line of the track, and 24.7 feet north of milepost #306+22. A standard disk, set in a concrete monument. 1049.998
- Y-10 In Tama County, at Gladbrook, at milepost #303+23, 0.6 mile south of the Chicago - Great Western Railroad station, 45.5 feet east of the main track, and 40 feet north of the center line of the road crossing. A standard disk, set in a concrete monument. 957.022
- Top of E rail opposite Chicago-Great Western Railroad MP 304. 957.6
- Z-10 In Tama County, at Gladbrook, 27 feet northeast of the northeast corner of the Chicago-Great Western Railroad station, 88 feet east of the center line of the main track, 24 feet northeast of milepost 303+3 and 60 feet west of the center line of graveled street. A standard disk, set in a concrete monument. 950.215
- Top of E rail at the crossing of the Chicago- & North Western Railroad with Chicago-Great Western Railroad at Gladbrook. 950.0
- A-11 In Tama County, about 0.8 mile north of Gladbrook, 37 feet north of the center line of the road crossing, 45 feet west of the center line of the track, and at milepost #302+13 on the Chicago-Great Western Railroad. A standard disk, set in a concrete monument. 971.104

- B-11 In Tama County, about 2.75 miles south of Lincoln, at Chicago-Great Western Railroad station, 35 feet north of the center line of county road crossing, 32.6 feet west of the center line of track, and at milepost #300-3. A standard disk, set in a concrete monument. El. Ft. 1041.412
- C-11 In Tama County, at Lincoln, at milepost #297-19, -93 feet north of the north end of the Chicago-Great Western Railroad station, 44 feet east of the center line of main track, 57 feet south of the center line of the street crossing railroad, and 20 feet south of the south edge of the sidewalk. A standard disk, set in a concrete monument. 1060.500
- D-11 In Tama County, about 3.5 miles north of Lincoln, 22 feet west of the center line of the track, at Milepost #294-2 of the Chicago-Great Western Railroad, and 32 feet north of the center line of the road crossing. A standard disk, set in a concrete monument. 969.283
- Top of E rail opposite Chicago-Great Western Railroad MP 293. 966.7
- Top of W rail opposite Chicago-Great Western Railroad MP 292. 942.3
- E-11 In Grundy County, at Reinbeck, 15 feet north of milepost #291-0; 0.25 mile south of the intersection of the Chicago-Great Western Railroad and the Chicago, Rock Island & Pacific Railway; 0.5 mile south of the Chicago-Great Western Railroad station, 40 feet east of the center line of the track, and 39 feet west of the center line of Highway #58. A standard disk, set in a concrete monument. 929.509
- Top of E rail at the Chicago-Great Western Railroad Crossing with C. R. I. & P. RR at Reinbeck. 929.1
- For descriptions of additional bench marks in this vicinity, see pages
- F-11 In Grundy County, at Reinbeck, at Milepost #290-17, 92 feet northeast of the northeast corner of the Chicago-Great Western Railroad station, 24.3 feet west of center line of side track; 115 feet east of center line of main track, and 47 feet south of center line of street running east and west. A standard disk, set in a concrete monument. 925.907
- G-11 In Grundy County, about 1.3 miles south of Hicks, Black Hawk County, 18 feet north of milepost #287-13,

- 34 feet south of road crossing, 49 feet east of center line of track, and 6 feet south of power line pole and fence corner. A standard disk, set in a concrete monument. El. Ft. 912.173
- H-11 In Black Hawk County, at Hicks, at the intersection of Chicago-Great Western Railroad and Chicago - & North Western Railway, 6 feet south of Milepost #286-5, 37 feet east of center line of main track of the Chicago-Great Western Railroad, 71.6 feet north of center line of main track of Chicago & North Western Railway and 83 feet north of switch tower. A standard disk, set in a concrete monument. 906.671
- Top of S rail opposite Chicago-Great Western Railroad station at Hicks. 908.0
- J-11 In Black Hawk County, 0.25 mile north of intersection of tracks at Hicks, 9 feet south of milepost #285-27; 49 feet north of center line of road crossing, 44 feet east of center line of main track, 60 feet east of signal tower, and 4.5 feet west of fence corner. A standard disk, set in a concrete monument. 899.263
- Top of E rail opposite Chicago-Great Western Railroad MP 284. 895.9
- K-11 In Black Hawk County, at Hudson, 58 yards south of the Chicago-Great Western Railroad station, 17 feet south of milepost #281-11; 62 feet east of center line of main track, 40 feet north of road crossing, and 4 feet north of power line pole. A standard disk, set in a concrete monument. 888.834
- Top of E rail opposite Chicago-Great Western Railroad MP 281. 885.0
- Top of E rail opposite Chicago-Great Western Railroad MP 280. 881.2
- L-11 In Black Hawk County, about 0.25 mile south of Cedar Falls Junction, along the Chicago-Great Western Railroad right-of-way, 8 feet north of milepost #278-4, 46 feet east of center line of main track, 5 feet west of fence corner, and 37.4 feet north of center line of a county road crossing with railroad. A standard disk, set in a concrete monument. 871.534
- M-11 In Black Hawk County, about 3.5 miles south of Waterloo, along the Chicago - Great Western Railroad right-of-way, 17 feet east of Milepost #275-23; 46.6

feet east of center line of track, 36 feet north of center line of road crossing, and 3 feet west of fence corner. A standard disk, set in a concrete monument. El. Ft. 860.110

WATERLOO #2 In Black Hawk County, at Waterloo, 3.2 feet east of east corner of Public Library, at corner of South Street and 4th Street, 5.6 feet northeast of the concrete retaining wall, 30.3 feet northeast of the northeast curb of South Street; and 48.8 feet northwest of the northwest curb of 4th Street. This mark was set by city officials. A standard disk, set in a concrete monument. 866.547

WATERLOO #1 In Black Hawk County, at Waterloo, 3 feet east of the east corner of Public Library, located at Mulberry Street and East 5th Street; 22.8 feet southwest of southwest curb on Mulberry Street, and 23 feet northwest of northwest curb on East 5th Street. This mark was set by city officials. A standard disk, set in a concrete monument. 845.943

For descriptions of additional bench marks in this vicinity, see page 81.

City BM In Black Hawk County, at Waterloo, at intersection of west corner of Washington School and west corner of Fourth Street. 855.297

City BM In Black Hawk County, at Waterloo, at intersection of South Street and Fourth Street. 863.788

Top of W rail opposite Chicago-Great Western Railroad station at Waterloo. 844.7

Top of W rail at the Chicago-Great Western Railroad Crossing with Highway #20. 847.6

N-11 In Black Hawk County, at Waterloo, along right-of-way of Chicago-Great Western Railroad, 600 feet east of water tank in Waterloo yards, 38 feet south of center line of track, and 23 feet west of center line of road (City Limits). A standard disk, set in a concrete monument. 869.011

P-11 In Black Hawk County, about 2.1 miles southwest by rail, of Dewar along right-of-way of the Chicago-Great Western Railroad, 500 feet southeast of East Waterloo Township School #8; 41 feet and 7 inches southwest of Milepost #267-19; 46 feet south of center line of track, and 31 feet east of center line of road crossing. A standard disk, set in a concrete monument. 876.652

Q-11 In Black Hawk County, at Dewar, along right-of-way of the Chicago-Great Western Railroad, 142 feet east of station, 11 rails west of center line of county road crossing, 38 feet south of center line of track, and 5 feet southwest of milepost #265-13. A standard disk, set in a concrete monument. El. Ft. 890.133

Top of E rail opposite Chicago-Great Western Railroad MP 262. 989.4

R-11 In Black Hawk County, at Dunkerton, on right-of-way of the Chicago-Great Western Railroad, 573 yards southwest of station, 35 feet east of center line of track, 36 feet south of center line of County Highway "H", and 36 feet, 7 inches northeast of milepost #261-13. A standard disk, set in a concrete monument. 954.670

Top of E rail opposite Chicago-Great Western Railroad station at Dunkerton. 948.2

Top of E rail opposite Chicago-Great Western Railroad MP 259. 949.2

S-11 In Black Hawk County, about 3.7 miles southwest, by rail, of Fairbanks, Buchanan County, on right-of-way of the Chicago-Great Western Railroad, 28 feet west of center line of road crossing, 34 feet and 5 inches south of center line of track, and 5 feet north west of milepost #256-36. A standard disk, set in a concrete monument. 1000.090

T-11 In Buchanan County, at Fairbanks, on right-of-way of the Chicago-Great Western Railroad, 6.25 rails west of station, 25 feet north of center line of track, 46 feet west of County Highway crossing, and 81 feet northeast of milepost #253-13. A standard disk, set in a concrete monument. 994.801

Top of N rail opposite Chicago-Great Western Railroad station at Fairbanks. 997.1

U-11 In Fayette County, about 3 miles north of Fairbanks, Buchanan County, along the Chicago-Great Western Railroad, 28.5 feet north of milepost #250-7; 22.5 feet east of center line of track, and 38 feet west of center line of county road crossing. A standard disk, set in a concrete monument. 1068.285

Top of E rail opposite Chicago-Great Western Railroad MP 248. 1044.4

- V-11 In Fayette County, at Oelwein, at intersection of the Chicago-Great Western Railroad and South Frederick Street (Highway #11), 40 feet east of center line of South Frederick Street, 44 feet north of center line of main track, 8 feet east of east edge of sidewalk along South Frederick Street, 28 feet southwest of southwest corner of house, and 12 feet southwest of a 14-inch red oak tree. A standard disk, set in a concrete monument. El. Ft. 1039.079
- DBQ-1044 In Fayette County, at Oelwein, in east wall of the Janison & Martin Building, located at corner of Frederick and Charles Streets, 11.5 feet west of west curb of South Frederick Street, 24.7 feet south of south curb of West Charles Street, 12.4 feet south of northeast corner, and at entrance to building. A U.S.G.S. tablet, set vertically. 1045.388
- OELWEIN In Fayette County, at Oelwein, in lawn of City Hall on First Avenue, N. E., 7.5 feet north of center line of east entrance, 34 feet west of west curb of First Avenue, N. E., 3.5 feet east of first step of an entrance, and 2.2 feet north of north edge of sidewalk to entrance. This mark set by city officials. A standard disk, set in a concrete monument. 1046.628
- For descriptions of additional bench marks in this vicinity, see pages
- W-11 In Fayette County, about 0.5 mile north of the Chicago, Rock Island & Pacific Railway station at Oelwein, along the right-of-way, 60 feet south of milepost #54; 38 feet east of center line of track, 28 feet north of county road crossing, and 2.5 feet west of fence corner. A standard disk, set in a concrete monument. 1071.665
- X-11 In Fayette County, about 2 miles southwest, by rail, of Maynard, on the Chicago, Rock Island & Pacific Railway right-of-way, 344 yards north of milepost #58; 45 feet east of center line of track, and 37 feet north of center line of road crossing. A standard disk, set in a concrete monument. 1106.707
- Y-11 In Fayette County, at Maynard, on the Chicago, Rock Island & Pacific Railway right-of-way, 416 yards north of milepost #60; 79 feet southeast of southeast corner of station at Maynard, 54 feet southwest of southwest corner of the Merchants Hotel, 44 feet north of center line of State Highway #11; 42 feet east of center line of track. Standard disk in concrete monument. 1101.274

- Z-11 In Fayette County, about 3 miles north, by rail, of Maynard, along the Chicago, Rock Island & Pacific-Railway right-of-way, 483 yards north of milepost #63; 47 feet east of center line of track, and 34 feet south of center line of road crossing. A standard disk, set in a concrete monument. El. Ft. 1065.411
- Top of E rail opposite Chicago, Rock Island & Pacific Railway MP 63. 1067.4
- Top of E rail opposite Chicago, Rock Island & Pacific Railway MP 64. 1081.4
- Top of E rail at the Chicago, Rock Island & Pacific Railway Crossing with Highway #93. 1107.5
- A-12 In Fayette County, at Randalia, on the Chicago, Rock Island & Pacific Railway right-of-way, 549 yards north of milepost #66; 619 feet south of station at Randalia, 45 feet west of center line of track, and 34 feet south of center line of State Highway #93. A standard disk, set in a concrete monument. 1108.226
- Top of E rail opposite Chicago, Rock Island & Pacific Railway MP 66. 1119.9
- B-12 In Fayette County, about 2.5 miles northeast, by rail, of Randalia, on the Chicago, Rock Island & Pacific Railway right-of-way, 413 yards south of mile post #69; 139 feet northeast of northeast corner of Chicago, Milwaukee, St. Paul & Pacific Railroad station at Donnan, 117 feet northeast of crossing of Chicago, Rock Island & Pacific Railway and the Chicago, Milwaukee, St. Paul & Pacific Railroad, 43 feet east of center line of the Chicago, Rock Island & Pacific Railway track, and 37 feet west of center line of County Highway "E". A standard disk, set in a concrete monument. 1151.382
- C-12 In Fayette County, about 2.7 miles southwest, by rail, of West Union, on the Chicago, Rock Island & Pacific Railway right-of-way, 257 yards south of milepost #72; 44 feet west of center line of track, and 39 feet north of center line of road crossing. A standard disk, set in a concrete monument. 1179.971
- D-12 In Fayette County, at West Union, on the Chicago, Rock Island & Pacific Railway right-of-way, 793 yards north of milepost #74; 76 feet northwest of southwest corner of station, 84 feet northeast of intersection of track and State Highway #11 (City route), 77 feet

LEVELING IN IOWA

147

north of center line of track, and 38 feet east of center line of State Highway #11 (City route). A standard disk, set in a concrete monument. El. Ft. 1107.298

WEST UNION 1933 In Fayette County, at West Union, Ia. in the northwest corner of step at east entrance to Fayette County Courthouse, 5 feet north of center line of east entrance, and 18 feet west of center line of driveway. This mark set by city officials. A standard disk, set in a drill hole. 1197.163

Top of W rail opposite Chicago, Rock Island & Pacific Railway station at West Union. 1106.8

E-12 In Fayette County, about 1.4 miles southeast, by rail, of West Union, on the right-of-way of Chicago, Rock Island & Pacific Railway, 194 yards south of milepost #76; 34 feet south of center line of track, and 26 feet east of center line of road crossing. A standard disk, set in a concrete monument. 1087.997

F-12 In Fayette County, about 4.5 miles southwest, by rail, of Elgin, on the Chicago, Rock Island & Pacific Railway right-of-way, 491 yards south of milepost #81, approximately 0.25 miles northwest of Brainerd flag stop, 15 feet south of center line of county road, and 23 feet north of center line of track. A standard disk, set in a concrete monument. 912.229

Top of E rail opposite Chicago, Rock Island & Pacific Railway MP 82. 886.3

G-12 In Fayette County, at Elgin, at intersection of the Chicago, Rock Island & Pacific Railway and street, (Highway #172), 78 feet northwest of northwest corner of the Chicago, Rock Island & Pacific Railway station, at Milepost #85.2; 43 feet south of center line of street, and 70 feet west of center line of main track. A standard disk, set in a concrete monument. 835.139

H-12 In Fayette County, at Clermont, in the northeast corner of the city park, 70 feet west of center line of main track, 87.3 feet west of the northwest corner of Clermont railroad station, and 35 feet south of center line of main street (U. S. Highway #18). A standard disk, set in a concrete monument. 859.565

J-12 In Fayette County, about 2.5 miles north of Clermont, along the track, in cap stone of bridge #909, in east end of first pier north of abutment, 5.5 feet east of center line of track, 75 feet north of center line of road crossing. A standard disk. 921.734

- K-12 In Fayette County, about 3.5 miles southwest of Postville, Allamakee County, 400 feet south of junction, 24 feet north of center line of road crossing, and 31 feet east of center line of track. A standard disk, set in a concrete monument. El. Ft. 1058.971
- L-12 In Allamakee County, about 1 mile west of Postville (track measurement), along the Chicago, Rock Island & Pacific Railway right-of-way, 31.4 feet north of center line of the Chicago, Rock Island & Pacific Railway track, approximately 800 feet west of intersection of Chicago, Rock Island & Pacific Railway and Chicago, Milwaukee, St. Paul & Pacific Railroad, 120 feet south of center line of Chicago, Milwaukee, St. Paul & Pacific Railroad track, and 38 feet south of center line of US Highway #55. A standard disk, set in a concrete monument. 1206.651
- DBQ 1195 In Allamakee County, at Postville, in north wall of the Commercial Hotel at corner of Green and Reynolds Streets, 4.4 feet from base line of building, 17.7 feet east of center line of north entrance, 15.2 feet east of southeast corner of building, and 18 feet south of south curb of Green Street. A U.S.G.S. tablet, set vertically in wall. 1194.102
- M-12 In Allamakee County, at Postville, at the intersection of the Chicago, Milwaukee, St. Paul & Pacific Railroad and Lawyer Street (US Highway #51), 58 feet south of center line of main track, 16.7 feet east of east curb of Lawyer Street, 3.2 feet west of west edge of east sidewalk, and 12.3 feet southwest of northwest corner of Postville Lumber Yard. A standard disk, set in a concrete monument. 1190.562
- N-12 In Clayton County, about 3 miles west of Luana, along the Chicago, Milwaukee, St. Paul & Pacific Railroad, 250 feet west of Ridley siding, 55.5 feet south of the center line of main track, 34 feet north of center line of US Highway #18; 85 feet northwest of northwest corner of Grand Meadow Cemetery, and 31 feet east of center line of road crossing. A standard disk set in a concrete monument. 1191.175
- P-12 In Clayton County, at Luana, 140 feet west of the Luana Railroad station, 35 feet south of center line of US Highway #18; 52 feet north of center line of track, and 16.5 feet east of center line of a road crossing. A standard disk, set in a concrete monument. 1132.202
- MONONA In Clayton County, at Monona, in west wall of

