

DEPARTMENT OF THE INTERIOR  
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GEORGE OTIS SMITH, DIRECTOR

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RESULTS OF SPIRIT LEVELING  
IN MONTANA

1896 TO 1910, INCLUSIVE

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R. B. MARSHALL, CHIEF GEOGRAPHER



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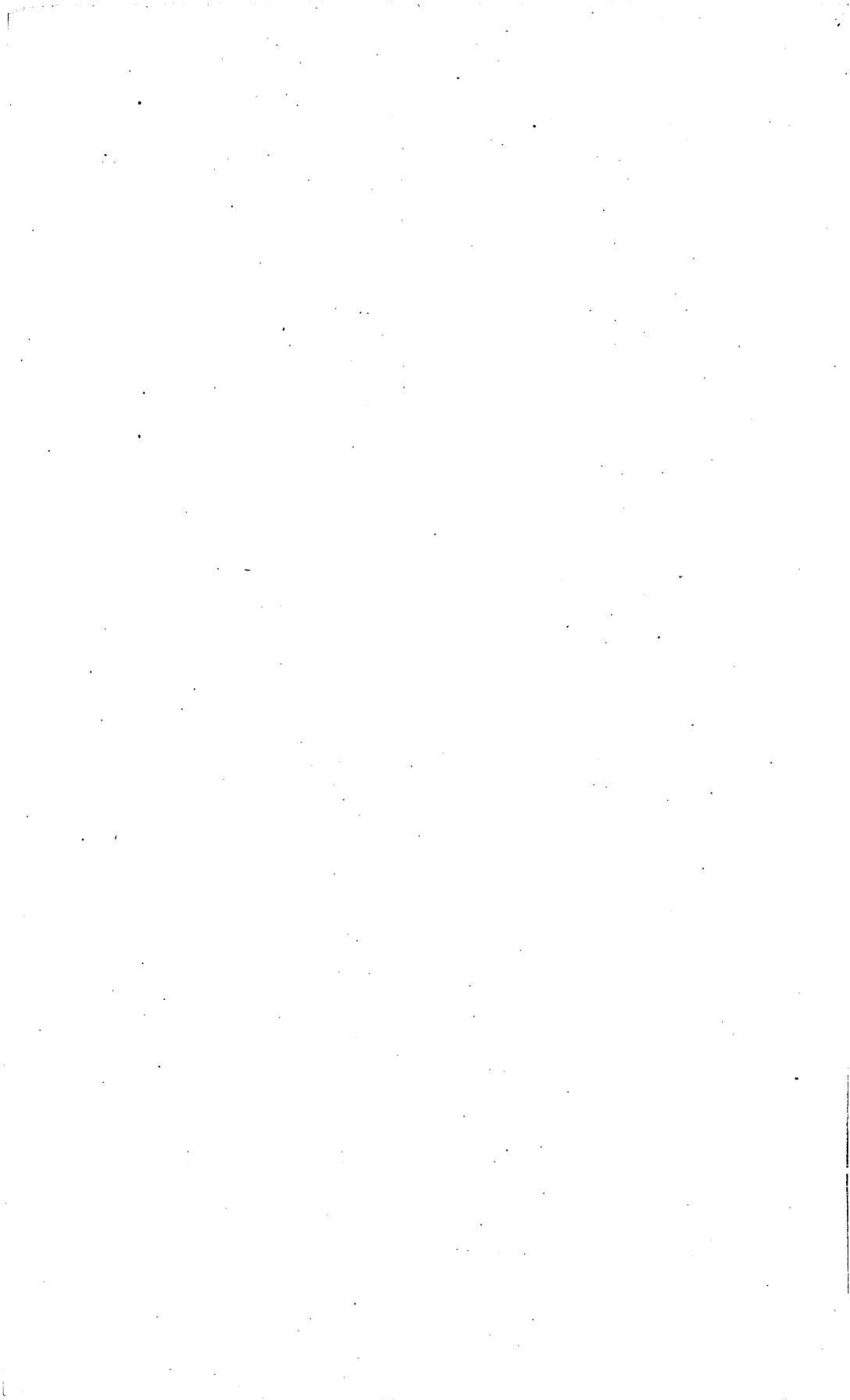


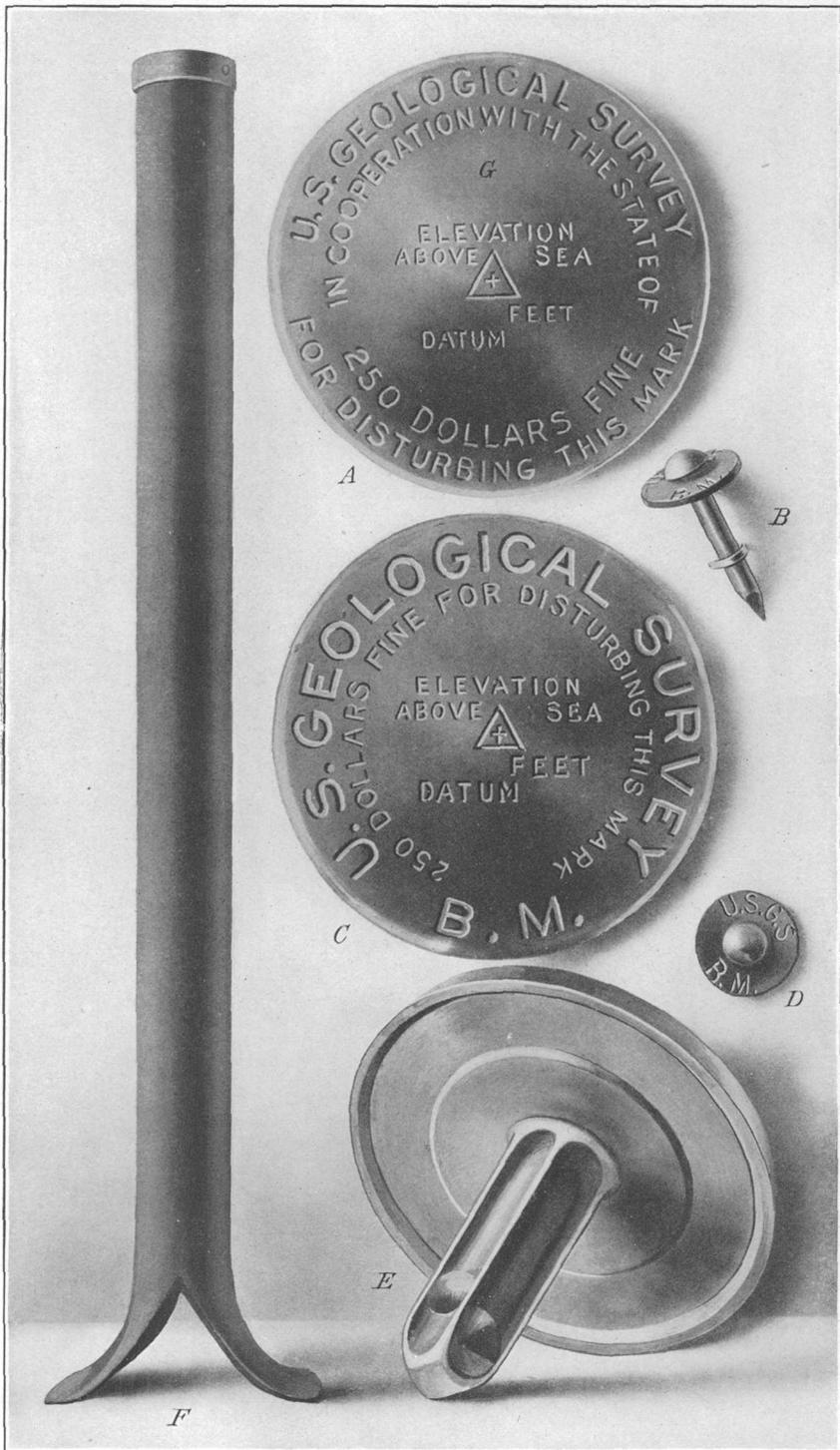
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GEOLOGICAL SURVEY BENCH MARKS.

A, Tablet used in cooperating States. The State name is inserted at *G*.  
 B and D, Copper temporary bench mark, consisting of a nail and copper washer.  
 C, and E, Tablets for stone or concrete structures.  
 F, Iron post used where there is no rock.

# RESULTS OF SPIRIT LEVELING IN MONTANA, 1896 TO 1910, INCLUSIVE.

R. B. MARSHALL, Chief Geographer.

## INTRODUCTION.

*Scope of the work.*—All results of spirit leveling in Montana previously published by the United States Geological Survey and all the results of later work are included in this report, rearranged by quadrangles. Nearly all elevations are based on preliminary heights of bench marks along the precise level line of the Coast and Geodetic Survey from Ogden, Utah, via Pocatello, Idaho, Butte, Mont., and Sheridan, Wyo., to Crawford, Nebr., or on the checked primary leveling of the Missouri River Commission from the Montana-North Dakota State line along the Missouri River to Three Forks, Mont., and are subject to slight changes by future adjustments.

*Personnel.*—The field work from 1896 to 1906, inclusive, was done under the general direction of E. M. Douglas, geographer; that for 1907 to 1909, inclusive, under E. C. Barnard, geographer; and the later work under Sledge Tatum, geographer, under the general direction of R. B. Marshall, chief geographer. The names of the various levelmen are given in the introduction to each list. The office work of computation, adjustment, and preparation of lists was done mainly by S. S. Gannett, geographer, and D. H. Baldwin, topographer, and since 1907 under the general direction of E. M. Douglas, geographer.

*Classification.*—No precise leveling has been done by the United States Geological Survey in this State. For primary lines standard Y levels are used; lines are run in circuits or are closed on precise lines, with an allowable closing error in feet represented by  $0.05 D$ , in which  $D$  is the length of the circuit in miles, sufficient care being given to the work to maintain this standard. For all levels of this class careful office adjustments are made, the circuit closure errors being distributed over the lines.

*Bench marks.*—The standard bench marks are of two forms. The first form is a circular bronze or aluminum tablet (*C* and *E*, Pl. I),  $3\frac{1}{2}$  inches in diameter and one-quarter inch thick having a 3-inch

stem, which is cemented in a drill hole in solid rock in the wall of some public building, a bridge abutment, or other substantial masonry structure. The second form (*F*, Pl. I), used where masonry or rock is not available, consists of a hollow wrought-iron post  $3\frac{1}{2}$  inches in outer diameter and 4 feet in length. The bottom is spread out to a width of 10 inches in order to give a firm bearing on the earth. A bronze or aluminum-bronze cap is riveted over the top of the post, which is set about 3 feet in the ground. A third style of bench mark with abbreviated lettering (*B* and *D*, Pl. I), is used for unimportant points. This consists of a special copper nail  $1\frac{1}{2}$  inches in length driven through a copper washer seven-eighths inch in diameter. The tablets as well as the caps on the iron posts are appropriately lettered. Cooperation by States is indicated by the addition of the State name (*G*, Pl. I).

The numbers stamped on the bench marks described in the following pages represent the elevations to the nearest foot as determined by the levelman. These numbers are stamped with  $\frac{3}{16}$ -inch steel dies on the tablets or post caps, to the left of the word "feet." The office adjustment of the notes and the reduction to mean sea level datum may so change some of the figures that the original markings are 1 or 2 feet in error. It is assumed that engineers and others who have occasion to use the bench-mark elevations will apply to the Director of the United States Geological Survey, at Washington, D. C., for the adjusted values and will use the markings as identification numbers only.

*Datum.*—All United States Geological Survey elevations are referred to mean sea level, which is the level that the sea would assume if the influence of winds and tides were eliminated. This level is not the elevation determined from the mean of the highest and the lowest tides, nor is it the half sum of the mean of all the high tides and the mean of all the low tides, which is called the half-tide level. *Mean sea level is the average height of the water, all stages of the tide being considered.* It is determined from observations made by means of tidal gages placed at stations where local conditions, such as long, narrow bays, rivers, and like features will not affect the height of the water. To obtain even approximately correct results these observations must extend over at least one lunar month, and if accuracy is desired they must extend over several years. At ocean stations the half-tide level and the mean sea level usually differ but little. It is assumed that there is no difference between the mean sea level as determined from observations in the Atlantic Ocean, the Gulf of Mexico, or the Pacific Ocean.

The connection with tidal stations for bench marks in certain areas that lie at some distance from the seacoast is still uncertain,

and this fact is indicated by the addition of a letter or word to the right of the word "DATUM" on tablets or posts. For such areas corrections for published results will be made from time to time as the precise-level lines of the United States Geological Survey or other Government organizations are extended.

*Topographic maps.*—Maps of the following quadrangles wholly or partly in Montana have been published by the United States Geological Survey up to June 20, 1911. They may be obtained, except as noted, for 5 cents each, or \$3 a hundred, on application to the Director of the Survey, at Washington, D. C.

Aladdin (Wyo.-S. Dak.-Mont.)	Helena. <sup>1</sup>
Assiniboine.	Helena special.
Big Snowy Mountain.	Hinsdale special.
Big Timber.	Huntley.
Bonner.	Kintla Lakes.
Boulder. <sup>1</sup>	Kremlin.
Bowdoin.	Little Belt Mountains.
Boxelder.	Livingston (Mont.-Yellowstone National Park).
Browning.	Lonesome special.
Butte special. <sup>2</sup>	Marysville special.
Chief Mountain.	Ovando.
Chinook.	Philipsburg.
Cœur d'Alene special (Idaho-Mont.) <sup>2</sup>	Rosebud.
Coopers Lake.	Saco special.
Custer Battlefield. <sup>3</sup>	St. Xavier.
Dillon.	Sapphire.
Fort Benton.	Saypo.
Fort Custer.	Stillwater.
Fort Logan.	Threeforks (Mont.-Yellowstone National Park).
Glendive (Mont.-N. Dak.)	Wayne Creek.
Great Falls.	Yantic.
Hamilton (Mont.-Idaho).	
Harlem.	
Havre.	

## PRIMARY LEVELING.

## Glendive Quadrangle.

## DAWSON COUNTY.

The following bench marks along the west bank of Yellowstone River were established by the Reclamation Service in 1903, 1904, and 1906. The elevations have been reduced to approximate mean sea-level datum by adding 14.074 feet to Reclamation Service values.

The elevations given without fractions were determined by single level lines in the early stages of the Lower Yellowstone Project.

<sup>1</sup> Boulder map shows part of Helena quadrangle on larger scale.

<sup>2</sup> Price 10 cents.

<sup>3</sup> Custer Battlefield map shows also map of Custer Battlefield Reservation on scale of 1:5280.

## GLENDIVIVE QUADRANGLE.

## Terry along west side of Yellowstone River to Glendive.

Terry, 2 miles north of, about 3,500 feet below the Lower Terry Ferry; iron post.....	2, 184
Terry, 6 miles north of, about 4.5 miles below the Lower Terry Ferry, 3,500 feet north of Haley Bros.' ranch houses; iron post.....	2, 187
Fallon Ferry, 7,200 feet east and down river from, at lower end of Ferry Point; iron post.....	2, 196
Lewis ranch houses, about 0.5 mile southeast of, 20 feet from edge of bank above wooded flat, about 540 feet southeast of southwest corner of NE. $\frac{1}{4}$ sec. 13, T. 13 N., R. 53 E.; iron post.....	2, 148
Fallon Ferry, about 12 miles below; bench mark bears S. 51° E. from mouth of ravine and S. 36° E., about 500 feet from pointed butte at mouth of ravine; iron post.....	2, 128
Yellowstone River, about 0.2 mile west of, on north bank of Clear Creek, bearing S. 33° 30' W., to door of old dugout and N. 28° 45' W., 0.4 mile to log house at foot of bluff; iron post.....	2, 122
T. 15 N., R. 55 E., 0.2 mile due east from southwest corner of sec. 21; 0.8 mile east of Pepin's ranch, about 60 feet above river and 100 feet west of crest of cut bank; iron post.....	2, 138
Glendive, 1 mile west of county bridge across Yellowstone River, on crest of high bank, 50 feet above road; log house on road bears S. 7° 30' E., 50 rods from bench mark, county bridge bears N. 72° E.; iron post.....	2, 121

## Glendive down west side of Yellowstone River to Missouri River.

Glendive, 6 miles north of, 75 feet west of slough of Yellowstone River, 200 feet south of east-west line of fence, about 3,000 feet south of cabin, supposed to be in sec. 33, T. 17 N., R. 55 E.; iron post.....	2, 080
Glendive, 10 miles northeast of, about 600 feet west of Yellowstone River at point on high bank extending east into river, and about 900 feet in south direction from quarter section corner on west side of sec. 18, T. 17 N., R. 56 E.; iron post.....	2, 093
Glendive, 11 miles east of, on north side of mouth of Seven Mile Creek, 100 feet west of Yellowstone River, on top of large rock; cross.....	2, 039
T. 17 N., R. 56 E., about 900 feet east of northeast corner of sec. 5, about 1,800 feet below Morgan Creek, 100 feet east of Glendive-Fort Buford County road, about 900 feet west of Yellowstone River, about 30 feet south of point of butte; iron post.....	2, 052
Thirteenmile Creek, on flat 900 feet north of river road, 200 feet west of hills, on bank of creek near two small bullberry trees, on large rock; chisel mark.....	2, 026
T. 18 N., R. 58 E., in sec. 36, 350 feet east by 135 feet south of northwest end of wing wall of headworks, 6 feet north by 48 feet east of southwest corner of gatekeeper's house; iron post.....	2, 048. 044
T. 18 N., R. 56 E., corner of secs. 25, 26, 35, and 36, on meander corner, 25 feet north of Yellowstone River, on edge of high cut bank, on top of stone; marked cross.....	2, 054
Stewart's house, 3,000 feet northeast of, 100 feet north of road, near large rock monument about 700 feet southwest of Yellowstone River, on large rock; cross mark.....	2, 024
T. 18 N., R. 57 E., in south part of sec. 17, 3 miles down river from Neil Stewart's ranch, on point of hill extending toward Yellowstone River, 300 feet west of road from Glendive to Fort Buford; iron post.....	1, 989. 468

	Feet.
T. 19 N., R. 57 E., 2,400 feet southeast of corner of secs. 26, 27, 34, and 35, 30 feet south of county road from Glendive to Buford, 125 feet north of Yackey's north line of fence and 1,300 feet east of Yackey's house, 600 feet west of Yackey's fence; iron post.....	2,024.665
T. 19 N., R. 58 E., near center of sec. 26, at Burns Creek, in small coulee which is about 200 feet north of Burns Creek, and 1,300 feet north of canal line; iron post.....	2,004.115
T. 19 N., R. 58 E., about 2,000 feet northwest of quarter section corner on south side of sec. 18, 800 feet northeast of Pettigrove's shack, 600 feet east of Glendive and Buford road, near where road leaves Tokna Flat to Glendive, 25 feet north of high bank and 4.5 miles south of Tokna; iron post.....	2,034.748
T. 19 N., R. 58 E., SE. $\frac{1}{4}$ SE. $\frac{1}{4}$ sec. 7, at mouth of Beef Slough, a few feet south of Beef Slough drain; iron post.....	1,979.114
Tokna, 600 feet east of Frederickson's house, 900 feet north of Dunlap Creek, 30 feet of north-south line of fence on east side of county road from Buford to Glendive, in SW. $\frac{1}{4}$ sec. 20, T. 20 N., R. 58 E.; iron post.	1,985.864
T. 20 N., R. 58 E., in sec. 21, 100 feet west of transit station 1105, 300 feet south of fence corner on Devitt ranch; iron post.....	2,009.734
T. 21 N., R. 58 E., in sec. 32, 6 feet south of Sear's east-west fence, 1,400 feet north of Sear's house, 600 feet north of Sears Creek bottom; iron post.	2,008.758
T. 21 N., R. 58 E., 0.5 mile west of J. A. Stewart's, 400 feet north of station 1506, 250 feet north of fence corner, 0.5 mile south of Crane Creek, near point of foothills, 20 feet west of tenth post north of fence corner; iron post.....	1,999.596
T. 12 N., R. 58 E., 1,365 feet west of northeast corner of sec. 10, 300 feet north of Meddie Simard's house, 3 feet south of Simard's east-west fence, about 4 miles southeast of Newlon post office; iron post.....	1,990.032
T. 22 N., R. 58 E., sec. 23, in Charles Stierle's front yard; iron post.....	1,953.789
T. 22 N., R. 58 E., near quarter section corner on west side of sec. 13, 2,000 feet east of Lowe's house, 100 feet west of small butte, on west side of north end of pass between Fox Creek and Lonetree Creek; iron post....	1,994.045
Sidney, 1.25 miles southwest of, at quarter corner near old log house, 300 feet south of bank of Lonetree Creek and about 0.8 mile upstream from Lonetree; iron post.....	1,978.309
T. 23 N., R. 58 E., 700 feet east of southwest corner of sec. 16, on section line, 3,000 feet north of Kelly's house, 5,000 feet west of Anderson's house, 3 feet south of south line of section; iron post.....	1,987.056
T. 23 N., R. 59 E., in sec. 2, on section line halfway from Ridgelawn post office to Hastey's house, 1,000 feet west of county road; iron post.....	1,969.274
George Rhodes's house, 2,600 feet west of, 600 feet west of road between Buford and Glendive, halfway between First Hay and Second Hay Creeks, 700 feet from each; iron post.....	1,951.162
T. 24 N., R. 60 E., 2,300 feet west of corner of secs. 17, 18, 19, and 20, east side of county road, 0.5 mile southwest of J. Meador's; iron post...	1,932.145
Fairview; 600 feet east of Newlon's store, 15 feet south of east-west line fence, 300 feet east of county road from Buford to Glendive; iron post..	1,938.293
T. 151 N., R. 104 W., near corner of secs. 17, 18, 19, and 20, 50 feet from road, 10 feet north of section line, west side of county road, 0.5 mile north of H. L. Moody's place; iron post (reset).....	1,926.518
George Dore's house, 600 feet west of, 1,100 feet west of quarter section corner and county road, 50 feet south of east-west line fence; iron post..	1,926.286
T. 152 N., R. 105 W., 30 feet east by 55 feet south of corner of secs. 29, 30, 31, and 32; iron post.....	1,904.806

State line between North Dakota and Montana, 1.5 miles south of Missouri River, 50 feet north of Missouri River bluffs; iron post .....	Feet. 1, 898. 224
Buford, N. Dak., 850 feet west of station, 98 feet south of center line of main track of Great Northern Ry., in southeast corner of fence on south side of Great Northern Ry. right of way, on north side of county road from Buford west to State line; iron post .....	1, 961

**Brocton, Milk River, Plentywood, Poplar, Scobey, Whiskey Buttes, and Wolf Point  
Quadrangles, and Quadrangle Two.**

**DAWSON AND VALLEY COUNTIES (FORT PECK INDIAN RESERVATION).**

The following elevations are based upon Missouri River Commission leveling, as given in the Report of Chief of Engineers, United States Army, Part 4, 1894.

The work was done by the General Land Office. The iron posts at township corners are similar to those of the Geological Survey, but are 1 foot shorter. The interiors are filled with concrete. The iron section corner posts are of the same length (3 feet), 1 inch in diameter, filled with cement, capped, pointed at bottom, and driven in place with a maul. Elevations are stamped upon the posts at township corners and on many of those at section corners.

The leveling was done in the Brocton quadrangle in 1909 by Henry Bucher, H. L. Baldwin, L. E. Dequine, and L. B. Roberts; in the Milk River quadrangle in 1904 by E. W. Myers and F. E. Fellows, in 1908 by C. H. Burns, and in 1910 by H. L. Baldwin; in quadrangle 2, in 1910 by H. L. Baldwin; in the Plentywood and Scobey quadrangles in 1909 by Henry Bucher; in the Poplar quadrangle in 1908 by C. H. Burns, and in 1909 by L. B. Roberts and Henry Bucher; in the Wolf Point quadrangle in 1908 by C. H. Burns and J. S. Rohrer, in 1909 by Henry Bucher, and in 1910 by H. L. Baldwin; and in the Whiskey Buttes quadrangle in 1909 by Henry Bucher and in 1910 by H. L. Baldwin.

The leveling in the Brocton, Poplar, and Wolf Point quadrangles south of the Missouri River was done in 1910 by J. H. Wilke. Nearly all bench marks established by Wilke were by single unchecked sights and are therefore individually unreliable.