- City Hall, located on Page Street; 1.8 feet from base line of building, 12.6 feet east of east curb of Page Street, 2.1 feet south of south edge of steps to west entrance, and 17.8 feet north of southwest corner of building. A standard disk, set vertically. El. Ft. 1218.154
- Q-12 In Clayton County, about 2.8 miles east of Monona, in south end of west abutment, of the first railroad bridge west of Valdora siding, 71 feet east of road crossing, and 9.5 feet south of center line of track. A standard disk. 1067.865
- R-12 In Clayton County, 1 mile east of Beulah, at intersection of county road and Chicago, Milwaukee, St. Paul & Pacific Railroad, in the southwest wingwall of the concrete abutment of bridge on county road, and approximately 65 feet north of center line of track. A standard disk. 921.078
- Top of S rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 6. 828.0
- Top of S rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 4. 757.0
- S-12 In Clayton County, about 3 miles west of Marquette, along the track, 37 feet south of center line of track, 44 feet east of road crossing, and 6 feet north of fence corner. A standard disk, set in a concrete monument. 710.005
- T-12 In Clayton County, about 1 mile west of Marquette, along the Chicago, Milwaukee, St. Paul & Pacific Railroad, in railroad yards, in center of north end of double 9- by 7-foot culvert, 10.4 feet north of center line of north track, and 110 feet south of center line of county road. A standard disk. 631.629
- U-12 In Clayton County, at Marquette in the southeast corner of a small park, 800 feet east of Chicago, Milwaukee, St. Paul & Pacific Railroad station, 106 feet north of center line of track crossing Mississippi River, and 19.2 feet west of west curb of street (U.S. Highway #18). A standard disk, set in a concrete monument. 627.253
- Top of S rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad station at Marquette. 624.3

For descriptions of additional bench marks in this vicinity, see page 7.

This Line follows the Chicago, Milwaukee, St. Paul & Pacific Railroad from Davenport to Oneida, Iowa. The field work was done during January and February, 1935, by a party in charge of E. E. Stohsner.

For descriptions of additional bench marks in this vicinity, see page 42.

- | | | |
|--------------------------|---|--------------------|
| <u>DAVENPORT-1934</u> | In <u>Scott County</u> , at <u>Davenport</u> , in the new U. S. Post Office on Fourth Street, at the northwest corner of the building, 1.5 feet east of the corner, facing Fourth Street, and 14 inches above granite water table. A standard disk, stamped "Davenport-1934" and set vertically in the limestone wall. | El. Ft.
588.673 |
| <u>P B M City Hall</u> | In <u>Scott County</u> , at <u>Davenport City Hall</u> , in the southwest corner of the lawn, 13 feet east of the curb on Harrison Street, and 15 feet north of the curb on Fourth Street. A bronze disk, set on edge in top of a concrete monument, inside the iron cap. | 590.488 |
| <u>P B M Union Depot</u> | In <u>Scott County</u> , at <u>Davenport Union Depot</u> , in the northeast corner of the yard, 35 feet south of the center line of First Street, 37 feet west of center line of Harrison Street, 8 feet south of the center line of the track, 0.5 foot west of sidewalk, and 0.25 foot below sidewalk level. A brass bolt, set in a concrete monument. | 560.143 |
| <u>D-70</u> | In <u>Scott County</u> , at <u>Davenport</u> , along the Chicago, Milwaukee, St. Paul & Pacific Railroad, at the Davenport Water Works pumping plant, in the southeast corner of the west banister, at the front entrance on East River Street, 40 feet south of the center line of the track, and 3 feet below rail level. A standard disk, stamped "D-70, 1934". | 582.325 |
| <u>P B M #1</u> | In <u>Scott County</u> , about 4 miles north of the <u>Davenport Union Depot</u> , along the Chicago, Milwaukee, St. Paul & Pacific Railroad, 350 feet east of the center line of track, at a public road crossing, 27 feet west of the center line of Eastern Avenue, 25 feet south of East 35th Street, and 4 feet north of the fence corner. A brass bolt, set in a concrete monument. | 633.437 |
| | Top of E rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 2. | 626.9 |

Top of E rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 3.	El. Ft. 644.6
<u>E-70</u> In <u>Scott County</u> , about 2.8 miles south of U.S. Highway #61 crossing at <u>Mt. Joy</u> , along the Chicago, Milwaukee, St. Paul & Pacific Railroad, 6 poles south of Milepost #4; 24 feet north of center line of a public road crossing, 27 feet west of center line of the track, 8 feet north of a crossing sign, 5 feet north, 1 foot east of a right-of-way fence corner, and at rail level. A standard disk, stamped "E-70, 1934" and set in a concrete monument.	669.835
Top of E rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 5.	702.0
<u>F-70</u> In <u>Scott County</u> , at <u>Mt. Joy</u> , along the Chicago, Milwaukee, St. Paul & Pacific Railroad, 19 poles northwest of Milepost #6; 155 feet southeast of the center of a public crossing on U. S. Highway #61, in the post, 65 feet southeast of the southeast corner of an elevator, 25 feet northeast of the center line of the track, at rail level, and in line with the poles. A standard disk, stamped "F-70, 1934".	741.160
Top of E rail at the Chicago, Milwaukee, St. Paul & Pacific Railroad-Highway Crossing at Mt. Joy.	742.1
Top of E rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 7.	726.0
<u>G-70</u> In <u>Scott County</u> , 0.65 mile southeast of <u>Elridge</u> , along the Chicago, Milwaukee, St. Paul & Pacific Railroad, 85 feet south of Milepost #9; 30 feet west of the center line of the track, at a 1.5 foot cast-iron pipe-culvert #H-78, at a 3- by 3-foot R C B Highway culvert, in the north end of the east head wall, and 3.5 feet below rail level. A standard disk, stamped "G-70, 1934".	780.251
<u>H-70</u> In <u>Scott County</u> , at <u>Elridge</u> , along the Chicago, Milwaukee, St. Paul & Pacific Railroad, 435 feet north of the ticket office window, 17 feet south of railroad water tank, 20 feet east of the center line of the track, in the concrete engine base, and 2 feet above rail level. A standard disk, stamped "H-70, 1934".	793.207
Top of W rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad station at Elridge.	795.8
Top of E rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 11.	775.5

- J-70 In Scott County, about 2.3 miles northwest of El-ridge, along the Chicago, Milwaukee, St. Paul & Pacific Railroad, 4 feet north of Milepost #12; 36 feet north of the center line of a public road crossing, 27 feet northeast of the center line of the track, 12 feet northwest of a right-of-way fence corner, 1 foot southwest of a right-of-way fence, and 2 feet below rail level. A standard disk, stamped "J-70, 1934" and set in a concrete monument. El. Ft. 762.558
- Top of N rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 13. 736.9
- K-70 In Scott County, about 1.5 miles southeast of the depot at Donahue, along the Chicago, Milwaukee, St. Paul & Pacific Railroad, 8 poles east of milepost #14, at a public road crossing, 26 feet west of the center line of the crossing, 18 feet south of the center line of the track, 11 feet north and 2 feet west of the right-of-way fence corner, 2 feet east of a cattle guard, and 1 foot above rail level. A standard disk, stamped "K-70, 1934" and set in a concrete monument. 726.619
- USC & G & SS #32 In Scott County, at Donahue, along the Chicago, Milwaukee, St. Paul & Pacific Railroad 312 feet northwest of the depot, 33 feet northwest of the center line of a public road crossing, 17 feet northeast of the center line of the track, 4 feet east of the sidewalk, 1.5 foot west of the derail sign, and at rail level. A bronze disk, stamped "32" and set in a concrete monument. 703.299
- Top of E rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 15. 708.2
- Top of E rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad station at Donahue. 703.3
- L-70 In Scott County, at the Donahue Savings Bank, in the coping at the northeast corner of the building, and about 4 feet above the sidewalk. A standard disk stamped "L-70, 1934". 711.029
- M-70 In Scott County, about 2.8 miles northwest of the depot at Donahue, along the Chicago, Milwaukee, St. Paul & Pacific Railroad, 2 poles northwest of Milepost #18, at a private road crossing, 10 feet northwest of the center line of crossing, 15 feet north of the center line of the track, 4 feet north of a plank bridge, and 1 foot below rail level. A standard disk, stamped "M-70, 1934" and set in a concrete monument. 659.986

Top of E rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 17. El. Ft. 705.6

Top of N rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 19. 650.1

For descriptions of additional bench marks in this vicinity, see page 87.

N-70 In Scott County, about 1 mile southeast of depot at Dixon, along the Chicago, Milwaukee, St. Paul & Pacific Railroad, 5 poles north of milepost #20, at the crossing of the Chicago, Rock Island & Pacific Railroad, 72 feet southeast of the crossing, 39 feet southwest of the center line of track at stop gate, 104 feet northwest of a private road crossing, 2 feet northeast of a right-of-way fence, and 1 foot below rail level. A standard disk, stamped "N-70, 1934" and set in a concrete monument. 656.042

Top of N rail at the Chicago, Milwaukee, St. Paul & Pacific Railroad crossing with Chicago, Rock Island & Pacific Railroad, 1 mile southeast of the Dixon Depot. 657.1

P-70 In Scott County, at Dixon, at the Dixon Savings Bank, in the northwest corner of the building, about 4.5 feet above the level of the sidewalk, and facing the street. A standard disk, stamped "P-70, 1934" and set vertically in the brick wall. 684.241

Top of S rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad station at Dixon. 670.6

Q-70 In Scott County, about 1 mile southeast of the depot at Big Rock, Along the Chicago, Milwaukee, St. Paul & Pacific Railroad, 10 poles southeast of milepost #24; 23 feet north of the center line of a road crossing, 36 feet northeast of the center line of the track, 10 feet northwest, thence 7 feet southwest of the right-of-way fence corner, 8 feet southeast of a telegraph pole, in line with the poles, and 3 feet below rail level. A standard disk, stamped "Q-70, 1934" and set in a concrete monument. 719.900

Top of E rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 23. 688.7

R-70 In Scott County, at Big Rock, along the Chicago, Milwaukee, St. Paul & Pacific Railroad, 2 poles north of milepost #25; 425 feet south of the station, at a concrete overhead bridge #H-124, in the north end of the west side wall, 0.5 feet below track, and 8 feet

- southwest of the center line of track. A standard disk, stamped "R-70, 1934" and set in a concrete side wall. El. Ft. 707.840
- Top of E rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 26. 721.7
- S-70 In Clinton County, about 2.4 miles southeast of Wheatland, along the Chicago, Milwaukee, St. Paul & Pacific Railroad, 6 poles south of Milepost #28; 24 feet north of the center line of a public road crossing, 13 feet west of the center line of the track, 6 feet north of a crossing sign, 7 feet southeast of a telegraph pole, and 1 foot below rail level. A standard disk, stamped "S-70, 1934" and set in a concrete monument. 687.190
- T-70 In Clinton County, at Wheatland, along the Chicago, Milwaukee, St. Paul & Pacific Railroad, 2 poles south of Milepost #30, at the crossing of Chicago & North Western Railroad, in the southwest corner of the concrete switch block, 20 feet west and 18 feet south of the point of intersection of the crossing, 25 feet east of the signal tower, and 1 foot below rail level. A standard disk, stamped "T-70, 1934". 674.057
- Top of E rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 29. 685.0
- U-70 In Clinton County, at Wheatland, along the Chicago, Milwaukee, St. Paul & Pacific Railroad, $6\frac{1}{2}$ poles north of Milepost #30; 81 feet south of the depot, 14 feet west of the center line of the track, and at rail level. A standard disk, stamped "U-70, 1934" and set in a concrete monument. 679.087
- Top of SE rail at the Chicago, Milwaukee, St. Paul & Pacific Railroad Crossing with C & NW at Wheatland. 675.2
- Top of NW rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad station at Wheatland. 679.3
- Top of E rail at the Chicago, Milwaukee, St. Paul & Pacific Railroad Highway Crossing with US #30 at Wheatland. 679.9
- Top of E rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 31. 679.9
- V-70 In Clinton County, about 2.2 miles north of the depot at Wheatland, along the Chicago, Milwaukee, St. Paul & Pacific Railroad, $17\frac{1}{2}$ poles south of milepost

#33, at a private road crossing, 14 feet north of center line of the gate, 43 feet west of the center line of the track, 2 feet east of the right-of-way fence, and 1 foot below rail level. A standard disk, stamped "V-70, 1934" and set in a concrete monument.	El. Ft. 684.310
Top of N rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 33.	698.2
<u>W-70</u> In <u>Clinton County</u> , about 0.8 mile south of the depot at <u>Toronto</u> , along the Chicago, Milwaukee, St. Paul & Pacific Railroad, 3 poles south of milepost #35; 45 feet north of wood-culvert #H-160 $\frac{1}{2}$; 50 feet west of the center line of the track at a 4- by 6 foot skewbox-culvert, in the north end of the east head wall, and 1 foot above rail level. A standard disk, stamped "W-70, 1934".	733.266
<u>X-70</u> In <u>Clinton County</u> , at <u>Toronto</u> , along the Chicago, Milwaukee, St. Paul & Pacific Railroad, 195 feet southeast of the depot, 210 feet south of the center line of track, at a 4- by 5-foot R C B culvert on the highway, in the north end of the east head wall, 7 feet below rail level, and 3 feet below road level. A standard disk, stamped "X-70, 1934".	718.050
Top of S rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad station at Toronto.	726.1
<u>Y-70</u> In <u>Cedar County</u> , about 1.7 miles northwest of <u>Toronto</u> , <u>Clinton County</u> , along the Chicago, Milwaukee, St. Paul & Pacific Railroad, 17 poles east of milepost #38, at a 65-foot steel bridge, in the south end of the east abutment, 10 feet south of the center line of track, and 1 foot below rail level. A standard disk, stamped "Y-70, 1934".	702.564
Top of E rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 37.	703.4
<u>Z-70</u> In <u>Cedar County</u> , at <u>Massillon</u> , along the Chicago, Milwaukee, St. Paul & Pacific Railroad, 2 poles northwest of milepost #39; 105 feet northwest of the depot, in post, 20 feet south of the center line of track, 4 feet south of crossing sign, and 1 foot above rail level. A standard disk, stamped "Z-70, 1934".	727.069
Top of N rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 39.	729.3
Top of E rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 40.	708.2

A-71 In Cedar County, about 1.9 miles northwest of Massillon, along the Chicago, Milwaukee, St. Paul & Pacific Railroad, 110 feet south of Milepost #41, at a private road crossing, 25 feet south of a wooden trestle #H-190; 8 feet south of the center line of gate, 27 feet east of the center line of track, and 3 feet below rail level. A standard disk, stamped "A-71 1934" and set in a concrete monument. El. Ft. 705.333

Top of SE rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 42. 715.9

B-71 In Jones County, about 1.6 miles southeast of the depot at Oxford Junction, along the Chicago, Milwaukee, St. Paul & Pacific Railroad, 5 poles northwest of Milepost #43, at a 5- by 6-foot R C B culvert #H-200, in the southeast end of the southwest head wall, 22 feet southwest of center line of track, and 5 feet below rail level. A standard disk, stamped "B-71, 1934". 719.923

C-71 In Jones County, 0.65 mile south of the depot at Oxford Junction, along the Chicago, Milwaukee, St. Paul & Pacific Railroad, 2 poles north of milepost #44, at a 3-span steel bridge over the Wapsipinicon River, in the east end of the north pier, 6 feet east of the center line of the track, 5 feet west and 8 inches south of the northeast corner of the pier, and 4 feet below rail level. A standard disk, stamped "C-71, 1934". 719.772

D-71 In Jones County, at Oxford Junction, along the Chicago, Milwaukee, St. Paul & Pacific Railroad, 105 feet south of the depot, in the southeast corner of the southeast leg foundation of the railroad water tank, 85 feet south of the center line of the main track, and 16 feet west of the center line of branch tracks. A standard disk, stamped "D-71, 1934". 723.457

E-71 In Jones County, at Oxford Junction, at the Oxford Junction Savings Bank Building, in the north side of the building, 2 feet west of the front entrance, and about 4.5 feet above the sidewalk. A standard disk, stamped "E-71, 1934" and set vertically in the brick wall. 729.723

Top of E rail at the Chicago, Milwaukee, St. Paul & Pacific Railroad X-ing, (main and branch lines) at Oxford Junction. 723.1

El. Ft.

<p><u>F-71</u> In <u>Jones County</u>, about 2.3 miles northwest of <u>Oxford Junction</u>, along the Chicago, Milwaukee, St. Paul & Pacific Railroad, 150 feet southeast of Milepost #47; 29 feet east of the center line of the road, at a public road crossing, 50 feet north of the center line of the track, 5 feet north and 1 foot west of right-of-way fence corner, and 2 feet below rail level. A standard disk, stamped "F-71, 1934", set in a concrete monument.</p>	763.374
<p>Top of NE rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 46.</p>	746.7
<p><u>G-71</u> In <u>Jones County</u>, about 2.4 miles southeast of <u>Wyoming</u>, along the Chicago, Milwaukee, St. Paul & Pacific Railroad, 9 poles southeast of milepost #49, at a wooden trestle #H-230; 2 feet south of the center of the west head wall of a 4- by 4-foot R C B highway culvert, 70 feet east of the center line of the track, and 7 feet below rail level. A standard disk, stamped "G-71, 1934".</p>	818.161
<p>Top of E rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 48.</p>	796.2
<p><u>H-71</u> In <u>Jones County</u>, at <u>Wyoming</u>, along the Chicago, Milwaukee, St. Paul & Pacific Railroad, 1 pole north of milepost #51; 120 feet northwest of station, 20 feet southwest of Main Street crossing, 18 feet west of the center line of track, in the center of corner park, 5 feet north of the sidewalk, and 5 feet east of the curb. A standard disk, stamped "H-71, 1934" and set in a concrete monument.</p>	813.844
<p>Top of E rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 50.</p>	844.4
<p>Top of W rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad station at Wyoming.</p>	812.6
<p>Top of E rail at the Chicago, Milwaukee, St. Paul & Pacific Railroad-Highway Crossing at Wyoming.</p>	813.8
<p>Top of N rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 52.</p>	834.2
<p>Top of N rail at the Chicago, Milwaukee, St. Paul & Pacific Railroad-Highway Crossing. (Jones Co. Road "A")</p>	836.9

J-71 In Jones County, at Wyoming, at the Main Street Bridge over Little Bear Creek, in the east end of the north felloe guard, and 0.5 foot above road level. A standard disk, stamped "J-71, 1934". El. Ft. 817.515

K-71 In Jones County, about 2.3 miles northwest of the depot at Wyoming, along the Chicago, Milwaukee, St. Paul & Pacific Railroad, 11 poles northwest of milepost #53, at a public road crossing, 120 feet northwest of a wooden trestle #256; 80 feet northwest of the center line of the crossing, 30 feet southwest of the center line of the track, 5 feet northwest of the right-of-way fence, and 2 feet below rail level. A standard disk, stamped "K-71, 1934" and set in a concrete monument. 846.462

For descriptions of additional bench marks in this vicinity, see pages 194 and 206.

L-71 In Jones County, about 1.6 miles southeast of the depot at Center Junction, along the Chicago, Milwaukee, St. Paul & Pacific Railroad, 19 poles northwest of milepost #55, at a public road crossing, in post, 25 feet west of the center line of road, 22 feet north of the center line of track, 85 feet southeast of culvert #H-233; 2 feet west of the right-of-way fence, and 2 feet above rail level. A standard disk, stamped "L-71, 1934". 905.041

Top of E rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 55. 884.4

Top of E rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 57. 939.9

Top of E rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad at Center Junction depot. 924.6

M-71 In Jones County, at Center Junction, at the Center Junction Public School, 6 feet east of the center line of the front (south) entrance, about 4.5 feet above the level of the sidewalk, and 2 bricks below light. A standard disk, stamped "M-71, 1934" and set vertically in the brick wall. 909.916

N-71 In Jones County, at Center Junction, along the Chicago, Milwaukee, St. Paul & Pacific Railroad, about 10 poles north of the depot, at a 75-foot concrete bridge #H-300, in the southeast corner of the south abutment, 7 feet east of the center line of track, and at rail level. A standard disk, stamped "N-71, 1934". 908.420

- Top of E rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 59. El. Ft. 910.6
- P-71 In Jones County, about 3.1 miles north of the Center Junction depot, along the Chicago, Milwaukee, St. Paul & Pacific Railroad, 8 poles south of milepost #60; 245 feet south of the center line of a public road crossing, 215 feet north of a wooden trestle #314; 27 feet west of the center line of track, 3 feet below rail level, and 2 feet east of right-of-way fence. A standard disk, stamped "P-71, 1934" and set in a concrete monument. 907.013
- Q-71 In Jones County, at Scotch Grove, along the Chicago, Milwaukee, St. Paul & Pacific Railroad, 4 poles north of depot, 360 feet east of a public road crossing, at a 30-foot steel banister highway bridge, and in the southeast end of the north wing wall of the west abutment. A standard disk, stamped "Q-71, 1934". 874.145
- Top of E rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 61. 883.3
- Top of E rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 62. 867.1
- Top of E rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad station at Scotch Grove. 876.1
- R-71 In Jones County about 1.9 miles northwest of depot at Scotch Grove, along the Chicago, Milwaukee, St. Paul & Pacific Railroad, 57 feet northwest of center line of a public road crossing, at a 40-foot steel banister bridge #H-334; $9\frac{1}{2}$ poles northwest of milepost #63; 18 feet north of the center line of track, 25 feet west of center line of road, and 3 feet below rail level. A standard disk, stamped "R-71, 1934" and set in a concrete monument. 850.034
- Top of E rail opposite Chicago, Milwaukee, St. Paul & Pacific MP 64. 842.6
- S-71 In Jones County, about 2.3 miles southeast of Monticello, along the Chicago, Milwaukee, St. Paul & Pacific Railroad, 11 poles southeast of milepost #66, at a private road crossing, 11 feet south of the center line of gate, 30 feet west of the center line of track, 1 foot southeast of the right-of-way fence corner, and 2 feet below rail level. A standard disk, stamped "S-71, 1934" and set in a concrete monument. 830.720

- Top of E rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 66. El. Ft. 824.0
- T-71 In Jones County, about 0.7 mile southeast of the depot at Monticello, along the Chicago, Milwaukee, St. Paul & Pacific Railroad, $4\frac{1}{2}$ poles north of milepost #67, at a 100-foot steel bridge, in the west end of the north abutment between banister and girder, 6 feet west of the center line of track, 0.5 foot west of the north end of west girder, and 4 feet below rail level. A standard disk, stamped "T-71, 1934". 805.638
- U-71 In Jones County, at Monticello, at the Monticello State Bank, 0.5 foot below the first window west of the front entrance, on the south side of the building, and about 3.5 feet above the sidewalk. A standard disk, stamped "U-71, 1934" and set vertically. 837.154
- Top of E rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad station at Monticello. 836.2
- V-71 In Jones County, about 1.6 miles northwest of the Monticello depot, along the Chicago, Milwaukee, St. Paul & Pacific Railroad, $10\frac{1}{2}$ poles south of milepost #26, in the west end of the south pier, between banister and girder, 8 inches west of girder joint, and 6 feet below rail level. A standard disk, stamped "V-71 1934". 807.784
- Top of N rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 25. 822.1
- Top of E rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 26. 814.6
- USGS-849 In Jones County, about 3 miles northwest of the Monticello depot, along the Chicago, Milwaukee, St. Paul & Pacific Railroad, 3 poles north of milepost #28-0; 435 feet north of the railroad junction, 30 feet east of center line of the main track, 30 feet west of the center line of branch line, and 2.5 feet above the ground. A bronze-capped iron post stamped "849". 839.644
- W-71 In Delaware County, about 3.4 miles southeast of the depot at Hopkinton, along the Chicago, Milwaukee, St. Paul & Pacific Railroad, 10 poles southeast of milepost #31; 23 feet south of the center line of road, 60 feet southeast of wooden trestle #H-374; 51 feet northeast of the center line of track, in a corner of the pasture fence, and 2.5 feet below rail lev-

- el. A standard disk, stamped "W-71, 1934" and set in a concrete monument. El. Ft. 853.164
- Top of E rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 29. 843.9
- X-71 In Delaware County, about 1.1 mile southeast of the Hopkinton depot, along the Chicago, Milwaukee, St. Paul & Pacific Railroad, at milepost #32, in the center of the northwest wing wall of a 25-foot concrete highway bridge, 120 feet east of the center line of track, and 3 feet above road level. A standard disk stamped "X-71, 1934". 863.837
- Top of E rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 31. 896.6
- Y-71 In Delaware County, at Hopkinton, at Lennox College, 1 block northeast of the railroad, and in the south side of the stone base of the Civil War Monument on the Campus. A standard disk, stamped "Y-71, 1934". 898.315
- Z-71 In Delaware County, at Hopkinton, at the Citizens State Bank, in the southeast corner of the building, 15 inches north of the corner, about 4 feet above the sidewalk, and at the top of stairs to the basement. A standard disk, stamped "Z-71, 1934" and set vertically in the stone wall. 865.189
- Top of W rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad station, at Hopkinton. 866.0
- A-72 In Delaware County, about 1.9 miles northwest of the depot at Hopkinton, along the Chicago, Milwaukee, St. Paul & Pacific Railroad, 2 poles south of milepost #35, at a public road crossing, 70 feet west of the center line of the track, in the north end of the east abutment of a 165-foot wooden highway bridge, and 1 foot below road level. A standard disk, stamped "A-72 1934". 846.829
- Top of E rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 34. 851.9
- Top of E rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 35. 848.2
- B-72 In Delaware County, about 3.9 miles northwest of the Hopkinton depot, along the Chicago, Milwaukee, St. Paul & Pacific Railroad, $1\frac{1}{2}$ poles south of milepost #37, in post, 20 feet north of the center line of the

road, at a public road crossing, 35 feet north of culvert #H-303-3/4; 35 feet east of the center line of track, 4 feet west of the right-of-way fence, and at rail level. A standard disk, stamped "B-72, 1934".	El. Ft. 855.300
<u>C-72</u> In <u>Delaware County</u> , about 2.1 miles southeast of <u>Delhi</u> depot, along the Chicago, Milwaukee, St. Paul & Pacific Railroad, 2 poles southeast of milepost #39; 21 feet northwest of center line of gate, at a private road crossing, 44 feet southwest of the center line of the track, 1 foot northeast of right-of-way fence, and 2 feet below rail level. A standard disk, stamped "C-72, 1934" and set in a concrete monument.	910.553
Top of E rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 38.	890.5
Top of E rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 40.	961.7
<u>D-72</u> In <u>Delaware County</u> , at <u>Delhi</u> , at the Delhi Public School, 16 inches south of the northwest corner of the building, about 4.5 feet above the sidewalk, and 8 inches below the coping. A standard disk, stamped "D-72, 1934" and set vertically in the brick wall.	1050.113
<u>USGS-1016</u> In <u>Delaware County</u> , at <u>Delhi</u> , along the Chicago, Milwaukee, St. Paul & Pacific Railroad, 48 feet north of milepost #41, in post, 100 feet east of the center line of track, at depot, and 52 feet northeast of the northeast corner of the coal bin on the east side of the road along fence. A bronze-capped iron post, stamped "1016".	1007.590
Top of E rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 42.	1026.4
Top of E rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad station at Delhi.	1001.9
<u>E-72</u> In <u>Delaware County</u> , about 2.2 miles southeast of the depot at <u>Delaware</u> , along the Chicago, Milwaukee, St. Paul & Pacific Railroad, 2 poles north of milepost #43, at a private road crossing, in post, 12 feet south of the center line of gate, 35 feet west of center line of track, 8 feet east of right-of-way fence, and at rail level. A standard disk, stamped "E-72, 1934".	1021.760
Top of E rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 44.	1043.7

- F-72 In Delaware County, at Delaware, along the Chicago, Milwaukee, St. Paul & Pacific Railroad, 108 feet north of the depot, in post, 20 feet east of center line of track, 3 feet west of telegraph pole, and at rail level. A standard disk stamped "F-72, 1934". El. Ft. 1085.198
- Top of E rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad station at Delaware. 1083.3
- G-72 In Delaware County, about 0.6 mile north of the depot at Delaware, along the Chicago, Milwaukee, St. Paul & Pacific Railroad, 6 poles southwest of milepost #46, at a public road crossing of State Highway #113, 58 feet northeast of center line of crossing, at a 2 - by 2-foot R C B highway culvert, 8 feet northwest of center line of track, in the south end of the east head wall, 18 feet east of the center line of highway, and at rail level. A standard disk, stamped "G-72, 1934". 1088.718
- Top of E rail at the Chicago, Milwaukee, St. Paul and Pacific Railroad Crossing with US Highway #20. 1096.6
- Top of E rail at the Chicago, Milwaukee, St. Paul and Pacific Railroad Crossing with Highway #113. 1087.8
- Top of E rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 47. 1084.5
- H-72 In Delaware County, about 1.8 miles southeast of the depot at Oneida, along the Chicago, Milwaukee, St. Paul & Pacific Railroad, $7\frac{1}{2}$ poles northwest of a milepost #48, at a private road crossing, 10 feet south of the center line of crossing, 43 feet west of the center line of track, 2 feet east of the right-of-way fence, 6 feet southeast of a telegraph pole, and 2 feet below rail level. A standard disk, stamped "H-72, 1934" and set in a concrete monument. 1083.571
- Top of E rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 48. 1084.8
- Top of E rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 49. 1067.6
- J-72 In Delaware County at Oneida, along the Chicago, Milwaukee, St. Paul & Pacific Railroad, 3 poles north of milepost #50; 92 feet southeast of the depot, in the southeast corner of the concrete base of the semaphore signal, 12 feet east of center line of track, and at rail level. A standard disk, stamped "J-72, 1934". 1051.225

Top of W rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad station at Oneida.	El. Ft. 1051.3
---	-------------------

K-72 In Delaware County, at Oneida, along the Chicago, Milwaukee, St. Paul & Pacific Railroad, at the crossing of the Chicago & Great Western Railroad, 78 feet south of the center line of Chicago & Great Western main track, 13 feet north of a wooden trestle bridge #H-448; 10 feet east of the center line of track in the old semaphore signal base, in the center of the top, and 1.5 feet below rail level. A standard disk, stamped "K-72, 1934". 1049.854

For descriptions of additional bench marks in this vicinity, see page 171.

LINE 4946. DUBUQUE TO ONEIDA, IOWA
(Second-order Leveling)

165

This Line follows the Chicago & Great Western Railroad from Dubuque to Oneida, Iowa. The field work was done in January, 1935, by a party in charge of E. E. Stohsner.

For description of additional bench marks in this vicinity, see page 21.