**MILK RIVER QUADRANGLE.**

**T. 28 N., R. 40 E., southeast to Missouri River Commission bench mark 90/L.**

T. 28 N., R. 40 E., 145 feet west of southeast corner of sec. 36, 9 miles south-east of Glasgow, 150 feet west of road, near mouth of coulee, toward west; iron post stamped "2085 MALTA" .....	Feet. 2, 092. 465
T. 27 N., R. 41 E., 2 feet south of, northeast corner of sec. 8, 12 miles south-east of Glasgow; iron post stamped "2132 MALTA" .....	2, 139. 471
T. 27 N., R. 41 E., 2 feet south of quarter corner on east side of sec. 3, 14.5 miles southeast of Glasgow, 200 feet north of road, 200 feet west of slough, 900 feet south of Milk River; iron post stamped "2158 MALTA" .....	2, 165. 447

T. 27 N., R. 41 E., 2 feet south of northeast corner of sec. 27, 18 miles southeast of Glasgow, 500 feet south of base of bluff, 0.5 mile north of Missouri River, 0.5 mile east of Cowles house, 100 feet north of road, beside wire fence; iron post stamped "2047 MALTA".....	2, 054. 418
Milk River and Missouri River, 3.5 miles west of junction of, 500 feet south of Missouri River, 1 mile northwest of Milk River, 3.75 miles southeast of Stephens ranch house; iron post stamped "Mo. River Commission U. S. B. M. 90/1 chart 57":	
Top of cap (Missouri River Commission bench mark).....	2, 091. 869
Subsurface mark, under iron post.....	2, 095. 969
<b>Northeast corner of sec. 27, T. 27 N., R. 41 E., east to point 3 miles north of mouth of Milk River (single spur line).</b>	
T. 27 N., R. 41 E., 3 feet south of northeast corner of sec. 13, 19 miles southeast of Glasgow, 200 feet north of gate in wire fence; iron post stamped "2104 MALTA".....	2, 111. 408
T. 27 N., R. 42 E., near center of sec. 16, 2.5 miles southeast of Glasgow, 3 miles north of junction of Milk River and Missouri River, 1 mile west of Milk River; iron triangulation mark post set by Missouri River Commission Survey:	
Top of cap of iron post.....	2, 182. 746
Top of bolt under iron post.....	2, 179. 731
T. 27 N., R. 42 E., quarter corner on south side of sec. 22, 24.5 miles southeast of Glasgow, 0.25 mile west of Milk River, 2,000 feet north of log cabin; iron post stamped "2039 MALTA".....	2, 046. 412
<b>Glasgow southeast along Great Northern Ry. and highway to Missouri River Commission bench mark 92/2, 7 miles below mouth of Milk River (old double run line).</b>	
Whateley, east end of siding, in switch stand; top of southeast bolt.....	2, 096. 67
Nashua, east end of siding, south side of switchboard; head of bolt.....	2, 071. 21
Milk River station, water tank, 3 feet south of gauge rod, southeast corner of pedestal block; corner point.....	2, 059. 88
Bridge 325, 2.5 miles south of, 1,000 feet north of north bank of river, 7 miles below mouth of Milk River, on hill north of point at large bend in river, 600 feet east of house, Missouri River Commission bench mark 92/2:	
Subsurface mark under iron post.....	2, 067. 145
Top of cap of iron post.....	2, 071. 195
<b>Bench mark 92/2 near mouth of Milk River north to point near Milk River station.</b>	
Missouri River Commission bench mark 91/2 on left bank, 1 mile below mouth of Milk River, 1,800 feet from shore.....	2, 037. 824
T. 27 N., R. 42 E., at quarter corner of sections 35 and 36; iron sec. post stamped "2044".....	2, 042. 652
T. 27 N., R. 42 E., at corner of secs. 35, 36, 25, and 26; iron sec. post stamped "2045".....	2, 042. 756
T. 27 N., R. 42 E., at quarter corner of secs. 25 and 26; iron sec. post stamped "2043".....	2, 041. 526
Milk River station, 0.5 mile east of, 100 feet south of Great Northern Railway track, in northeast corner of lot around boat house; iron post stamped "2057".....	2, 056. 413
<b>Point near Milk River station east along railroad and road to Missouri River Commission bench mark 93/2.</b>	
Milk River station, 1 mile east of, south of track, in east end of wooden trestle; bolt marked "2073".....	2, 069. 78

Milk River station, 1.6 miles east of, north of railroad 60 feet, in telegraph pole; spike stamped "2097".....	Feet. 2, 092. 41
Milk River station, 2.25 miles east of, south of railroad, in coping on west side of stone culvert; spike stamped "2111".....	2, 106. 27
Kintyre, 1 mile west of, south of railroad, in station milepost; spike stamped "2100".....	2, 095. 93
Kintyre, 30 feet north of track; in station signpost; spike stamped "2096".....	2, 092. 50
Kintyre; top of rail.....	2, 093. 0
Kintyre, 1 mile east of, opposite milepost (signal), 100 feet south of railroad; iron post stamped "2085".....	2, 081. 380
Frazer, 1 mile west of, south of railroad, in station milepost; spike marked "2071" (marked erroneously).....	2, 059. 53
Frazer, southeast end of wooden trestle over Little Porcupine Creek, at rail joint; top of rail stamped "2074".....	2, 069. 7
Frazer, 1 mile east of, north of track, in station milepost; spike stamped "2083".....	2, 078. 61
T. 27 N., R. 44 E., quarter corner of secs. 34 and 35; iron section post stamped "2045" (marked erroneously).....	2, 070. 039
Tps. 26 and 27 N., R. 44 E., corner of secs. 2, 3, 34, and 35; iron section post stamped "2088".....	2, 084. 082
T. 26 N., R. 44 E., at quarter corner of secs. 2 and 3; iron section post stamped "2086".....	2, 081. 240
Lenox, opposite, on east bank of river, 500 feet from bank, top of high bench, Missouri River Commission bench mark 93/2, plotted on chart 60: Subsurface mark under iron post.....	2, 066. 285
Top of cap of iron post.....	2, 070. 335
<b>Bench mark 92/2 north to point 1 mile east of Kintyre.</b>	
T. 27 N., R. 43 E., quarter corner of secs. 35 and 36; iron section post.....	2, 118. 014
<b>Milk River station northwest along Great Northern Ry. 2.2 miles, thence along road east and south to Milk River station.</b>	
Milk River, in front of station; top of rail.....	2, 060. 9
Tps. 27 and 28 N., R. 42 E., 100 feet west of, quarter corner of secs. 3 and 34, on small ridge; white stone 6 by 8 by 8 marked "2225".....	2, 224. 76
Tps. 27 and 28 N., R. 42 E., corner of secs. 1, 2, 35, and 36; iron section post stamped "2248".....	2, 246. 969
T. 27 N., R. 43 E., northwest corner of sec. 6; iron post stamped "2168".....	2, 167. 252
Milk River Coulee, first west fork of; small stone marked "2117".....	2, 116. 23
<b>Point 2.2 miles northwest of Milk River station north and east to sec. 33, T. 29 N., R. 44 E.</b>	
Tps. 27 and 28 N., R. 42 E., corner of secs. 4, 5, 32, and 33, 6 feet northeast of iron section post; iron post stamped "2075".....	2, 073. 937
T. 28 N., R. 42 E., corner of secs. 28, 29, 32, and 33; stone marked "2062".....	2, 261. 07
T. 28 N., R. 42 E., corner of secs. 20, 21, 28, and 29; stone marked "2322".....	2, 321. 45
T. 28 N., R. 42 E., quarter corner between secs. 20 and 21; stone marked "2329".....	2, 328. 21
T. 28 N., R. 42 E., corner of secs. 16, 17, 20, and 21; iron section post stamped "2227".....	2, 225. 908
T. 28 N., R. 42 E., quarter corner between secs. 16 and 17; stone marked "2342".....	2, 341. 43
T. 28 N., R. 42 E., corner of secs. 8, 9, 16, and 17; stone marked "2351".....	2, 350. 38
T. 28 N., R. 42 E., quarter corner between secs. 8 and 9; stone marked "2384".....	2, 383. 12

	Feet.
T. 28 N., R. 42 E., corner of secs. 4, 5, 8, and 9; stone marked "2380"....	2, 379. 09
T. 28 N., R. 42 E., quarter corner between secs. 4 and 5; iron section post stamped "2410".....	2, 409. 626
T. 29 N., R. 42 E., south side of sec. 31, on standard quarter corner; iron section post stamped "2434".....	2, 432. 943
T. 29 N., R. 42 E., standard corner of secs. 31 and 32; iron section post stamped "2450".....	2, 448. 774
T. 29 N., R. 42 E., south side of sec. 32, standard quarter corner; iron section post stamped "2487".....	2, 485. 958
T. 29 N., R. 42 E., standard corner of secs. 32 and 33; iron section post stamped "2482".....	2, 481. 104
T. 29 N., R. 42 E., standard quarter corner of secs. 33; iron section post stamped "2494".....	2, 492. 980
T. 29 N., R. 42 E., standard corner of secs. 33 and 34; iron section post stamped "2480".....	2, 478. 937
T. 29 N., R. 42 E., standard quarter corner of sec. 34; iron section post stamped "2485".....	2, 484. 107
T. 29 N., R. 42 E., standard corner of secs. 34 and 35; iron section post stamped "2469".....	2, 468. 488
T. 28 N., Rs. 42 and 43 E., closing corner of; iron post stamped "2507"....	2, 505. 775
T. 29 N., R. 42 E., standard quarter corner of sec. 35; iron section post stamped "2515".....	2, 513. 771
T. 29 N., R. 42 E., standard quarter corner of sec. 36; iron section post stamped "2514".....	2, 513. 067
T. 29 N., R. 42 and 43 E., standard corner of; iron post stamped "2533"....	2, 532. 049
T. 28 N., R. 43 E., closing corner of secs. 4 and 5; iron section post stamped "2544".....	2, 544. 564
T. 29 N., R. 43 E., standard quarter corner of sec. 31; iron section post stamped "2563".....	2, 561. 982
T. 28 N., R. 43 E., quarter closing corner on north side of sec. 3; iron section post.....	2, 576. 66
T. 29 N., R. 43 E., standard corner of secs. 31 and 32; iron section post stamped "2580".....	2, 578. 809
T. 28 N., R. 43 E., closing corner of secs. 3 and 4; iron section post.....	2, 573. 287
T. 29 N., R. 43 E., standard quarter corner of sec. 32; iron section post stamped "2592".....	2, 590. 899
T. 28 N., R. 42 E., quarter closing corner of sec. 33; iron section post.....	2, 592. 390
T. 29 N., R. 43 E., standard corner of secs. 32 and 33; iron section post stamped "2578".....	2, 576. 821
T. 29 N., R. 43 E., standard quarter corner on south side of sec. 33, iron section post stamped "2540".....	2, 539. 333
T. 28 N., R. 43 E., quarter closing corner sec. 2; iron section post.....	2, 531. 762
T. 29 N., R. 43 E., standard corner of secs. 33 and 34; iron section post stamped "2530".....	2, 529. 409
T. 28 N., R. 43 E., closing corner of secs. 1 and 2; iron section post.....	2, 587. 15
T. 29 N., R. 43 E., standard quarter corner of sec. 34; iron section post stamped "2515" (stamped 100 feet low).....	2, 614. 103
T. 28 N., R. 43 E., quarter closing corner of sec. 1; iron section post.....	2, 588. 430
T. 29 N., R. 43 E., standard corner of secs. 34 and 35; iron section post stamped "2536".....	2, 535. 202
T. 28 N., Rs. 43 and 44 E., closing corner of; iron post stamped "2487"....	2, 485. 999
T. 28 N., R. 43 E., quarter closing corner of sec. 6; iron section post stamped "2452".....	2, 451. 615

T. 29 N., R. 43 E., standard corner of secs. 35 and 36; iron section post stamped "2414".....	Feet. 2, 413. 189
T. 28 N., R. 44 E., closing corner of secs. 5 and 6; iron section post stamped "2358".....	2, 356. 740
T. 29 N., R. 43 E., standard quarter corner of sec. 36; stamped "2356".....	2, 354. 94
T. 28 N., R. 44 E., quarter closing sec. 5; iron section post stamped "2389" (marked wrong).....	2, 377. 742
T. 29 N., Rs. 43 and 44 E., standard corner of; iron post stamped "2425"....	2, 423. 963
T. 28 N., R. 44 E., closing corner of secs. 4 and 5; stone.....	2, 428. 79
T. 29 N., R. 44 E., standard quarter corner of sec. 31; iron section post stamped "2429".....	2, 427. 972
T. 28 N., R. 44 E., quarter closing corner of sec. 4; iron section stamped "2466".....	2, 464. 840
T. 29 N., R. 44 E., standard corner of secs. 31 and 32; iron section post stamped "2508".....	2, 507. 452
T. 28 N., R. 44 E., closing corner of secs. 3 and 4; iron section post stamped "2568".....	2, 567. 28
T. 29 N., R. 44 E., standard quarter corner of sec. 32; iron section post stamped "2614".....	2, 612. 817
T. 28 N., R. 44 E., quarter closing corner of sec. 3; iron section post stamped "2660".....	2, 659. 658
T. 29 N., R. 44 E., standard corner of secs. 32 and 33; iron section post stamped "2596".....	2, 595. 397
T. 28 N., R. 44 E., closing corner of secs. 2 and 3; iron section post stamped "2533".....	2, 532. 135
T. 29 N., R. 44 E., standard quarter corner of sec. 33; iron section post stamped "2527".....	2, 526. 317
T. 28 N., R. 44 E., quarter closing corner of sec. 2; iron section post stamped "2562".....	2, 560. 983
T. 29 N., R. 44 E., standard corner of secs. 33 and 34; iron section post stamped "2592".....	2, 591. 442
T. 28 N., R. 44 E., closing corner of secs. 1 and 2; iron section post stamped "2599".....	2, 598. 093
<b>Corner of secs. 3, 4, 33, and 34, Tps. 30 and 31 N., R. 44 E., west along township line between corner of secs. 5, 6, 31, and 32, R. 41 E., thence northwest to quarter corner between secs. 19 and 24, T. 31 N., Rs. 40-41 E., and north along range line to quarter corner between secs. 25 and 30, T. 32 N.</b>	
Tps. 30 and 31 N., R. 44 E., 75 feet south of quarter corner between secs. 4 and 5; red granite stone 1 by 2 feet, 8 inches above ground.....	2, 842. 81
Tps. 30 and 31 N., R. 44 E., corner secs. 5, 6, 31, and 32; iron section post stamped "2850".....	2, 843. 600
Tps. 30 and 31 N., R. 44 E., quarter corner between secs. 6 and 31; iron section post stamped "2776".....	2, 775. 073
Tps. 30 and 31 N., Rs. 43 and 44 E., corner of; iron post stamped "2674"....	2, 673. 245
Tps. 30 and 31 N., R. 43 E., 33 feet east of quarter corner between secs. 1 and 36; small water-worn boulder surrounded by circle of rocks.....	2, 571. 74
Tps. 30 and 31 N., R. 43 E., corner of secs. 1, 2, 35, and 36; iron section post stamped "2606".....	2, 604. 629
Tps. 30 and 31 N., R. 43 E., quarter corner between secs. 2 and 35; iron section post stamped "2720".....	2, 718. 589
Tps. 30 and 31 N., R. 43 E., corner of secs. 2, 3, 34 and 35; iron section post stamped "2742".....	2, 740. 674
Tps. 30 and 31 N., R. 43 E., quarter corner between secs. 3 and 34; iron section post stamped "2867".....	2, 865. 988

	Feet.
Tps. 30 and 31 N., R. 43 E., corner of secs. 3, 4, 33, and 34; iron section post stamped "2849".....	2, 848. 074
Tps. 30 and 31 N., R. 43 E., quarter corner between secs. 4 and 33; iron section post stamped "2792".....	2, 791. 108
Tps. 30 and 31 N., R. 43 E., corner of secs. 4, 5, 32, and 33; iron section post stamped "2837".....	2, 836. 054
Tps. 30 and 31 N., R. 43 E., quarter corner between secs. 5 and 32; iron section post stamped "2856".....	2, 855. 134
Tps. 30 and 31 N., R. 43 E., corner of secs. 5, 6, 31, and 32; iron section post stamped "2854".....	2, 853. 172
Tps. 30 and 31 N., Rs. 42 and 43 E., corner of; iron post stamped "2846".....	2, 844. 916
Tps. 30 and 31 N., R. 42 E., 300 feet west of quarter corner between secs. 36 and 1; granite bowlder 2 by 2 by 1 foot above ground.....	2, 803. 88
Tps. 30 and 31 N., R. 42 E., corner of secs. 1, 2, 35, and 36; iron section post stamped "2774" (corner was moved after the elevation was taken, but is still correct to nearest foot).....	2, 773
Tps. 30 and 31 N., R. 42 E., 600 feet west of quarter corner between secs. 2 and 35; rock surrounded by circle of rocks.....	2, 798. 10
Tps. 30 and 31 N., R. 42 E., corner of secs. 2, 3, 34, and 35; iron section post stamped "2794".....	2, 793. 065
Tps. 30 and 31 N., R. 42 E., near quarter corner between secs. 3 and 34; on small rock in circle of rocks.....	2, 765. 91
Tps. 30 and 31 N., R. 42 E., corner of secs. 3, 4, 33, and 34; iron section post stamped "2784".....	2, 783. 360
Tps. 30 and 31 N., R. 42 E., corner of secs. 4, 5, 32, and 33; iron section post stamped "2761".....	2, 759. 925
Tps. 30 and 31 N., R. 42 E., corner of secs. 5, 6, 31, and 32; iron section post stamped "2698".....	2, 697. 364
Tps. 30 and 31 N., R. 42 E., quarter corner between secs. 6 and 31; iron section post stamped "2595".....	2, 593. 648
Tps. 30 and 31 N., R. 42 E., 200 feet south of creek; rock surrounded by a pile of rocks.....	2, 561. 66
Tps. 30 and 31 N., Rs. 41 and 42 E., corner of; iron post stamped "2603".....	2, 603. 280
Tps. 30 and 31 N., R. 41 E., quarter corner between secs. 1 and 36; iron section post stamped "2581".....	2, 581. 498
Tps. 30 and 31 N., R. 41 E., corner of secs. 1, 2, 35, and 36; iron section post stamped "2486".....	2, 486. 267
Tps. 30 and 31 N., R. 41 E., corner of secs. 2, 3, 34, and 35; iron section post stamped "2553".....	2, 553. 562
Tps. 30 and 31 N., R. 41 E., quarter corner between secs. 3 and 34; iron section post stamped "2587".....	2, 587. 595
Tps. 30 and 31 N., R. 41 E., corner of secs. 3, 4, 33, and 34; iron section post stamped "2592".....	2, 592. 630
Tps. 30 and 31 N., R. 41 E., quarter corner between secs. 4 and 33; iron section post stamped "2584".....	2, 584. 543
Tps. 30 and 31 N., R. 41 E., corner of secs. 4, 5, 32, and 33; iron section post stamped "2562".....	2, 562. 120
Tps. 30 and 31 N., R. 41 E., quarter corner between secs. 5 and 32; iron section post stamped "2467".....	2, 467. 612
Tps. 30 and 31 N., R. 41 E., corner of secs. 5, 6, 31, and 32; iron section post stamped "2425".....	2, 425. 549
Tps. 30 and 31 N., R. 41 E., near corner of secs. 5, 6, 31, and 32; rock.....	2, 425. 49
Tps. 30 and 31 N., R. 41 E., quarter corner between secs. 31 and 6; iron post stamped "2428".....	2, 428. 275

T. 31 N., R. 41 E., quarter corner between secs. 29 and 30; iron section post stamped "2522".....	Feet. 2,522.169
T. 31 N., R. 41 E., quarter corner between secs. 19 and 30; iron section post stamped "2513".....	2,513.734
T. 31 N., Rs. 40 and 41 E., quarter corner between secs. 19 and 24; iron section post stamped "2494".....	2,494.516
T. 31 N., Rs. 40 and 41 E., corner of secs. 13, 18, 19, and 24; iron section post stamped "2525".....	2,525.795
T. 31 N., Rs. 40 and 41 E., quarter corner between secs. 13 and 18; iron section post stamped "2563".....	2,563.408
T. 31 N., Rs. 40 and 41 E., corner of secs. 7, 12, 13, and 18; iron section post stamped "2556".....	2,556.749
T. 31 N., Rs. 40 and 41 E., quarter corner between secs. 7 and 12; iron section post stamped "2621".....	2,621.478
T. 31 N., Rs. 40 and 41 E., corner of secs. 1, 6, 7, and 12; iron section post stamped "2648".....	2,648.863
T. 31 N., Rs. 40 and 41 E., quarter corner between secs. 1 and 6; iron section post stamped "2637".....	2,637.294
Tps. 31 and 32 N., Rs. 40 and 41 E., corner common to; iron post stamped "2669".....	2,669.986
T. 32 N., Rs. 40 and 41 E., corner of secs. 25, 30, 31, and 36; iron section post stamped "2741".....	2,741.980
T. 32 N., Rs. 40 and 41 E., quarter corner between secs. 25 and 30; iron section post stamped "2772".....	2,772.692
<b>Quarter corner of sec. 31, T. 29 N., R. 42 E., north along range line between Rs. 41 and 42 E., to quarter corner between secs. 1 and 6, T. 30.<sup>1</sup></b>	
T. 29 N., R. 42 E., witness corner to standard quarter corner of sec. 31; iron section post stamped "2434".....	2,432.943
T. 38 N., Rs. 41 and 42 E., witness corner, standard quarter corner of secs. 4 and 5; iron section post stamped "2422".....	2,420.944
T. 29 N., Rs. 41 and 42 E., standard corner; iron post stamped "2409".....	2,408.288
T. 29 N., Rs. 41 and 42 E., quarter corner between secs. 31 and 36; iron section post stamped "2416".....	2,415.466
T. 29 N., Rs. 41 and 42 E., corner of secs. 25, 30, 31, and 36; iron section post stamped "2420".....	2,419.268
T. 29 N., Rs. 41 and 42 E., quarter corner between secs. 25 and 30; iron section post stamped "2448".....	2,446.626
T. 29 N., Rs. 41 and 42 E., corner of secs. 19, 24, 25, and 30; iron section post stamped "2464".....	2,462.780
T. 29 N., Rs. 41 and 42 E., quarter corner between secs. 19 and 24; iron section post stamped "2482".....	2,480.557
T. 29 N., Rs. 41 and 42 E., corner of secs. 13, 18, 19, and 24; iron section post stamped "2528".....	2,526.640
T. 29 N., Rs. 41 and 42 E., quarter corner between secs. 13 and 18; iron section post stamped "2533".....	2,531.910
T. 29 N., Rs. 41 and 42 E., corner of secs. 7, 12, 13, and 18; iron section post stamped "2497".....	2,495.830
T. 29 N., Rs. 41 and 42 E., quarter corner between secs. 7 and 12; iron section post stamped "2531".....	2,529.734
T. 29 N., Rs. 41 and 42 E., corner of secs. 1, 6, 7, and 12; iron section post stamped "2560".....	2,558.841

<sup>1</sup> Unadjusted line closing 1.511 feet low on adjusted line.

T. 29 N., Rs. 41 and 42 E., quarter corner between secs. 1 and 6; iron section post stamped "2614".....	Feet. 2, 612. 704
Tps. 29 and 30 N., Rs. 41 and 42 E., corner of; iron post stamped "2568".....	2, 566. 907
T. 30 N., Rs. 41 and 42 E., quarter corner between secs. 31 and 36; iron section post stamped "2534".....	2, 533. 106
T. 30 N., Rs. 41 and 42 E., corner of secs. 25, 30, 31, and 36; iron section post stamped "2595".....	2, 593. 747
T. 30 N., Rs. 41 and 42 E., quarter corner between secs. 25 and 30; iron section post stamped "2695".....	2, 694. 171
T. 30 N., Rs. 41 and 42 E., corner of secs. 24, 25, 19, and 30; iron section post stamped "2608".....	2, 607. 166
T. 30 N., Rs. 41 and 42 E., quarter corner between secs. 19 and 24; iron section post stamped "2669".....	2, 667. 954
T. 30 N., Rs. 41 and 42 E., quarter corner between secs. 13 and 18; iron section post stamped "2737".....	2, 736. 247
T. 30 N., Rs. 41 and 42 E., corner of secs. 7, 12, 13, and 18; iron section post stamped "2745".....	2, 744. 155
T. 30 N., Rs. 41 and 42 E., quarter corner between secs. 7 and 12; iron section post stamped "2695".....	2, 694. 313
T. 30 N., Rs. 41 and 42 E., corner of secs. 1, 6, 7, and 12; iron section post stamped "2721".....	2, 719. 657
T. 30 N., Rs. 41 and 42 E., quarter corner between secs. 1 and 6; iron section post stamped "2615".....	2, 614. 032

## WOLF POINT 30' QUADRANGLE.

Missouri River Commission bench mark 98/2 east, north, east, and south along township and range lines to Missouri River Commission bench mark 98/2.

Tps. 26 and 27 N., R. 44 E., corner of secs. 2, 3, 34, and 35; iron section post stamped "2084".....	2, 084. 082
Tps. 26 and 27 N., R. 44 E., quarter corner between secs. 5 and 32; iron section post stamped "2089".....	2, 088. 642
T. 27 N., R. 44 E., south side of sec. 36, on sixteenth corner; top of white limestone 8 by 8 inches and 4 inches above ground, marked "2036".....	2, 035. 88
Tps. 26 and 27 N., R. 44 E., quarter corner between secs. 1 and 36; iron section post stamped "2031".....	2, 031. 233
Tps. 26 and 27 N., Rs. 44 and 45 E., corner of; iron post stamped "2030".....	2, 029. 941
T. 27 N., Rs. 44 and 45 E., quarter corner between secs. 25 and 30; iron section post stamped "2109".....	2, 108. 645
T. 27 N., Rs. 44 and 45 E., corner of secs. 19, 24, 25, and 30; iron section post stamped "2146".....	2, 146. 025
T. 27 N., R. 44 E., center of sec. 24; iron section post stamped "2185".....	2, 184. 660
T. 27 N., Rs. 44 and 45 E., corner of secs. 13, 18, 19, and 24; iron section post stamped "2198".....	2, 199. 117
T. 27 N., Rs. 44 and 45 E., quarter corner between secs. 13 and 18; iron section post stamped "2201".....	2, 201. 530
T. 27 N., Rs. 44 and 45 E., corner of secs. 7, 12, 13, and 18; iron section post stamped "2223".....	2, 223. 755
T. 27 N., Rs. 44 and 45 E., quarter corner between secs. 7 and 12; iron section post stamped "2276".....	2, 276. 963
T. 27 N., Rs. 44 and 45 E., corner of secs 1, 6, 7, and 12; iron section post stamped "2274".....	2, 274. 852
T. 27 N., Rs. 44 and 45 E., quarter corner between secs. 1 and 6; iron section post stamped "2273".....	2, 273. 806
Tps. 27 and 28 N., Rs. 44 and 45 E., corner of; iron post stamped "2280".....	2, 281. 137

	Feet.
Tps. 27 and 28 N., R. 45 E., quarter corner between secs. 6 and 31; iron section post stamped "2278".....	2, 277. 808
Tps. 27 and 28 N., R. 45 E., corner of secs. 5, 6, 31, and 32; iron post stamped "2276".....	2, 276. 425
Tps. 27 and 28 N., R. 45 E., quarter corner between secs. 5 and 32; iron section post stamped "2270".....	2, 271. 174
Tps. 27 and 28 N., R. 45 E., corner of secs. 4, 5, 32, and 33; iron section post stamped "2275".....	2, 275. 629
Tps. 27 and 28 N., R. 45 E., quarter corner between secs. 4 and 33; iron section post stamped "2265".....	2, 265. 906
Tps. 27 and 28 N., R. 45 E., corner of secs. 3, 4, 33, and 34; iron section post stamped "2263".....	2, 263. 870
Tps. 27 and 28 N., R. 45 E., quarter corner between secs. 3 and 34; iron section post stamped "2271".....	2, 271. 951
Tps. 27 and 28 N., R. 45 E., corner of secs. 2, 3, 34, and 35; iron section post stamped "2279".....	2, 279. 727
Tps. 27 and 28 N., R. 42 E., quarter corner between secs. 2 and 35; iron section post stamped "2286".....	2, 287. 074
Tps. 27 and 28 N., R. 45 E., corner of secs. 1, 2, 35, and 36; iron section post stamped "2287".....	2, 287. 739
Tps. 27 and 28 N., R. 45 E., quarter corner between secs. 1 and 36; iron section post stamped "2264".....	2, 264. 744
Tps. 27 and 28 N., Rs. 45 and 46 E., corner of; iron post stamped "2284".....	2, 285. 206
Tps. 27 and 28 N., R. 46 E., quarter corner between secs. 6 and 31; stone marked "2279".....	2, 279. 29
Tps. 27 and 28 N., R. 46 E., corner of secs. 5, 6, 31, and 32; stone marked "2283".....	2, 283. 72
Tps. 27 and 28 N., R. 46 E., quarter corner between secs. 5 and 32; stone marked "2269".....	2, 269. 77
Tps. 27 and 28 N., R. 46 E., corner of secs. 4, 5, 32, and 33; stone marked "2260".....	2, 260. 52
Tps. 27 and 28 N., R. 46 E., quarter corner between secs. 4 and 33; stone marked "2259".....	2, 259. 61
Tps. 27 and 28 N., R. 46 E., corner of secs. 3, 4, 33, and 34; stone marked "2281".....	2, 282. 05
Tps. 27 and 28 N., R. 46 E., corner of secs. 3, 4, 33, and 34; iron section post stamped "2282".....	2, 282. 947
Tps. 27 and 28 N., R. 46 E., quarter corner between secs. 3 and 34; stone marked "2279".....	2, 280. 19
Tps. 27 and 28 N., R. 46 E., corner of secs. 2, 3, 34, and 35; stone marked "2241".....	2, 241. 86
Tps. 27 and 28 N., R. 46 E., quarter corner between secs. 2 and 35; stone marked "2265".....	2, 265. 48
Tps. 27 and 28 N., R. 46 E., corner of secs. 1, 2, 35, and 36; stone marked "2209".....	2, 209. 65
Tps. 27 and 28 N., R. 46 E., quarter corner between secs. 1 and 36; stone marked "2261".....	2, 261. 63
Tps. 27 and 28 N., R. 46 E., standard corner of range line between ranges 46 and 47 E.; iron post stamped "2077".....	2, 078. 168
Tps. 27 and 28 N., R. 47 E., closing corner; iron post stamped "2075".....	2, 073. 900
Tps. 27 and 28 N., R. 47 E., quarter corner between secs. 6 and 31; stone marked "2248".....	2, 248. 50
Tps. 27 and 28 N., R. 47 E., corner of secs. 5, 6, 31, and 32; stone marked "2237".....	2, 238. 01