<u>DUBUQUE-1934</u> In Dubuque County, at Dubuque, at the U.S. Post Office on Sixth and Locust Streets, and in the granite window ledge beneath the third window south from the northwest corner of the building. A standard disk, stamped "Dubuque, 1934".	El. Ft. 643.490
<u>L-72</u> In Dubuque County, at Dubuque, along the Chicago & Great Western Railroad, at the depot, on the west side of the sill of the ticket office window, and about 5 feet above the platform. A standard disk, stamped "L-72, 1934" and set vertically.	613.375
Top of W rail opposite Chicago & Great Western Railroad station at Dubuque.	608.0
<u>M-72</u> In Dubuque County, about 2.1 miles northwest of Dubuque, along the Chicago & Great Western Railroad, 6 poles west of milepost #174; 70 feet east of the Fair Grounds Station, at highway overhead bridge, in the east end of the concrete leg foundation, 10 feet north of the track, and 2 feet above rail level. A standard disk, stamped "M-72, 1934".	631.488
Top of N rail opposite Chicago & Great Western Railroad MP 174.	629.1
Top of W rail opposite Chicago & Great Western Railroad MP 175.	630.1
Top of N rail opposite Chicago & Great Western Railroad MP 176.	612.8
<u>N-72</u> In Dubuque County, about 3.8 miles southeast of the depot at Durango, along the Chicago & Great Western Railroad, 13 poles west of milepost #176, at the 45-foot steel bridge #174-13, in the south end of the west abutment, 9 feet south of the center line of the track, and 1 foot below rail level. A standard disk, stamped "N-72, 1934".	614.047
Top of N rail opposite Chicago & Great Western Railroad MP 177.	645.2

- P-72 In Dubuque County, about 2.1 miles southeast of the depot at Durango, along the Chicago & Great Western Railroad, 2 poles west of Milepost #178, at the 3-span steel bridge #178-02, in the south end of the west abutment, 6 feet south of the center line of the track, and 1 foot below rail level. A standard disk, stamped "P-72, 1934". El. Ft. 625.780
- Top of N rail opposite Chicago & Great Western Railroad MP 179. 640.5
- Q-72 In Dubuque County, at Durango, along the Chicago & Great Western Railroad, 6 poles southwest of milepost #180; 340 feet southwest of the depot, at the 3-span steel bridge #180-13, in the northwest end of the northeast abutment, 8 feet northwest of the center line of the track, and 1 foot below rail level. A standard disk, stamped "Q-72, 1934". 643.834
- Top of S rail opposite Chicago & Great Western Railroad station at Durango. 641.4
- R-72 In Dubuque County, about 1.5 miles southwest of Durango, along the Chicago & Great Western Railroad, 24 poles southwest of milepost #181, at the 15-foot steel bridge #181-57, in the center of the north side of the west abutment, 7 feet north of the center line of the track, 4 feet north of the north girder, and 3 feet below rail level. A standard disk, stamped "R-72, 1934". 666.613
- Top of N rail opposite Chicago & Great Western Railroad MP 181. 662.1
- Top of N rail opposite Chicago & Great Western Railroad MP 182. 679.4
- S-72 In Dubuque County, at Budd, along the Chicago & Great Western Railroad, 18 poles southwest of milepost #183; 65 feet east of the center line of the track, at the station, at the 100-foot highway bridge, in the southwest wing wall of the west abutment, and 7 feet above rail level. A standard disk, stamped "S-72, 1934". 706.081
- Top of N rail opposite Chicago & Great Western Railroad station at Budd. 700.4
- Top of N rail opposite Chicago & Great Western Railroad MP 184. 710.3

	El. Ft.
<u>T-72</u> In <u>Dubuque County</u> , about 2.1 miles southwest of the depot at <u>Budd</u> , along the Chicago & Great Western Railroad, 19 poles west of milepost #185, at the 3-span steel bridge over the Middle Maquoketa River and Highway, in the north end of the east abutment, 7 feet north of the center line of the track, and 4 feet below rail level. A standard disk, stamped "T-72, 1934".	740.691
Top of N rail opposite Chicago & Great Western Railroad MP 186.	757.3
<u>U-72</u> In <u>Dubuque County</u> , about 0.8 mile northeast of the depot at <u>Graf</u> , along the Chicago & Great Western Railroad, 4 poles southwest of milepost #187, at the 100-foot steel bridge #187-13, over the south fork of the Maquoketa River, in the northwest end of the northeast abutment, 8 feet northwest of the center line of the track, and 1 foot below rail level. A standard disk, stamped "U-72, 1934".	771.547
<u>V-72</u> In <u>Dubuque County</u> , at <u>Graf</u> , along the Chicago & Great Western Railroad, 29 poles southwest of milepost #187; 130 feet southeast of the depot, at the railroad water tank, and in the north corner of the northwest leg foundation. A standard disk, stamped "V-72, 1934".	766.134
Top of N rail opposite Chicago & Great Western Railroad station at Graf.	766.5
Top of N rail opposite Chicago & Great Western Railroad MP 189.	783.0
<u>W-72</u> In <u>Dubuque County</u> , about 1.2 miles northeast of <u>Kidder</u> , along the Chicago & Great Western Railroad, 15 poles southwest of milepost #190, at a private road crossing, in post, 33 feet east of the center line of the crossing, 12 feet west of the center line of gate, 43 feet south of the center line of the track, 3 feet north of the right-of-way fence, and 5 feet below rail level. A standard disk, stamped "W-72, 1934".	806.763
Top of N rail opposite Chicago & Great Western Railroad MP 190.	796.6
Top of N rail opposite Chicago & Great Western Railroad MP 191.	825.5
Top of S rail opposite Chicago & Great Western Railroad station at Kidder.	848.9
<u>X-72</u> In <u>Dubuque County</u> , at <u>Kidder</u> , along the Chicago &	

- road crossing, 8 feet west of the center line of the crossing, 43 feet north of center line of the track, 9 feet east of a T-fence, north, 3 feet south of the right-of-way fence, and 3 feet below rail level. A standard disk, stamped "B-73, 1934" and set in a concrete monument. El. Ft. 1059.138
- Top of N rail opposite Chicago & Great Western Railroad MP 199. 1065.9
- C-73 In Dubuque County, about 2.3 miles southeast of the depot at Dyersville, along the Chicago & Great Western Railroad, $13\frac{1}{2}$ poles west of milepost #200, at a 6- by 10-foot arch stone culvert, $4\frac{1}{2}$ poles east of a public crossing, in the west end of the south head wall, 12 feet south of the center line of the track, and 4 feet below rail level. A standard disk, stamped "C-73, 1934". 994.106
- Top of N rail opposite Chicago & Great Western Railroad MP 201. 978.1
- DYERSVILLE-1934 In Dubuque County, at Dyersville, at the City Hall (Memorial Building), 6 inches east of the door to upstairs, 2 feet above level of sidewalk, and in the concrete foundation. A standard disk stamped "Dyersville, 1934" and set vertically. 966.625
- Top of N rail opposite Chicago & Great Western Railroad MP 203. 943.5
- USGS - 952 In Dubuque County, at Dyersville, along the Chicago & Great Western Railroad, 16 poles west of milepost #202; 135 feet south of the center line of the track at Oil Company's bulk plant, 100 feet north and 5 feet east of the northeast corner of the Illinois Central Railroad depot, 12 feet east of the north track, and inside of fence next to the building. A bronze-capped iron pipe, stamped "952". 942.669
- D-73 In Dubuque County, at Dyersville, along the Chicago & Great Western Railroad, 120 feet north of the center line of the track, at the depot, and in the south corner of the southwest leg foundation of the railroad water tank. A standard disk, stamped "D -73, 1934". 941.619
- Top of N rail opposite Chicago & Great Western Railroad station at Dyersville. 943.3
- E-73 In Delaware County, about 1.3 miles northwest of

170 DUBUQUE TO ONEIDA, IOWA, SUPPLEMENTARY ADJUSTMENTS

the depot at <u>Dyersville</u> , Dubuque County, along the Chicago & Great Western Railroad, 27 poles northwest of milepost #203, at a public road crossing, 66 feet north of the center line of the track, at a 60-foot highway bridge, in the corner of the east wing wall of the south abutment, and at rail level. A standard disk, stamped "E-73, 1934".	El. Ft. 946.799
Top of N rail opposite Chicago & Great Western Railroad MP 206.	962.0
<u>F-73</u> In <u>Delaware County</u> , about 1.1 miles southeast of the depot at <u>Petersburg</u> , along the Chicago & Great Western Railroad, 11 poles northwest of milepost #206, at a public road crossing, 48 feet north of the center line of the track, at a 4-foot steel pipe culvert, 30 feet south of the point of intersection of the road junction, and 3 feet below rail level. A standard disk, stamped "F-73, 1934".	1000.549
<u>G-73</u> In <u>Delaware County</u> , at <u>Petersburg</u> , along the Chicago & Great Western Railroad, 14 $\frac{1}{2}$ poles west of milepost #207; 72 feet east of the depot, in post, 66 feet south of the center line of the track, 174 feet west of a public road crossing, 1 foot north of right-of-way fence, and 2 feet below rail level. A standard disk, stamped "G-73, 1934".	1033.676
Top of S rail opposite Chicago & Great Western Railroad station at Petersburg.	1034.4
Top of N rail opposite Chicago & Great Western Railroad MP 207.	1035.9
<u>H-73</u> In <u>Delaware County</u> , about 2.1 miles northwest of the <u>Petersburg</u> depot, along the Chicago & Great Western Railroad, 15 poles northwest of milepost #209, at a 5- by 6-foot stone cattle pass, 32 feet west of the center line of a public road crossing, in the northeast corner of the northwest wing wall, 12 feet north of center line of track, and 4 feet below rail level. A standard disk, stamped "H-73, 1934".	965.385
Top of N rail opposite Chicago & Great Western Railroad MP 209.	984.8
Top of N rail opposite Chicago & Great Western Railroad station at Almoral.	975.5
<u>J-73</u> In <u>Delaware County</u> , about 3.9 miles southeast of the crossing of the Chicago, Milwaukee, St. Paul & Pa-	

cific Railroad at Oneida, along the Chicago & Great Western Railroad, 11 poles west of milepost #211; 27 poles west of Almorat Station, at a 4- by 6-foot stone culvert, 55 feet west of the whistle signal, in the center of the first step down on the north end of the east abutment, 15 feet north of the center line of the track, and 3 feet below rail level. A standard disk, stamped "J-73, 1934". El. Ft. 978.062

Top of N rail opposite Chicago & Great Western Railroad MP 211. 977.2

Top of N rail opposite Chicago & Great Western Railroad MP 212. 995.4

K-73 In Delaware County, about 1.8 miles southeast of the crossing of the Chicago, Milwaukee, St. Paul & Pacific Railroad at Oneida, along the Chicago & Great Western Railroad, 15 poles west of milepost #213, at a 8- by 10-foot stone and concrete culvert and cattle pass, in the east end of the north head wall, 12 feet north of the center line of the track, and 1 foot below rail level. A standard disk, stamped "K-73, 1934". 1015.283

Top of S rail opposite Chicago & Great Western Railroad MP 214. 1036.6

For descriptions of additional bench marks in this vicinity, see page 163.

LINE 4949. ONEIDA TO OELWEIN, IOWA
(Second-order Leveling)

This Line follows the Chicago & Great Western Railroad from Oneida to Oelwein, Iowa. The field work was done during December, 1934, and January, 1935, by a party in charge of E. E. Stohsner.

For descriptions of additional bench marks in this vicinity, see pages 163 and 171.

- | | |
|--|-------------------|
| Top of N rail opposite Chicago & Great Western Railroad MP 216. | El. Ft.
1067.6 |
| <u>L-73</u> In <u>Delaware County</u> , about 1.8 miles northwest of the crossing of the Chicago & Great Western Railroad and the Chicago, Milwaukee, St. Paul & Pacific Railroad at <u>Oneida</u> , along the Chicago & Great Western Railroad, 2 poles northwest of milepost #217, at the 30-foot steel bridge, 220 feet southeast of the center line of a public road crossing, in the southwest end of the northwest abutment, 9 feet southwest of the center line of the track, and at rail level. A standard disk, stamped "L-73, 1934". | 1033.551 |
| <u>M-73</u> In <u>Delaware County</u> , about 2.5 miles southeast of the depot at <u>Thorpe</u> , along the Chicago & Great Western Railroad, $2\frac{1}{2}$ poles southeast of milepost #218, at the 65-foot steel bridge #217-93, in the south end of the west abutment, 9 feet south of the center line of the track, and 1 foot below rail level. A standard disk, stamped "M-73, 1934". | 1004.480 |
| Top of N rail opposite Chicago & Great Western Railroad MP 219. | 1000.4 |
| <u>N-73</u> In <u>Delaware County</u> , at <u>Thorpe</u> , along the Chicago & Great Western Railroad, 14 poles northwest of milepost #220; 180 feet southwest of the depot, 110 feet south of the center line of the track, in the north corner of the northeast leg foundation of the railroad water tower. A standard disk, stamped "N-73, 1934". | 1049.401 |
| Top of S rail opposite Chicago & Great Western Railroad station at Thorpe. | 1046.6 |
| Top of N rail opposite Chicago & Great Western Railroad MP 221. | 1056.5 |
| <u>P-73</u> In <u>Delaware County</u> , about 2.1 miles northwest of the depot at <u>Thorpe</u> , along the Chicago & Great Western Railroad, 13 poles northwest of milepost #222, at a | |

- 40-foot steel bridge #222-40, in the south side of the east abutment, 6 feet south of the center line of the track, and 1 foot below rail level. A standard disk stamped "P-73, 1934". El. Ft. 1007.436
- Q-73 In Delaware County, about 1.8 miles southeast of the depot at Dundee, along the Chicago & Great Western Railroad, 10 poles west of milepost #223, at a 50-foot steel bridge #223-30, in the south end of the west abutment, 9 feet south of the center line of the track, and 1 foot below rail level. A standard disk, stamped "Q-73, 1934". 999.250
- Top of N rail opposite Chicago & Great Western Railroad MP 223. 1009.6
- USGS-D B Q- 997 In Delaware County, at Dundee, at the Dundee Post Office, 62 feet north of the northeast corner of the building, 30 feet west of the center line of Center Street, 32 feet north of the center line of Second Street, and in the corner of the yard fence. A bronze-capped iron pipe, stamped "997- ADJ-D B Q". 997.869
- Top of N rail opposite Chicago & Great Western Railroad station at Dundee. 999.0
- Top of N rail opposite Chicago & Great Western Railroad MP 225. 1008.0
- R-73 In Delaware County, at Dundee, along the Chicago & Great Western Railroad, 17 poles west of milepost #225, at the 130-foot steel bridge #225-48; 6 poles west of the depot, in the south end of the east abutment, 6 feet south of the center line of the track, and 2 feet below rail level. A standard disk, stamped "R-73, 1934". 993.896
- S-73 In Delaware County, about 1.9 miles northwest of the depot at Dundee, along the Chicago & Great Western Railroad, 5 poles northwest of milepost #227, at the double box 6- by 8-foot and 4- by 5-foot arch stone-culvert and cattle pass, in the west end of the south head wall, 20 feet south of the center line of the track, and 4 feet below rail level. A standard disk, stamped "S-73, 1934". 1068.558
- Top of N rail opposite Chicago & Great Western Railroad MP 227. 1067.3
- T-73 In Delaware County, about 2 miles southeast of the

	El. Ft.
depot at <u>Lamont</u> , along the Chicago & Great Western Railroad, 19 poles west of milepost #228, at a 20-foot steel bridge #228-57, in the south end of east abutment, 6 feet south of the center line of the track, and 1.5 feet below rail level. A standard disk, stamped "T-73, 1934".	1054.998
Top of N rail opposite Chicago & Great Western Railroad MP 228.	1082.8
Top of N rail opposite Chicago & Great Western Railroad MP 229.	1053.4
<u>U-73</u> In <u>Buchanan County</u> , at <u>Lamont</u> , along the Chicago-Great Western Railroad, 180 feet northwest of the depot, at hotel, in the southwest corner of the building, about 4 feet above the sidewalk between the third and fourth layers of brick. A standard disk, stamped "U-73, 1934", and set vertically in the brick wall.	1047.137
Top of N rail opposite Chicago & Great Western Railroad station at Lamont.	1046.6
<u>V-73</u> In <u>Buchanan County</u> , at <u>Lamont</u> , at the City Park, in the Civil War Monument, and in the center of the east side of the granite base. A standard disk - stamped "V-73, 1934".	1041.920
Top of N rail opposite Chicago & Great Western Railroad MP 231.	1056.5
<u>W-73</u> In <u>Buchanan County</u> , about 2.8 miles northwest of the depot at <u>Lamont</u> , along the Chicago & Great Western Railroad, 31 poles northwest of milepost #232; 42 feet west of a public road crossing, in a twin 4- by 6-foot concrete deck-culvert, in the east end of the north head wall, 12 feet north of the center line of the track, and 3 feet below rail level. A standard disk, stamped "W-73, 1934".	1070.520
<u>X-73</u> In <u>Buchanan County</u> , at <u>Aurora</u> , at the Public School Building, 1 block south of the depot, at the southeast corner of building, 1 foot north of the corner, and about 3 feet above the ground. A standard disk, stamped "X-73, 1934", and set vertically in the brick wall.	1137.521
Top of S rail opposite Chicago & Great Western Railroad station at Aurora.	1135.4
Top of N rail opposite Chicago & Great Western Railroad MP 235.	1130.1

- Y-73 In Buchanan County, about 1.6 miles northwest of the depot at Aurora, along the Chicago & Great Western Railroad, 22 poles northwest of milepost #236, at a 75-foot steel bridge, in the south end of the west abutment, 10 feet south of the center line of the south track, and 1 foot below rail level. A standard disk, stamped "Y-73, 1934". El. Ft. 1099.883
- Top of N rail opposite Chicago & Great Western Railroad MP 236. 1112.9
- Z-73 In Buchanan County, about 1.1 miles southeast of the depot at Stanley, Fayette County, along the Chicago & Great Western Railroad, 22 poles northwest of milepost #238, at a 4- by 5-foot arch concrete-culvert, in the west end of the south head wall, and 5 feet below rail level. A standard disk, stamped "Z-73, 1934". 1120.460
- Top of N rail opposite Chicago & Great Western Railroad MP 238. 1142.0
- A-74 In Fayette County, at Stanley, along the Chicago & Great Western Railroad, at the depot, in the north west corner of the semaphore signal foundation, 27 feet south of the center line of the south track. A standard disk, stamped "A-74, 1934". 1106.733
- B-74 In Fayette County, at Stanley, at the Stanley Cafe building, 16 inches west of the southeast corner of the building, 16 inches east of the door, and about 4 feet above the level of the sidewalk. A standard disk, stamped "B-74, 1934" and set vertically in brick wall. 1123.138
- Top of S rail opposite Chicago & Great Western Railroad station at Stanley. 1107.7
- Top of N rail opposite Chicago & Great Western Railroad MP 240. 1104.1
- C-74 In Fayette County, about 2.7 miles northwest of the depot at Stanley along the Chicago & Great Western Railroad, at milepost #242; 2 feet south of the milepost, 27 feet north of the center line of the south track, 32 feet south of the right-of-way fence, 2 $\frac{1}{2}$ poles east of the public road crossing, at rail level. A standard disk, stamped "C-74, 1934" and set in a concrete monument. 1126.956

176 ONEIDA TO OELWEIN, IOWA, SUPPLEMENTARY ADJUSTMENTS

D-74 In Fayette County, about 2.2 miles southeast of Highway #11 crossing at Oelwein, along the Chicago-Great Western Railroad, 9 poles northwest of milepost #243, at steel overhead bridge #243-28, over the county road, in the north end of the west abutment, 8 feet north of the center line of the track, and 1 foot below rail level. A standard disk, Stamped "D-74, 1934". El. Ft. 1092.029

Top of N rail opposite Chicago & Great Western Railroad MP 243. 1100.6

Top of N rail opposite Chicago & Great Western Railroad MP 244. 1079.8

For descriptions of additional bench marks in this vicinity, see pages 145 and 177.

LINE 4952, OELWEIN TO CONESVILLE, IOWA
(Second-order Leveling)

177

This Line follows the Chicago, Rock Island & Pacific Railway from Oelwein to Conesville, Iowa. The field work was done in September and October, 1934, by a party in charge of E. E. Stohsner.

For descriptions of additional bench marks in this vicinity, see pages 145 and 176.

	El. Ft.
Top of W rail opposite Chicago, Rock Island & Pacific Railway station at Oelwein.	1053.4
<u>S-74</u> In <u>Fayette County</u> , at <u>Oelwein</u> , along the Chicago, Rock Island & Pacific Railway, 95 feet south of milepost #53; 120 feet north of the Chicago & Great Western Railroad crossing, at the 4- by 4-foot stone box-culvert, in the south end of the west head wall, 11 feet west of the center line of the track, and at rail level. A standard disk, stamped "S-74, 1934".	1047.961
Top of E rail at the Chicago, Rock Island & Pacific Railway Crossing with C. & G.W. RR at Oelwein.	1049.4
Top of E rail opposite Chicago, Rock Island & Pacific Railway MP 52.	1023.0
<u>T-74</u> In <u>Buchanan County</u> , 2.6 miles southeast of the <u>Oelwein City Hall</u> at <u>Oelwein</u> , <u>Fayette County</u> , along the Chicago, Rock Island & Pacific Railway, $3\frac{1}{2}$ poles south of milepost #51; 300 feet south of the center line of a public crossing, in the north end of the west head wall of a 4- by 6-foot stone box-culvert; 18 feet west of the center line of the track, and 4 feet below rail level. A standard disk, stamped "T-74, 1934".	1003.430
<u>U-74</u> In <u>Buchanan County</u> , 0.2 mile northwest of the <u>Hazelton Public School</u> , along the Chicago, Rock Island & Pacific Railroad, 18 poles north of milepost #49, in the stone abutment of steel bridge #496; 7 feet west of the center line of the track, in the west end of the south abutment, and 2.5 feet below rail level. A standard disk, stamped "U-74, 1934".	993.663
Top of E rail opposite Chicago, Rock Island & Pacific Railway MP 50.	1003.4
<u>USGS-995 D B Q</u> In <u>Buchanan County</u> , at <u>Hazelton</u> , along the Chicago, Rock Island & Pacific Railroad, 11 poles north of milepost #49; 144 feet west of the center	

- line of the track, at a public road crossing, in the northeast corner of the schoolyard, 48 feet west of the center line of highway #11; 48 feet south of the center line of a side street, and 2 feet south of a 30-inch elm tree. A brass cap on an iron pipe, stamped "995-D B Q". El. Ft. 996.688
- Top of W rail opposite Chicago, Rock Island & Pacific Railway station at Hazleton. 995.9
- V-74 In Buchanan County, about 1.5 miles southeast of the Hazelton Public School, along the Chicago, Rock Island & Pacific Railway, at milepost #48, at a wooden trestle #480, in the center of the southeast wing wall of a concrete highway bridge, 65 feet west of the center line of the track, and 5 feet below rail level. A standard disk, stamped "V-74, 1934". 973.974
- W-74 In Buchanan County, at Bryantburg, along the Chicago, Rock Island & Pacific Railroad, 11 poles north of milepost #46; 22 feet north, thence 50 feet east of the depot, 2 feet south of the center line of the crossing, 35 feet east of the track, and at rail level. A standard disk, stamped "W-74, 1934" and set in concrete monument. 979.122
- Top of E rail opposite Chicago, Rock Island & Pacific Railroad-Highway Crossing, at MP 47. 977.0
- Top of W rail opposite Chicago, Rock Island & Pacific Railroad station at Bryantburg. 978.3
- Top of E rail opposite Chicago, Rock Island & Pacific Railroad MP 46. 988.6
- X-74 In Buchanan County, about 2.3 miles southeast of the depot at Bryantburg, along the Chicago, Rock Island & Pacific Railway, 3 poles north of milepost #44, at a public road crossing, 20 feet south of the center line of the crossing, 18 feet east of the center line of the track, 8 feet north and 27 feet west of the right-of-way fence corner, and 1 foot below rail level. A standard disk, stamped "X-74, 1934" and set in concrete monument. 1004.906
- Top of E rail opposite Chicago, Rock Island & Pacific Railroad MP 44. 999.1
- Y-74 In Buchanan County, about 3.7 miles northwest of the depot at Independence, along the Chicago, Rock Island & Pacific Railway, 17 poles north of milepost

- #42, at a public road crossing, 400 feet west of the center line of the track, in an 18-foot concrete highway bridge in the southeast corner of the bridge floor, 0.5 foot west of the east edge, 4 inches north of the east end of the guard rail, and 10 feet south of the center line of the road. A standard disk, stamped "Y-74, 1934". El. Ft. 945.868
- Top of E rail opposite Chicago, Rock Island & Pacific Railway MP 42. 937.0
- Z-74 In Buchanan County, about 2.2 miles northwest of the depot at Independence, along the Chicago, Rock Island & Pacific railway, $1\frac{1}{2}$ poles northwest of milepost #41, in the southeast end of a 4- by 6-foot stone culvert, 525 feet northwest of a road crossing, 2 feet below rail level, and 9 feet northeast of the center line of the track. A standard disk, stamped "Z-74, 1934". 928.578
- A-75 In Buchanan County, at Independence, along the Chicago, Rock Island & Pacific Railway, 70 feet west, thence 20 feet south of the depot, 48 feet west of the center line of the track, at a 3- by 3-foot R C B highway culvert, and in the south end of the east head wall. A standard disk, stamped "A-75, 1934". 914.657
- Top of E rail opposite Chicago, Rock Island & Pacific Railway MP 40. 905.4
- Top of E rail at the Chicago, Rock Island & Pacific Railway Crossing with Illinois Central RR at Independence. 914.1
- Top of E rail opposite Chicago, Rock Island & Pacific Railway station at Independence.- 914.3
- B-75 In Buchanan County, at Independence, at the First Street bridge over the Wapsipinicon River, 15 feet east of the northwest end of the bridge, in the felloe guard, and about 3 inches above the sidewalk. A standard disk, stamped "B-75, 1934". 908.817
- C-75 In Buchanan County, about 2.9 miles southeast of the Independence depot, along the Chicago, Rock Island & Pacific Railway, 5 poles southeast of milepost #37, at a 2-foot pipe culvert, 48 feet southeast of the center line of a public road crossing, in the southeast end of the southwest head wall, and 2 feet below rail level. A standard disk, stamped "C-75, 1934". 942.429
- Top of E rail opposite Chicago, Rock Island & Pacific Railway MP 37. 947.9

Top of E rail opposite Chicago, Rock Island & Pacific Railway MP 36.	El. Ft. 930.9
<u>D-75</u> In <u>Buchanan County</u> , near <u>Independence</u> , about 4.7 miles southeast of the depot, along the Chicago, Rock Island & Pacific Railway, at milepost #35; 75 feet southeast of the center line of a public road crossing on Highway #11, at a 2-foot iron-culvert, in the northwest end of the northeast head wall, 16 feet northeast of the center line of the track, and 3 feet below rail level. A standard disk, stamped "D-75, 1934".	919.919
Top of NE rail opposite Chicago, Rock Island & Pacific Railway-Highway Crossing, at MP 35.	922.2
Top of E rail opposite Chicago, Rock Island & Pacific Railway MP 34.	917.9
<u>E-75</u> In <u>Buchanan County</u> , about 1.2 miles northwest of the <u>Rowley Public School</u> , along the Chicago, Rock Island & Pacific Railway, $19\frac{1}{2}$ poles northwest of milepost #32, in post, 150 feet southeast of the public road crossing, thence 45 feet southwest of the center line of the track, 5 feet northeast of right-of-way fence, 40 feet northwest of the center line of the field gate, and 4 feet below rail level. A standard disk, stamped "E-75, 1934".	929.073
<u>F-75</u> In <u>Buchanan County</u> , at the <u>Rowley Public School</u> , in the concrete flagpole base in front of the building, in the center of the north side. A standard disk, stamped "F-75, 1934".	975.612
Top of E rail opposite Chicago, Rock Island & Pacific Railway MP 32.	953.4
Top of E rail opposite Chicago, Rock Island & Pacific Railway station at Rowley.	982.8
Top of E rail opposite Chicago, Rock Island & Pacific Railway MP 31.	980.7
Top of E rail opposite Chicago, Rock Island & Pacific Railway MP 30.	968.8
<u>G-75</u> In <u>Buchanan County</u> , about 2.4 miles southeast of the <u>Rowley Public School</u> , along the Chicago, Rock Island & Pacific Railway, 2 poles northwest of milepost #29, at a public road crossing, 45 feet northwest of the center line of the road, 43 feet north-	

east of the center line of the track, 6 feet northwest and 2 feet southwest of the right-of-way fence corner, and 2 feet below rail level. A standard disk, stamped "G-75, 1934", and set in a concrete monument. El. Ft. 941.474

H-75 In Buchanan County, about 2.6 miles northwest of the depot at Walker, Linn County, along the Chicago, Rock Island & Pacific Railway, 21 poles northwest of milepost #27, at a 6- by 8-foot R C B culvert and cattle pass, in the northwest end of the northeast head wall, 10 feet northeast of the center line of the track, and 2 feet below rail level. A standard disk, stamped "H-75, 1934". 916.986

Top of E rail opposite Chicago, Rock Island & Pacific Railway MP 27. 935.6

J-75 In Linn County, about 1.5 miles northwest of the depot at Walker, along the Chicago, Rock Island & Pacific Railway, 6 poles northwest of milepost #26, at a public road crossing, in post, 10 feet southeast of the center line of the crossing, 43 feet northeast of the center line of the track, 20 feet southeast, thence 5 feet southwest of the right-of-way fence corner, and at rail level. A standard disk, stamped "J-75, 1934". 920.940

K-75 In Linn County, at Walker, along the Chicago, Rock Island & Pacific Railway, 50 feet northeast of the northeast corner of the depot, 65 feet east of the center line of the track, 45 feet south of the center line of the street, between 2 large cottonwood trees in the park. A standard disk, stamped "K-75, 1934" and set in a concrete monument. 885.070

Top of E rail opposite Chicago, Rock Island & Pacific Railway MP 25. 882.3

Top of E rail opposite Chicago, Rock Island & Pacific Railway station at Walker. 884.5

Top of E rail opposite Chicago, Rock Island & Pacific Railway MP 24. 862.6

L-75 In Linn County, about 2.2 miles southeast of the depot at Walker, along the Chicago, Rock Island & Pacific Railway, 15 poles north of milepost #22, at a 120-foot steel bridge #225, in the west end of the north abutment, 11 feet west of the center line of the track, and 2 feet below rail level. A standard disk, stamped "L-75, 1934". 838.693

- Top of E rail opposite Chicago, Rock Island & Pacific Railway MP 22. El. Ft. 854.0
- M-75 In Linn County, about 2.5 miles northwest of the Center Point Depot, along the Chicago, Rock Island & Pacific Railway, $15\frac{1}{2}$ poles northeast of milepost #20, at a 4- by 3-foot stone box-culvert, in a 5- by 6-foot R C B highway culvert, 75 feet northwest of the center line of the track, in the center of the southeast head wall, and 1 foot above rail level. A standard disk, stamped "M-75, 1934". 806.668
- N-75 In Linn County, about 1.4 miles northwest of the depot at Center Point, along the Chicago, Rock Island & Pacific Railway, 11 poles northeast of milepost #19, at a 100-foot steel bridge #194, in the west end of the south abutment, 9 feet west of the center line of the track, and 2 feet below rail level. A standard disk, stamped "N-75, 1934". 793.758
- P-75 In Linn County, at Center Point, along the Chicago, Rock Island & Pacific Railway, 75 feet north and 120 feet west of the northwest corner of the depot, in the semaphore signal base in front of the Cedar Valley (Electric) Railroad depot, and in the northeast corner of the concrete foundation. A standard disk, stamped "P-75, 1934". 807.475
- Top of E rail opposite Chicago, Rock Island & Pacific Railway station at Center Point. 812.5
- Q-75 In Linn County, about 0.4 miles southeast of the depot at Center Point, along the Chicago, Rock Island & Pacific Railway, 17 poles northwest of milepost #17, at a 30-foot steel bridge #175, on the beam rest of the south abutment, 2 feet east of the east beam and 14 inches north of the back wall, 8 feet east of the center line of the track, and 3 feet below rail level. A standard disk, stamped "Q-75, 1934". 814.139
- Top of E rail at the Chicago, Rock Island & Pacific Railway Crossing with Waterloo, Cedar Falls & Northern Railroad. 815.9
- Top of E rail opposite Chicago, Rock Island & Pacific Railway-Highway Crossing, at Center Point. 824.4
- Top of E rail opposite Chicago, Rock Island & Pacific Railway MP 17. 829.7
- R-75 In Linn County, about 2.8 miles southeast of the depot at Center Point, along the Chicago, Rock Island

- & Pacific Railway, 5 poles north of milepost #15, at a 35-foot steel bridge #153, on the beam rest of the south abutment, 16 inches west of the south end of the west beam, 1 foot north of the back wall, 8 feet west of the center line of the track, and 3 feet below rail level. A standard disk, stamped "R-75, 1934". El. Ft. 812.154
- RR-75 In Linn County, about 3.3 miles northwest of the depot at Toddville, along the Chicago, Rock Island & Pacific Railway, 4 poles northwest of milepost #13, at a public road crossing, 200 feet south of the center line of the crossing, at a 3- by 4-foot RCB highway culvert, in the west head wall, and 12 feet below rail level. A standard disk, stamped "RR-75, 1934". 803.079
- Top of E rail opposite Chicago, Rock Island & Pacific Railway MP 14. 796.6
- S-75 In Linn County, about 3 miles northwest of the depot at Toddville, along the Chicago, Rock Island & Pacific Railway, 2 poles southeast of milepost #13, in the southeast end of the southwest head wall of a 4- by 6-foot stone culvert and cattle pass, 18 feet southwest of the center line of the track, and 4.5 feet below rail level. A standard disk, stamped "S-75 1934." 822.479
- Top of E rail opposite Chicago, Rock Island & Pacific Railway MP 13. 823.0
- T-75 In Linn County, about 0.8 mile northwest of the Toddville depot, along the Chicago, Rock Island & Pacific Railway, 24 poles northwest of milepost #10, in the west end of the south abutment, and 10 feet west of the center line of the track. A standard disk, stamped "T-75, 1934". 777.062
- Top of E rail opposite Chicago, Rock Island & Pacific Railway MP 11. 786.5
- V-75 In Linn County, about 1.6 miles southeast of the depot at Toddville, along the Chicago, Rock Island & Pacific Railway, $13\frac{1}{2}$ poles northwest of milepost #8, in the southeast end of the southwest head wall of a twin 8- by 10-foot stone culvert, 20 feet southwest of the center line of the track, and 6 feet below rail level. A standard disk, stamped "V-75, 1934". 766.855
- Linn Co. Eng. Dept. 1903, #2067 In Linn County, at Toddville, along the Chicago, Rock Island & Pacific Railway, 1 pole south of milepost #10; 120 feet west

- of the center line of the track, at a 5- by 5-foot highway culvert, in the center of the west head wall, and 7 feet below rail level. A bronze disk, stamped "Linn Co. Eng. Dept. 1903". El. Ft. 767.676
- Top of W rail opposite Chicago, Rock Island & Pacific Railway station at Toddville. 772.2
- U-75 In Linn County, at Toddville, along the Chicago, Rock Island & Pacific Railway, 2 poles south of milepost #10; 400 feet south of the depot, in the west end of the north abutment of a 145-foot wooden trestle bridge #99; 10 feet west of the center line of the track, 3.5 feet south of the back wall, and 3 feet below rail level. A standard disk, stamped "U-75, 1934". 768.935
- Top of E rail opposite Chicago, Rock Island & Pacific Railway MP 9. 762.9
- Top of E rail opposite Chicago, Rock Island & Pacific Railway MP 8. 787.6
- W-75 In Linn County, about 3 miles southeast of the depot at Toddville, along the Chicago, Rock Island & Pacific Railway, 1 pole northwest of milepost #7, in the west end of the south abutment of a 45-foot steel bridge #70; 14 feet west of the center line of the track, and 3 feet below rail level. A standard disk, stamped "W-75, 1934". 788.781
- Linn Co. Eng. Dept. #1402 In Linn County, about 1.3 miles north of Linn Junction, along the Chicago, Rock Island & Pacific Railway, 18 poles northwest of milepost #5, at a public road crossing, 300 feet east of the center line of the track, at a twin 5- by 12- foot highway bridge, and in the center of the south guard rail. A bronze disk, stamped "BM-1402". 787.987
- Top of E rail opposite Chicago, Rock Island & Pacific Railway MP 6. 799.8
- X-75 In Linn County, about 0.9 mile north of Linn Junction, along the Chicago, Rock Island & Pacific Railway, 6 poles north of milepost #5; 35 feet south of the Chicago, Milwaukee, St. Paul & Pacific Railway overhead, in the center of the east head wall of a 3-ft. iron pipe culvert, 13 feet east of the center line of the track, and at rail level. A standard disk, stamped "X-75, 1934". 776.665

Top of E rail opposite Chicago, Rock Island & Pacific Railway MP 5. El. Ft.