Tps. 27 and 28 N., R. 47 E., quarter corner between secs. 5 and 32; stone marked "2195".....	Feet. 2, 195. 47
Tps. 27 and 28 N., R. 47 E., corner of secs. 4, 5, 32, and 33; stone marked "2171".....	2, 172. 00
Tps. 27 and 28 N., R. 47 E., quarter corner between secs. 4 and 33; stone marked "2189".....	2, 189. 89
Tps. 27 and 28 N., R. 47 E., corner of secs. 3, 4, 33, and 34; iron section post stamped "2171".....	2, 171. 448
Tps. 27 and 28 N., R. 47 E., quarter corner between secs. 3 and 34; stone marked "2233".....	2, 234. 18
Tps. 27 and 28 N., R. 47 E., corner of secs. 2, 3, 34, and 35; stone marked "2122".....	2, 123. 05
Tps. 27 and 28 N., R. 47 E., quarter corner between secs. 2 and 35, 100 feet east of stone; white limestone, 12 by 8 by 5 inches, surrounded by stone pile marked "2134".....	2, 134. 244
Tps. 27 and 28 N., R. 47 E., corner of secs. 1, 2, 35, and 36; stone marked "2164".....	2, 164. 88
Tps. 27 and 28 N., R. 47 E., quarter corner between secs. 1 and 36; stone marked "2085".....	2, 085. 45
Tps. 27 and 28 N., Rs. 47 and 48 E., corner of; iron post stamped "2126"....	2, 127. 168
T. 27 N., Rs. 47 and 48 E., quarter corner between secs. 1 and 6; stone marked "2060".....	2, 060. 96
T. 27 N., Rs. 47 and 48 E., corner of secs. 1, 6, 7, and 12; stone marked "2039".....	2, 039. 42
T. 27 N., Rs. 47 and 48 E., quarter corner between secs. 7 and 12; stone marked "1990".....	1, 991. 05
Wolf Point, 2.5 miles east of railway station, on east bank of Missouri River, 665 feet west of railway bridge, 75 feet north of wagon road; Missouri River Commission Bench Mark 98/2, plotted on chart 64 of Missouri River Commission:	
Subsurface mark under iron post.....	1, 985. 741
Top of cap of iron post.....	1, 989. 791
<b>Sec. 33, T. 29 N., R. 44 E., east along township line to sec. 32, T. 29 N., R. 48 E.</b>	
T. 29 N., R. 44 E., 150 feet east of standard quarter corner of sec. 34; white limestone, 8 by 6 by 4 inches, marked "2580".....	2, 578. 843
T. 28 N., R. 44 E., quarter closing corner of sec. 1; iron section post stamped "2599".....	2, 598. 096
T. 29 N., R. 44 E., standard corner of secs. 34 and 35; iron section post stamped "2618".....	2, 617. 065
T. 28 N., Rs. 44 and 45 E., closing corner of; iron post stamped "2613".....	2, 611. 699
T. 29 N., R. 44 E., standard quarter corner of sec. 35; iron section post stamped "2600".....	2, 598. 672
T. 28 N., R. 45 E., quarter closing corner of sec. 6; iron section post stamped "2626".....	2, 625. 318
T. 29 N., R. 44 E., standard corner of secs. 35 and 36; iron section post stamped "2686".....	2, 685. 587
T. 28 N., R. 45 E., closing corner of secs. 5 and 6; iron section post stamped "2705".....	2, 703. 740
T. 29 N., R. 44 E., standard quarter corner of sec. 36; iron section post stamped "2711".....	2, 709. 923
T. 28 N., R. 44 E., quarter closing corner of sec. 5; iron section post stamped "2697".....	2, 696. 544
T. 29 N., Rs. 44 and 45 E., standard corner of; iron post stamped "2709"....	2, 708. 490

	Feet.
T. 28 N., R. 44 E., closing corner of secs. 4 and 5; iron section post stamped "2707" .....	2, 705. 714
T. 29 N., R. 45 E., quarter closing corner of sec. 31; iron section post stamped "2683" .....	2, 681. 996
T. 28 N., R. 45 NW. $\frac{1}{4}$ sec. 4, White Rock triangulation station; iron post stamped "2740" .....	2, 739. 076
T. 29 N., R. 45 E., standard quarter corner of sec. 31; iron section post stamped "2683" .....	2, 681. 991
T. 28 N., R. 45 E., quarter closing corner of sec. 4; iron section post stamped "2668" .....	2, 667. 389
T. 29 N., R. 45 E., standard corner of secs. 31 and 32; iron section post stamped "2689" .....	2, 687. 663
T. 28 N., R. 45 E., closing corner secs. 3 and 4; iron section post stamped "2713" .....	2, 712. 494
T. 29 N., R. 45 E., standard quarter corner of sec. 32; iron section post stamped "2706" .....	2, 704. 804
T. 28 N., R. 45 E., quarter closing corner of sec. 3; iron section post stamped "2686" .....	2, 684. 832
T. 29 N., R. 45 E., standard corner of secs. 32 and 33; iron section post stamped "2672" .....	2, 671. 214
T. 29 N., R. 45 E., standard quarter corner of sec. 33; iron section post stamped "2669" .....	2, 668. 277
T. 28 N., R. 45 E., quarter closing corner of sec. 2; iron section post stamped "2631" .....	2, 629. 568
T. 29 N., R. 45 E., standard corner of secs. 33 and 34; iron section post stamped "2667" .....	2, 666. 013
T. 28 N., R. 45 E., closing corner of secs. 1 and 2; iron section post stamped "2704" .....	2, 702. 565
T. 29 N., R. 45 E., standard quarter corner of sec. 34; iron section post stamped "2654" .....	2, 653. 230
T. 28 N., R. 45 E., quarter closing corner of sec. 1; iron section post stamped "2657" .....	2, 656. 365
T. 29 N., R. 45 E., standard corner of secs. 34 and 35; iron section post stamped "2614" .....	2, 612. 930
T. 28 N., Rs. 45 and 46 E., closing corner of; iron post stamped "2705" .....	2, 703. 675
T. 29 N., R. 45 E., standard quarter corner of sec. 35; iron section post stamped "2705" .....	2, 703. 668
T. 28 N., R. 46 E., quarter closing corner of sec. 6; iron section post stamped "2660" .....	2, 659. 136
T. 28 N., R. 46 E., closing corner of secs. 5 and 6; iron section post stamped "2639" .....	2, 638. 541
T. 29 N., R. 45 E., standard quarter corner of sec. 36; iron section post stamped "2517" .....	2, 516. 648
T. 29 N., Rs. 45 and 46 E., corner of; iron post stamped "2472" .....	2, 470. 725
T. 28 N., R. 46 E., closing corner of secs. 4 and 5; iron section post stamped "2490" .....	2, 488. 542
T. 29 N., R. 46 E., standard quarter corner of sec. 31; stamped "2496" .....	2, 495. 03
T. 28 N., R. 46 E., quarter closing corner of sec. 4; iron section post stamped "2486" .....	2, 485. 006
T. 29 N., R. 46 E., standard corner of secs. 31 and 32; iron section post stamped "2440" .....	2, 438. 602
T. 28 N., R. 46 E., closing corner of secs. 3 and 4; iron section post stamped "2416" .....	2, 415. 966

	Feet.
T. 29 N., R. 46 E., standard quarter corner of sec. 32; iron section post stamped "2399" .....	2, 398. 394
T. 28 N., R. 46 E., quarter closing corner of sec. 3; iron section post stamped "2396" .....	2, 394. 733
T. 29 N., R. 46 E., standard corner of secs. 32 and 33; iron section post stamped "2314" .....	2, 313. 221
T. 28 N., R. 46 E., closing corner of secs. 2 and 3; iron section post stamped "2273" .....	2, 271. 692
T. 29 N., R. 46 E., standard quarter corner of sec. 33; iron section post stamped "2290" .....	2, 291. 213
T. 28 N., R. 46 E., quarter closing corner of sec. 2; iron section post stamped "2321" .....	2, 320. 406
T. 29 N., R. 46 E., standard section corner of secs. 33 and 34; iron section post stamped "2393" .....	2, 392. 405
T. 28 N., R. 46 E., closing corner of secs. 1 and 2; iron section post stamped "2391" .....	2, 389. 640
T. 29 N., R. 46 E., standard quarter corner of sec. 34; iron section post stamped "2408" .....	2, 406. 550
T. 28 N., R. 46 E., quarter closing corner of sec. 1; iron section post stamped "2429" .....	2, 427. 712
T. 29 N., R. 46 E., standard corner of secs. 34 and 35; iron section post stamped "2460" .....	2, 458. 99
T. 28 N., Rs. 46 and 47 E., closing corner of; iron post stamped "2496" .....	2, 494. 782
T. 28 N., R. 47 E., quarter closing corner of sec. 6; iron section post stamped "2654" .....	2, 652. 940
T. 28 N., R. 47 E., in northeast quarter of sec. 6, triangulation station "Bone;" iron post stamped "2679" .....	2, 678. 160
T. 28 N., R. 47 E., closing corner of secs. 5 and 6; iron section post stamped "2549" .....	2, 547. 865
T. 29 N., R. 46 E., standard quarter corner of sec. 36; iron section post stamped "2568" .....	2, 566. 612
T. 28 N., R. 47 E., quarter closing corner of sec. 5; iron section post stamped "2565" .....	2, 563. 528
T. 29 N., R. 46 E., southeast corner of; iron post stamped "2556" .....	2, 554. 447
T. 29 N., R. 47 E., southwest corner of; iron post stamped "2532" .....	2, 530. 506
T. 28 N., R. 47 E., closing corner of secs. 4 and 5; iron post stamped "2520" .....	2, 518. 930
T. 29 N., R. 47 E., standard quarter corner of sec. 31; iron section post stamped "2437" .....	2, 435. 515
T. 29 N., R. 47 E., standard corner of secs. 31 and 32; iron section post stamped "2477" .....	2, 476. 360
T. 29 R. N., 47 E., standard quarter corner of sec. 32; iron section post stamped "2451" .....	2, 449. 790
T. 29 N., R. 47 E., standard corner of secs. 32 and 33; iron section post stamped "2508" .....	2, 507. 317
T. 28 N., R. 47 E., quarter closing corner of sec. 2; iron section post stamped "2532" .....	2, 530. 661
T. 29 N., R. 47 E., standard corner of secs. 33 and 34; iron section post stamped "2482" .....	2, 480. 881
T. 29 N., R. 47 E., standard quarter corner of sec. 34; iron section post stamped "2516" .....	2, 514. 379
T. 28 N., Rs. 47 and 48 E., closing corner of; iron post stamped "2515" .....	2, 514. 302
T. 29 N., R. 47 E., standard quarter corner of sec. 35; iron section post stamped "2462" .....	2, 460. 868

T. 29 N., R. 47 E., standard corner of secs. 35 and 36; iron section post stamped "2424".....	Feet. 2, 422. 613
T. 29 N., R. 47 E., standard quarter corner of sec. 36; iron section post stamped "2400".....	2, 399. 117
T. 29 N., Rs. 47 and 48 E., standard corner of; iron section post stamped "2338".....	2, 336. 649
T. 29 N., R. 48 E., standard quarter corner of sec. 31; iron section post stamped "2307".....	2, 305. 609
T. 29 N., R. 48 E., standard corner of secs. 31 and 32; iron section post stamped "2246".....	2, 244. 599

**Corner of Tps. 27 and 28 N., Rs. 46 and 47 E., north along guide meridian to seventh standard parallel.**

Tps. 27 and 28 N., Rs. 46 and 47 E., on range line between Rs. 46 and 47 E., closing corner; iron post stamped "2073".....	2, 073. 900
T. 28 N., R. 47 E., quarter closing corner of sec 31; iron section post.....	2, 086. 402
T. 28 N., R. 47 E., secs. 30 and 31, closing corner; iron section post.....	2, 101. 960
T. 28 N., R. 46 E., sec. 25, standard quarter corner; iron section post....	2, 122. 620
T. 28 N., R. 47 E., secs. 19 and 30, closing corner; iron section post.....	2, 129. 212
T. 28 N., R. 46 E., sec. 24, standard quarter corner; iron section post....	2, 155. 425
T. 28 N., R. 47 E., secs. 18 and 19, closing corner; iron section post.....	2, 173. 001
T. 28 N., R. 46 E., secs. 13 and 24, standard corner; iron section post.....	2, 204. 209
T. 28 N., R. 47 E., secs. 7 and 18, closing corner; iron section post.....	2, 273. 558
T. 28 N., R. 46 E., at northeast corner; iron post stamped "2496".....	2, 494. 782

**Sec. 5, T. 29 N., R. 48 E., west along township line to Rs. 46 and 47, thence south to southeast corner of T. 29 N., R. 46 E.**

Tps. 29 and 30 N., R. 48 E., corner of secs. 5, 6, 31, and 32; iron section post stamped "2589".....	2, 587. 937
Tps. 29 and 30 N., R. 48 E., quarter corner between secs. 6 and 31; iron section post stamped "2611".....	2, 609. 269
Tps. 29 and 30 N., Rs. 47 and 48 E., township corner; iron post stamped "2655".....	2, 653. 804
Tps. 29 and 30 N., R. 47 E., quarter corner between secs. 1 and 36; iron section post stamped "2543".....	2, 541. 620
Tps. 29 and 30 N., R. 47 E., corner of secs. 1, 2, 35, and 36; iron section post stamped "2470".....	2, 469. 027
Tps. 29 and 30 N., R. 47 E., quarter corner between secs. 2 and 35; iron section post stamped "2433".....	2, 431. 927
Tps. 29 and 30 N., R. 47 E., corner of secs. 2, 3, 34, and 35; iron section post stamped "2407".....	2, 406. 010
Tps. 29 and 30 N., R. 47 E., quarter corner between secs. 3 and 34; iron section post stamped "2423".....	2, 421. 633
Tps. 29 and 30 N., R. 47 E., corner of secs. 3, 4, 33, and 34; iron section post stamped "2477".....	2, 475. 557
Tps. 29 and 30 N., R. 47 E., quarter corner between secs. 4 and 33; iron section post stamped "2624".....	2, 622. 929
Tps. 29 and 30 N., R. 47 E., corner of secs. 4, 5, 32, and 33; iron section post stamped "2674".....	2, 672. 781
Tps. 29 and 30 N., R. 47 E., quarter corner between secs. 5 and 32; iron section post stamped "2684".....	2, 682. 592
Tps. 29 and 30 N., R. 47 E., corner of secs. 5, 6, 31, and 32; iron section post stamped "2696".....	2, 694. 723

	Feet.
Tps. 29 and 30 N., R. 47 E., quarter corner between secs. 6 and 31; iron section post stamped "2687".....	2, 685. 837
Tps. 29 and 30 N., Rs. 47 and 46 E., closing township corner; iron post stamped "2712".....	2, 710. 639
T. 29 N., R. 46 E., east quarter corner of sec. 1; iron section post stamped "2709".....	2, 707. 294
T. 29 N., R. 46 E., corner of secs. 1 and 12; iron section post stamped "2681".....	2, 679. 709
T. 29 N., R. 46 E., east quarter corner of sec. 12; iron section post stamped "2684".....	2, 682. 717
T. 29 N., R. 46 E., northeast corner of sec. 13; iron section post stamped "2632".....	2, 630. 781
T. 29 N., R. 46 E., east quarter corner of sec. 13; iron section post stamped "2605".....	2, 603. 201
T. 29 N., R. 46 E., witness corner to east corner of secs. 13 and 24; iron section post stamped "2552".....	2, 550. 068
T. 29 N., R. 46 E., east quarter corner of sec. 24; iron section post stamped "2660".....	2, 658. 260
T. 29 N., R. 46 E., witness corner to corner of secs. 24 and 25; iron section post stamped "2673".....	2, 671. 009
T. 29 N., R. 46 E., east quarter corner of sec. 25; iron section post stamped "2685".....	2, 683. 393
T. 29 N., R. 46 E., northeast corner of sec. 36; iron section post stamped "2593".....	2, 591. 441
T. 29 N., R. 46 E., east quarter corner of sec. 36; iron section post stamped "2547".....	2, 545. 774
T. 29 N., R. 46 E., southeast corner of township; iron post stamped "2556".....	2, 554. 447

**Sec. 25, T. 32 N., R. 46 E., south and east to corner of Tps. 31 and 32 N., Rs. 47 and 48 E.**

T. 32 N., R. 46 E., quarter corner of sec. 36; iron section post stamped "2605".....	(Moved.)
Tps. 31 and 32 N., Rs. 46 and 47 E., township corner; iron post stamped "2646".....	2, 642. 992 <sup>1</sup>
Tps. 31 and 32 N., R. 47 E., closing township corner; iron post stamped "2666".....	2, 663. 373 <sup>1</sup>
Tps. 31 and 32 N., R. 47 E., quarter corner common to secs. 31 and 6; iron section post stamped "2783".....	(Moved.)
Tps. 31 and 32 N., R. 47 E., corner of secs. 5, 6, 31, and 32; iron section post stamped "2815".....	(Moved.)
Tps. 31 and 32 N., R. 47 E., quarter corner common to secs. 32 and 5; iron section post stamped "2855".....	(Moved.)
Tps. 31 and 32 N., R. 47 E., corner of secs. 4, 5, 32, and 33; iron section post stamped "2845".....	(Moved.)
Tps. 31 and 32 N., R. 47 E., quarter corner between secs. 4 and 33, R. 47 E.; iron section post stamped "2851".....	(Moved.)
Tps. 31 and 32 N., R. 47 E., corner of secs. 3, 4, 33, and 34; iron section post stamped "2849".....	(Moved.)
Tps. 31 and 32 N., R. 47 E., quarter corner between secs. 3 and 34; iron section post stamped "2850".....	(Moved.)
Tps. 31 and 32 N., R. 47 E., corner of secs. 2, 3, 34, and 35; iron section post stamped "2858".....	(Moved.)

<sup>1</sup> Value given is probably wrong, as post was moved twice during 1909-1910 and no record was made in 1910.

Tps. 31 and 32 N., R. 47 E., quarter corner between secs. 2 and 35; iron section post stamped "2852".....	Feet. (Moved.)
Tps. 31 and 32 N., R. 47 E., corner of secs. 1, 2, 35, and 36; iron section post stamped "2849".....	(Moved.)
Tps. 31 and 32 N., R. 47 E., quarter corner of secs. 3 and 34; iron section post stamped "2850".....	(Moved.)
Tps. 31 and 32 N., R. 47 E., corner secs. 2, 3, 34, and 35; iron section post stamped "2858".....	(Moved.)
Tps. 31 and 32 N., R. 47 E., quarter corner secs. 2 and 35; iron section post stamped "2852".....	(Moved.)
Tps. 31 and 32 N., R. 47 E., corner secs. 1, 2, 35, and 36; iron section post stamped "2849".....	(Moved.)
Tps. 31 and 32 N., R. 47 E., quarter corner of secs. 1 and 36; iron section post stamped "2863".....	(Moved.)
Tps. 31 and 32 N., Rs. 47 and 48 E., township corner; iron post stamped "2852".....	2, 851. 336
<b>Quarter corner of secs. 5 and 32, Tps. 31 and 32 N., R. 47 E., southwest and west 3 miles, thence south along range line and east along township line to sec. 32, Tps. 30 and 31 N., R. 48 E.</b>	
Tps. 31 and 32 N., R. 47 E., 0.5 mile southwest of quarter corner of secs. 5 and 32; wooden stake marked "2884".....	2, 883. 0
Tps. 31 and 32 N., R. 47 E., 0.8 mile northeast of triangulation Station "Hole;" wooden stake marked "2890".....	2, 889. 1
Triangulation Station "Hole;" iron post stamped "2898".....	2, 896. 837
T. 31 N., R. 46 E., northeast corner of sec. 13; iron section post stamped "2881".....	2, 880. 354
T. 31 N., R. 46 E., east quarter corner of sec. 13; iron section post stamped "2827".....	2, 825. 567
T. 31 N., R. 46 E., northeast corner of sec. 24; iron section post stamped "2772".....	2, 770. 524
T. 31 N., R. 46 E., east quarter corner of sec. 24; iron section post stamped "2760".....	2, 759. 221
T. 31 N., R. 46 E., northeast corner of sec. 25; iron section post stamped "2750".....	2, 748. 592
T. 31 N., R. 46 E., east quarter corner of sec. 25; iron section post stamped "2737".....	2, 735. 981
T. 31 N., R. 46 E., northeast corner of sec. 36; iron section post stamped "2717".....	2, 715. 818
T. 31 N., R. 46 E., east quarter corner of sec. 36; iron section post stamped "2701".....	2, 699. 630
Tps. 30 and 31 N., R. 46 E., township corner; iron post stamped "2668".....	2, 667. 335
Tps. 30 and 31 N., R. 47 E., closing township corner; iron post stamped "2671".....	2, 670. 000
Tps. 30 and 31 N., R. 47 E., quarter corner between secs. 6 and 31; iron section post stamped "2727".....	2, 726. 040
Tps. 30 and 31 N., R. 47 E., corner of secs. 5, 6, 31, and 32; iron section post stamped "2735".....	2, 734. 234
Tps. 30 and 31 N., R. 47 E., quarter corner secs. 5 and 32; iron section post stamped "2728".....	2, 727. 280
Tps. 30 and 31 N., R. 47 E., corner of secs. 4, 5, 32, and 33; iron section post stamped "2733".....	2, 731. 548
Tps. 30 and 31 N., R. 47 E., quarter corner between secs. 4 and 33; iron section post stamped "2717".....	2, 715. 884

T. 30 and 31 N., R. 47 E., corner of secs. 3, 4, 33, and 34; iron section post stamped "2692".....	Feet. 2, 691. 369
Tps. 30 and 31 N., R. 47 E., quarter corner between secs. 3 and 34; iron section post stamped "2694".....	2, 693. 660
Tps. 30 and 31 N., R. 47 E., corner of secs. 2, 3, 34, and 35; iron section post stamped "2702".....	2, 701. 381
Tps. 30 and 31 N., R. 47 E., quarter corner between secs. 2 and 35; iron section post stamped "2694".....	2, 692. 903
Tps. 30 and 31 N., R. 47 E., corner of secs. 1, 2, 35, and 36; iron section post stamped "2693".....	2, 691. 990
Tps. 30 and 31 N., R. 47 E., quarter corner between secs. 1 and 36; iron section post stamped "2700".....	2, 698. 574
Tps. 30 and 31 N., Rs. 47 and 48 E., township corner; iron post stamped "2703".....	2, 702. 108
Tps. 30 and 31 N., R. 48 E., quarter corner between secs. 5 and 31; iron section post stamped "2630".....	2, 629. 217
Tps. 30 and 31 N., R. 48 E., corner of secs. 5, 6, 31, and 32; iron section post stamped "2635".....	2, 633. 936

Nearly all the following bench marks, established by J. H. Wilke in 1910, were by single unchecked sights, and are therefore unreliable.

**Sec. 28, T. 27 N., R. 48 E., northwest across Missouri River to point near Wolf Point.**

T. 27 N., R. 48 E., about sec. 28, at roadside just west of badlands, inside corner of fence at southwest corner of field, one-half mile south of windmill; top of small rock marked "2105.4".....	Feet. 2, 104. 47
T. 27 N., R. 48 E., sec. 28, one-half mile south of Missouri River, at corner of fence one-half mile south of windmill at house at foot of hill; iron post stamped "2106.2".....	2, 105. 119
T. 27 N., R. 48 E., sec. 28, at foot of hill where wagon road turns east to house at windmill; highest point of large sandstone, marked "2000.3".....	1, 999. 38
T. 27 N., R. 48 E., sec. 20, 125 feet south of river bank at sharp point on shore of Missouri River; notch 2 feet up on small ash tree, marked "1990.1".....	1, 989. 24
T. 27 N., R. 48 E., sec. 28; surface of water, Missouri River.....	1, 967. 4
T. 27 N., R. 48 E., sec. 20, just below bench where trail through woods comes into open; spike in 8-inch blazed cottonwood, marked "1981.7".....	1, 980. 80
T. 27 N., R. 48 E., sec. 17, quarter corner 50 yards north of Indian's house; top of iron allotment post.....	1, 987. 41
Wolf Point, 4 miles southeast of, at quarter corner; top of Indian allotment post.....	1, 988. 57
Wolf Point, 665 feet west of railway bridge, 25 feet north of wagon road; top of nut (Missouri River Commission standard bench mark 98/2) <sup>1</sup> .....	1, 989. 741

**Southeast corner of sec. 36, T. 31 N., R. 46 E., west along township line to corner of secs. 3, 4, 33, and 34, T. 31 N., R. 44 E.**

Tps. 30 and 31 N., R. 46 E., township corner; iron post stamped "2668".....	2, 667. 335
Tps. 30 and 31 N., R. 46 E., 5 feet south of quarter corner between secs. 1 and 36, small rock.....	2, 719. 42
Tps. 30 and 31 N., R. 46 E., 8 feet south of temporary position of corner of secs. 1, 2, 35, and 36; small rock.....	2, 659. 07
Tps. 30 and 31 N., R. 46 E., corner of secs. 2, 3, 34, and 35; iron section post.....	2, 745. 285

<sup>1</sup> Cap on which nut is fastened has about 0.01 foot play vertically. Reading taken with cap depressed.

Tps. 30 and 31 N., R. 46 E., quarter corner between secs. 3 and 34; iron section post stamped "2731".....	Feet. 2, 729. 789
Tps. 30 and 31 N., R. 46 E., corner of secs. 3, 4, 33, and 34; iron section post stamped "2721".....	2, 720. 242
Tps. 30 and 31 N., R. 46 E., quarter corner between secs. 4 and 33; iron section post stamped "2741".....	2, 739. 905
Tps. 30 and 31 N., R. 46 E., corner of secs. 4, 5, 32, and 33; iron section post stamped "2734".....	2, 733. 311
Tps. 30 and 31 N., R. 46 E., quarter corner between secs. 5 and 32; iron section post stamped "2727".....	2, 726. 451
Tps. 30 and 31 N., R. 46 E., corner of secs. 5, 6, 31, and 32; iron section post stamped "2693".....	2, 692. 082
Tps. 30 and 31 N., R. 46 E., quarter corner between secs. 6 and 31; iron section post stamped "2748".....	2, 746. 685
Tps. 30 and 31 N., Rs. 45 and 46 E., corner common to; iron post stamped "2788".....	2, 786. 640
Tps. 30 and 31 N., R. 45 E., quarter corner between secs. 1 and 36; iron section post stamped "2782".....	2, 781. 142
Tps. 30 and 31 N., R. 45 E., corner of secs. 1, 2, 35, and 36; iron section post stamped "2745".....	2, 743. 849
Tps. 30 and 31 N., R. 45 E., quarter corner between secs. 2 and 35; iron section post stamped "2794".....	2, 792. 627
Tps. 30 and 31 N., R. 45 E., corner of secs. 2, 3, 34, and 35; iron section post stamped "2734".....	2, 732. 803
Tps. 30 and 31 N., R. 45 E., quarter corner between secs. 3 and 34; iron section post stamped "2757".....	2, 755. 745
Tps. 30 and 31 N., R. 45 E., corner of secs. 3, 4, 33, and 34; iron section post stamped "2680".....	2, 678. 580
Tps. 30 and 31 N., R. 45 E., corner of secs. 4, 5, 31, and 32; iron section post stamped "2835".....	2, 833. 940
Tps. 30 and 31 N., R. 45 E., corner of secs. 5, 6, 31, and 32; iron section post stamped "2820".....	2, 818. 628
Tps. 30 and 31 N., Rs. 44 and 45 E., corner of iron post stamped "2802".....	2, 800. 527
Tps. 30 and 31 N., R. 44 E., corner of secs. 1, 2, 35, and 36; iron section post stamped "2769".....	2, 769. 778
Tps. 30 and 31 N., R. 44 E., corner of secs. 2, 3, 34, and 35; iron section post stamped "2857".....	2, 855. 810
Tps. 30 and 31 N., R. 44 E., corner of secs. 3, 4, 33, and 34; iron section post stamped "2860".....	2, 859. 399

**POPLAR QUADRANGLE.**

**Missouri River Commission bench mark 104/2 via Poplar to Missouri River Commission bench mark 103/2.**

Poplar, 750 feet north by 150 feet east of station; Missouri River Commission bench mark 104/2, iron post with cap:

Top of tile under post.....	1, 993. 242
Top of cap.....	1, 997. 334
Poplar, in front of station, east end; top of north rail.....	1, 965. 9
Poplar, 0.9 mile west of, east end of steel truss bridge over Poplar River; top of north rail.....	1, 970. 3
T. 27 N., R. 30 E., corner of secs. 2, 3, 10, and 11, north of track; iron section post.....	1, 970. 382
Poplar, 2.4 miles west of, culvert over slough; top of rail.....	1, 973. 1

Missouri River Commission bench mark 103/2 north along section line 9 miles east of  
twelfth guide meridian to seventh standard parallel.

	Feet.
T. 27 N., R. 50 E., northeast corner of sec. 4; top of corner stone.....	1, 971. 697
T. 28 N., R. 50 E., between secs. 33 and 34; quarter corner stone.....	1, 980. 191
T. 28 N., R. 50 E., between secs. 27 and 28; top of quarter corner stone...	2, 006. 353
T. 28 N., R. 50 E., southeast corner sec. 21; corner stone.....	2, 087. 928
T. 28 N., R. 50 E., secs. 21 and 22; quarter corner stone.....	2, 116. 596
T. 28 N., R. 50 E., southeast corner of sec. 16; corner stone.....	2, 137. 133
T. 28 N., R. 50 E., secs. 15 and 16; quarter section stone.....	2, 151. 533
T. 28 N., R. 50 E., near corner of secs. 9, 10, 15, and 16; rock.....	2, 170. 135
T. 28 N., R. 50 E., secs. 9 and 10; quarter corner stone.....	2, 171. 429
T. 28 N., R. 50 E., secs. 3, 4, 9, and 10; corner stone.....	2, 180. 660
T. 28 N., R. 50 E., secs. 3 and 4; quarter corner stone.....	2, 182. 756
T. 28 N., R. 50 E., secs. 3 and 4, closing corner; iron section post stamped "2201".....	2, 200. 503
T. 29 N., R. 50 E., secs. 31 and 32, standard corner; iron section post stamped "2195".....	2, 193. 054
T. 28 N., R. 50 E., quarter corner on north side of sec. 3; iron section post..	2, 193. 442
<b>Sec. 32, T. 29 N., R. 48 E., east and south to Missouri River Commission bench mark 105/2.</b>	
T. 29 N., R. 48 E., standard quarter corner of sec. 32; stone marked "2202".....	2, 200. 81
T. 29 N., R. 48 E., standard corner of secs. 32 and 33; stone marked "2261".....	2, 260. 09
T. 29 N., R. 48 E., standard quarter corner of sec. 33; stone marked "2308".....	2, 306. 68
T. 29 N., R. 48 E., standard corner of secs. 33 and 34; stone marked "2373".....	2, 371. 62
T. 29 N., R. 48 E., standard quarter corner of sec. 34; stone marked "2340".....	2, 339. 07
T. 28 N., R. 48 and 49 E., closing corner of; iron post stamped "2354".....	2, 352. 486
T. 29 N., R. 48 E., standard quarter corner of sec. 35; stone marked "2339".....	2, 337. 42
T. 29 N., R. 48 E., standard corner of secs. 35 and 36; stone marked "2353".....	2, 351. 20
T. 29 N., R. 48 E., standard quarter corner of sec. 36; stone marked "2294".....	2, 292. 93
T. 29 N., R. 48 and 49 E., standard quarter corner of; iron post stamped "2273".....	2, 271. 148
T. 29 N., R. 49 E., standard quarter corner of sec. 31; stone marked "2211".....	2, 209. 26
T. 29 N., R. 49 E., standard corner of secs. 31 and 32; stone marked "2244".....	2, 242. 77
T. 29 N., R. 49 E., standard quarter corner of sec. 32; stone marked "2245".....	2, 243. 52
T. 29 N., R. 49 E., standard corner of secs. 32 and 33; stone marked "2249".....	2, 247. 95
T. 29 N., R. 49 E., standard quarter corner of sec. 33; stone marked "2241".....	2, 239. 26
T. 29 N., R. 49 E., standard corner of secs. 33 and 34; stone marked "2229".....	2, 227. 82
T. 29 N., R. 49 E., standard quarter corner of sec. 34; stone marked "2210".....	2, 208. 61
T. 28 N., Rs. 49 and 50 E., closing corner of; iron post stamped "2150".....	2, 148. 430
T. 29 N., R. 49 E., standard quarter corner of sec. 35; stone marked "2211".....	2, 209. 21
T. 29 N., R. 49 E., standard corner of secs. 35 and 36; iron section post stamped "2227".....	2, 225. 432
T. 29 N., R. 49 E., standard quarter corner of sec. 36; iron section post stamped "2222".....	2, 220. 731
T. 29 N., Rs. 49 and 50 E., standard corner of; iron post stamped "2222".....	2, 220. 130
T. 29 N., R. 50 E., standard quarter corner of sec. 31; iron section post stamped "2213".....	2, 213. 905
T. 29 N., R. 50 E., standard corner of secs. 31 and 32; iron section post stamped "2195".....	2, 193. 054
T. 29 N., R. 50 E., standard quarter corner of sec. 32; iron section post stamped "2196".....	2, 194. 834
T. 29 N., R. 50 E., standard corner of secs. 32 and 33; iron section post stamped "2182".....	2, 180. 624

	Feet.
T. 29 N., R. 50 E., standard quarter corner of sec. 33; iron section post stamped "2175".....	2, 173. 275
T. 29 N., R. 50 E., standard corner of secs. 33 and 34; iron section post stamped "2168".....	2, 166. 877
T. 29 N., R. 50 E., standard quarter corner of sec. 34; iron section post stamped "2159".....	2, 157. 799
T. 28 N., Rs. 50 and 51 E., closing corner of township; iron post stamped "2089".....	2, 087. 930
T. 29 N., R. 50 E., standard quarter corner of sec. 35; iron section post stamped "2213".....	2, 211. 023
T. 29 N., R. 50 E., standard corner of secs. 35 and 36; iron section post stamped "2136".....	2, 134. 319
T. 29 N., R. 50 E., standard quarter corner of sec. 36; iron section post stamped "2044".....	2, 042. 762
T. 29 N., Rs. 50 and 51 E., standard corner of; iron post stamped "2000".....	1, 998. 904
T. 29 N., R. 51 E., standard quarter corner of sec. 31; iron section post stamped "2005".....	2, 003. 067
T. 29 N., R. 51 E., standard corner of secs. 31 and 32; iron section post stamped "2058".....	2, 056. 164
T. 29 N., R. 51 E., standard quarter corner of sec. 32; iron section post stamped "2079".....	2, 077. 881
T. 29 N., R. 51 E., standard corner of secs. 32 and 33; iron section post stamped "2122".....	2, 120. 446
T. 29 N., R. 51 E., standard quarter corner of sec. 33; iron section post stamped "2129".....	2, 127. 894
T. 29 N., R. 51 E., standard corner of secs. 33 and 34; iron section post stamped "2206".....	2, 204. 721
T. 29 N., R. 51 E., standard quarter corner of sec. 34; iron section post stamped "2196".....	2, 194. 450
T. 28 N., Rs. 51 and 52 E., closing corner of; iron post stamped "2171".....	2, 169. 048
T. 29 N., R. 51 E., standard quarter corner of sec. 35; iron section post.....	2, 126. 222
T. 29 N., R. 51 E., standard corner of secs. 35 and 36; iron section post.....	2, 068. 058
T. 28 N., R. 51 E., standard quarter corner between secs. 3 and 4; iron section post stamped "2054".....	2, 052. 278
T. 28 N., R. 51 E., corner of secs. 3, 4, 9, and 10; iron section post stamped "2062".....	2, 060. 432
T. 28 N., R. 51 E., quarter corner between secs. 9 and 10; iron section post stamped "2057".....	2, 055. 615
T. 28 N., R. 51 E., corner of secs. 9, 10, 15, and 16; iron section post stamped "2059".....	2, 057. 069
T. 28 N., R. 51 E., quarter corner between secs. 15 and 16; iron section post stamped "2076".....	2, 073. 995
T. 28 N., R. 51 E., corner of secs. 15, 16, 21, and 22; iron section post stamped "2069".....	2, 067. 029
T. 28 N., R. 51 E., quarter corner between secs. 21 and 22; iron section post stamped "2084".....	2, 082. 623
T. 28 N., R. 51 E., corner of secs. 21, 22, 27, and 28; iron section post stamped "2090".....	2, 088. 795
T. 28 N., R. 51 E., quarter corner between secs. 27 and 28; iron section post stamped "2099".....	2, 097. 139
T. 28 N., R. 51 E., corner of secs. 27, 28, 33, and 34; iron section post stamped "2103".....	2, 101. 151
T. 28 N., R. 51 E., quarter corner between secs. 33 and 34; iron section post stamped "2113".....	2, 111. 005

Tps. 27 and 28 N., R. 51 E., corner of secs. 3, 4, 33, and 34; iron section post stamped "2086".....	Feet. 2, 084. 422
T. 27 N., R. 51 E., quarter corner between secs. 3 and 4; iron section post stamped "2047".....	2, 045. 178
T. 27 N., R. 51 E., corner of secs. 3, 4, 9, and 10; iron section post stamped "1974".....	1, 972. 912
Poplar, about 2.5 miles east of station, on east bank of Missouri River, 400 feet south of Great Northern Ry. track; Missouri River Commission bench mark 105/2, plotted on chart 68 of Missouri River Commission; tile underground.....	1, 960. 504

**Missouri River Commission bench mark 104/2 northwest along Great Northern Ry. to Missouri River Commission bench mark 103/2, thence north along section line to sec. 32, T. 29 N., R. 50 E.**

Poplar, 750 feet north by 150 feet east of Great Northern Ry. station, on east bank; Missouri River Commission bench mark 104/2.....	1, 993. 242
Poplar, in front of station; top of east end of north rail of main track.....	1, 965. 9
Poplar, 0.8 mile west of, steel bridge over Poplar River, at third joint west of east end of east steel truss; top of north rail.....	1, 970. 2
Poplar 0.8 mile west of Great Northern Ry. bench mark; spike in telephone pole on north side of track near east end of bridge.....	1, 962. 46
Poplar, 1 mile west of, at road crossing; top of north rail.....	1, 968. 2
Poplar, 1.8 miles east of, north side of track, Great Northern Ry. bench mark; spike in telephone pole, marked "1968.57".....	1, 974. 57
T. 27 N., R. 50 E., corner of secs. 2, 3, 10, and 11, north of track; iron section post.....	1, 970. 382
Poplar, 2.7 miles west of, at center of road crossing; top of north rail.....	1, 973. 0
Poplar Creek, 2.25 miles west of Great Northern Ry. bridge over, on east bank of Missouri River; Missouri River Commission bench mark 103/2, 300 feet south of track and 650 feet from edge of timber; tile underground.....	1, 964. 237
T. 27 N., R. 50 E., quarter section corner between secs. 3 and 4; top of stone.....	1, 966. 95
Tps. 27 and 28 N., R. 50 E., corner of secs. 3, 4, 33, and 34; top of stone....	1, 971. 70
T. 28 N., R. 50 E., quarter section corner between secs. 33 and 34; top of stone.....	1, 980. 19
T. 28 N., R. 50 E., quarter section corner between secs. 27 and 28; top of stone.....	2, 006. 35
T. 28 N., R. 50 E., corner of secs. 21, 22, 27, and 28; top of stone.....	2, 087. 93
T. 28 N., R. 50 E., quarter section corner, between secs. 21 and 22; top of stone.....	2, 116. 60
T. 28 N., R. 50 E., corner of secs. 15, 16, 21, and 22; top of stone.....	2, 137. 07
T. 28 N., R. 50 E., quarter corner between secs. 15 and 16; top of stone...	2, 151. 53
T. 28 N., R. 50 E., near corner of secs. 9, 10, 15, and 16; rock.....	2, 170. 13
T. 28 N., R. 50 E., quarter corner between secs. 9 and 10; top of stone....	2, 171. 43
T. 28 N., R. 50 E., corner of secs. 3, 4, 9, and 10; top of stone.....	2, 180. 66
T. 28 N., R. 50 E., quarter section corner between secs. 3 and 4; top of stone.....	2, 182. 76
T. 28 N., R. 50 E., closing corner of secs. 3 and 4; iron section post stamped "2202".....	2, 200. 503
T. 29 N., R. 50 E., standard corner of secs. 31 and 32; iron section post stamped "2195".....	2, 193. 054
T. 28 N., R. 50 E., closing quarter corner of sec. 3; iron section post.....	2, 193. 442

**T. 28 N., Rs. 51 and 52 E., east along standard parallel, thence north along range line to corner of Tps. 29 and 30 N., Rs. 51 and 52 E.**

	Feet.
T. 28 N., Rs. 51 and 52 E., closing corner of; iron post stamped "2171"...	2, 169. 048
T. 29 N., R. 51 E., standard corner of secs. 34 and 35; iron section post stamped "2168".....	2, 166. 605
T. 29 N., R. 52 E., witness corner to closing corner of secs. 5 and 6; iron section post stamped "2071".....	2, 069. 814
T. 29 N., R. 51 E., witness corner to standard corner of secs. 35 and 36; iron section post stamped "2071".....	2, 069. 639
T. 29 N., R. 51 E., sec. 36; standard quarter section stone.....	2, 066. 89
T. 29 N., Rs. 51 and 52 E., witness corner to standard township corner; iron post stamped "2069".....	2, 067. 914
T. 29 N., R. 51 E., and 52 E., standard township corner; iron post stamped "2069".....	2, 067. 914
T. 29 N., Rs. 51 and 52 E., quarter corner between secs. 36 and 31; iron section post.....	2, 063. 048
T. 29 N., Rs. 51 and 52 E., corner of secs. 25, 30, 31, and 36; iron section post.....	2, 065. 440
T. 29 N., Rs. 51 and 52 E., quarter corner between secs. 25 and 30; iron section post.....	2, 061. 059
T. 29 N., Rs. 51 and 52 E., corner of secs. 19, 24, 25, and 30; iron section post.....	2, 091. 346
T. 29 N., Rs. 51 and 52 E., quarter corner between secs. 24 and 19; iron section post.....	2, 136. 627
T. 29 N., Rs. 51 and 52 E., corner of secs. 13, 18, 24, and 19; iron section post.....	2, 162. 129
T. 29 N., Rs. 51 and 52 E., quarter corner between secs. 13 and 18; iron section post.....	2, 180. 468
T. 29 N., Rs. 51 and 52 E., corner of secs. 12, 13, 7, and 18; iron section post.....	2, 199. 450
T. 29 N., Rs. 51 and 52 E., quarter corner between secs. 7 and 12; iron section post.....	2, 238. 543
T. 29 N., Rs. 51 and 52 E., corner of secs. 1, 12, 6, and 7; iron section post.....	2, 256. 354
T. 29 N., Rs. 51 and 52 E., quarter corner between secs. 1 and 6; iron section post.....	2, 283. 755
Tps. 29 and 30, Rs. 51 and 52 E., township corner; iron post stamped "2255".....	2, 254. 270

**Corner of Tps. 28 and 29 N., Rs. 50 and 51 E., north along range line to sec. 25, T. 32 N., R. 50 E.**

T. 29 N., R. 50 E., sec. 36, 66.6 feet (1.01 chains) west of standard township corner, which falls in Poplar River, set as witness corner on standard parallel; iron post stamped "2000".....	1, 998. 904
T. 29 N., Rs. 50 and 51 E., secs. 36 and 31, 66 feet (1 chain) north of true point for this corner, set as witness corner of 12th guide meridian east; iron post stamped "2001".....	2, 000. 216
T. 29 N., Rs. 50 and 51 E., set as witness corner on 7th standard parallel, 66 feet (1 chain) west of true point for the corner as given in first description of this line; stone.....	1, 998.856
T. 29 N., Rs. 50 and 51 E., at quarter corner between secs. 36 and 31; iron section post stamped "2001".....	1, 999. 799
T. 29 N., Rs. 50 and 51 E., corner of secs. 31, 30, 25, and 36; iron section post stamped "2036".....	2, 034. 855
T. 29 N., Rs. 50 and 51 E., quarter corner between secs. 25 and 30; iron section post stamped "2057".....	2, 055. 138

T. 29 N., Rs. 50 and 51 E., corner of secs. 24, 25, 19, and 30; iron section post stamped "2089".....	Feet. 2,087.828
T. 29 N., Rs. 50 and 51 E., quarter corner between secs. 19 and 24; iron section post stamped "2135".....	2,134.130
T. 29 N., Rs. 50 and 51 E., corner of secs. 18, 19, 13, and 24; iron section post stamped "2162".....	2,161.304
T. 29 N., Rs. 50 and 51 E., quarter corner between secs. 13 and 18; iron section post stamped "2145".....	2,143.691
T. 29 N., Rs. 50 and 51 E., corner of secs. 12, 13, 7, and 18; iron section post stamped "2191".....	2,189.486
T. 27 N., Rs. 50 and 51 E., quarter corner between secs. 12 and 7; iron section post stamped "2230".....	2,228.898
T. 29 N., Rs. 50 and 51 E., corner of secs. 6, 7, 1, and 12; iron section post stamped "2255".....	2,254.103
T. 29 N., Rs. 50 and 51 E., quarter corner between secs. 1 and 6; iron section post stamped "2332".....	2,331.360
Tps. 29 and 30 N., Rs. 50 and 51 E., township corner; iron post stamped "2474".....	2,472.614
T. 29 N., R. 51 E., NW. $\frac{1}{4}$ sec. 6, "Polaris" triangulation station; located by short circuit from township corner (2,472.614) to triangulation station and return; iron post stamped "2506".....	2,505.371
T. 30 N., Rs. 50 and 51 E., quarter corner between secs. 31 and 36; iron section post stamped "2398".....	2,396.660
T. 30 N., Rs. 50 and 51 E., corner of secs. 30, 31, 25, and 36; iron section post stamped "2281".....	2,279.934
T. 30 N., Rs. 50 and 51 E., quarter corner between secs. 25 and 30; iron section post stamped "2361".....	2,359.647
T. 30 N., Rs. 50 and 51 E., corner of secs. 24, 25, 19, and 30; iron section post stamped "2227".....	2,226.220
T. 30 N., Rs. 50 and 51 E., quarter corner between secs. 19 and 24; iron section post stamped "2238".....	2,236.961
T. 30 N., Rs. 50 and 51 E., sixteenth corner, north half of secs. 19 and 24; stone painted 2163.....	2,161.722
T. 30 N., Rs. 50 and 51 E., corner of secs. 18, 19, 13, and 24; iron section post stamped "2146".....	2,144.612
T. 30 N., Rs. 50 and 51 E., south sixteenth corner between secs. 13 and 18; stone marked "2124".....	2,122.57
T. 30 N., Rs. 50 and 51 E., quarter corner between secs. 13 and 18; iron section post stamped "2112".....	2,111.071
T. 30 N., Rs. 50 and 51 E., north sixteenth corner between secs. 13 and 18; stone marked "2105".....	2,104.29
T. 30 N., Rs. 12, 13, 7, and 18, corner of; iron section post stamped "2091".....	2,089.645
T. 30 N., Rs. 50 and 51 E., south sixteenth corner between secs. 7 and 12; stone marked "2088".....	2,086.66
T. 30 N., Rs. 50 and 51 E., quarter corner between secs. 7 and 12; iron section post stamped "2092".....	2,090.418
T. 30 N., Rs. 50 and 51 E., north sixteenth corner between secs. 7 and 12; stone marked "2088".....	2,086.486
T. 30 N., Rs. 50 and 51 E., corner of secs. 6, 7, 1, and 12; iron section post stamped "2103".....	2,101.632
T. 30 N., Rs. 50 and 51 E., south sixteenth corner between secs. 1 and 6; stone marked "2114".....	2,112.64
T. 30 N., Rs. 50 and 51 E., quarter corner between secs. 1 and 6; iron section post stamped "2121".....	2,119.774

	Feet.
Tps. 30 and 31 N., Rs. 50 and 51 E., standard township corner; iron post stamped "2150".....	2, 148. 594
T. 31 N., Rs. 50 and 51 E., quarter corner between secs. 31 and 36; iron section post stamped "2180".....	2, 178. 785
T. 31 N., Rs. 50 and 51 E., corner of secs. 30, 31, 25, and 36; iron section post stamped "2218".....	2, 217. 015
T. 31 N., Rs. 50 and 51 E., quarter corner between secs. 30 and 35; iron section post stamped "2255".....	2, 253. 977
T. 31 N., Rs. 50 and 51 E., corner of secs. 24, 25, 19, and 30; iron section post stamped "2285".....	2, 284. 381
T. 31 N., Rs. 50 and 51 E., quarter corner between secs. 19 and 24; iron section post stamped "2318".....	2, 316. 695
T. 31 N., Rs. 50 and 51 E., corner of secs. 18, 19, 13, and 24; iron section post stamped "2365".....	2, 364. 401
T. 31 N., Rs. 50 and 51 E., quarter corner between secs. 13 and 18; iron section post stamped "2397".....	2, 396. 487
T. 31 N., Rs. 50 and 51 E., corner of secs. 12, 13, 7, and 18; iron section post stamped "2407".....	2, 406. 330
T. 31 N., Rs. 50 and 51 E., quarter corner between secs. 7 and 12; iron section post stamped "2448".....	2, 447. 357
T. 31 N., Rs. 50 and 51 E., corner of secs. 6, 7, 1, and 12; iron section post stamped "2507".....	2, 505. 754
T. 31 N., Rs. 50 and 51 E., quarter corner between secs. 1 and 6; iron section post stamped "2602".....	2, 600. 770
Tps. 31 and 32 N., Rs. 50 and 51 E., township corner; iron post stamped "2670".....	2, 669. 016
T. 32 N., Rs. 50 and 51 E., quarter corner between secs. 31 and 36; iron section post stamped "2652".....	2, 651. 251
T. 32 N., Rs. 50 and 51 E., corner of secs. 30, 31, 25, and 36; iron section post stamped "2654".....	2, 653. 170

**Corner of Tps. 29 and 30 N., Rs. 50 and 51 E., west along township line to sec. 31, T. 30 N., R. 48 E.**

Tps. 29 and 30 N., R. 50 E., quarter corner between secs. 1 and 36; iron section post stamped "2452".....	2, 450. 839
Tps. 29 and 30 N., R. 50 E., corner of secs. 1, 2, 35, and 36; iron section post stamped "2415".....	2, 414. 143
Tps. 29 and 30 N., R. 50 E., quarter corner between secs. 2 and 35; iron section post stamped "2457".....	2, 456. 180
Tps. 29 and 30 N., R. 50 E., corner of secs. 34, 3, 35, and 2; iron section post stamped "2462".....	2, 461. 107
Tps. 29 and 30 N., R. 50 E., quarter corner between secs. 3 and 34; iron section post stamped "2386".....	2, 384. 900
Tps. 29 and 30 N., R. 50 E., corner of secs. 33, 4, 34, and 3; iron section post stamped "2418".....	2, 416. 879
Tps. 29 and 30 N., R. 50 E., quarter corner between secs. 4 and 33; iron section post stamped "2413".....	2, 412. 203
Tps. 29 and 30 N., R. 50 E., corner of secs. 32, 4, 33, and 3; iron section post stamped "2406".....	2, 404. 969
Tps. 29 and 30 N., R. 50 E., quarter corner between secs. 3 and 32; iron section post stamped "2421".....	2, 419. 693
Tps. 29 and 30 N., R. 50 E., corner of secs. 31, 5, 32, and 4; iron section post stamped "2568".....	2, 567. 119

Tps. 29 and 30 N., R. 50 E., quarter corner between secs. 5 and 31; iron section post stamped "2655".....	Feet. 2, 653. 705
Tps. 29 and 30 N., Rs. 49 and 50 E., township corner; iron post stamped "2553".....	2, 552. 094
Tps. 29 and 30 N., R. 49 E., quarter corner between secs. 1 and 36; iron section post stamped "2516".....	2, 515. 091
Tps. 29 and 30 N., R. 49 E., corner of secs. 35, 2, 36, and 1; iron section post stamped "2495".....	2, 493. 360
Tps. 29 and 30 N., R. 49 E., quarter corner between secs. 2 and 35; iron section post stamped "2570".....	2, 568. 850
Tps. 29 and 30 N., R. 49 E., corner of secs. 34, 3, 35, and 2; iron section post stamped "2529".....	2, 527. 787
Tps. 29 and 30 N., R. 49 E., quarter corner between secs. 3 and 34; iron section post stamped "2522".....	2, 520. 357
Tps. 29 and 30 N., R. 49 E., corner of secs. 33, 4, 24, and 3; iron section post stamped "2444".....	2, 442. 922
Tps. 29 and 30 N., R. 49 E., quarter corner between secs. 33 and 4; iron section post stamped "2406".....	2, 405. 067
Tps. 29 and 30 N., R. 49 E., corner of secs. 32, 5, 33, and 4; iron section post stamped "2357".....	2, 355. 491
Tps. 29 and 30 N., R. 49 E., quarter corner between secs. 32 and 5; iron section post stamped "2367".....	2, 365. 718
Tps. 29 and 30 N., R. 49 E., corner of secs. 31, 32, 6, and 5; iron section post stamped "2346".....	2, 344. 753
Tps. 29 and 30 N., R. 49 E., quarter corner between secs. 6 and 31; iron section post stamped "2436".....	2, 434. 539
Tps. 29 and 30 N., Rs. 48 and 49 E., township corner; iron post stamped "2492".....	2, 490. 915
Tps. 29 and 30 N., R. 48 E., quarter corner between secs. 1 and 36; iron section post stamped "2596".....	2, 594. 614
Tps. 29 and 30 N., R. 48 E., corner of secs. 1, 2, 35, and 36; iron section post stamped "2654".....	2, 652. 815
Tps. 29 and 30 N., R. 48 E., quarter corner between secs. 2 and 35; iron section post stamped "2665".....	2, 663. 948
Tps. 29 and 30 N., R. 48 E., corner of secs. 2, 3, 34, and 35; iron section post stamped "2640".....	2, 638. 862
Tps. 29 and 30 N., R. 48 E., quarter corner between secs. 3 and 34; iron section post stamped "2611".....	2, 609. 624
Tps. 29 and 30 N., R. 48 E., corner of secs. 33, 34, 3, and 4; iron section post stamped "2529".....	2, 527. 497
Tps. 29 and 30 N., R. 48 E., quarter corner between secs. 33 and 4; iron section post stamped "2502".....	2, 500. 264
Tps. 29 and 30 N., R. 48 E., corner of secs. 32, 33, 4, and 5; iron section post stamped "2590".....	2, 588. 504
Tps. 29 and 30 N., R. 48 E., quarter corner between secs. 5 and 32; iron section post stamped "2604".....	2, 602. 380
<b>Corner of Tps. 30 and 31 N., Rs. 51 and 52 E., west along township line to sec. 31, T. 31 N., R. 48 E.</b>	
Tps. 30 and 31 N., Rs. 51 and 52 E., standard corner; iron post stamped "2400".....	2, 399. 142
Tps. 30 and 31 N., R. 51 E., quarter corner between secs. 1 and 36; iron section post stamped "2362".....	2, 360. 590