778.5

For descriptions of additional bench marks in this vicinity, see page 88.

Y-75 In Linn County, at Linn Junction, along the Chicago, Rock Island & Pacific Railway, 33 poles north of milepost #101; 255 feet north of the junction with the main line, in post, 14 feet east of the center line of the main track, 15 feet west of the center line of the branch line, 20 feet southwest of the semaphore signal, and at rail level. A standard disk, stamped "Y-75, 1934".

753.017

Top of S rail opposite Chicago, Rock Island & Pacific Railway station at Linn.

750.6

Z-75 In Linn County, 0.2 mile south of Linn Junction, along the Chicago, Rock Island & Pacific Railway, 25 poles north of milepost #101, at the west end of the north head wall of a steel bridge #1016; 9 feet west of the center line of the track, and 0.5 feet below rail level. A standard disk, stamped "Z-75, 1934".

745.491

Top of S rail opposite Chicago, Rock Island & Pacific Railway MP 101.

739.5

A-76 In Linn County, about 2.1 miles north of the depot at Cedar Rapids, along the Chicago, Rock Island & Pacific Railway, 16 poles north of milepost #99, in the center of the west end of the south wing wall of the west head wall of a 4- by 4-foot stone box culvert, 18 feet west of the center line of the track, and 5 feet below rail level. A standard disk, stamped "A-76, 1934".

728.644

B-76 In Linn County, at Cedar Rapids, along the Chicago, Rock Island & Pacific Railway, at the depot, in the center of a limestone building block between the ticket office windows, and 4.5 feet above the level of the platform. A standard disk, stamped "B-76, 1934".

735.222

C-76 In Linn County, at Cedar Rapids, at the Post Office, 17 feet west of the center line of the south entrance, 4 feet south of the building, and in the retaining wall for basement windows. A standard disk, stamped "C-76, 1934" and set in a limestone building block.

726.665

CEDAR RAPIDS-1934 In Linn County, at Cedar Rapids City Hall, at front (Second Avenue) entrance arch, in the center of the alcove, and at the base of the tablet panel. A standard disk, stamped "Cedar Rapids-1934" and set in the limestone block porch floor. El. Ft. 728.932

D-76 In Linn County, about 2.1 miles south of the depot at Cedar Rapids, along the Chicago, Rock Island & Pacific Railway, 7 poles north of milepost #96; 12 feet north of the southwest corner of the south abutment of a steel railroad bridge #962 over the Cedar River, 8 feet west of the center line of the track, and at rail level. A standard disk, stamped "D-76, 1934". 729.178

For descriptions of additional bench marks in this vicinity, see pages 74 and 114.

Top of E rail opposite Chicago, Rock Island & Pacific Railway MP 96. 735.5

E-76 In Linn County, about 3.7 miles south of the depot at Cedar Rapids, along the Chicago, Rock Island & Pacific Railway, 22 poles north of milepost #94, at a stone arch highway underpass, 310 feet south of the Chicago, & North Western Railway underpass #946, 10 feet north of the south end of the east head wall, and at rail level. A standard disk, stamped "E-76, 1934". 740.123

Top of E rail opposite Chicago, Rock Island & Pacific Railway MP 94. 743.2

F-76 In Linn County, about 5.3 miles south of the depot at Cedar Rapids, along the Chicago, Rock Island & Pacific Railway, 1 pole southeast of milepost #93, at a 6-foot stone box culvert and cattle pass, in the north east corner of the southeast wing wall, 16 feet north-east of the center line of the track, and 4.5 feet below rail level. A standard disk, stamped "F-76, 1934". 797.603

Top of W rail opposite Chicago, Rock Island & Pacific Railway station at Rutledge. 811.7

Linn Co. Eng. Dept. #851 In Linn County, about 2.7 miles north of the depot at Ely, along the Chicago, Rock Island & Pacific Railway, 31 poles north of milepost #91, at a public road crossing, 108 feet west of the center line of the track, at a 4- by 4-foot highway culvert, in the center of the south head wall, and 5 feet below rail level. A bronze disk, stamped "851". 791.114

Top of E rail opposite Chicago, Rock Island & Pacific Railway MP 92. 797.2

- Top of E rail opposite Chicago, Rock Island & Pacific Railway MP 91. El. Ft. 807.5
- G-76 In Linn County, about 1.2 miles north of the depot at Ely, along the Chicago, Rock Island & Pacific Railway, 9 poles northwest of milepost #90, at a 10-foot arch railroad culvert, 545 feet southeast of a public road crossing, in the northwest end of the southwest head wall, 25 feet southwest of the center line of the track, and 7 feet below rail level. A standard disk, stamped "G-76, 1934". 750.031
- Top of E rail opposite Chicago, Rock Island & Pacific Railway-Highway Crossing, 1 mile north of Ely. 766.3
- Top of E rail opposite Chicago, Rock Island & Pacific Railway MP 90. 753.6
- H-76 In Linn County, at Ely, along the Chicago, Rock Island & Pacific Railway, at the depot, in the east corner of the concrete semaphore signal foundation, 18 feet southwest of the center line of the track, and at rail level. A standard disk, stamped "H-76, 1934". 736.734
- Top of W rail opposite Chicago, Rock Island & Pacific Railway station at Ely. 736.2
- J-76 In Johnson County, about 2.7 miles southeast of the depot at Ely, Linn County, along the Chicago, Rock Island & Pacific Railway, 30 poles northwest of milepost #86, on the southwest end of the back wall of the southeast abutment of a 60-foot steel bridge #867; 12 feet southwest of the center line of the track, and 3 feet below rail level. A standard disk, stamped "J-76 1934". 706.212
- Top of E rail opposite Chicago, Rock Island & Pacific Railway MP 87. 723.7
- Top of E rail opposite Chicago, Rock Island & Pacific Railway MP 86. 737.8
- K-76 In Johnson County, about 4.8 miles southeast of the depot at Ely, Linn County, along the Chicago, Rock Island & Pacific Railway, 26 poles northwest of milepost #84, at a public road crossing, in the center of the north head wall of a 2- by 2-foot R C B culvert, 100 feet west of the center of the public crossing, 55 feet southwest of the center line of the track, and 2 feet below rail level. A standard disk, stamped "K-76 1934". 757.092

- L-76 In Johnson County, about 1.5 miles northwest of the depot at Solon, along the Chicago, Rock Island & Pacific Railway, 27 poles northwest of milepost #83, in the northeast end of the back wall of the northwest abutment of a steel bridge #836; 10 feet northeast of the center line of the track, and 2 feet below rail level. A standard disk, stamped "L-76, 1934". El. Ft. 721.055
- Top of E rail opposite Chicago, Rock Island & Pacific Railway MP 84. 739.0
- M-76 In Johnson County, at Solon, along the Chicago - Rock Island & Pacific Railway, 10 poles northwest of milepost #82, and in the southwest corner of the concrete foundation of the semaphore signal in front of the depot. A standard disk stamped "M-76, 1934". 791.898
- Top of E rail opposite Chicago, Rock Island & Pacific Railway-Highway Crossing at Solon. 785.9
- Top of E rail opposite Chicago, Rock Island & Pacific Railway station at Solon. 791.2
- Top of E rail opposite Chicago, Rock Island & Pacific Railway MP 83. 752.4
- N-76 In Johnson County, about 2.1 miles southeast of the depot at Solon, along the Chicago, Rock Island & Pacific Railway, 5 poles northwest of milepost #80; 500 feet northwest of Delvida Station sign, in the center of the southwest head wall of an 18-inch VSP culvert, 12 feet southwest of the center line of the track, and 3 feet below rail level. A standard disk, stamped "N-76, 1934". 834.172
- Top of S rail opposite Chicago, Rock Island & Pacific Railway station at Delvida. 841.1
- Top of N rail opposite Chicago, Rock Island & Pacific Railway MP 81. 803.0
- Top of N rail opposite Chicago, Rock Island & Pacific Railway MP 79. 839.0
- P-76 In Johnson County, at Morse, along the Chicago, Rock Island & Pacific Railway, 21 poles northwest of milepost #77, at a public road crossing, at the depot, in the northeast end of the northwest hubguard of the 30-foot concrete highway bridge, 200 feet southwest of the center line of the track, and at rail level. A

standard disk, stamped "P-76, 1934".	765.176
Top of N rail opposite Chicago, Rock Island & Pacific Railway station at Morse.	762.9
<u>Q-76</u> In <u>Johnson County</u> , at <u>Elmira Junction</u> , along the Chicago, Rock Island & Pacific Railway, in the east corner of the concrete semaphore signal base at the depot, 9 feet southwest of the center line of the track, and at rail level. A standard disk, stamped "Q-76, 1934".	756.314
Top of E rail opposite Chicago, Rock Island & Pacific Railway MP 76.	746.5
<u>R-76</u> In <u>Johnson County</u> , at <u>Elmira Junction</u> , along the Chicago, Rock Island & Pacific Railway, 12 poles northwest of milepost #75; in the southwest corner of the west leg foundation of the railroad water tower, and 38 feet northeast of the center line of the track. A standard disk, stamped "R-76, 1934".	754.359
Top of S rail opposite Chicago, Rock Island & Pacific Railway station at Elmira.	756.2
<u>S-76</u> In <u>Johnson County</u> , at <u>Oasis</u> , along the Chicago, Rock Island & Pacific Railway, $8\frac{1}{2}$ poles northwest of milepost #73, in a concrete post, 50 feet northwest of the north corner of the depot, 14 feet southwest of the center line of the track, and at the rail level. A standard disk, stamped "S-76, 1934".	804.300
Top of S rail opposite Chicago, Rock Island & Pacific Railway station at Oasis.	804.1
Top of N rail opposite Chicago, Rock Island & Pacific Railway MP 74.	779.2
<u>T-76</u> In <u>Johnson County</u> , about 1.9 miles southeast of the depot at <u>Oasis</u> , along the Chicago, Rock Island & Pacific Railway, 14 poles northwest of milepost #71, in the northwest end of the northeast head wall of a 4- by 6-foot stone box culvert, 12 feet northeast of the center line of the track, and 3 feet below rail level. A standard disk, stamped "T-76, 1934".	734.070
Top of E rail opposite Chicago, Rock Island & Pacific Railway MP 72.	751.5
Top of E rail opposite Chicago, Rock Island & Pacific Railway MP 71.	729.9

- U-76 In Cedar County, at West Branch, along the Chicago, Rock Island & Pacific Railway, 21 poles northwest of milepost #69, at a public road crossing (Main Street), in the center of the west side of the east signal, 200 feet southeast of the depot, and at the crossing signal. A standard disk, stamped "U-76, 1934". El. Ft. 718.204
- Top of W rail opposite Chicago, Rock Island & Pacific Railway station at West Branch. 716.1
- V-76 In Cedar County, 0.17 mile southeast of the depot at West Branch, along the Chicago, Rock Island & Pacific Railway, 17 poles northwest of milepost #69, at the 60-foot steel girder 2-span bridge #695, on the southwest end of the back wall of the northwest abutment, 12 feet southwest of the center line of the track, and 3 feet below rail level. A standard disk, stamped "V-76, 1934". 709.670
- Top of E rail opposite Chicago, Rock Island & Pacific Railway MP 69. 710.0
- W-76 In Cedar County, about 1.5 miles northwest of the depot at Centerdale, along the Chicago, Rock Island & Pacific Railway, 6 poles northwest of milepost #68, at the 44-foot steel bridge #682, in the southwest end of the back wall of the northwest abutment, 10 feet southwest of the center line of the track, and 1 foot below rail level. A standard disk, stamped "W-76, 1934". 703.217
- Top of E rail opposite Chicago, Rock Island & Pacific Railway MP 68. 713.4
- X-76 In Cedar County, at Centerdale, along the Chicago, Rock Island & Pacific Railway, at milepost #67, at the 4- by 6-foot stone box cattle pass, 7 poles northwest of the depot, in the center of the northeast headwall, 15 feet northeast of the center line of the track, and 3 feet below rail level. A standard disk, stamped "X-76, 1934". 722.082
- Top of E rail opposite Chicago, Rock Island & Pacific Railway station at Centerdale. 722.7
- Y-76 In Cedar County, about 1.1 miles southeast of the depot at Centerdale, along the Chicago, Rock Island & Pacific Railway, 23 poles northwest of milepost #65, at a 20-foot, concrete deck bridge, in the northeast end of the southeast abutment, 9 feet northeast of the

center line of the track, and 1 foot below rail level. A standard disk, stamped "Y-76, 1934".	El. Ft. 694.618
Top of E rail opposite Chicago, Rock Island & Pacific Railway MP 66.	702.1
Top of E rail opposite Chicago, Rock Island & Pacific Railway MP 65.	688.0
<u>Z-76</u> In <u>Cedar County</u> , near <u>West Liberty</u> , Muscatine County, about 1.9 miles north of the depot, along the Chicago, Rock Island & Pacific Railway, 9 poles northwest of milepost #63, at a public road crossing, 35 feet northwest of the center line of the crossing, 45 feet northeast of the center line of the track, 10 feet northwest, thence 5 feet southwest of the right of way fence corner. and 1 foot below rail level. A standard disk, stamped "Z-76, 1934" and set in a concrete monument.	700.530
<u>A-77</u> In <u>Muscatine County</u> , at <u>West Liberty</u> , along the Chicago, Rock Island & Pacific Railway, 18 poles north of milepost #61; 405 feet north of the Main Line crossing at the depot, in the northwest corner of the concrete foundation of the water column, and 6 feet east of the center line of the track. A standard disk, stamped "A-77, 1934".	671.026
Top of W rail opposite Chicago, Rock Island & Pacific Railway MP 62.	690.3
Top of E rail opposite Chicago, Rock Island & Pacific Railway-Highway Crossing. at West Liberty.	700.8
Top of E rail opposite Chicago, Rock Island & Pacific Railway Crossing.	669.2
<u>B-77</u> In <u>Muscatine County</u> , at <u>West Liberty</u> depot, at the northwest corner of the ticket office, 16 inches northwest of the window, and about 4 feet above the platform. A standard disk, stamped "B-77, 1934" and set vertically in the brick wall.	674.694
Top of E rail opposite Chicago, Rock Island & Pacific Railway MP 61.	654.9
<u>C-77</u> In <u>Muscatine County</u> , about 1.3 miles southwest of the depot at <u>West Liberty</u> , along the Chicago, Rock Island & Pacific Railway, 3 poles north of milepost #60, at a 20-foot steel bridge #601, in the west end of the back wall of the north abutment, 10 feet west of the	

- center line of the track, and 1 foot below rail level. El. Ft.
A standard disk, stamped "C-77, 1934". 649.910
- D-77 In Muscatine County, about 3.4 miles southwest of the depot at West Liberty, along the Chicago, Rock Island & Pacific Railway, 3 poles northeast of milepost #58, at a public road crossing, in the southwest end of the northwest head wall, 18 feet southeast of the center line of the crossing, 9 feet northwest of the center line of the track, and 1.5 feet below rail level. A standard disk, stamped "D-77, 1934". 647.102
- Top of E rail opposite Chicago, Rock Island & Pacific Railway MP 59. 645.7
- Top of E rail opposite Chicago, Rock Island & Pacific Railway MP 58. 647.6
- T T 6S- 1929 In Muscatine County, about 2.4 miles northeast of the Nichols City Hall, along the Chicago, Rock Island & Pacific Railway, $1\frac{1}{2}$ poles south of milepost #57, at a public road crossing, 320 feet west of the north corner Sections 2 and 3, T-77-N, R-4-W, 18 feet north of the road, 18 feet east of railroad on south side of the right-of-way fence, at cattle guard, 3 feet below rail level. A bronze tablet, stamped "T T - 6S, 1929" and set in a concrete monument. 635.661
- E-77 In Muscatine County, about 2.2 miles northeast of the Nichols City Hall, along the Chicago, Rock Island & Pacific Railway, 23 poles northeast of milepost #56, in the west end of the back wall of the north abutment of a 72-foot steel bridge #567; 10 feet west of the center line of the track, and 2 feet below rail level. A standard disk, stamped "E-77, 1934". 637.761
- Top of E rail opposite Chicago, Rock Island & Pacific Railway MP 55. 637.6
- F-77 In Muscatine County, at Nichols, along the Chicago, Rock Island & Pacific Railway, in the northeast leg foundation of the Water Tower, 10 feet west of the center line of the north-bound track, 20 feet south of the center line of the east-bound track, and 0.5 foot above rail level. A standard disk, stamped "F-77, 1934". 636.741
- G-77 In Muscatine County, at Nichols, at the City Hall, in the front (north) side of the building, 8 inches west of the door, and about 5 feet above the ground. A standard disk, stamped "G-77, 1934" and set vertically in the brick wall. 642.236

H-77 In Muscatine County, about 1.2 miles southeast of the Nichols City Hall, along the Chicago, Rock Island & Pacific Railway, 22 poles north of milepost #53, at a public road crossing, 30 feet northeast of the center line of the crossing, 45 feet northwest of the center line of the track, 2 feet east of the right-of-way fence, and 2.5 feet below rail level. A standard disk, stamped "H-77, 1934" and set in a concrete monument.