	Feet.
Tps. 30 and 31 N., R. 51 E., corner of secs. 1, 2, 35, and 36; iron section post stamped "2353".....	2, 352. 055
Tps. 30 and 31 N., R. 51 E., quarter corner between secs. 2 and 35; iron section post stamped "2334".....	2, 333. 188
Tps. 30 and 31 N., R. 51 E., corner of secs. 2, 3, 34, and 35; iron section post stamped "2321".....	2, 320. 070
Tps. 30 and 31 N., R. 51 E., quarter corner between secs. 3 and 34; iron section post stamped "2306".....	2, 304. 634
Tps. 30 and 31 N., R. 51 E., corner of secs. 3, 4, 33, and 34; iron section post stamped "2260".....	2, 258. 654
Tps. 30 and 31 N., R. 51 E., quarter corner between secs. 4 and 33; iron section post stamped "2236".....	2, 234. 747
Tps. 30 and 31 N., R. 51 E., corner of secs. 4, 5, 32, and 33; iron section post stamped "2240".....	2, 239. 355
Tps. 30 and 31 N., R. 51 E., quarter corner between secs. 5 and 32; iron section post stamped "2240".....	2, 238. 845
Tps. 30 and 31 N., R. 51 E., corner of secs. 5, 6, 31, and 32; iron section post stamped "2219".....	2, 217. 560
Tps. 30 and 31 N., R. 51 E., quarter corner between secs. 6 and 31; iron section post stamped "2190".....	2, 188. 615
Tps. 30 and 31 N., Rs. 50 and 51 E., standard township corner; iron post stamped "2150".....	2, 148. 594
Tps. 30 and 31 N., R. 50 E., quarter corner between secs. 1 and 36; iron section post stamped "2175".....	2, 174. 366
Tps. 30 and 31 N., R. 50 E., sixteenth corner W. $\frac{1}{2}$ secs. 1 and 36; stone marked "2163".....	2, 161. 947
Tps. 30 and 31 N., R. 50 E., corner of secs. 1, 2, 35, and 36; iron section post stamped "2101".....	2, 099. 776
Tps. 30 and 31 N., R. 50 E., east sixteenth corner between secs. 2 and 35; stone marked "2102".....	2, 101. 01
Tps. 30 and 31 N., R. 50 E., quarter corner between secs. 2 and 35; iron section post stamped "2106".....	2, 104. 998
Tps. 30 and 31 N., R. 50 E., west sixteenth corner between secs. 2 and 35; stone marked "2110".....	2, 109. 054
Tps. 30 and 31 N., R. 50 E., corner of secs. 2, 3, 34, and 35; iron section post stamped "2112".....	2, 111. 383
Tps. 30 and 31 N., R. 50 E., east sixteenth corner between secs. 3 and 34; stone marked "2115".....	2, 113. 98
Tps. 30 and 31 N., R. 50 E., quarter corner between secs. 3 and 34; iron section post stamped "2119".....	2, 117. 702
Tps. 30 and 31 N., R. 50 E., corner of secs. 3, 4, 33, and 34; iron section post stamped "2200".....	2, 198. 730
Tps. 30 and 31 N., R. 50 E., quarter corner between secs. 4 and 33; iron section post stamped "2167".....	2, 166. 322
Tps. 30 and 31 N., R. 50 E., corner of secs. 4, 5, 32, and 33; iron section post stamped "2220".....	2, 218. 796
Tps. 30 and 31 N., R. 50 E., quarter corner between secs. 5 and 32; iron section post stamped "2317".....	2, 316. 259
Tps. 30 and 31 N., R. 50 E., corner of secs. 5, 6, 31, and 32; iron section post stamped "2326".....	2, 325. 205
Tps. 30 and 31 N., R. 50 E., quarter corner between secs. 31 and 6; iron section post stamped "2331".....	2, 329. 751
Tps. 30 and 31 N., Rs. 49 and 50 E., standard township corner; iron post stamped "2364".....	2, 362. 465

Tps. 30 and 31 N., R. 49 E., quarter corner between secs. 1 and 36; iron section post stamped "2438".....	Feet. 2, 436. 540
Tps. 30 and 31 N., R. 49 E., corner of secs. 1, 2, 35, and 36; iron section post stamped "2526".....	2, 525. 037
Tps. 30 and 31 N., R. 49 E., quarter corner between secs. 3 and 34; iron section post stamped "2680".....	2, 678. 801
Tps. 30 and 31 N., R. 49 E., corner of secs. 3, 4, 33, and 34; iron section post stamped "2677".....	2, 675. 992
Tps. 30 and 31 N., R. 49 E., quarter corner between secs. 4 and 33; iron section post stamped "2678".....	2, 676. 975
Tps. 30 and 31 N., R. 49 E., corner of secs. 4, 5, 32, and 33; iron section post stamped "2669".....	2, 667. 844
Tps. 30 and 31 N., R. 49 E., quarter corner between secs. 32 and 5; iron section post stamped "2704".....	2, 702. 983
Tps. 30 and 31 N., R. 49 E., corner of secs. 5, 6, 31, and 32; iron section post stamped "2707".....	2, 705. 555
Tps. 30 and 31 N., R. 49 E., quarter corner between secs. 6 and 31; iron section post stamped "2719".....	2, 718. 341
Tps. 30 and 31 N., R. 48 and 49 E., township corner; iron post stamped "2687".....	2, 685. 772
Tps. 30 and 31 N., R. 48 E., quarter corner between secs. 1 and 36; iron section post stamped "2674".....	2, 673. 384
Tps. 30 and 31 N., R. 48 E., corner of secs. 1, 2, 35, and 36; iron section post stamped "2678".....	2, 676. 595
Tps. 30 and 31 N., R. 48 E., quarter corner between secs. 35 and 2; iron section post stamped "2709".....	2, 708. 193
Tps. 30 and 31 N., R. 48 E., corner secs. 34, 35, 3, and 2; iron section post stamped "2651".....	2, 650. 031
Tps. 30 and 31 N., R. 48 E., corner of secs. 3, 4, 33, and 34; iron section post stamped "2687".....	2, 685. 644
Tps. 30 and 31 N., R. 48 E., quarter corner between secs. 4 and 33; iron section post stamped "2614".....	2, 612. 524
Tps. 30 and 31 N., R. 48 E., corner of secs. 4, 5, 32, and 33; iron section post stamped "2606".....	2, 604. 830
Tps. 30 and 31 N., R. 48 E., near quarter corner between secs. 5 and 32; wooden stake marked "2631".....	2, 629. 40
<b>Corner of Tps. 31 and 32 N., Rs. 51 and 52 E., west along township line to corner of Tps. 31 and 32 N., Rs. 49 and 50 E., thence northwest 1 mile.</b>	
Tps. 31 and 32 N., Rs. 51 and 52, township corner; iron post stamped "2596".....	2, 594. 967
Tps. 31 and 32 N., R. 51 E., quarter corner between secs. 1 and 36; iron section post stamped "2621".....	2, 619. 424
Tps. 31 and 32 N., R. 51 E., corner of secs. 1, 2, 35, and 36; iron section post stamped "2627".....	2, 625. 496
Tps. 31 and 32 N., R. 51 E., quarter corner between secs. 2 and 35; iron section post stamped "2633".....	2, 631. 075
Tps. 31 and 32 N., R. 51 E., corner of secs. 2, 3, 34, and 35; iron section post stamped "2620".....	2, 618. 595
Tps. 31 and 32 N., R. 51 E., quarter corner between secs. 3 and 34; iron section post stamped "2649".....	2, 647. 502
Tps. 31 and 32 N., R. 51 E., corner of secs. 3, 4, 33, and 34; iron section post stamped "2650".....	2, 648. 304

	Feet.
Tps. 31 and 32 N., R. 51 E., quarter corner between secs. 4 and 33; iron section post stamped "2656".....	2, 654. 471
Tps. 31 and 32 N., R. 51 E., corner of secs. 4, 5, 32, and 33; iron section post stamped "2652".....	2, 650. 845
Tps. 31 and 32 N., R. 51 E., quarter corner between secs. 5 and 32; iron section post stamped "2664".....	2, 662. 114
Tps. 31 and 32 N., R. 51 E., corner of secs. 5, 6, 31, and 32; iron section post stamped "2664".....	2, 662. 951
Tps. 31 and 32 N., R. 51 E., quarter corner between secs. 6 and 31; iron section post stamped "2658".....	2, 656. 221
Tps. 31 and 32 N., Rs. 50 and 51 E., township corner; iron post stamped "2670".....	2, 669. 015
Tps. 31 and 32 N., R. 50 E., quarter corner between secs. 1 and 36; iron section post stamped "2588".....	2, 586. 808
Tps. 31 and 32 N., R. 50 E., corner of secs. 1, 2, 35, and 36; iron section post stamped "2685".....	2, 683. 623
Tps. 31 and 32 N., R. 50 E., quarter corner between secs. 2 and 35; iron section post stamped "2643".....	2, 642. 314
Tps. 31 and 32 N., R. 50 E., quarter corner between secs. 3 and 34; iron section post stamped "2529".....	2, 528. 282
Tps. 31 and 32 N., R. 50 E., corner of secs. 3, 4, 33, and 34; iron section post stamped "2457".....	2, 455. 829
Tps. 31 and 32 N., R. 50 E., quarter corner between secs. 4 and 33; iron section post stamped "2408".....	2, 407. 274
Tps. 31 and 32 N., R. 50 E., corner of secs. 4, 5, 32, and 33; iron section post stamped "2329".....	2, 328. 071
Tps. 31 and 32 N., R. 50 E., quarter corner between secs. 5 and 32; iron section post stamped "2316".....	2, 314. 561
Tps. 31 and 32 N., R. 50 E., corner of secs. 5, 6, 31, and 32; iron section post stamped "2257".....	2, 255. 525
Tps. 31 and 32 N., R. 50 E., quarter corner between secs. 6 and 31; iron section post stamped "2243".....	2, 241. 788
Tps. 31 and 32 N., Rs. 49 and 50 E., township corner; iron post stamped "2196".....	2, 195. 276
Frank Custer's ranch, at west corner of garden fence, north side of road; wooden stake marked "2192".....	2, 191. 291

**Corner of Tps. 31 and 32 N., Rs. 49 and 50 E., north 1 mile.**

T. 32 N., Rs. 49 and 50 E., south sixteenth corner between secs. 31 and 36; stone marked "2215".....	2, 213. 75
T. 32 N., Rs. 49 and 50 E., quarter corner between secs. 31 and 36; iron section post stamped "2235".....	2, 233. 607
T. 32 N., Rs. 49 and 50 E., north sixteenth corner between secs. 31 and 36; stone marked "2265".....	2, 265. 14
T. 32 N., Rs. 49 and 50 E., corner of secs. 30, 31, 25, and 36; iron section post stamped "2295".....	2, 293. 760

Nearly all the following bench marks, established by J. H. Wilke in 1910, were by single unchecked sights and are therefore unreliable:

**Point near Poplar west and south across Missouri River to sec. 7, T. 26 N., R. 51 E., thence northwest to Missouri River.**

	Feet.
Poplar, 750 feet north and 150 feet east of Great Northern Ry. station; top of nut on iron post (Missouri River Commission bench mark 104/2).....	1, 997. 242
Elevation of subsurface mark.....	1, 993. 242
Poplar, 0.5 mile east of, on east side of corner post of wire fence at north-east corner of field; nail marked "1968.9".....	1, 967. 84
Poplar, 0.7 mile southeast of, first joint west of road crossing on north side of track, Great Northern Ry.; top of rail.....	1, 967. 1
Poplar, 1.3 miles southeast of, in highest point of northernmost peeled post 3 feet tall, just north of ferry across Missouri River; nail marked "1965" ..	1, 963. 95
Ferry, at west landing; surface of water of Missouri River.....	1, 942. 1
Ferry, in cable post west of, spike 6 inches above ground marked "1952"	1, 950. 76
Ferry, 0.5 mile southwest of, 30 feet east of road, 50 feet north of dim road east; nail in notch at root of 10-inch cottonwood tree, marked "1956.3" ..	1, 955. 18
Ferry, 1.1 miles southwest of, east edge of road, 2 feet above ground; spike in large leaning forked cottonwood tree, marked "1957.7".....	1, 956. 61
Ferry, 1.6 miles southwest of, southeast corner of yard at small house plastered with mud, 3.85 feet above ground; spike in top of fence post, marked "1968".....	1, 966. 97
T. 27 N., R. 51 E., between secs. 29 and 30, 150 yards north of new store; highest point of quarter section stone marked "1970".....	1, 969. 40
T. 27 N., R. 51 E., quarter corner on east side of sec. 30, 2 feet north of rock corner; iron post stamped "1971".....	1, 970. 030
T. 27 N., R. 51 E., 30 feet southwest of northeast corner of sec. 31, in corner fence post at southwest corner of road junction, near ground, spike marked "1989".....	1, 987. 97
T. 27 N., R. 51 E., east side sec. 31, in southwest corner of field, at foot of hill, north side, where road turns east; due south from preceding bench mark; spike in foot of heavy brace to corner post marked "2020".....	2, 019. 31
T. 27 N., R. 51 E., about sec. 32, south side of road up main right-hand coulee; highest point of rock marked "2075".....	2, 074. 14
T. 27 N., R. 51 E., about sec. 32, north side of road; highest point of big rock painted "2129.4".....	2, 128. 31
Davis, 2 miles south of store and post office, at west side of road, on top of hill at head of coulee running west, on Glendive Road; highest point of big white limestone rock marked "2195.7".....	2, 194.70
T. 26 N., R. 51 E., about sec. 6, 2 miles south of Davis store and post office, on Glendive Road, east of big white limestone; iron post stamped "2195" ..	2, 194. 049
Davis, 2 miles south and 0.2 mile west of, north end of point of ridge, south side of coulee; highest point on black rock marked "2117".....	2, 115. 95
T. 27 N., R. 50 E., about 200 yards west of southeast corner of sec. 36, 20 feet north of road up right-hand coulee south of Tom Bowden's reservoir; highest point of small rock marked "2043.3".....	2, 042. 30
Tom Bowden's reservoir, at divide between Red Water and coulee north side of road; highest point of pointed rock marked "2065.3".....	2, 064. 32
T. 27 N., R. 50 E., sec. 36, 150 yards east of Red Water Creek in 24-inch cottonwood tree, northernmost and largest of row of six; spike in notch on north side, 1 foot above ground, marked "1976.3".....	1, 975. 25

	Feet.
T. 27 N., R. 50 E., sec. 36, where clearly defined cow trail crosses Red Water Creek; surface of water . . . . .	1,961.1
T. 27 N., R. 50 E., sec. 35, about 0.25 mile south of Tom Bowden's house, at corner post inside fence; spike in notch marked "1970" . . . . .	1,969.04
T. 27 N., R. 50 E., sec. 35, 0.25 mile south of Tom Bowden's house, 2 feet west of corner fence post; iron post stamped "1970" . . . . .	1,969.006
T. 27 N., R. 50 E., sec. 34, east edge of flat, east of road; highest point of rock marked "2162.4" . . . . .	2,161.40
T. 27 N., R. 50 E., SW. $\frac{1}{4}$ sec. 34, at corner fence post southeast corner of field, 20 inches from ground; spike in notch on guy post marked "2161.6" . . . . .	2,160.54
T. 26 N., R. 50 E., 150 yards southeast of northwest corner of sec. 3, in corner post of new wire fence, at southeast corner of yard around house, 3 inches above ground; spike marked "2141.3" . . . . .	2,140.31
T. 26 N., R. 50 E., southeast corner of sec. 4, 2 feet west of corner on township line; iron post stamped "2148" . . . . .	2,146.979
T. 27 N., R. 50 E., quarter corner on west side of sec. 4; highest point of corner stone marked "2147.6" . . . . .	2,146.56
T. 26 N., R. 50 E., sec. 8, 40 feet west of road, on edge of hill on north side of small coulee, 0.25 mile north of steep cut bank in sharp bend of Red Water Creek; highest point on large rock marked "2089" . . . . .	2,087.89
T. 26 N., R. 50 E., sec. 7, at northeast corner of yard fence at Dr. Atkinson's ranch on Red Water Creek; iron post stamped "2011" . . . . .	2,009.977
T. 26 N., R. 50 E., 0.25 mile north and 0.25 mile east of southwest corner of sec. 7; 75 feet east of fence on south side of lane where lane turns north; highest point of rock marked "2026" . . . . .	2,024.06
T. 26 N., R. 49 E., northeast corner of SE. $\frac{1}{4}$ SW. $\frac{1}{4}$ sec. 12, 5 feet north of corner post of fence; highest point of rock marked "2039" . . . . .	2,037.99
T. 26 N., R. 49 E., northwest corner of SE. $\frac{1}{4}$ SE. $\frac{1}{4}$ sec. 11, southeast corner of field; spike in notch of corner fence post marked "2113.7" . . . . .	2,112.73
T. 26 N., R. 49 E., sec. 11, 100 yards above dam on left side of coulee going up; highest point of rock marked "2105" . . . . .	2,104.01
T. 26 N., R. 49 E., southwest corner of sec. 11; top of corner rock marked "2127.2" . . . . .	2,126.18
T. 26 N., R. 49 E., quarter corner on south side of sec. 10; top of corner rock marked "2147.8" . . . . .	2,146.79
T. 26 N., R. 49 E., sec. 9, in coulee; highest point of larger of two rocks marked "2195.7" . . . . .	2,194.76
T. 26 N., R. 49 E., quarter corner on south side of sec. 9; top of corner rock marked "2214.2" . . . . .	2,213.22
T. 26 N., R. 49 E., quarter corner on south side of sec. 9, 4 feet north of corner rock; iron post stamped "2214" . . . . .	2,213.000
T. 26 N., R. 49 E., about 100 yards northwest from southeast corner of sec. 8, on edge of flat; highest point of rock marked "2226" . . . . .	2,225.76
T. 26 N., R. 49 E., 100 yards west of big coulee; top of large rock marked "2212.5" . . . . .	2,211.52
T. 26 N., R. 49 E., southeast corner of sec. 7; top of corner stone marked "2217.2" . . . . .	2,216.28
T. 26 N., R. 49 E., quarter corner on south side of sec. 7; top of corner rock marked "2217.3" . . . . .	2,216.40
T. 26 N., R. 49 E., southwest corner of sec. 7; top of corner stone marked "2179.5" . . . . .	2,178.55
Burch, post office, sec. 13, T. 26 N., R. 48 E., in bed of creek, 50 feet west of where road crosses south fork of Nickwall Creek; highest point of large rock marked "2144.9" . . . . .	2,143.97

Burch, sec. 13, T. 26 N., R. 48 E., at forks of road west of post office; highest point of large rock marked "2171.1".....	2,170.23
T. 26 N., R. 48 E., on section line between secs. 13 and 14, north side of east end of lane; spike in fence post marked "2119.7".....	2,118.74
T. 26 N., R. 48 E., sec. 13, 2 feet outside wire fence on north side of lane running west from fence near section line; iron post stamped "2220"....	2,219.192
T. 26 N., R. 48 E., sec. 12, inside corner of field with furrow plowed on south and east sides; highest point on flat rock marked "2165".....	2,163.12
T. 26 N., R. 48 E., sec. 11, 50 feet west and 300 feet south of high post to mark northeast corner of section before subdivision; highest point of large rock marked "2204.6".....	2,203.70
T. 26 N., R. 48 E., sec. 2, 200 yards northwest of two trees in north fork of Nickwall Creek at old corral; highest point of large rock.....	2,157.49
T. 26 N., R. 48 E., sec. 2, just under edge of badlands; highest point of large rock marked "2201.9".....	2,200.99
Badlands, on spur ridge; highest point on sandstone marked "2182.6"....	2,181.69
T. 27 N., R. 48 E., about sec. 27, on west side of ridge, in plain view from road on west; white rock marked "2148".....	2,147.16
<b>Sec. 7, T. 26 N., R. 51 E., south, east, and north to northeast corner of sec. 33, T. 27 N., R. 52 E.</b>	
T. 26 N., R. 51 E., sec. 6, west edge of road; highest point of large flat rock marked "2219.6".....	2,218.64
T. 26 N., R. 51 E., about sec. 7, west side of road, at head of coulee; rock at top of hill marked "2263".....	2,262.02
T. 26 N., R. 51 E., about sec. 8, north side of road, 200 yards southeast of newly roofed cabin; highest point of rock marked "2275".....	2,274.02
T. 26 N., R. 51 E., about sec. 17, 50 feet north of road forks where Glendive road goes up on terrace, near badlands; highest point of rock marked "2282.3".....	2,281.35
T. 26 N., R. 51 E., about sec. 17, 100 feet south of road forks, where Glendive road goes up on terrace, near badlands; iron post stamped "2284".....	2,283.036
T. 26 N., R. 51 E., about sec. 17, at southeast corner of new hay corral, 250 yards northwest of prominent butte in coulee; spike in post, 6 inches from ground, marked "2232.6".....	2,231.59
T. 26 N., R. 51 E., about sec. 16, near point of ridge, 200 yards southwest of new hay corral; highest point of large rock marked "2175.2".....	2,174.26
T. 26 N., R. 51 E., about sec. 16, east side of small coulee; highest point of large porous rock marked "2194.9".....	2,193.88
T. 26 N., R. 51 E., about sec. 15, on flat; top of rock marked "2185".....	2,184.0
T. 26 N., R. 51 E., about sec. 15, west side of big coulee; black rock marked "2129.3".....	2,128.38
T. 26 N., R. 51 E., about sec. 15, on hillside west of big coulee; highest point of one of a number of large round rocks marked "2100".....	2,098.02
T. 26 N., R. 51 E., about sec. 15, 75 feet northwest of stake at northwest corner of Gallagher's land; top of rock marked "2181.7".....	2,180.75
T. 26 N., R. 51 E., about sec. 15, east of big coulee, on hillside; highest point of large flat white rock marked "2118".....	2,117.01
T. 26 N., R. 51 E., about sec. 14; highest point of white rock marked "2171.7".....	2,170.74
T. 26 N., R. 51 E., about sec. 14, on top of hill; top of rock 10 feet square marked "2194.4".....	2,193.48
T. 26 N., R. 51 E., about sec. 14, on south side of white rock 10 feet square and 4 feet high; iron post stamped "2193".....	2,192.035

	Feet.
T. 26 N., R. 51 E., about sec. 13, on east slope of hill; highest point of white rock 6 feet square marked "2090.6".....	2, 089. 67
T. 26 N., R. 51 E., about sec. 13, north side of coulee; top of large sharp-pointed rock marked "2183.4".....	2, 182. 45
T. 26 N., R. 52 E., about sec. 18, on point west of big coulee; highest point of large, spotted, and partly crumbled rock marked "2215.7".....	2, 214. 76
T. 26 N., R. 52 E., about sec. 18, on west side of flat hillside; highest point of prominent white rock marked "2234.4".....	2, 233. 41
T. 26 N., R. 52 E., about sec. 17, on point of ridge, south side of small coulee (first south of spring); highest point of small flat rock marked "2150.7".....	2, 149. 74
T. 26 N., R. 52 E., about sec. 16, at foot of small ridge in coulee, 200 feet west of creek bed; top of rock marked "2100.5".....	2, 099. 54
T. 26 N., R. 52 E., about sec. 16, on side of small ridge, in big coulee, 200 feet west of creek bed; iron post stamped "2102".....	2, 101. 106
T. 26 N., R. 52 E., about sec. 9, in bed of coulee at small stump; sandstone marked "2041.6".....	2, 040. 69
T. 26 N., R. 52 E., about sec. 5, near foot of ridge, 250 feet north of tree in bend of coulee; small rock marked "2007.6".....	2, 006. 69
T. 27 N., R. 52 E., sec. 32, south side of section; top of quarter section stone marked "1999.9".....	1, 998. 95
T. 27 N., R. 52 E., about sec. 33, at gate one-half mile east of Brown windmill at house, where 3 fences join; top of rock marked "1973.3".....	1, 972. 34
T. 27 N., R. 52 E., about sec. 33, at gate one-half mile east of Brown windmill at Reuz house; iron post stamped "1973".....	1, 972. 130
T. 27 N., R. 52 E., nearly 0.25 mile west of northeast corner of sec. 33, west side of small draw, 50 yards west of Kern's house; spike in root of small tree marked "1964.2".....	1, 963. 28

**BROCTON 30' QUADRANGLE.**

Corner of Tps. 28 and 29, Rs. 51 and 52 E., east along township line to sec. 3, T. 29 N.,  
R. 54 E.