El. Ft.

627.725

J-77 In Muscatine County, about 3.5 miles southeast of the Nichols City Hall, along the Chicago, Rock Island & Pacific Railway, 15 poles north of milepost #51, in the north end of the west head wall of a 3- by 6-foot stone box culvert, 10 feet west of the center line of the track, and 1.5 feet below rail level. A standard disk, stamped "J-77, 1934".

621.984

Top of E rail opposite Chicago, Rock Island & Pacific Railway MP 52.

623.2

Top of E rail opposite Chicago, Rock Island & Pacific Railway MP 51.

623.9

Top of E rail opposite Chicago, Rock Island & Pacific Railway station at Dean Spur.

623.9

K-77 In Muscatine County, about 2.1 miles northwest of the depot at Conesville, along the Chicago, Rock Island & Pacific Railway, $18\frac{1}{2}$ poles north of milepost #49, in the south end of the west head wall of a 14-inch cast-iron pipe culvert, 12 feet west of the center line of the track, and 1.5 feet below rail level. A standard disk, stamped "K-77, 1934".

616.216

Top of E rail opposite Chicago, Rock Island & Pacific Railway-Highway Crossing at Dean Spur.

620.1

L-77 In Muscatine County, at Conesville, along the Chicago, Rock Island & Pacific Railway, at the depot, in the northwest corner of the concrete base of the semaphore signal, 10 feet east of the center line of the track, and 0.5 foot above rail level. A standard disk, stamped "L-77, 1934".

615.583

Top of E rail opposite Chicago, Rock Island & Pacific Railway MP 48.

615.0

For descriptions of additional bench marks in this vicinity, see page 59.

This Line follows the Chicago & North Western Railway from Center Junction to Anamosa, Iowa, and the Chicago Milwaukee, St. Paul & Pacific Railroad from Anamosa to Linn Junction, Iowa. The field work was done in October, 1934, by a party in charge of E. E. Stohsner.

For descriptions of additional bench marks in this vicinity, see pages 158 and 206.

Y-79 In Jones County, at Center Junction, along the Chicago & North Western Railway, 14 poles east of milepost #61, at a public road crossing, 125 feet west of the depot, 25 feet south of the center line of the track, 23 feet east of the center line of crossing, 10 feet east of the crossing sign, and 1.5 feet above rail level. A standard disk, stamped "Y-79, 1934" - set in the top of a concrete monument. El. Ft. 907.830

Z-79 In Jones County, about 2 miles west of the depot, at Center Junction, along the Chicago & North Western Railway, 13 poles west of milepost #62, at a public road crossing, 21 feet west of the center line of the road, 43 feet north of the center line of the track at the 15-foot wooden trestle #1402; 3 feet south and 2 feet east of right-of-way fence corner, and at rail level. A standard disk, stamped "Z-79, 1934" and set in the top of a concrete monument. 917.226

A-80 In Jones County, about 2.1 miles east of the depot at Amber, along the Chicago & North Western Railway, 11 poles west of milepost #63, at a 5- by 6-foot R C B culvert #1409, in the center of the west wing of the north head wall, 12 feet north of the center line of the track, and 2 feet below rail level. A standard disk, stamped "A-80, 1934". 929.014

B-80 In Jones County, at Amber, along the Chicago & North Western Railway, 270 feet west of the depot, 30 feet east of the center line of the crossing, 48 feet south of the center line of the track, 2 feet north of the right-of-way fence corner, and 1 foot below rail level. A standard disk, stamped "B-80, 1934" and set in the top of a concrete monument. 1011.861

Top of N rail opposite Chicago & North Western Railway station at Amber. 1009.6

C-80 In Jones County, about 2 miles west of the depot

- at Amber, along the Chicago & North Western Railway, 13 $\frac{1}{2}$ poles southwest of milepost #67, at a public road crossing, 145 feet west of the center line of the crossing, at a 4- by 5-foot R C B culvert #1428, in the east end of the south head wall, 28 feet south of the center line of the track, and 7 feet below rail level. A standard disk, stamped "C-80, 1934". El. Ft. 960.362
- D-80 In Jones County, about 1.1 miles east of the depot at Anamosa, along the Chicago & North Western Railway, 6 poles southwest of milepost #70, at a 15-foot wooden bridge with stone abutment #1443, in the north end of the west abutment, 8 feet north of the center line of the track, and 2.5 feet below rail level. A standard disk, stamped "D-80, 1934". 840.536
- E-80 In Jones County, at Anamosa, along the Chicago & North Western Railway, at the depot, in a concrete post, 153 feet west of the northwest corner of the depot, in a small park, 12 feet south of the center line of the Chicago, Milwaukee, St. Paul & Pacific Railroad tracks, 33 feet north of the center line of the Chicago & North Western Railway tracks, 9 feet east of the box culvert #H-974, and at rail level. A standard disk, stamped "E-80, 1934" and set in the top of a concrete monument. 826.160
- Top of N rail at the Chicago & North Western Railway-Highway #161, center line of intersection. 821.8
- Top of N rail opposite Chicago & North Western Railway station at Anamosa. 824.7
- Top of E rail at the intersection of Chicago & North Western Railway with Chicago, Milwaukee, St. Paul & Pacific Railroad. 829.2
- F-80 In Jones County, at the Anamosa Post Office, 1 foot west of the northeast corner of the building, 4.5 feet high, and between the sixteenth and seventeenth courses of brick. A standard disk, stamped "F-80, 1934" and set vertically. 837.252
- Top of S rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 13. 829.0
- G-80 In Jones County, about 1.2 miles west of the depot at Anamosa, along the Chicago, Milwaukee, St. Paul & Pacific Railroad, 18 poles west of milepost #13, at the 100-foot steel bridge #970 over the Buffalo River, in the south end of the back wall of the west abut-

- ment, 9 feet south of the center line of the track, and 2 feet below rail level. A standard disk, stamped "G-80, 1934". El. Ft. 790.113
- Top of S rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 12. 792.6
- H-80 In Jones County, about 0.6 mile east of the Stone City Post Office, along the Chicago, Milwaukee, St. Paul & Pacific Railroad, 3 poles southeast of milepost #10, at the old stone quarry, in the second step at the front entrance to the old stone house, 80 feet northwest of stone culvert #H-821; 45 feet northeast of the center line of the track, and at rail level. A standard disk, stamped "H-80, 1934". 799.887
- J-80 In Jones County, at Stone City, along the Chicago, Milwaukee, St. Paul & Pacific Railroad, at the Stone City Post Office, in the 225-foot steel bridge over the Wapsipinicon River, in the south end of the east abutment, 10 feet south of the center line of the track, and 1.5 feet below rail level. A standard disk stamped "J-80, 1934". 801.655
- Top of S rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad depot at Stone City. 810.5
- K-80 In Jones County, about 0.6 mile west of the Stone City Post Office, along the Chicago, Milwaukee, St. Paul & Pacific Railroad, 8 poles west of milepost #9, in the south end of the back wall of the west abutment of the 50-foot steel bridge #H-960; 7 feet south of the center line of the track, and 0.5 foot below rail level. A standard disk, stamped "K-80, 1934". 794.838
- L-80 In Linn County, at Viola, along the Chicago, Milwaukee, St. Paul & Pacific Railroad, 16 poles southwest of milepost #7; 90 feet south of the depot, 50 feet southeast of the center line of the track, at a public road crossing, at the 20-foot concrete deck bridge with steel handrail, in the northwest end of the northwest abutment, and 2 feet below rail level. A standard disk, stamped "L-80, 1934". 867.328
- Top of E rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 7. 850.9
- Top of W rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad station at Viola. 868.8
- M-80 In Linn County, about 1.6 miles northeast of the

	El. Ft.
<u>S-80</u> In <u>Linn County</u> , about 3.6 miles west of <u>Paralta</u> , along the Chicago, Milwaukee, St. Paul & Pacific Railroad, 13 poles west of milepost #222, at a public road crossing, 12 feet west of the center line of the crossing, 15 feet south of the center line of the south track, 20 feet north of the right-of-way fence, and at rail level. A standard disk, stamped "S-80 1934" and set in the top of a concrete monument.	828.676
Top of N rail of north track opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 222.	833.6
Top of N rail of south track opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 223.	820.1
<u>T-80</u> In <u>Linn County</u> , about 2 miles east of the depot at <u>Marion</u> , along the Chicago, Milwaukee, St. Paul & Pacific Railroad, at milepost #225, at a 30-foot arch concrete bridge, in the south end of the east abutment, 10 feet south of the south track, and 2 feet below rail level. A standard disk, stamped "T-80, 1934".	807.134
<u>U-80</u> In <u>Linn County</u> , at <u>Marion</u> , along the Chicago - Milwaukee, St. Paul & Pacific Railroad, at the depot, between the ticket office windows and about 5 feet above the level of the track. A standard disk, stamped "U-80, 1934" and set vertically in the brick wall.	849.782
Top of N rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad station at Marion.	844.5
<u>MARION-1934</u> In <u>Linn County</u> , at the <u>Marion City Park</u> , in the concrete foundation base of a French 75-mm gun in the center of the west side of the city square, in the northeast corner, and 3 feet above the level of the ground. A standard disk, stamped "Marion 1934".	850.658
<u>V-80</u> In <u>Linn County</u> , about 0.8 mile west of the depot at <u>Marion</u> , along the Chicago, Milwaukee, St. Paul & Pacific Railroad, at the 300-foot steel bridge over Indian Creek, in the northeast corner of the east abutment, and at rail level. A standard disk, stamped "V-80, 1934".	821.488
Top of S rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 228.	817.2

W-80 In Linn County, about 2.4 miles west of the depot at Marion, along the Chicago, Milwaukee, St. Paul & Pacific Railroad, $12\frac{1}{2}$ poles west of milepost #229; 210 feet east of the center of a public road crossing, at a 2-foot cast-iron pipe culvert, in the northeast end of the southeast head wall, 25 feet southeast of the center line of the track, and 3 feet below rail level. A standard disk, stamped "W-80, 1934". El. Ft. 841.737

Top of S rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 230. 838.4

X-80 In Linn County, at Louisa, along the Chicago, Milwaukee, St. Paul & Pacific Railroad, at the concrete overhead highway bridge on Center Point road, Highway #11; 170 feet east of the station, 20 feet south of the center line of the track, in cross beam on the east side of the center post, about 3 inches from the post, and 2 feet above rail level. A standard disk, stamped "X-80, 1934" and set in concrete cross beam. 820.992

Top of N rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad station at Louisa. 818.8

Top of S rail opposite Chicago, Milwaukee, St. Paul & Pacific Railroad MP 231. 814.7

Y-80 In Linn County, about 2.4 miles west of the depot at Louisa, along the Chicago, Milwaukee, St. Paul & Pacific Railroad, 1 pole west of milepost #233, at an overhead bridge over the Chicago, Rock Island & Pacific Railroad tracks, in the south end of the west abutment, 20 feet south of the center line of the track, and at rail level. A standard disk, stamped "Y-80 1934". 811.652

For descriptions of additional bench marks in this vicinity, see pages 88 and 184.

200 LINE 5419. SAVANNA, ILL. to CENTER JCT. IOWA
(Second-order Leveling)

This Line follows State Highway #117 from near Savanna, Illinois, to Maquoketa, Iowa; and from Maquoketa to Center Junction, Iowa, it follows the Chicago & Northwestern Railway. The field work was done in February, 1935, by a party in charge of E. E. Stohsner.

Elevations are based on the 1929 General Adjustment of the First-order Level Net.

For descriptions of additional bench marks in this vicinity, see page 37.

F-57 In Carroll County, Illinois, at Savanna, along the Chicago, Burlington & Quincy Railroad at the depot, 8 inches south of the ticket office center window and about 4 feet above the platform. A standard disk, stamped "F-57, 1934" and set vertically in the brick wall. El. Ft. 598.854

G-57 In Carroll County, Illinois, about 0.5 mile north of the depot at Savanna, along State Highway #80, at the east end of the Mississippi River bridge at Junction of Iowa State Highway #117, in the north end of the east pier, and 5 feet below the level of the bridge floor. A standard disk, stamped "G-57, 1934". 630.140

For descriptions of additional bench marks in this vicinity, see page

M-78 In Jackson County, Iowa, 2.5 miles north of the Knights of Pythias Hall at Sabula, along State Highway #117, Savanna to Maquoketa Road, at the west end of the Mississippi River bridge, in the center of the north collision post, and 4 feet above the level of the road. A standard disk, stamped "M-78, 1934". 602.263

N-78 In Jackson County, 0.37 mile north of the Knights of Pythias Hall at Sabula, along State Highway #117, Savanna to Maquoketa Road, at a 320-foot steel bridge, in the center of the west collision post at the north end of the bridge, and 4 feet above the road level. A standard disk, stamped "N-78, 1934". 601.606

P-78 In Jackson County, at Sabula, in the northeast corner of the Knights of Pythias Hall, 10 feet north of the corner, and 2 feet above the corner stone. A standard disk, stamped "P-78, 1934" and set vertically in the brick wall. 601.170

- Q-78 In Jackson County, 0.94 mile west of the Knights of Pythias Hall at Sabula, along State Highway #117, at the Chicago, Milwaukee, St. Paul & Pacific Railroad underpass, in the east end of the north hub-guard, 0.5 foot above the road level. A standard disk, stamped "Q-78, 1934". El. Ft. 622.646
- R-78 In Jackson County, 3.1 miles west of the Knights of Pythias Hall at Sabula, along State Highway #117, Savanna to Maquoketa road, at a 2- by 3-foot R C B culvert by orchard west of farm house, in the east end of the south head wall, 18 feet south of the center line of the road, and 2 feet below road level. A standard disk, stamped "R-78, 1934". 860.851
- S-78 In Jackson County, 5.2 miles west of the Knights of Pythias Hall at Sabula, along State Highway #117, Savanna to Maquoketa road, at a 4- by 6-foot R C B culvert, 32 feet east of a private entrance to field near the middle of the west slope, in the west end of the south head wall, 16 feet south of the center line of the road at road level. A standard disk, stamped "S-78, 1934". 787.646
- T-78 In Jackson County, 6.1 miles west of the Knights of Pythias Hall at Sabula, along State Highway #117 at a 40-foot concrete bridge over a small creek, 40 feet east of the section corner and crossroad, in the north end of the west abutment in wing wall, 15 feet north of the center line of road, and at road level. A standard disk, stamped "T-78, 1934". 734.041
- U-78 In Jackson County, 1.8 miles north of the City Water Tank at Miles, along State Highway #117, Savanna to Maquoketa road, at a 2- by 3-foot R C B culvert 300 feet east of the P I of curve to the south, 27 feet east of T-fence to the south, in the west end of the south head wall, 18 feet south of the center line of the road at road level. A standard disk, stamped "U-78, 1934". 875.284
- V-78 In Jackson County, at Miles, in the southwest side of the southwest leg foundation of the City Water Tower, 2 feet above level of the ground. A standard disk, stamped "V-78, 1934". 823.552
- W-78 In Jackson County, 0.4 mile west of the City Water Tower at Miles, along State Highway #117, Savanna to Maquoketa road, at a 6- by 8-foot R C B Culvert at the bottom of the west slope at the edge of town, in the east end of the north head wall, 18 feet

north of the center line of the road and at road level.
A standard disk, stamped "W-78, 1934".