T. 28 N., R. 52 E., witness corner to closing corner of secs. 3 and 4; iron section post stamped "2092".....	2, 090. 969
T. 29 N., R. 52 E., witness corner to closing corner of secs. 31 and 32; iron section post stamped "2087".....	2, 085. 500
T. 29 N., R. 52 E., south quarter corner of sec. 32; stone.....	2, 054. 98
T. 28 N., R. 52 E., witness corner to closing corner of secs. 32 and 33; iron section post stamped "2060".....	2, 059. 049
T. 29 N., R. 52 E., witness corner to standard corner of secs. 32 and 33; iron section post stamped "2059".....	2, 058. 225
T. 29 N., R. 52 E., south quarter corner of sec. 33; stone.....	2, 062. 23
T. 28 N., R. 52 E., witness corner to closing corner of secs. 2 and 1; iron section post stamped "2053".....	2, 052. 166
T. 29 N., R. 52 E., witness corner to standard corner of secs. 33 and 34; iron section post stamped "2053".....	2, 051. 935
T. 28 N., Rs. 52 and 53 E., witness corner to closing township corner iron post stamped "2036".....	2, 035. 105
T. 29 N., R. 52 E., witness corner to standard corner of secs. 34 and 35; iron section post stamped "2042".....	2, 040. 821
T. 29 N., R. 52 E., witness corner south quarter corner of sec. 35; iron section post stamped "2047".....	2, 045. 655
T. 28 N., R. 53 E., witness corner to closing corner of secs. 5 and 6; iron section post stamped "2054".....	2, 053. 147

T. 29 N., R. 52 E., witness corner to standard corner of secs. 35 and 36; iron section post stamped "2057".....	2,056.360
T. 29 N., R. 52 E., witness corner south quarter corner of sec. 36; iron section post stamped "2097".....	2,096.301
T. 28 N., R. 50 E., witness corner to closing corner secs. 4 and 5; iron section post stamped "2111".....	2,109.794
T. 29 N., Rs. 52 and 53 E., witness corner to standard township corner iron post stamped "2100".....	2,099.396
T. 29 N., R. 53 E., witness corner to south quarter corner of sec. 31; iron section post stamped "2141".....	2,139.820
T. 29 N., R. 53 E., witness corner to closing corner of secs. 3 and 4; iron section post stamped "2139".....	2,137.844
T. 29 N., R. 53 E., witness corner to south corner of secs. 31 and 32; iron section post stamped "2142".....	2,140.505
T. 29 N., R. 53 E., witness corner to south quarter corner of sec. 32; iron section post stamped "2143".....	2,142.001
T. 28 N., R. 53 E., witness corner to closing corner of secs. 2 and 3; iron section post stamped "2190".....	2,188.821
T. 29 N., R. 53 E., witness corner to standard corner of secs. 32 and 33; iron section post stamped "2246".....	2,244.737
T. 29 N., R. 53 E., witness corner to south quarter corner of sec. 33; iron section post stamped "2270".....	2,269.109
T. 28 N., R. 53 E., NE. $\frac{1}{4}$ sec. 2, triangulation station Syp; iron post stamped "2369".....	2,367.554
T. 28 N., R. 53 E., witness corner to closing corner of secs. 1 and 2, iron section post stamped "2296".....	2,295.012
T. 29 N., R. 53 E., witness corner to standard corner of secs. 33 and 34; iron section post stamped "2246".....	2,244.825
T. 29 N., R. 53 E., witness corner to south quarter corner of sec. 34; iron section post stamped "2211".....	2,209.455
T. 28 N., Rs. 53 and 54 E., witness corner to closing township corner; iron post stamped "2180".....	2,178.805
T. 29 N., R. 53 E., witness corner to standard corner of secs. 34 and 35; iron section post stamped "2163".....	2,161.582
T. 29 N., R. 53 E., witness corner to south quarter corner of sec. 35; iron section post stamped "2159".....	2,157.442
T. 28 N., R. 54 E., witness corner to closing corner of secs. 5 and 6; iron section post stamped "2141".....	2,139.751
T. 29 N., R. 53 E., witness corner to standard corner of secs. 35 and 36; iron section post stamped "2134".....	2,133.286
T. 29 N., R. 53 E., witness corner to south quarter corner of sec. 36; iron section post stamped "2119".....	2,117.760
T. 28 N., R. 54 E., witness corner to closing corner of secs. 4 and 5; iron section post stamped "2089".....	2,087.587
T. 29 N., Rs. 53 and 54 E., witness corner to standard township corner; iron post stamped "2069".....	2,067.741
T. 29 N., R. 54 E., witness corner to south quarter corner of sec. 31; iron section post stamped "2002".....	2,001.352
T. 28 N., R. 54 E., witness corner to closing corner of secs. 3 and 4; iron section post stamped "2004".....	2,002.899
T. 29 N., R. 54 E., witness corner to south corner of secs. 31 and 32; iron section post stamped "1934".....	1,983.313
T. 29 N., R. 54 E., witness corner to south quarter corner of sec. 32; iron section post stamped "2002".....	2,000.430

T. 28 N., R. 54 E., witness corner to closing corner of secs. 2 and 3; iron section post stamped "2000".....	Feet. 1,999.165
T. 29 N., R. 54 E., witness corner to south corner of secs. 32 and 33; iron section post stamped "2004".....	2,002.778
T. 29 N., R. 54 E., witness corner to south quarter corner of sec. 33; iron section post stamped "1987".....	1,985.801
T. 28 N., R. 54 E., witness corner to closing corner of secs. 1 and 2; iron section post stamped "1969".....	1,967.493
T. 29 N., R. 54 E., witness corner to standard corner of secs. 33 and 34; iron post stamped "1945".....	1,943.480
<b>Corner of Tps. 29 and 30 N., Rs. 51 and 52 E., east along township line to southwest sec. 33, T. 30 N., R. 54 E.</b>	
Tps. 29 and 30 N., R. 52 E., quarter corner between secs. 5 and 32; iron section post.....	2,194.643
Tps. 29 and 30 N., R. 52 E., corner of secs. 4, 5, 32, and 33; iron section post.....	2,179.219
Tps. 29 and 30 N., R. 52 E., quarter corner between secs. 4 and 33; iron section post.....	2,165.573
Tps. 29 and 30 N., R. 52 E., corner of secs. 3, 4, 33, and 34; iron section post.....	2,143.886
Tps. 29 and 30 N., R. 52 E., quarter corner of secs. 3 and 34; iron section post.....	2,133.549
Tps. 29 and 30 N., R. 52 E., corner of secs. 2, 3, 34, and 35; iron section post.....	2,135.725
Tps. 29 and 30 N., R. 52 E., quarter corner of secs. 2 and 35; iron section post.....	2,136.722
Tps. 29 and 30 N., R. 52 E., corner of secs. 1, 2, 35, and 36; iron section post.....	2,134.439
Tps. 29 and 30 N., R. 52 E., quarter corner of secs. 1 and 36; iron section post.....	2,123.612
Tps. 29 and 30 N., Rs. 52 and 53, township corner; iron post.....	2,094.863
Tps. 29 and 30 N., R. 53 E., quarter corner between secs. 6 and 31; iron section post stamped "2104".....	2,102.632
Tps. 29 and 30 N., R. 53 E., corner of secs. 5, 6, 31, and 32; iron section post stamped "2093".....	2,092.103
Tps. 29 and 30 N., R. 53 E., quarter corner between secs. 5 and 32; iron section post stamped "2085".....	2,083.570
Tps. 29 and 30 N., R. 53 E., corner of secs. 4, 5, 32, and 33; iron section post stamped "2067".....	2,065.644
Tps. 29 and 30 N., R. 53 E., quarter corner between secs. 4 and 33; iron section post stamped "2054".....	2,053.230
Tps. 29 and 30 N., R. 53 E., corner of secs. 3, 4, 33, and 34; iron section post stamped "2054".....	2,053.119
Tps. 29 and 30 N., R. 53 E., quarter corner between secs. 3 and 34; iron section post stamped "2036".....	2,034.811
Tps. 29 and 30 N., R. 53 E., corner of secs. 2, 3, 34, and 35; iron section post stamped "2019".....	2,017.763
Tps. 29 and 30 N., R. 53 E., quarter corner between secs. 2 and 35; iron section post stamped "2016".....	2,014.917
Tps. 29 and 30 N., R. 53 E., corner of secs. 1, 2, 35, and 36; iron section post stamped "1989".....	1,987.293
Tps. 29 and 30 N., R. 53 E., quarter corner between secs. 1 and 36; iron section post stamped "1988".....	1,986.544

Tps. 29 and 30 N., Rs. 53 and 54 E., township corner; iron post stamped "2017".....	Feet. 2,015.297
Tps. 29 and 30 N., R. 54 E., quarter corner between secs. 6 and 31; iron section post stamped "1966".....	1,964.180
Tps. 29 and 30 N., R. 54 E., east sixteenth corner between secs. 31 and 6; stone.....	1,952.70
Tps. 29 and 30 N., R. 54 E., corner of secs. 5, 6, 31, and 32; iron section post stamped "1930".....	1,928.903
Tps. 29 and 30 N., R. 54 E., west sixteenth corner between secs. 5 and 32; stone.....	1,924.41
Tps. 29 and 30 N., R. 54 E., quarter corner between secs. 5 and 32; iron section post stamped "1927".....	1,925.481
Tps. 29 and 30 N., R. 54 E., corner of secs. 4, 5, 32, and 33; iron section post stamped "1929".....	1,927.524
<b>Corner of Tps. 30 and 31 N., Rs. 51 and 52 E., east along township line to sec. 6, T. 30 N., R. 55 E.</b>	
Tps. 30 and 31 N., R. 52 E., quarter corner between secs. 6 and 31; iron section post stamped "2415".....	2,414.127
Tps. 30 and 31 N., R. 52 E., corner of secs. 5, 6, 31, and 32; iron section post stamped "2501".....	2,499.760
Tps. 30 and 31 N., R. 52 E., quarter corner between secs. 5 and 32; iron section post stamped "2439".....	2,438.249
Tps. 30 and 31 N., R. 52 E., corner of secs. 4, 5, 32, and 33; iron section post stamped "2399".....	2,398.110
Tps. 30 and 31 N., R. 52 E., quarter corner between secs. 4 and 33; iron section post stamped "2351".....	2,350.297
Tps. 30 and 31 N., R. 52 E., corner of secs. 4, 3, 33, and 34; iron section post stamped "2416".....	2,415.256
Tps. 30 and 31 N., R. 52 E., quarter corner between secs. 3 and 34; iron section post stamped "2317".....	2,316.572
Tps. 30 and 31 N., R. 52 E., corner of secs. 2, 3, 34, and 35; iron section post stamped "2319".....	2,318.407
Tps. 30 and 31 N., R. 52 E., quarter corner between secs. 2 and 35; iron section post stamped "2331".....	2,330.103
Tps. 30 and 31 N., R. 52 E., corner of secs. 1, 2, 35, and 36; iron section post stamped "2399".....	2,358.296
Tps. 30 and 31 N., R. 52 E., quarter corner secs. 1 and 36; iron section post stamped "2349".....	2,348.119
Tps. 30 and 31 N., Rs. 52 and 53 E., township corner; iron post stamped "2339".....	2,338.137
Tps. 30 and 31 N., R. 53 E., quarter corner between secs. 6 and 31; iron section post stamped "2305".....	2,304.247
Tps. 30 and 31 N., R. 53 E., corner of secs. 5, 6, 31, and 32; iron section post stamped "2285".....	2,283.496
Tps. 30 and 31, R. 53 E., quarter corner between secs. 5 and 32; iron section post stamped "2233".....	2,231.498
Tps. 30 and 31 N., R. 53 E., corner of secs. 4, 5, 32, and 33; iron section post stamped "2222".....	2,220.985
Tps. 30 and 31 N., R. 53 E., quarter corner between secs. 4 and 33; iron section post stamped "2228".....	2,227.024
Tps. 30 and 31 N., R. 53 E., corner of secs. 4, 3, 33, and 34; iron section post stamped "2181".....	2,180.266
Tps. 30 and 31 N., R. 53 E., quarter corner between secs. 3 and 34; iron section post stamped "2149".....	2,147.423

Tps. 30 and 31 N., R. 53 E., corner of secs. 2, 3, 34, and 35; iron section post stamped "2127".....	Feet. 2, 126. 254
Tps. 30 and 31 N., R. 53 E., quarter corner between secs. 2 and 35; iron section post stamped "2044".....	2, 043. 432
Tps. 30 and 31 N., R. 53 E., corner of secs. 1, 2, 35, and 36; iron section post stamped "2065".....	2, 063. 784
Tps. 30 and 31 N., R. 53 E., quarter corner between secs. 1 and 36; iron section post stamped "2101".....	2, 099. 913
Tps. 30 and 31 N., Rs. 53 and 54 E., township corner; iron post stamped "2117".....	2, 115. 451
Tps. 30 and 31 N., R. 54 E., quarter corner between secs. 6 and 31; iron section post stamped "2117".....	2, 116. 211
Tps. 30 and 31 N., R. 54 E., corner of secs. 5, 6, 31, and 32; iron section post stamped "2104".....	2, 102. 436
Tps. 30 and 31 N., R. 54 E., quarter corner between secs. 5 and 32; iron section post stamped "2091".....	2, 089. 836
Tps. 30 and 31 N., R. 54 E., corner of secs. 4, 5, 32, and 33; iron section post stamped "2084".....	2, 082. 337
Tps. 30 and 31 N., R. 54 E., quarter corner between secs. 4 and 33; iron section post stamped "2092".....	2, 090. 988
Tps. 30 and 31 N., R. 54 E., corner of secs. 3, 4, 33, and 34; iron section post stamped "2086".....	2, 085. 238
Tps. 30 and 31 N., R. 54 E., quarter corner between secs. 3 and 34; iron section post stamped "2051".....	2, 049. 808
Tps. 30 and 31 N., R. 54 E., corner of secs. 2, 3, 34, and 35; iron section post stamped "2086".....	2, 084. 912
Tps. 30 and 31 N., R. 54 E., quarter corner between secs. 2 and 35; iron section post stamped "2088".....	2, 086. 858
Tps. 30 and 31 N., R. 54 E., corner of secs. 1, 2, 35, and 36; iron section post stamped "2063".....	2, 062. 149
Tps. 30 and 31 N., R. 54 E., quarter corner between secs. 1 and 36; iron section post stamped "2036".....	2, 035. 128
Tps. 30 and 31 N., Rs. 54 and 55 E., township corner; iron post stamped "2008".....	2, 007. 363
Tps. 30 and 31 N., R. 55 E., quarter corner between secs. 6 and 31; iron section post stamped "1984".....	1, 983. 261
Tps. 30 and 31 N., R. 55 E., about 0.4 mile south of quarter corner between secs. 6 and 31; wooden hub with nail point (United States Reclamation Service bench mark M 23).....	1, 944. 601
<b>Corner of Tps. 31 and 32 N., Rs. 51 and 52 E., east along township line to sec. 4, T. 31 N., R. 55 E.</b>	
Tps. 31 and 32 N., R. 52 E., quarter corner between secs. 6 and 31; iron section post stamped "2544".....	2, 542. 454
Tps. 31 and 32 N., R. 52 E., corner of secs. 5, 6, 31, and 32; iron section post stamped "2530".....	2, 528. 434
Tps. 31 and 32 N., R. 52 E., quarter corner between secs. 5 and 32; iron section post stamped "2406".....	2, 404. 451
Tps. 31 and 32 N., R. 52 E., corner of secs. 4, 5, 32, and 33; iron section post stamped "2365".....	2, 363. 564
Tps. 31 and 32 N., R. 52 E., quarter corner between secs. 4 and 33; iron section post stamped "2362".....	2, 360. 698
Tps. 31 and 32 N., R. 52 E., corner of secs. 3, 4, 33, and 34; iron section post stamped "2276".....	2, 274. 861

	Feet.
Tps. 31 and 32 N., R. 52 E., quarter corner between secs. 3 and 34; iron section post stamped "2321".....	2, 319. 837
Tps. 31 and 32 N., R. 52 E., corner of secs. 2, 3, 34, and 35; iron section post stamped "2389".....	2, 387. 491
Tps. 31 and 32 N., R. 52 E., quarter corner between secs. 2 and 35; iron section post stamped "2423".....	2, 421. 972
Tps. 31 and 32 N., R. 52 E., corner of secs. 1, 2, 35, and 36; iron section post stamped "2478".....	2, 476. 729
Tps. 31 and 32 N., R. 52 E., quarter corner between secs. 1 and 36; iron section post stamped "2467".....	2, 465. 751
Tps. 31 and 32 N., Rs. 52 and 53 E., township corner; iron post stamped "2412".....	2, 410. 315
Tps. 31 and 32 N., R. 53 E., quarter corner between secs. 6 and 31; iron section post stamped "2396".....	2, 394. 959
Tps. 31 and 32 N., R. 53 E., corner of secs. 5, 6, 31, and 32; iron section post stamped "2289".....	2, 287. 528
Tps. 31 and 32 N., R. 53 E., quarter corner between secs. 5 and 32; iron section post stamped "2217".....	2, 215. 635
Tps. 31 and 32 N., R. 53 E., corner of secs. 4, 5, 32, and 33; iron section post stamped "2195".....	2, 193. 486
Tps. 31 and 32 N., R. 53 E., quarter corner between secs. 4 and 33; iron section post stamped "2208".....	2, 207. 056
Tps. 31 and 32 N., R. 53 E., corner of secs. 3, 4, 33, and 34; iron section post stamped "2271".....	2, 269. 654
Tps. 31 and 32 N., R. 53 E., quarter corner between secs. 3 and 34; iron section post stamped "2311".....	2, 309. 505
Tps. 31 and 32 N., R. 53 E., corner of secs. 2, 3, 34, and 35; iron section post stamped "2313".....	2, 311. 816
Tps. 31 and 32 N., R. 53 E., quarter corner between secs. 2 and 35; iron section post stamped "2359".....	2, 357. 767
Tps. 31 and 32 N., R. 53 E., corner of secs. 1, 2, 35, and 36; iron post stamped "2385".....	2, 383. 428
Tps. 31 and 32 N., R. 53 E., quarter corner between secs. 1 and 36; iron section post stamped "2376".....	2, 374. 668
Tps. 31 and 32 N., Rs. 53 and 54 E., township corner; iron post stamped "2368".....	2, 366. 909
Tps. 31 and 32 N., R. 54 E., quarter corner between secs. 6 and 31; iron section post stamped "2371".....	2, 369. 657
Tps. 31 and 32 N., R. 54 E., corner of secs. 5, 6, 31, and 32; iron section post stamped "2354".....	2, 352. 947
Tps. 31 and 32 N., R. 54 E., quarter corner between secs. 32 and 5; iron post not stamped. (To be reset.)	
Tps. 31 and 32 N., R. 54 E., corner of secs. 4, 5, 32, and 33; iron section post stamped "2337".....	2, 335. 476
Tps. 31 and 32 N., R. 54 E., quarter corner between secs. 4 and 33; iron section post stamped "2334".....	2, 332. 969
Tps. 31 and 32 N., R. 54 E., corner of secs. 3, 4, 33, and 34; iron section post stamped "2295".....	2, 293. 284
Tps. 31 and 32 N., R. 54 E., near quarter corner between secs. 3 and 34; painted circle on rock.....	2, 267. 07
Tps. 31 and 32 N., R. 54 E., corner of secs. 2, 3, 34, and 35; iron section post stamped "2207".....	2, 205. 630
Tps. 31 and 32 N., R. 54 E., quarter corner between secs. 2 and 35; iron section post stamped "2137".....	2, 135. 243

Tps. 31 and 32 N., R. 54 E., corner of secs. 1, 2, 35, and 36; iron section post stamped "2163".....	Feet. 2, 161. 778
Tps. 31 and 32 N., R. 54 E., near quarter corner between secs. 1 and 36; painted circle on rock; marked "2159".....	2, 157. 45
Tps. 31 and 32 N., Rs. 54 and 55 E., township corner; iron post stamped "2096".....	2, 094. 637
Tps. 31 and 32 N., R. 55 E., quarter corner between secs. 6 and 31; iron section post stamped "2076".....	2, 074. 732
Tps. 31 and 32 N., R. 55 E., corner of secs. 5, 6, 31, and 32; iron section post stamped "2031".....	2, 029. 844
Tps. 31 and 32 N., R. 55 E., corner of secs. 4, 5, 32, and 33; iron section post stamped "1957".....	1, 955. 881
Tps. 31 N., R. 55 E., north sixteenth corner between secs. 4 and 5; stone marked "1953".....	1, 951. 81
Tps. 31 N., R. 55 E., quarter corner between secs. 4 and 5; iron section post stamped "1952".....	1, 950. 559

**Corner of Tps. 30 and 31 N., Rs. 52 and 53 E., north along range line to T. 32.**

Tps. 30 and 31 N., Rs. 52 and 53 E., township corner; iron post stamped "2339".....	2, 338. 137
Tps. 31 N., Rs. 52 and 53 E., quarter corner between secs. 31 and 36; iron section post stamped "2308".....	2, 306. 965
Tps. 31 N., Rs. 52 and 53 E., corner of secs. 30, 31, 25, and 36; iron section post stamped "2293".....	2, 291. 444
T. 31 N., Rs. 52 and 53 E., quarter corner between secs. 30 and 25; iron section post stamped "2274".....	(Moved.)
T. 31 N., Rs. 52 and 53 E., corner of secs. 24, 25, 19, and 30; iron section post stamped "2250".....	(Moved.)
T. 31 N., Rs. 52 and 53 E., quarter corner between secs. 19 and 24; iron section post stamped "2198".....	(Moved.)
T. 31 N., Rs. 52 and 53 E., corner of secs. 18, 19, 13, and 24; iron section post stamped "2174".....	(Moved.)
T. 31 N., Rs. 52 and 53 E., quarter corner between secs. 13 and 18; iron section post stamped "2205".....	2, 203. 510
T. 31 N., Rs. 52 and 53 E., corner of secs. 12, 13, 7, and 18; iron section post stamped "2270".....	2, 268. 610
T. 31 N., Rs. 52 and 53 E., quarter corner between secs. 7 and 12; iron section post stamped "2371".....	2, 369. 424
T. 31 N., Rs. 52 and 53 E., corner of secs. 1, 6, 7, and 12; iron section post stamped "2377".....	2, 376. 028
T. 31 N., Rs. 52 and 53 E., quarter corner between secs. 1 and 6; iron section post stamped "2483".....	2, 482. 035

**Sec. 33, T. 29 N., R. 54 E., southeast to Missouri River Commission bench mark 112/2 on Great Northern Ry.**

T. 29 N., Rs. 54 and 55 E., witness corner to corner of secs. 1, 6, 7, and 12; iron section post stamped "1922".....	1, 921. 012
T. 28 N., Rs. 54 and 55 E., witness corner to quarter corner between secs. 7 and 12; iron section post stamped "1923".....	1, 922. 267
T. 28 N., Rs. 54 and 55 E., witness corner to corner of secs. 12, 13, 6, and 18; iron section post stamped "1939".....	1, 937. 628
T. 28 N., Rs. 54 and 55 E., witness corner to quarter corner between secs. 13 and 18; iron section post stamped "1975".....	1, 974. 404

T. 28 N., Rs. 54 and 55 E., witness corner to corner of secs. 18, 19, 13, and 24; iron section post stamped "2042" .....	Feet. 2,040.481
T. 28 N., Rs. 54 and 55 E., witness corner to quarter corner between secs. 19 and 24; iron section post stamped "2073" .....	2,072.309
T. 28 N., Rs. 54 and 55 E., witness corner to corner of secs. 24, 25, 19, and 30; iron section post stamped "2081" .....	2,079.749
T. 28 N., Rs. 54 and 55 E., witness corner to quarter corner between secs. 25 and 30; iron section post stamped "2006" .....	2,005.064
Blair, Great Northern Ry. station, 2.25 miles west of, east bank of Missouri River, about 1.25 miles west of bridge 225, 240 feet north of track; Missouri River Commission bench mark 112/2, Commission elevation 1,946.481; subsurface mark .....	1,947.254
<b>Connection between Missouri River Commission bench marks 112/2 and 113/2.<sup>1</sup></b>	
Blair, in front of station; top of north rail .....	1,933.02
Blair, 3,800 feet west of station, 135 feet south of track, on east bank of Missouri River, in pump house garden, southeast of gate. (Missouri River Commission bench mark 113/2; Commission elevation is same as United States Geological Survey value); title under iron post .....	1,923.564
<b>Sec. 33, T. 29 N., R. 54 E., north along Big Muddy River to corner of Tps. 30 and 31 N., Rs. 53 and 54 E.</b>	
John Manning's ranch, in northeast corner of vegetable garden, 1 foot from corner fence post; township corner post; iron post stamped "1939" .....	1,937.461
John Manning's ranch, 3.2 miles northeast of, 1.4 miles northeast of ford on Big Muddy River, between road and river, clump of thorn apple trees stand alone on opposite side of river some distance from bank; iron post stamped "1927" .....	1,925.582
T. 30 N., Rs. 53 and 54 E., 1,100 feet north and 300 feet east of corner of secs. 1, 12, 6, and 7; paint mark on rock; rock pile marks location .....	2,076.17
T. 30 N., Rs. 53 and 54 E., quarter corner between secs. 1 and 6; iron section post stamped "2094" .....	2,093.080
<b>Sec. 29, T. 30 N., R. 54 E., east to Reclamation Service bench mark No. M. 18.</b>	
Murray's ranch, 2 miles north of, at mouth of wide deep coulee draining east, 3 feet east of bench mark "M. 18," on west side of Big Muddy River, on east side of bluffs; iron post stamped "1939" .....	1,937.965
Nearly all the following bench marks, established by J. H. Wilke in 1910, were by single unchecked sights, and are therefore unreliable:	
<b>Northeast corner of sec. 33, T. 27 N., R. 52 E., northeast and north to Payguntasaba Indian village.</b>	
T. 27 N., R. 52 E., about sec. 27, at gate 0.1 mile south of Armstrong's house; nail in brace of fence marked "1948.8" .....	Feet. 1,947.94
Armstrongs Landing, 2.2 miles southeast of, in corner post of old fence west of road where Missouri River bends north; spike marked "1948.6" .....	1,947.73
T. 27 N., R. 52 E., about 350 yards northwest of southeast corner of sec. 22, 200 feet east of bank of Missouri River, at sharp bend north; iron post stamped "1949" .....	1,948.039
T. 27 N., R. 52 E., about 300 feet southeast of northeast corner of sec. 22, west side of road, in south edge of woods; nail in notch of forked cottonwood tree marked "1945.5" .....	1,944.66

<sup>1</sup> The difference of elevation, 23.690 feet, as herein given is an average of four measures and differs by 0.773 foot from the difference published by the Missouri River Commission.

Armstrongs Landing, 0.4 mile south of, east edge of road, 150 feet north of turn north out of opening; notch in 28-inch leaning cottonwood tree marked "1944.5".....	Feet. 1,943.62
Armstrongs Landing, on south bank of Missouri River; spike in 12-inch post 10 feet high marked "1941.7".....	1,940.79
Armstrongs Landing; surface of water, Missouri River, Oct. 8, 1910.....	1,924.8
Armstrongs Landing, 0.2 mile north of, north side of road; top of Indian allotment post 76, marked, "1944.2".....	1,943.29
Armstrongs Landing, 1.3 miles north of, north side of road, east of cripple half-breed's house; top of Indian allotment post.....	1,994.01
Payguntasaba Indian village, west of; Missouri River Commission bench mark; top edge of gas pipe (cap gone); iron post stamped (no value given).....	1,993.20
Payguntasaba Indian village, just west of; top of stone beneath above-described gas pipe.....	1,989.494

## PLENTYWOOD 30' QUADRANGLE.

Sec. 35, T. 33 N., R. 51 E., east along township line to sec. 35, T. 33 N., R. 55 E.

T. 33 N., R. 51 E., south quarter corner of sec. 36; iron section post stamped "2532".....	2,530.880
T. 33 N., Rs. 51 and 52 E., standard township corner; iron post stamped "2530".....	2,528.457
T. 33 N., R. 52 E., south quarter corner of sec. 31; iron section post stamped "2542".....	2,540.811
T. 33 N., R. 52 E., south corner of secs. 31 and 32; iron section post stamped "2563".....	2,561.522
T. 33 N., R. 52 E., south quarter corner of sec. 32; iron section post stamped "2584".....	2,582.493
T. 33 N., R. 52 E., south corner of secs. 32 and 33; iron section post stamped "2587".....	2,585.497
T. 33 N., R. 52 E., south quarter corner of sec. 33; iron section post stamped "2609".....	2,607.606
T. 33 N., R. 52 E., south corner of secs. 33 and 34; iron section post stamped "2614".....	2,613.211
T. 33 N., R. 52 E., south quarter corner of sec. 34; iron section post stamped "2597".....	2,595.663
T. 33 N., R. 52 E., south corner of secs. 34 and 35; iron section post stamped "2584".....	2,582.768
T. 33 N., R. 52 E., south quarter corner of sec. 35; iron section post stamped "2611".....	2,609.698
T. 33 N., R. 52 E., south corner of secs. 35 and 36; iron section post stamped "2611".....	2,610.283
T. 33 N., R. 52 E., south quarter corner of sec. 36; iron section post stamped "2511".....	2,509.625
T. 33 N., Rs. 52 and 53 E., standard township corner; iron post stamped "2533".....	2,532.375
T. 33 N., R. 53 E., south quarter corner of sec. 31; iron section post stamped "2541".....	2,539.729
T. 33 N., R. 53 E., south corner of secs. 31 and 32; iron section post stamped "2596".....	2,594.465
T. 33 N., R. 53 E., south quarter corner of sec. 32; iron section post stamped "2544".....	2,542.707
T. 33 N., R. 53 E., south corner of secs. 32 and 33; iron section post stamped "2489".....	2,488.131

	Feet.
T. 33 N., R. 53 E., south quarter corner of sec. 33; iron section post stamped "2431" .....	2, 429. 717
T. 33 N., R. 53 E., south corner of secs. 33 and 34; iron section post stamped "2359" .....	2, 358. 222
T. 33 N., R. 53 E., south quarter corner of sec. 34; iron section post stamped "2299" .....	2, 298. 198
T. 33 N., R. 53 E., south corner of secs. 34 and 35; iron section post stamped "2235" .....	2, 233. 827
T. 33 N., R. 53 E., south quarter corner of sec. 35; iron section post stamped "2198" .....	2, 196. 668
T. 33 N., R. 53 E., south corner of secs. 35 and 36; iron section post stamped "2196" .....	2, 195. 328
T. 33 N., R. 53 E., south quarter corner of sec. 36; iron section post stamped "2211" .....	2, 210. 276
T. 33 N., Rs. 53 and 54 E., standard township corner; iron post stamped "2207" .....	2, 205. 984
T. 33 N., R. 54 E., south quarter corner of sec. 31; iron section post stamped "2205" .....	2, 203. 985
T. 33 N., R. 54 E., south corner of secs. 31 and 32; iron section post stamped "2139" .....	2, 138. 302
T. 33 N., R. 54 E., south quarter corner of sec. 32; iron section post stamped "2117" .....	2, 116. 190
T. 33 N., R. 54 E., south corner of secs. 32 and 33; iron section post stamped "2144" .....	2, 142. 627
T. 33 N., R. 54 E., south quarter corner of sec. 33; iron section post stamped "2152" .....	2, 150. 810
T. 33 N., R. 54 E., south corner of secs. 33 and 34; iron section post stamped "2171" .....	2, 169. 763
T. 33 N., R. 54 E., south quarter corner of sec. 34; iron section post stamped "2182" .....	2, 180. 661
T. 33 N., Rs. 54 and 55 E., closing township corner; iron post stamped "2175" .....	2, 173. 457
T. 33 N., R. 54 E., south corner of secs. 34 and 35; iron section post stamped "2160" .....	2, 158. 375
T. 33 N., R. 54 E., south quarter corner of sec. 35; iron section post stamped "2173" .....	2, 171. 784
T. 33 N., R. 54 E., south corner of secs. 35 and 36; iron section post stamped "2213" .....	2, 211. 493
T. 33 N., R. 54 E., south quarter corner of sec. 36; iron section post stamped "2204" .....	2, 203. 316
T. 33 N., Rs. 54 and 55 E., standard township corner; iron post stamped "2124" .....	2, 122. 905
T. 33 N., R. 55 E., south quarter corner of sec. 31; iron section post stamped "2083" .....	3, 081. 890
T. 33 N., R. 55 E., south corner of secs. 31 and 32; iron section post stamped "2081" .....	2, 080. 321
T. 33 N., R. 55 E., south quarter corner of sec. 32; iron section post stamped "2066" .....	2, 065. 109
T. 33 N., R. 55 E., south corner of secs. 32 and 33; iron section post stamped "2049" .....	2, 047. 594
T. 33 N., R. 55 E., south quarter corner of sec. 33; iron section post stamped "2037" .....	2, 035. 969

T. 33 N., R. 55 E., south corner of secs. 33 and 34; iron section post stamped "2046".....	Feet. 2,045. 112
T. 33 N., R. 55 E., south quarter corner of sec. 34; iron section post stamped "1980".....	1,978. 753
T. 33 N., R. 54 E., south corner of secs. 34 and 35; iron section post stamped "1975".....	1,973. 415

## SCOBEY 30' QUADRANGLE.

Tps. 31 and 32 N., Rs. 49 and 50 E., northwest to sec. 5, T. 32 N., R. 48 E.

Custer's ranch, 1.8 miles northwest of, at ford of Poplar River; surface of water, July 9, 1909.....	2,171. 5
Custer's ranch, 1.9 miles northwest of, on south side of river, 0.25 mile northwest of ford of Poplar River near east end of a prominent line of bluffs on northeast side of river, south of poorly defined road; iron post stamped "2183".....	2,181. 888
Custer's ranch, 4.2 miles northwest of, at wagon ford over West Branch of Poplar River; surface of water, July 10, 1909.....	2,196. 5
Custer's ranch, 5.2 miles northwest of, north side of West Branch of Poplar River, 1 mile northwest of wagon ford, 60 feet northeast of road; iron post stamped "2215".....	2,213. 630
Custer's ranch, 8.6 miles northwest of, north side of West Branch, about 1,600 feet southeast of the southeast end of very prominent 40-foot clay bluff, 110 feet north of river bank and 540 feet east of small lone cottonwood on river bank; iron post stamped "2251".....	2,250. 231
Custer's ranch, 11.7 miles northwest of, south side of West Branch; iron post stamped "2281".....	2,280. 376

Sec. 25, T. 32 N., R. 49 E., north and east along range line and township line to T. 33 N., Rs. 51 and 52 E.

T. 32 N., Rs. 49 and 50 E., quarter corner between secs. 25 and 30; iron section post stamped "2236".....	2,234. 790
T. 32 N., Rs. 49 and 50 E., corner of secs. 24, 25, 30, and 19; iron section post stamped "2318".....	2,316. 668
T. 32 N., Rs. 49 and 50 E., quarter corner between secs. 24 and 19; iron section post stamped "2396".....	2,394. 555
T. 32 N., Rs. 49 and 50 E., corner of secs. 18, 19, 13, and 24; iron section post stamped "2437".....	2,436. 185
T. 32 N., Rs. 49 and 50 E., quarter corner between secs. 13 and 18; iron section post stamped "2474".....	2,472. 629
T. 32 N., Rs. 49 and 50 E., corner of secs. 12, 13, 7, and 18; iron section post stamped "2541".....	2,540. 082
T. 32 N., Rs. 49 and 50 E., quarter corner between secs. 12 and 7; iron section post stamped "2566".....	2,564. 506
T. 32 N., Rs. 49 and 50 E., corner of secs. 1, 12, 6, and 7; iron section post stamped "2647".....	2,646. 042
T. 32 N., Rs. 49 and 50 E., quarter corner between secs. 1 and 6; iron section post stamped "2664".....	2,662. 520
T. 32 N., Rs. 49 and 50 E., closing township corner; iron post stamped "2667".....	2,666. 262
T. 33 N., R. 49 E., south quarter corner of sec. 35; iron section post stamped "2649".....	2,648. 161
T. 33 N., R. 49 E., south corner of secs. 35 and 36; iron section post stamped "2575".....	2,574. 325

T. 33 N., R. 49 E., south quarter corner of sec. 36; iron section post stamped "2616" .....	Feet. 2, 615. 234
T. 33 N., Rs. 49 and 50, standard township corner; iron section post stamped "2615" .....	2, 613. 503
T. 33 N., R. 50 E., south quarter corner of sec. 31; ground elevation.....	2, 628. 2
T. 33 N., R. 50 E., about 0.25 mile north of south corner secs. 31 and 32, Morgan triangulation station; iron post stamped "2753" .....	2, 751. 657
T. 33 N., R. 50 E., south quarter corner of sec. 32; iron section post stamped "2678" .....	2, 677. 185
T. 33 N., R. 50 E., south corner of secs. 32 and 33; iron section post stamped "2695" .....	2, 693. 457
T. 33 N., R. 50 E., south quarter corner of sec. 33; iron section post stamped "2689" .....	2, 687. 962
T. 32 N., R. 50 E., closing corner of secs. 1 and 2; iron section post stamped "2669" .....	2, 668. 053
T. 33 N., R. 50 E., south quarter corner of sec. 34; iron section post stamped "2656" .....	2, 654. 726
Tps. 32 and 33 N., Rs. 50 and 51 E., closing township corner; iron post stamped "2660" .....	2, 658. 653
T. 33 N., R. 50 E., south corner of secs. 34 and 35; iron section post stamped "2659" .....	2, 657. 771
T. 33 N., R. 50 E., south quarter corner of sec. 35; iron section post stamped "2611" .....	2, 610. 158
T. 33 N., R. 50 E., south corner of secs. 35 and 36; iron section post stamped "2560" .....	2, 559. 097
T. 33 N., R. 50 E., south quarter corner of sec. 36; iron section post stamped "2545" .....	2, 544. 035
T. 33 N., Rs. 50 and 51 E., standard township corner; iron post stamped "2548" .....	2, 546. 729
T. 33 N., R. 51 E., south quarter corner of sec. 31; iron section post stamped "2529" .....	2, 528. 128
T. 33 N., R. 51 E., south corner of secs. 31 and 32; iron section post stamped "2495" .....	2, 493. 849
T. 33 N., R. 51 E., south quarter corner of sec. 32; iron section post stamped "2454" .....	2, 453. 313
T. 33 N., R. 51 E., south corner of secs. 32 and 33; iron section post stamped "2527" .....	2, 525. 446
T. 33 N., R. 51 E., south quarter corner of sec. 33; iron section post stamped "2526" .....	2, 524. 643
T. 33 N., R. 51 E., south corner of secs. 33 and 34; iron section post stamped "2522" .....	2, 521. 108
T. 33 N., R. 51 E., south quarter corner of sec. 34; iron section post stamped "2515" .....	2, 513. 881
T. 33 N., R. 51 E., south corner of secs. 34 and 35; iron section post stamped "2529" .....	2, 527. 522
T. 33 N., R. 51 E., south quarter corner of sec. 35; iron section post stamped "2536" .....	2, 535. 106
T. 33 N., R. 51 E., south corner of secs. 35 and 36; iron section post stamped "2540" .....	2, 538. 417
<b>Quarter corner between secs. 25 and 30, T. 32 N., Rs. 50 and 51 E., north along range line to Tps. 32 and 33 N.</b>	
T. 32 N., Rs. 50 and 51 E., quarter corner between secs. 25 and 30; iron section post stamped "2606" .....	2, 604. 909

	Feet.
T. 32 N., Rs. 50 and 51 E., corner of secs. 24, 25, 19, and 30; iron section post stamped "2624" .....	2, 622. 824
T. 32 N., Rs. 50 and 51 E., quarter corner between secs. 19 and 24; iron section post stamped "2654" .....	2, 652, 574
T. 32 N., Rs. 50 and 51 E., corner of secs. 18, 19, 13, and 24; iron section post stamped "2655" .....	2, 653. 854
T. 32 N., Rs. 50 and 51 E., quarter corner between secs. 13 and 18; iron section post stamped "2659" .....	2, 657. 564
T. 32 N., Rs. 50 and 51 E., corner of secs. 12, 13, 7, and 18; iron section post stamped "2635" .....	2, 633. 493
T. 32 N., Rs. 50 and 51 E., quarter corner between secs. 7 and 12; iron section post stamped "2644" .....	2, 643. 253
T. 32 N., Rs. 50 and 51 E., corner of secs. 6, 7, 1, and 12; iron section post stamped "2665" .....	2, 664. 042
T. 32 N., Rs. 50 and 51 E., quarter corner between secs. 1 and 6; iron section post stamped "2666" .....	2, 664. 543
T. 32 N., Rs. 50 and 51 E., closing township corner; iron post stamped "2660" .....	2, 658. 649

#### WHISKEY BUTTES QUADRANGLE.

**Sec. 5, T. 32 N., R. 48 E., southwest to line between Rs. 46 and 47, thence south to sec. 25, T. 32 N., R. 47 E.**

T. 32 N., Rs. 47 and 48 E., witness corner to closing township corner, south side of river, 240 feet south of bank, location marked by high cut clay bank on north edge with a small break in same where gully empties, Windy triangulation station bears S. 14° E.; iron post stamped "2296" ..	2, 294. 943
Cottonwood Creek, 90 feet south of, on small terrace, center of gap through which West Branch of Poplar River flows to join Cottonwood Creek, bears N. 10° W. about 0.8 mile; iron post stamped "2350" .....	2, 349. 050
T. 32 N., R. 46 E., northeast corner of sec. 13; iron section post stamped "2429" .....	(Moved.)
T. 32 N., R. 46 E., quarter corner of sec. 13; iron section post stamped "2431" .....	(Moved.)
T. 32 N., R. 46 E., northeast corner of sec. 24; iron section post stamped "2453" .....	(Moved.)
T. 32 N., R. 46 E., quarter corner of sec. 24; iron section post stamped "2492" .....	(Moved.)
T. 32 N., R. 46 E., northeast corner of sec. 25; iron section post stamped "2504" .....	(Moved.)
T. 32 N., R. 46 E., quarter corner of sec. 25; iron section post stamped "2546" .....	(Moved.)
T. 32 N., R. 46 E., northeast corner of sec. 36; iron section post stamped "2565" .....	(Moved.)

#### Single spur line into T. 33 N., R. 47 E.

T. 33 N., R. 47 E., standard corner of secs. 32 and 33; iron section post stamped "2345" .....	2, 344. 248
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**Sec. 12, T. 32 N., R. 46 E., north and west along range and township line to quarter corner of sec. 33, T. 33 N., R. 44 E. (spur line).**

T. 32 N., R. 46 E., corner of secs. 12 and 13, on 11th guide meridian; iron section post stamped "2429" .....	(Moved.)
T. 32 N., R. 46 E., east quarter corner of sec. 12, on 11th guide meridian; iron section post stamped "2388" .....	(Moved.)

	Feet.
T. 32 N., R. 46 E., corner of secs. 1 and 12, on 11th guide meridian; iron section post stamped "2426" . . . . .	(Moved.)
T. 32 N., R. 46 E., east quarter corner of sec. 1, on 11th guide meridian; iron section post stamped "2432" . . . . .	(Moved.)
Tps. 32 and 33, Rs. 46 and 47 E., closing township corner; iron post stamped "2460" . . . . .	2, 458. 808
T. 33 N., R. 46 E., south quarter corner of sec. 34; iron section post stamped "2474" . . . . .	2, 473. 361
T. 33 N., R. 46 E., south corner of secs. 33 and 34; iron section post stamped "2492" . . . . .	2, 491. 032
T. 33 N., R. 46 E., south quarter corner of sec. 33; iron section post stamped "2488" . . . . .	2, 486. 676
T. 33 N., R. 46 E., south corner of secs. 32 and 33; iron section post stamped "2518" . . . . .	2, 516. 564
T. 33 N., R. 46 E., south quarter corner of sec. 32; iron section post stamped "2554" . . . . .	2, 552. 795
T. 33 N., R. 46 E., south corner of secs. 31 and 32; iron section post stamped "2564" . . . . .	2, 563. 362
T. 33 N., R. 46 E., south quarter corner of sec. 31; iron section post stamped "2576" . . . . .	2, 575. 085
T. 33 N., Rs. 45 and 46 E., standard township corner; iron post stamped "2604" . . . . .	2, 602. 505
T. 33 N., R. 45 E., south quarter corner of sec. 36; iron section post stamped "2575" . . . . .	2, 573. 590
T. 33 N., R. 45 E., south corner of secs. 35 and 36; iron section post stamped "2569" . . . . .	2, 568. 271
T. 33 N., R. 45 E., south quarter corner of sec. 35; iron section post stamped "2595" . . . . .	2, 594. 320
T. 33 N., R. 45 E., south corner of secs. 34 and 35; iron section post stamped "2712" . . . . .	2, 710. 885
T. 33 N., R. 45 E., south quarter corner of sec. 34; iron section post stamped "2683" . . . . .	2, 682. 158
T. 33 N., R. 45 E., south corner of secs. 33 and 34; iron section post stamped "2668" . . . . .	2, 666. 507
T. 33 N., R. 45 E., south quarter corner of sec. 33; iron section post stamped "2696" . . . . .	2, 695. 018
T. 33 N., R. 45 E., south corner of secs. 32 and 33; iron section post stamped "2704" . . . . .	2, 702. 938
T. 33 N., R. 45 E., south quarter corner of sec. 32; iron section post stamped "2723" . . . . .	2, 722. 011
T. 33 N., R. 45 E., south corner of secs. 31 and 32; iron section post stamped "2801" . . . . .	2, 799. 747
T. 33 N., R. 45 E., south quarter corner of sec. 31; iron section post stamped "2785" . . . . .	2, 783. 461
T. 33 N., Rs. 44 and 45 E., standard township corner; iron post stamped "2780" . . . . .	2, 778. 497
T. 33 N., R. 44 E., south quarter corner of sec. 36; iron section post stamped "2813" . . . . .	2, 812. 029
T. 33 N., R. 44 E., south corner of secs. 35 and 36; iron section post stamped "2893" . . . . .	2, 891. 996
T. 33 N., R. 44 E., south quarter corner of sec. 35; iron section post stamped "2900" . . . . .	2, 898. 537
T. 33 N., R. 44 E., south corner of secs. 34 and 35; iron section post stamped "2908" . . . . .	2, 906. 545

	Feet.
T. 32 N., Rs. 44 and 45 E., closing corner; iron post stamped "2908".....	2, 907. 440
T. 33 N., R. 44 E., south quarter corner of sec. 34; iron section post stamped "2914".....	2, 912. 764
T. 33 N., R. 44 E., south corner of secs. 33 and 34; iron section post stamped "2908".....	2, 906. 878
T. 33 N., R. 44 E., south quarter corner of sec. 33; iron section post stamped "2936".....	2, 935. 127

**Sec. 33, T. 33 N., R. 44 W., east along township line to sec. 36.**

T. 33 N., R. 44 E., standard quarter corner of sec. 33; iron section post stamped "2936".....	2, 935. 127
T. 33 N., R. 44 E., standard corner between secs. 32 and 33; iron post stamped "2953".....	2, 951. 942
T. 33 N., R. 44 E., standard quarter corner of sec. 32; iron section post stamped "2953".....	2, 951. 951
T. 33 N., R. 44 E., standard corner between secs. 31 and 32; iron section post stamped "2946".....	2, 945. 279
T. 33 N., R. 44 E., standard quarter corner of sec. 31; iron section post stamped "2950".....	2, 949. 194
T. 33 N., Rs. 43 and 44 E., standard corner; iron post stamped "2932".....	2, 930. 696
T. 33 N., R. 43 E., standard quarter corner of sec. 36; iron section post stamped "2942".....	2, 940. 757

**QUADRANGLE TWO.**

**Corner of secs. 19, 30, 24, and 25, T. 32 N., Rs. 40 and 41 E., north along range line to closing corner of T. 32 N., Rs. 40 and 41 E., thence east along township line to standard corner of secs. 35 and 36, T. 33 N., R. 44 E.**

T. 32 N., Rs. 40 and 41 E., corner of secs. 19, 24, 25, and 30; iron section post stamped "2828".....	2, 828. 372
T. 32 N., Rs. 40 and 41 E., quarter corner between secs. 19 and 24; iron section post stamped "2769".....	2, 769. 992
T. 32 N., Rs. 40 and 41 E., quarter corner between secs. 13 and 18; iron section post stamped "2707".....	2, 707. 053
T. 32 N., Rs. 40 and 41 E., corner of secs. 7, 12, 13, and 18; iron section post stamped "2680".....	2, 680. 218
T. 32 N., Rs. 40 and 41 E., quarter corner between secs. 7 and 12; iron section post stamped "2646".....	2, 646. 362
T. 32 N., Rs. 40 and 41 E., corner of secs. 1, 6, 7, and 12; iron section post stamped "2678".....	2, 678. 363
T. 32 N., Rs. 40 and 41 E., quarter corner between secs. 1 and 6; iron section post.....	2, 686. 494
T. 32 N., Rs. 40 and 41 E., closing corner; iron post stamped "2698".....	2, 698. 048
T. 33 N., R. 40 E., standard quarter corner of sec. 35; iron section post stamped "2713".....	2, 712. 037
T. 32 N., R. 41 E., closing quarter corner of sec. 6; iron section post stamped "2734".....	2, 732. 707
T. 32 N., R. 41 E., closing corner of secs. 5 and 6; iron section post stamped "2713".....	2, 712. 193
T. 33 N., R. 40 E., standard quarter corner of sec. 36; iron section post stamped "2712".....	2, 711. 405
T. 32 N., R. 41 E., closing quarter corner of sec. 5; iron section post stamped "2708".....	2, 707. 279
T. 33 N., Rs. 40 and 41 E., standard corner; iron post stamped "2686".....	2, 685. 372

T. 32 N., R. 41 E., closing corner between secs. 4 and 5; iron section post stamped "2688".....	Feet. 2, 686. 687
T. 33 N., R. 41 E., standard quarter corner of sec. 31; iron section post stamped "2690".....	2, 689. 002
T. 32 N., R. 41 E., closing quarter corner of sec. 4; iron section post stamped "2691".....	2, 689. 812
T. 33 N., R. 41 E., standard corner between secs. 31 and 32; iron section post stamped "2697".....	2, 695. 672
T. 33 N., R. 41 E., standard quarter corner of sec. 32; iron section post stamped "2706".....	2, 704. 627
T. 32 N., R. 41 E., closing quarter corner of sec. 3; iron section post stamped "2711".....	2, 709. 883
T. 33 N., R. 41 E., standard corner between secs. 32 and 33; iron section post stamped "2719".....	2, 718. 277
T. 32 N., R. 41 E., closing corner between secs. 2 and 3; iron section post stamped "2723".....	2, 721. 594
T. 33 N., R. 41 E., standard quarter corner of sec. 33; iron section post stamped "2723".....	2, 722. 192
T. 32 N., R. 41 E., closing quarter corner of sec. 2; iron section post stamped "2724".....	2, 723. 142
T. 33 N., R. 41 E., standard corner between secs. 33 and 34; iron section post stamped "2731".....	2, 729. 928
T. 32 N., R. 41 E., closing corner between secs. 1 and 2; iron section post stamped "2732".....	2, 731. 330
T. 33 N., R. 41 E., standard quarter corner of sec. 34; iron section post stamped "2746".....	2, 744. 846
T. 32 N., R. 41 E., closing quarter corner of sec. 1; iron section post stamped "2753".....	2, 751. 533
T. 33 N., R. 41 E., standard corner between secs. 34 and 35; iron section post stamped "2779".....	2, 777. 943
T. 33 N., R. 41 E., standard quarter corner of sec. 35; iron section post stamped "2812".....	2, 810. 703
T. 32 N., R. 42 E., closing corner between secs. 5 and 6; iron section post stamped "2858".....	2, 857. 067
T. 33 N., R. 41 E., standard quarter corner of sec. 36; iron section post stamped "2916".....	2, 914. 728
T. 33 N., Rs. 41 and 42 E., standard corner; iron post stamped "2933".....	2, 932. 171
T. 33 N., R. 42 E., closing corner between secs. 4 and 5; iron section post stamped "2925".....	2, 923. 786
T. 33 N., R. 42 E., standard quarter corner of sec. 31; iron section post stamped "2934".....	2, 932. 835
T. 33 N., R. 42 E., standard corner between secs. 31 and 32; iron section post stamped "2934".....	2, 933. 253
T. 33 N., R. 42 E., closing corner between secs. 3 and 4; iron section post stamped "2938".....	2, 937. 202
T. 33 N., R. 42 E., standard quarter corner of sec. 32; iron section post stamped "2932".....	2, 930. 697
T. 33 N., R. 42 E., standard corner between secs. 32 and 33; iron section post stamped "2944".....	2, 943. 104
T. 32 N., R. 42 E., closing corner between secs. 2 and 3; iron section post stamped "2933".....	2, 931. 615
T. 33 N., R. 42 E., standard quarter corner of sec. 33; iron section post stamped "2934".....	2, 932. 659

T. 33 N., R. 42 E., standard corner between secs. 33 and 34; iron section post.....	Feet. 2,934.703
T. 32 N., R. 42 E., closing corner between secs. 1 and 2; iron section post stamped "2931".....	2,930.304
T. 33 N., R. 42 E., standard corner between secs. 34 and 35; iron section post stamped "2919".....	2,917.773
T. 33 N., R. 42 E., standard quarter corner of sec. 35; iron section post stamped "2954".....	2,952.778
T. 33 N., Rs. 42 and 43 E., standard corner between secs. 35 and 36; iron section post stamped "2949".....	2,947.956
T. 33 N., R. 42 E., standard quarter corner of sec. 36; iron section post stamped "2910".....	2,909.071
T. 33 N., Rs. 42 and 43 E., standard corner; iron post stamped "2889"....	2,888.343
T. 33 N., R. 43 E., standard quarter corner of sec. 31; iron section post stamped "2855".....	2,854.280
T. 33 N., R. 43 E., standard corner between secs. 31 and 32; iron section post stamped "2824".....	2,823.276
T. 33 N., R. 43 E., standard quarter corner of sec. 32; iron section post stamped "2919".....	2,918.324
T. 33 N., R. 43 E., standard corner between secs. 32 and 33; iron section post stamped "2823".....	2,821.736
T. 33 N., R. 43 E., standard quarter corner of sec. 33; iron section post stamped "2802".....	2,800.662
T. 33 N., R. 43 E., standard corner between secs. 33 and 34; iron section post stamped "2908".....	2,906.792
T. 33 N., R. 43 E., standard quarter corner of sec. 34; iron section post stamped "2912".....	2,910.781
T. 33 N., R. 43 E., standard corner between secs. 34 and 35; iron section post stamped "2925".....	2,924.138
T. 33 N., R. 43 E., standard quarter corner of sec. 35; iron section post stamped "2926".....	2,924.722
T. 33 N., R. 44 E., standard corner between secs. 35 and 36; iron section post stamped "2936".....	2,935.185

**Cowan, Glasgow, Larb Creek, Leedy, Malta, and Valleytown Quadrangles.**

**VALLEY COUNTY.**

The elevations in the following list were determined by primary leveling, forming part of a net extending from Fort Benton to the mouth of Milk River, north of Missouri River. Corrections of about 7.5 feet have been added to the original values based upon Malta datum. The values now given accord with Missouri River Commission values at the mouth of Milk River, as published in the 1894 report of the Chief of Engineers, United States Army, but a correction of +4 feet has been applied to the elevation therein published for Kismet.

The leveling by the United States Geological Survey was done in the Cowan quadrangle in 1903 by M. S. Bright; in the Glasgow quadrangle in 1904 by F. E. Fellows; in the Larb Creek quadrangle in 1903 by M. S. Bright and W. P. Flynn, and in 1904 by F. E. Fellows; in the Leedy quadrangle in 1904 by F. E. Fellows; in the Malta quadrangle in 1903 by M. S. Bright and W. P. Flynn, and in

1904 by F. E. Fellows; and in the Valleytown quadrangle in 1903 by M. S. Bright and W. P. Flynn. Additional leveling was done by the Reclamation Service in the Glasgow, Larb Creek, and Malta quadrangles in 1903 and 1904, in the Valleytown quadrangle in 1904, and in the Malta quadrangle in 1902.

## COWAN QUADRANGLE.

Iron bridge over Milk River west up Milk River to southeast corner of sec. 9, T. 32 N., R. 32 E., thence up river northwest to Martin's ranch (spur line).

T. 32 N., R. 31 E., 2 miles northwest of S. A. Martin's cabin, 6 feet north of road, 3 feet southeast of witness corner, south bank of Milk River; iron post stamped "2201 MALTA" .....	Feet. 2, 208. 310
Martin's ranch house, 1.5 miles south of, southeast point of bench land, 800 feet northwest of timber, west edge of bottom; iron post stamped "2213 MALTA" .....	2, 220. 125

Northeast corner of sec. 4, T. 31 N., R. 32 E., north along section line to T. 33 N., thence east along township line to northeast corner of T. 32 N., R. 32 E.