El. Ft.
774.903

X-78 In Jackson County, 2.3 miles west of the City Water Tower at Miles, along State Highway #117, Savanna to Maquoketa Road, near the top of the long west slope on the south curve, at a 4- by 5-foot R C B cattle pass and culvert, 100 feet east of a private entrance to pasture south of road, 210 feet west of fence north, 18 feet south of the center line of the road, 3 feet below road level, and in the west end of the south head wall. A standard disk, stamped "X-78, 1934".

749.631

Y-78 In Jackson County, 1 mile east of the Farmers Mutual Aid Association Bldg., at Preston, along State Highway #117, Savanna to Maquoketa Road, at a 30-foot concrete skew bridge, 150 feet east of the center line of the crossroad on the curve, in the north end of the east abutment, 15 feet north of the center line of the road, and at road level. A standard disk, stamped "Y-78, 1934".

677.692

Z-78 In Jackson County, at Preston, in the southeast corner of the Farmers Mutual Association Bldg., and about 4 feet above the sidewalk. A standard disk stamped "Z-78, 1934" and set vertically in brick wall.

663.001

A-79 In Jackson County, 1.9 miles west of the Farmers Mutual Aid Association Bldg., at Preston, along State Highway #117, Savanna to Maquoketa road, at a 200-foot steel bridge over a creek, in the south end of the east pier, and 5 feet below the level of the road. A standard disk, stamped "A-79, 1934".

629.418

B-79 In Jackson County, 2.8 miles west of the Farmers Mutual Aid Association Bldg., at Preston, along State Highway #117, Savanna to Maquoketa road, at a concrete overhead bridge over the Chicago, Milwaukee, St. Paul & Pacific Railroad, in the south end of the east abutment, and 0.5 foot above level of the road. A standard disk, stamped "B-79, 1934".

677.942

C-79 In Jackson County, 3.8 miles west of the Farmers Mutual Aid Association Bldg., at Preston, along State Highway #117, Savanna to Maquoketa road, at a 2- by 2-foot R C B culvert near the top of the long east slope, 45 feet west of the cemetery at the schoolhouse, 95 feet east of T-fence north, in the west end of the north head wall, and at road level. A standard disk stamped "C-79, 1934".

811.639

- D-79 In Jackson County, 5.7 miles west of the Farmers Mutual Aid Association Bldg., at Preston, along State Highway #117, Savanna to Maquoketa road, at a 2- by 2-foot R C B culvert at the top of the southeast slope and curve to the south, 230 feet east of private entrance to farm house, 95 feet west of T-fence south, in the east end of the north head wall and at road level. A standard disk, stamped "D-79, 1934". El. Ft. 786.015
- E-79 In Jackson County, about 7.7 miles west of the Farmers Mutual Aid Association Bldg., at Preston, along State Highway #117, Savanna to Maquoketa road, at top of hill on curve, in post 75 feet southwest of a private entrance to field, 285 feet southwest of a guard-rail fence in front of farmhouse, 44 feet northwest of the center line of the road, 2 feet below road level, and about 1 foot from the right-of-way fence. A standard disk, stamped "E-79, 1934". 885.228
- F-79 In Jackson County, near Maquoketa, about 6.7 miles east of the City Hall, along State Highway #117, Savanna to Maquoketa road, at a 2- by 2-foot R C B, culvert on flat on top of hill at the southwest end of curve, 350 feet southwest of the intersection with road north, 850 feet northeast of east-west road by farmhouse, in the northeast end of the southeast head wall, and at road level. A standard disk, stamped "F-79, 1934". 849.706
- G-79 In Jackson County, 5 miles east of the City Hall at Maquoketa, along State Highway #117, Savanna to Maquoketa road, at a 2- by 2-foot R C B culvert in swale between two farmhouses, 80 feet west of the northwest corner of yard fence, 250 feet east of private entrance to yard, in the east end of the south head wall, 2.5 feet below road level, and 20 feet northwest of a 30-inch stump. A standard disk, stamped "G-79, 1934". 848.217
- H-79 In Jackson County, 3.1 miles east of the City Hall at Maquoketa, along State Highway #117, Savanna to Maquoketa road, at a 4- by 6-foot cattle pass, 150 feet northwest of the private road to farmhouse, in the northwest end of the northeast head wall, and 2 feet below road level. A standard disk, stamped "H-79 1934". 839.401
- J-79 In Jackson County, 1.4 miles east of the City Hall at Maquoketa, along State Highway #117, Savanna to Maquoketa road, at a 160-foot steel bridge over a creek by a large stone barn, in the north end of the

- east pier, and 5 feet below road level. A standard disk, stamped "J-79, 1934". El. Ft. 660.176
- MAQUOKETA-1934 In Jackson County, at the Maquoketa City Hall 6 feet west of the building, and 10 feet north of the side door to the City Clerk's Office. A standard disk, stamped "Maquoketa-1934" and set in the top of a concrete monument. 704.474
- K-79 In Jackson County, at Maquoketa, in the center of the south banister of the U. S. Post Office, and 8 inches east of the building. A standard disk, stamped "K-79, 1934" and set in a limestone building block. 702.197
- P.B.M. #1 In Jackson County, at Maquoketa, 6 feet west of the City Hall and 14 feet north of the side door to the City Clerk's Office. A brass disk, set in a concrete monument. 704.969
- L-79 In Jackson County, at Maquoketa, along the Chicago & North Western Railroad, 120 feet west of the depot, at the Railroad Water Tank, in the southwest corner of the west front leg foundation. A standard disk, stamped "L-79, 1934". 687.627
- Top of N rail opposite Chicago & North Western Railroad station at Maquoketa. 686.9
- Top of N rail at the Chicago & North Western Railroad-Highway (#61) Crossing at Maquoketa. 686.8
- M-79 In Jackson County, 3.1 miles west of the Maquoketa City Hall, along the Chicago & North Western Railroad, $9\frac{1}{2}$ poles east of milepost #40 at underpass #1300, in the east end of the north head wall, 10 feet north of the center line of the track, and at rail level. A standard disk, stamped "M-79, 1934". 721.071
- N-79 In Jackson County, 4.8 miles west of the Maquoketa City Hall, along the Chicago & North Western Railroad, $11\frac{1}{2}$ poles west of milepost #41 at a public road crossing south of school house, 72 feet east of the center line of the crossing, 44 feet south of the center line of the track, 27 feet east of the right-of-way fence corner, 1 foot north of the right-of-way fence, and at rail level. A standard disk, stamped "N-79, 1934" and set in a concrete monument. 752.692
- P-79 In Jackson County, at Nashville, along the Chicago & North Western Railroad, 5 poles west of milepost #44; 55 feet west of the depot, 15 feet north of

the center line of the track, and at rail level. A standard disk, stamped "P-79, 1934" and set in a concrete monument.	El. Ft. 714.165
Top of N rail opposite Chicago & North Western Railroad MP 43.	725.4
Top of N rail opposite Chicago & North Western Railroad depot at Nashville.	714.7
Top of N rail opposite Chicago & North Western Railroad MP 45.	689.8
<u>Q-79</u> In Jackson County, 0.7 mile east of the depot at Baldwin, along the Chicago & North Western Railroad 3 poles west of milepost #46, at a private road crossing, 15 feet east of the center line of the gate, 42 feet north of the center line of the track, 3 poles east of a wooden bridge #1328, 3 feet south of the right-of-way fence, and at rail level. A standard disk, set in a concrete monument, stamped "Q-79, 1934".	699.057
<u>R-79</u> In Jackson County, at Baldwin, along the Chicago & North Western Railroad, $2\frac{1}{2}$ poles west of milepost #47; 1750 feet west of the depot, at a 4- by 4-foot stone box-culvert, in the northwest corner of the north head wall, 25 feet north of the center line of the track, 95 feet east of a steel overhead bridge #1331, and 7 feet below rail level. A standard disk stamped "R-79, 1934".	716.278
Top of N rail opposite Chicago & North Western Railroad station at Baldwin.	714.2
Top of NE rail at the Chicago & North Western Railroad-Highway Crossing. (Hwy. #117, 1 mi. W of Baldwin)	746.1
<u>S-79</u> In Jackson County, at Monmouth, along the Chicago & North Western Railroad, at the depot, 54 feet east and 42 feet south of the southeast corner of the building, 75 feet west of a public road crossing, 24 feet south of the center line of the track, 5 feet north of a telegraph pole, and at rail level. A standard disk, stamped "S-79, 1934" and set in the top of a concrete monument.	763.519
Top of N rail opposite Chicago & North Western Railroad MP 49.	747.4
Top of N rail opposite Chicago & North Western Railroad depot at Monmouth.	763.7

- Top of NE rail opposite Chicago & North Western Railroad MP 50. El. Ft. 766.1
- T-79 In Jones County, 2 miles west of the depot at Monmouth, along the Chicago & North Western Railroad 13 poles southwest of milepost #51, at a public road crossing, 26 feet west of the center line of the crossing, 62 feet east of a wooden trestle #1356, 28 feet north of the center line of the track, 3 feet east of the right-of-way fence, and 2 feet above track level. A standard disk, stamped "T-79, 1934" and set in the top of a concrete monument. 789.257
- U-79 In Jones County, about 3.7 miles northwest of the depot at Monmouth, along the Chicago & North Western Railroad, $2\frac{3}{4}$ poles west of milepost #53, at culvert #1364, in the northwest corner of the north head wall, 18 feet north of the center line of the track, and 3 feet below rail level. A standard disk, stamped "U-79, 1934". 815.159
- Top of N rail opposite Chicago & North Western Railroad MP 53. 818.3
- TBM "V" In Jones County, 1.7 miles southeast of the depot at Onslow, along the Chicago & North Western Railroad, 68 feet east of milepost #53 at a private road crossing, 9 feet east of the center line of the gate, 43 feet north of the center line of the tracks, $6\frac{1}{2}$ poles west of a public road crossing, $2\frac{1}{2}$ poles west of a wooden trestle #1374, 2 feet south of the right-of-way fence, and 3 feet below rail level. Bottom of hole chiseled in a concrete monument. 852.485
- W-79 In Jones County, at Onslow, along the Chicago & North Western Railroad, 150 feet east of the depot, in the south corner of the southwest leg foundation of the Railroad Water Tower. A standard disk, stamped "W-79, 1934". 918.259
- Top of N rail opposite Chicago & North Western Railroad MP 56. 892.7
- Top of N rail opposite Chicago & North Western Railroad depot at Onslow. 918.1
- X-79 In Jones County, 1.2 miles east of the depot at Center Junction, along the Chicago & North Western Railroad, 9 poles west of milepost #59, at a public road crossing, 39 feet east of the center line of the crossing, 36 feet south of the center line of the

track, 10 feet north and 3 feet west of the right-of-way fence corner, and 2 feet below rail level. A standard disk, stamped "X-79, 1934" and set in the top of a concrete monument.	El. Ft.
	921.005

For descriptions of additional bench marks in this vicinity, see pages 158 and 194.

802

202

LEVELS IN DATA

11. 11

Level 11 is 100 feet and 5 feet over of the level-
was 100 feet, and 5 feet below full level. A
standard disk, stamped "100" and set in the top
of a concrete basement.

201.000

For verification of additional bench marks in this vi-
sibility, see pages 100 and 101.

(All cities and towns, unless otherwise stated, are in Iowa)

	Page		
Albany, Ill.	39, 40	Delhi	162
Almoral	170	Dewar	143, 144
Amana	116, 117	Dillon	135
Amana, East	116	Dinsdale	95
Amana, Middle	117	Dixon	87, 153
Amana, South	117, 118	Donahue	152
Amber	194	Dubuque	21 - 26, 165
Anamosa	195	Dubuque, East (Ill.)	22
Ardon	61	Dundee	173
Arnold Landing	35, 36	Dunkerton	144
Atkins	76, 77	Durango	165, 166
Aurora	174, 175	Dyersville	169, 170
Baldwin	205	Dysart	92, 93
Baxter	137	Eagle Point	20, 21
Beacon	49, 128	Eckhart	10, 11
Belle Plaine	101, 107, 108	Edmore	19, 20
Bellevue	31, 32, 33	Eddyville	50
Bellevue, North	30, 31	Elberon	99, 100
Bennett	84, 85	Elgin	147
Beulah	149	Elmira Junction	82, 189
Beverly	113	Elridge	151, 152
Big Rock	153	Ely	186, 187
Blainstown	109, 110	Evans	48
Bryantburg	178	Fairbanks	144
Buchanan	83	Fairfax	76, 112, 113, 115
Budd	166, 167	Fairmont	45
Buena Vista	14, 15	Fairport	43
Buffalo	42	Farley	168
Cattes Siding	25	Farson	53, 54
Cedar Falls Jct.	142	Finley Landing	16
Cedar Rapids	74, 75, 76, 114 185, 186	Frenchtown Landing	17
Centerdale	190	Fulton, (Ill.)	39
Center Junction,	158, 159, 194, 206	Fulton Jet. (Ill.)	39
Center Point	182	Garrison	91, 92
Chelsea	106, 107	Gilman	133, 134
Clayton	9, 10	Given	49
Clermont	147	Gladbrook	140
Clutier	98, 99	Gladwin	59
Colfax	136	Gordon's Ferry	27, 28, 29
Cone	59, 60	Graf	167
Conesville	193	Greasers	90
Conroy	118	Green Mountain	140
Coralville	67, 68, 69, 70	Grinnell	132, 133
Cordova, (Ill.)	40	Guttenberg	11, 12, 13
Cranston	60	Hampton, (Ill.)	41
Culver Junction	61	Harris Landing, (Ill.)	34, 35
Curtis	72	Haskins	58, 59, 63
Davenport	42, 150	Hayesville	124
Davenport, West	42	Hazelton	177, 178
Delaware	162, 163	Hedrick	125
		Hicks	141, 142

Highland	126	New Liberty	86
Hills	64	New Sharon	129, 130
Hopkinton	160, 161	Nichols	192, 193
Hudson	142	Ninemile Island	26, 27
Independence	178, 179, 180	North English	120, 121
Iowa City	65, 66, 67	North Liberty	70, 71, 72
Ira	137	Norway	79, 111, 112
Irving	100, 101	Oasis	189
Island #207	16	Oelwein	145, 176, 177
Island #250	33	Oneida	163, 164, 171, 172
Island #253	33	Onslow	206
Island #256	35	Oskaloosa	128
Kidder	167, 168	Otley	46
Kirkville	51	Ottumwa	51, 52, 53
Lacey	128, 129	Oxford Junction	156, 157
Lamont	174	Palo	88
LaPorte City	81	Paralta	197, 198
LeGrand	103	Parnell	119, 120
Leighton	47, 48	Pella	46, 47
Linby	54, 55	Petersburg	170
Lincoln	141	Plato	82, 83
Linn Junction	88, 184, 185	Port Byron, (Ill.)	40, 41
Lone Tree	64	Postville	148
Louisa	199	Pickering	134, 135
Luana	148	Prairie City	45
Luzerne	108, 109	Preston	202, 203
Magregor, North	7	Quarry	102, 103
Magregor, South	7, 8, 9	Randalia	146
Maquoketa	203, 204	Rapids City, (Ill.)	41
Marcus, (Ill.)	36, 37	Reinbeck	95, 96, 141
Marion	198, 199	Richland	55, 56
Marquette	149	Riverside	63, 64
Marshalltown	102, 135, 139	Rock Island, (Ill.)	41, 42
Massey	26	Rowley	180
Massillon	155, 156	Rubio	56
Maynard	145, 146	Rutledge	53, 126, 127
Melbourne	138	Sabula	200, 201
Miles	201, 202	Savanna, (Ill.)	37, 38, 200
Mingo	136, 137	Scotch Grove	159
Moline, (Ill.)	41	Searsboro	131
Monmouth	205, 206	Shellsburg	89
Monona	148, 149	Shueyville	72, 73
Monroe	45, 46	Sigourney	122, 123
Monticello	159, 160	Smiths	29, 30
Montour	103, 104	Solon	188
Montpelier	43	Spechts Ferry	17, 18, 19
Moore	130, 131	Springville	197
Morse	188	Stanley	175
Mt. Auburn	80	Stone City	196
Mt. Joy	151	Tama	104, 105
Muscatine	43, 44, 61, 62	Thompson, (Ill.)	38
Nashville	204	Thorpe	172
Newburg	133	Tipton	83, 84
Newhall	77, 78	Titus	57

Toddville	183,	184
Toronto		155
Traer	94,	95, 97
Turkey River Jct.		13
Van Horne		78, 79
Vinton	79, 80,	90, 91
Viola		196
Walford	115,	146
Walker		181
Washburn		81
Washington		57, 58
Waterloo	81,	142, 143
Watertown, (Ill.,)		41
Watkins	110,	111
Waupeton		15, 16
Webster	121,	122
Wellston		57
West Branch		190
Western	73,	74
West Liberty	191,	192
West Union	146,	147
Wheatland		154
Williamsburg		119
Witmer		84
Wyoming	157,	158

STATE LIBRARY OF IOWA



3 1723 02101 2760