T. 32 N., R. 32 E., NE. $\frac{1}{4}$ sec. 28, Moraine triangulation station; iron post stamped "2353 MALTA" .....	2, 360. 481
T. 32 N., R. 32 E., 2 feet west of southeast corner of sec. 9, 4 feet north of gate; iron post stamped "2194 MALTA" .....	2, 201. 156

## GLASGOW QUADRANGLE.

Sec. 11, T. 30 N., R. 36 E., southeast along Great Northern Ry. to Whateley.

T. 30 N., R. 37 E., near center of SW. $\frac{1}{4}$ sec. 18 (unsurveyed), 0.5 mile south of railroad bridge over Ash Coulee, 0.3 mile southwest of northeast end of ridge; iron post. ....	2, 281. 819
Vandalia, 2 miles south of, about 0.2 mile east of northwest corner of sec. 34, T. 30 N., R. 37 E., 200 feet east of rocky point; iron post. ....	2, 222. 286
T. 29 N., R. 37 E., near northwest corner of sec. 13 (unsurveyed), near upper end of Hay Coulee, top of ridge, in sheep corral, 1,000 feet west of cabin; iron post. ....	2, 223. 334
T. 29 N., R. 38 E., near quarter corner on south side of sec. 30, 3.5 miles west of Chris Johnson's house, 300 feet north of Antelope Creek, 400 feet east of sheep corral and log cabin; iron post. ....	2, 210. 070
Glasgow, 6 miles west of, near quarter corner on east side of sec. 11 (unsurveyed), T. 28 N., R. 38 E., near top of second spur, 1 mile west of Griffiths reservoir; iron post. ....	2, 202. 562
Glasgow, 5 miles southwest of, southeast of quarter corner on west side of sec. 34, T. 28 N., R. 39 E., 0.5 mile north of Willow Creek, 1.5 miles north of Weatherford's ranch, at station 2238 "M;" iron post. ....	2, 186. 660
Glasgow, in front of telegraph office; top of rail .....	2, 098. 4

Northeast corner of sec. 27, T. 31 N., R. 36 E., southeast along Great Northern Ry. to Glasgow.

Hinsdale, 4 miles northeast of, near center of NW. $\frac{1}{4}$ sec. 25, T. 31 N., R. 36 E., station 680, 25 feet west of A. Schwartz's east line fence, on slope; iron post stamped "2136 MLT" .....	2, 143. 016
Hinsdale, 10 miles southeast of, center of SE. $\frac{1}{4}$ sec. 3, T. 30 N., R. 37 E., station 786, 1.5 miles south of Beet's ranch, on east bank of Bear Creek; iron post stamped "2127 MLT" .....	2, 134. 520

T. 30, R. 37 E., at northeast corner of sec. 24; iron post stamped "2108 MLT".....	Feet. 2, 115. 421
T. 30 N., R. 38 E., near center of SW. $\frac{1}{4}$ sec. 20, station 880, 30 feet south of main Glasgow road, 3 feet inside of Wm. Demessemacker's north line fence; iron post stamped "2115 MLT".....	2, 122. 498
Glasgow, 7 miles northwest of, about 0.2 mile west of center sec. 14, T. 29 N., R. 38 E., 100 feet northwest of W. B. Dolson's house, 50 feet south of main road, northwest corner of fence, 200 feet north of Milk River, at station 990-150; iron post stamped "2101 MLT".....	2, 108. 100
Glasgow, 2.5 miles northwest of, 700 feet south of northwest corner of sec. 33, T. 29 N., R. 39 E., 400 feet south of station 1093, beside main road, on fence line, 0.5 mile east of shearing plant; iron post stamped "2091 MLT"....	2, 098. 365
Glasgow, 0.5 mile northwest of courthouse, 850 feet south of northwest corner sec. 11, T. 28 N., R. 39 E., on west side of main road, on fence line; iron post stamped "2089 MLT".....	2, 096. 557
Glasgow, north side of courthouse, in foundation, east of stone steps; aluminum tablet stamped "2088 MLT".....	2, 095. 072

**Hinsdale southeast to sec. 26, T. 28 N., R. 39 E.**

T. 29 N., R. 38 E., center of south side of SW. $\frac{1}{4}$ sec. 30, station 3391, on north bank of Antelope Creek, 150 feet west of Chris Johnson's stable; iron post stamped "2139 MLT".....	2, 147. 063
Glasgow, 7.5 miles west of, NW. $\frac{1}{4}$ sec. 24 (unsurveyed), T. 28 N., R. 38 E., station 4006, 325 feet north of Brazil Creek, 200 feet east of Frank Miller's log cabin; iron post stamped "2126 MLT".....	2, 133. 794
Glasgow, 3 miles southwest of, sec. 21, T. 28 N., R. 39 E., station 4298, 100 feet west of main road running southwest across the hills; iron post stamped "2121 MLT".....	2, 128. 806
Glasgow, 3 miles south of, sec. 26, T. 28 N., R. 39 E., station 4553, at west side of mouth of Willow Creek Valley (end of "A" line) on spur of ridge; iron post stamped "2116 MLT".....	2, 123. 865

**Northeast corner of sec. 34, T. 31 N., R. 36 E., southeast between north and south Bowdoin Canal projects to Glasgow.**

Hinsdale, 6.2 miles east of, 45 feet southwest of northeast corner of sec. 1, T. 30 N., R. 36 E., side of wire fence, 200 feet northwest of house; iron post stamped "2128 MALTA".....	2, 135. 257
Hinsdale, 9.5 miles east of, about center of NE. $\frac{1}{4}$ NW. $\frac{1}{4}$ sec. 10, T. 30 N., R. 37 E., north side of road, 3 feet east of gatepost; iron post stamped "2119 MALTA".....	2, 126. 433
Hinsdale, 12.8 miles southeast of, 1 foot north of southeast corner of sec. 13, T. 30 N., R. 37 E., 0.2 mile southeast of E. L. Cain's house, 1,000 feet south of reservoir dam; iron post stamped "2108 MALTA".....	2, 115. 421
Hinsdale, 16.2 miles southeast of, center of NW. $\frac{1}{4}$ sec. 33, T. 30 N., R. 38 E., 0.2 mile southeast of schoolhouse, 200 feet southwest of road junction, 900 feet north of Milk River, 100 feet west of slough, 10 feet east of road, 8 feet east of gatepost; iron post stamped "2106 MALTA".....	2, 113. 530
Tampico, 3.8 miles southeast of, 1.5 feet south of northeast corner of sec. 21, T. 29 N., R. 38 E., 2,000 feet west of Great Northern Ry. bridge 389, 250 feet south of wire fence; iron post stamped "2099 MALTA".....	2, 106. 524
Tampico, 8 miles southeast of, 1.5 feet north of southeast corner of sec. 36, T. 29 N., R. 38 E., 15 feet south of wire fence, 200 feet south of irrigation ditch, in slough; iron post stamped "2090 MALTA".....	2, 097. 543

Glasgow, 3 miles southwest of, 3 feet south of northeast corner of sec. 16, T. 28 N., R. 39 E., 700 feet southwest of main road; iron post stamped "2087 MALTA" .....	Feet. 2, 094. 569
Glasgow, 0.5 mile north of, west side of road, 3 feet east of wire fence; iron post stamped "2089 MALTA" .....	2, 096. 582

Point on "M" line west of Vandalla to Glasgow.<sup>1</sup>

Tampico, 1.5 miles northwest of, Tampico triangulation station, 200 feet south of Great Northern Ry.; iron post stamped "2178 MALTA" .....	2, 185. 657
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Point on "M" line south of Glasgow east and southeast to T. 28 N., R. 40 E.

Glasgow, 4 miles southeast of, 255 feet south of northeast corner of sec. 36, T. 28 N., R. 39 E., 40 feet west of one and 60 feet east of other of two sloughs, 350 feet north of Willow Creek; iron post stamped "2082 MALTA" .....	2, 089. 547
Glasgow, 5.5 miles southeast of, 2 feet east of southwest corner of sec. 34, T. 28 N., R. 40 E., 300 feet south of road; iron post stamped "2075 MALTA" .....	2, 082. 511

LARB CREEK QUADRANGLE.

Sec. 11, T. 30 N., R. 32 E., down south side of Bowdoin Creek and Beaver Creek valley to sec. 11, T. 30 N., R. 36 E.

Saco, 3.5 miles west of, near center of sec. 3, T. 31 N., R. 33 E., near second post west of milepost 320, 300 feet south of track; iron post.....	2, 241. 089
Saco, 1 mile southwest of, near center of NW. $\frac{1}{4}$ sec. 18, T. 31 N., R. 34 E., on side hill near station "824 M;" iron post.....	2, 239. 590
Saco, 3 miles southeast of, near quarter corner between secs. 27 and 28, T. 31 N., R. 34 E., on ridge 500 feet north of mouth of creek, 1 mile east of William Taylor's ranch; iron post.....	2, 257. 408
T. 30 N., R. 34 E., 0.2 mile north of SE. $\frac{1}{4}$ sec. 9 (unsurveyed), 0.7 mile south of Second Creek, on first flat wash; iron post .....	2, 234. 676
T. 30 N., R. 34 E., west side of NW. $\frac{1}{4}$ sec. 11, 0.5 mile east of Second Creek, 500 feet north of bend in creek on top of spur; iron post.....	2, 227. 645
T. 31 N., R. 35 E., near center of SW. $\frac{1}{4}$ sec 30, 1 mile east of mouth of Larb Creek, 0.5 mile southeast of Great Northern Ry. bridge; iron post. ....	2, 229. 536
Hinsdale, 2.5 miles west of, northeast corner of sec. 2, T. 30 N., R. 35 E.; iron post.....	2, 233. 741
Hinsdale, 1 mile southeast of, northeast corner of sec. 8, T. 30 N., R. 36 E.; iron post.....	2, 225. 935
Hinsdale, 5 miles east of, about 0.2 mile east of center sec. 11, T. 30 N., R. 36 E., 0.2 mile east of railroad crossing, 50 feet north of road, on top of hill; iron post.....	2, 254. 822
<b>McCreary's ranch at "M" canal line east along road 13 miles, thence north 6 miles to "M" canal line at Otto Able's ranch.</b>	
McCreary's ranch, 6.2 miles east of, on mesa 0.5 mile south of coulee, 20 feet west of road; iron post stamped "2625 MALTA" .....	2, 632. 500
McCreary's ranch, 9.2 miles east of, top of broken divide 400 feet west of north-south road; iron post stamped "2712 MALTA" .....	2, 719. 780
Roach sheep ranch, 1.2 miles north of, on ridge extending northwest and southeast, 12 feet west of old road; iron post stamped "2617 MALTA" ..	2, 624. 500

<sup>1</sup> This line is connected at several other points with the "M" and South Bowdoin Canal lines of the Reclamation Service, and establishes the elevations of many temporary bench marks in addition to the one standard bench mark here listed.

Box house in coulee, 1.8 miles north of, north point of ridge, south side of coulee, at angle in road to east; iron post stamped "2457 MALTA".....	Feet. 2,464.454
<b>From "M" line canal east along highway to Larb Creek (Otto Able's ranch).</b>	
Tucker's sheep ranch, 600 feet west of, 30 feet north of road, 50 feet north of coulee; iron post stamped "2417 MALTA".....	2,425.302
Tucker's sheep ranch, 2.5 miles northeast of, 2 miles northwest of DK ranch, in road forks; iron post stamped "2802 MALTA".....	2,810.220
Otto Able's ranch house, 3.8 miles west of, west entrance to pasture, 16 feet south of gate and road; iron post stamped "2342 MALTA".....	2,350.129
T. 30 N., R. 34 E., in west half of sec. 22, 0.5 mile west of Otto Able's ranch house, 300 feet north of "M" canal station 1053, at fence corner, east of road; iron post stamped "2225 MALTA".....	2,232.516
<b>Otto Able's ranch, T. 30 N., R. 34 E., east along highway to point near center of T. 30 N., R. 36 E., thence north to Hinsdale.</b>	
T. 30 N., R. 35 E., in west side of unsurveyed township, 2.2 miles east of Otto Able's ranch house, 0.5 mile south of Powell's sheep sheds, south spur of ridge; iron post stamped "2535 MALTA".....	2,542.557
T. 30 N., R. 35 E., 2 feet east of quarter corner on south side of sec. 16, 800 feet east of A. W. Powell's stone house; iron post stamped "2596 MALTA".....	2,603.415
T. 30 N., R. 35 E., 550 feet east of southwest corner of sec. 12, top of ridge; iron post stamped "2792 MALTA".....	2,799.357
Hinsdale, 2 miles southeast of, 12 feet west of A. D. Kepple's ranch house, beside wire fence; iron post stamped "2470 MALTA".....	2,477.424
Hinsdale, 1.5 miles southeast of, southwest corner of sec. 4, T. 30 N., R. 36 E.; iron post.....	2,225.935
<b>Saco along highway east and north to river near Tanner's ranch.</b>	
Saco, 2.5 miles east of, near quarter corner on north side of sec. 15, T. 31 N., R. 34 E., 10 feet south of road fork, 2 feet west of fence corner post; iron post stamped "2178 MALTA".....	2,185.248
Saco, 6.2 miles east of, near center of SW. $\frac{1}{4}$ sec 18, T. 31 N., R. 35 E., 500 feet west of small coulee, top of flat ridge, north of dry lake; iron post stamped "2190 MALTA".....	2,197.126
<b>Northeast corner of sec. 1, T. 31 N., R. 32 E., east along township line to sec. 5, T. 31 N., R. 36 E., thence south to Hinsdale.</b>	
T. 31 N., R. 33 E., northwest corner of sec. 6, 0.8 mile west of Beaver Creek, on Bradys Meadow; iron post stamped "2193 MALTA".....	2,200.072
T. 31 N., R. 33 E., northwest corner of sec. 3, 1 mile west of north-south line fence on Gumbo flat; iron post stamped "2186 MALTA".....	2,193.003
T. 31 N., R. 34 E., northwest corner of sec. 6, at intersection of 4 fences; iron post stamped "2177 MALTA".....	2,184.078
T. 31 N., R. 34 E., quarter corner on north side of sec. 3, 700 feet east of wagon trail from Saco; iron post stamped "2264 MALTA".....	2,271.066
T. 32 N., R. 35 E., southwest corner of sec. 31, on hill sloping west, 3.2 miles west of Milk River, 4 feet north of section corner stone; iron post stamped "2247 MALTA".....	2,253.968
T. 32 N., R. 35 E., 6 feet north of southeast corner of sec. 33, 2,600 feet southeast of Tanner's house, 2,000 feet west of Milk River, in Tanner's field; iron post stamped "2155 MALTA".....	2,161.898

T. 31 N., R. 36 E., northwest corner of sec. 6, on hill, 300 feet west of section corner; iron post stamped "2299 MALTA" .....	Feet. 2, 305. 882
T. 31 N., R. 36 E., 5 feet south of quarter corner on north side of section 8; iron post stamped "2187 MALTA" .....	2, 193. 924
T. 31 N., R. 36 E., 60 feet northeast of southwest corner of sec. 16, on south side of county road; iron post stamped "2220 MALTA" .....	2, 226. 918
T. 30 N., R. 36 E., southeast corner of sec. 5, near canal line; iron post stamped "2219 MALTA" .....	2, 225. 913

**Northeast corner of sec. 28, T. 32 N., R. 33 E., east to northeast corner of sec. 27, T. 31 N., R. 36 E.**

Saco, 2.5 miles north of, sec. 32, T. 32 N., R. 34 E., station 290, in field, 0.5 mile east of A. Blue's old house; iron post stamped "2179 MLT" .....	2, 186. 485
T. 31 N., R. 34 E., at quarter corner on south side sec. 10; iron post stamped "2178 MLT" .....	2, 185. 248
T. 31 N., R. 34 E., sec. 24, station 430, 0.8 mile north of Beaverton siding on Great Northern Railway; iron post stamped "2170 MLT" .....	2, 176. 706
Hinsdale, 5 miles northwest of, center of SE. $\frac{1}{4}$ sec. 10, T. 31 N., R. 35 E., 160 feet east of S. Drabb's house, at northwest corner of hay corral; iron post stamped "2158 MLT" .....	2, 164. 911
Hinsdale, 2 miles north of, near quarter corner on east side of sec. 20, T. 31 N., R. 36 E., 100 feet northeast of station 610, at northwest corner of J. Janssen's yard; iron post stamped "2145 MLT" .....	2, 151. 686
T. 31 N., R. 36 E., northeast corner of sec. 27; iron post stamped "2137 MLT" .....	2, 144. 642

**Sec. 30, T. 31 N., R. 35 E., to Hinsdale.**

T. 31 N., 35 E., NW. $\frac{1}{4}$ sec 30, station 1136 + 50, 0.8 mile east of Beaverton siding, 400 feet east of Beaver Creek railroad bridge; iron post stamped "2173 MLT" .....	2, 180. 355
Hinsdale, in front of telegraph office; top of inside rail .....	2, 185. 8

**Southwest corner of sec. 31, T. 31 N., R. 35 E., north 3 miles, thence west 3 miles, and north 3 miles to northeast corner of sec. 4, T. 31 N., R. 35 E.**

Hinsdale, 4 miles northwest of, southeast corner of sec. 13, T. 31 N., R. 35 E., north side of Milk River, 1,200 feet west of house; iron post stamped "2144 MALTA" .....	2, 151. 991
Hinsdale, 7 miles northwest of, 45 feet northwest of southeast corner of sec. 16, T. 31 N., R. 35 E., 30 feet north of corner of wire fence; iron post stamped "2151 MALTA" .....	2, 158. 600
Hinsdale, 10 miles northwest of, 6 feet north of southeast corner of sec. 33, T. 32 N., R. 35 E., 0.5 mile southeast of Tanner's house, 0.5 mile southwest of Milk River; iron post stamped "2155 MALTA" .....	2, 161. 898

**Point 1.5 miles northeast of Hinsdale east to northeast corner of sec. 34, T. 31 N., R. 36 E., thence by spur line north 5 miles.**

Hinsdale, 2.5 miles northeast of, 30 feet east of southwest corner of sec 27, T. 31 N., R. 36 E., 0.2 mile south of schoolhouse, 250 feet northwest of Hanson's wire fence; iron post stamped "2137 MALTA" .....	2, 144. 722
Hinsdale, 5.5 miles northeast of, 1 foot south of northeast corner of sec. 22, T. 31 N., R. 36 E., iron post stamped "2165 MALTA" .....	2, 172. 382
Hinsdale, 8.5 miles northeast of, northwest corner of sec. 2, T. 31 N., R. 36 E., 1,700 feet north by 1,000 feet west of Rock Creek; iron post stamped "2164 MALTA" .....	2, 171. 031

## LEEDY QUADRANGLE.

Point near center of T. 26 N. southwest along west side of Sun Prairie Creek to Missouri River.

Sun Prairie Creek, 1,000 feet north and 1,000 feet west of, 0.8 mile south-east of mouth of coulee, top of small butte; iron post stamped "2331 MALTA"	Feet. 2, 338. 572
Sun Prairie Creek, 0.5 mile northwest of bridge, northwest edge of valley, 120 feet west of road; iron post stamped "2335 MALTA"	2, 342. 566
Sun Prairie Creek, 0.5 mile south of, 0.2 mile east of west edge of valley, top of east end of slight ridge; iron post stamped "2353 MALTA"	2, 360. 692
Sun Prairie Creek, 3.8 miles south of, 190 feet south of lone willow tree, 175 feet south of First Creek, 50 feet south of unfinished log cabin, in pasture; iron post stamped "2348 MALTA"	2, 355. 593
Telegraph Creek, 1 mile west of, west edge of valley, corner of wire fence, 300 feet south of board cabin, 20 feet west of road, 10 feet west of gate; iron post stamped "2344 MALTA"	2, 351. 596
Telegraph Creek, 900 feet west of, 100 feet west of slough, in center of valley, 0.8 mile northeast of Third Creek, 6 feet east of road; iron post stamped "2313 MALTA"	2, 320. 606
Telegraph Creek, 0.2 mile west of, 700 feet south of slough, 0.2 mile west of log cabin, 15 feet east of road; iron post stamped "2292 MALTA"	2, 299. 615
Long X ranch house, 250 feet west of, 600 feet southeast of Fourchette Creek, 10 feet west of wire fence gate and road; iron post stamped "2298 MALTA"	2, 305. 633
Long X ranch, 3.8 miles southwest of, 600 feet southwest of mouth of coulee, 500 feet north of Valentine Creek, 1.5 miles south of Fourchette Creek, in Valentine Creek valley; iron post stamped "2356 MALTA"	2, 363. 647
Long X ranch, 8 miles southwest of, 700 feet northwest of ridge in valley, southeast side wire fence, 6 feet east of gate and road; iron post stamped "2350 MALTA"	2, 357. 662
T. 21 N., R. 30 E., 8 feet northwest of corner of section 4, 3.5 miles north of Maginnis ranch, 180 feet west of road, 500 feet northwest of gate and wire fence, 800 feet east of west edge of valley, 0.2 mile west of Jim Wells Creek; iron post stamped "2335 MALTA"	2, 342. 657
Maginnis ranch, 0.5 mile northeast of, 30 feet east of road, 130 feet south of creek, 800 feet east of reservoir dam site, east edge of valley; iron post stamped "2228 MALTA"	2, 235. 669
Latitude 47° 29' 44.39", longitude 107° 53' 40.62", 4.2 miles above mouth of Musselshell River, 650 feet east of left bank of Missouri River, 30 feet south of mouth of coulee, 0.2 mile north of Maginnis ranch, 20 feet west of road, at side of wire fence; iron post stamped "Missouri River Commission B. M. 68/2;" Missouri River Commission bench mark 68/2 plotted on chart 64.	
Bolt underground	2, 218. 496
Top of cap of post	2, 222. 694

## MALTA QUADRANGLE.

Malta west up south side of Milk River to water tank dam site.

Malta, 2.5 miles southwest of, 10 feet northwest of Phillips road; iron post stamped "2258"	2, 264. 363
Malta, 4.5 miles west of, 1.5 miles south of Malta road, station 98A of canal line; iron post stamped "2261"	2, 267. 288

**Exeter east along Great Northern Ry. to Malta.**

	Feet.
Exeter, 4 feet west of station sign; iron post.....	2,263.242
<b>Point near Exeter northeast to mouth of Assiniboine Creek (single spur line).</b>	
Malta, 6.5 miles northeast of, sec. 22, T. 31 N., R. 30 E., near mouth of Assiniboine Creek, in southwest corner of fence of "Circle Diamond" ranch; iron post.....	2,247.295

**Malta east to west end of Bowdoin Lake.**

Malta, in front of telegraph station; top of rail.....	2,257.9
Malta, northeast corner of schoolhouse foundation; bronze tablet.....	2,266.618
Malta, sec. 22, T. 30 N., R. 30 E., 3.5 miles east of, 300 yards southeast of Morton's ranch, at "Camp Morton," iron post.....	2,275.392
Malta, sec. 12, T. 30 N., R. 30 E., 6 miles east of, northwest corner of Tucker's fence line; iron post.....	2,258.370
<b>Sec. 6, T. 30 N., R. 30 E., northeast around Bowdoin Lake to point near Ashfield, thence southwest along Great Northern Ry. to Bowdoin Lake.</b>	

T. 31 N., R. 31 E., 400 feet south of northwest corner of sec. 28, 0.5 mile northwest of Bowdoin Lake, 9 miles northeast of Malta, at station 73; iron post.....	2,262.300
T. 31 N., R. 31 E., near northwest corner of sec. 24, 1.5 miles northeast of Bowdoin Lake; iron post.....	2,258.254
Ashfield, NE. $\frac{1}{4}$ sec. 27, T. 31 N., R. 32 E., 1.3 miles west of, station 214; iron post.....	2,265.212

**Point on "M" canal line northwest to "B" canal line.**

Ashfield, 60 feet southeast of water tank; iron post.....	2,213.193
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**Point on "B" canal line south around Bowdoin Lake.**

Bowdoin Lake; surface of water, Oct. 7, 1903.....	2,211.8
T. 30 N., R. 31 E., near center of NW. $\frac{1}{4}$ sec. 15, 1 mile due south of Bowdoin section house, station 66 "E"; iron post stamped "2225".....	2,232.113

**Point on "E" canal line east to Great Northern Ry., thence southwest to station 86 K.**

T. 30 N., R. 32 E., sec. 5, station 62, 70 feet south of track; iron post stamped "2227".....	2,234.349
T. 30 N., R. 32 E., center of SE. $\frac{1}{4}$ sec. 7, station 86 K, 700 feet west of stone cabin; iron post.....	2,233.858

**Morton's ranch down south side of Bowdoin Valley to Circle Diamond dam.**

T. 30 N., R. 31 E., 400 feet southwest of northeast corner of sec. 25, station 254 "M," 0.5 mile west of yellow house and windmill; iron post.....	2,256.809
T. 29 N., R. 32 E., 0.2 mile west of northeast corner of sec. 7, first ranch north of Sanford's reservoir, 0.8 mile north of Sanford's residence, 700 feet south of northwest corner of fence, 30 feet west of road; iron post..	2,252.844
T. 29 N., R. 32 E., near center of NW. $\frac{1}{4}$ sec. 22, at station 432 "M," east of small frame house, 300 feet east of corner of fence; iron post.....	2,250.123
T. 29 N., R. 32 E., 0.2 mile southwest of center of sec. 4, 0.3 mile east of Beaver Creek, on point of spur; iron post.....	2,251.225
T. 30 N., R. 32 E., 400 feet south of northeast corner of sec. 21, 1 mile southeast of Circle Diamond dam, near Tucker's ranch, 200 feet east of fence, on point of spur; iron post.....	2,247.986
T. 30 N., R. 32 E., 0.3 mile north of southwest corner of sec. 11, 1.5 miles northeast of Circle Diamond dam, 2 miles northeast of Tucker's ranch, 20 feet west of road to Saco, 100 feet east of fence; iron post.....	2,248.684

**Bowdoin Lake south along section lines in R. 31 E., thence east 6 miles and northwest 20 miles to dam across coulee.**

T. 30 N., R. 31 E., 65 feet north of southwest corner of sec. 34; iron post stamped "2456 MALTA"	Feet. 2, 463. 336
T. 29 N., R. 31 E., 0.25 mile south of northeast corner of sec. 21, at top of ridge; iron post stamped "2632 MALTA"	2, 639. 138
T. 28 N., R. 31 E., sec. 4, 1 foot south of stone corner at northeast corner; iron post stamped "2660 MALTA"	2, 667. 199
T. 28 N., R. 31 E., 220 feet south of northeast corner of sec. 22; iron post stamped "2593 MALTA"	2, 599. 993
T. 27 N., R. 31 E., 1 foot southwest of northeast corner of sec. 3; iron post stamped "2501 MALTA"	2, 507. 906
Frank Rudy's old sheep ranch, 0.2 mile east of; iron post stamped "2525 MALTA"	2, 531. 899
Rudy's lower sheep ranch, 2,000 feet southwest of, 585 feet south of Beaver Creek, 100 feet west of canal line; iron post stamped "2352 MALTA"	2, 359. 040
Beaver Creek, 2.5 miles south of, 200 feet south of creek bottom, top of small butte; iron post stamped "2410 MALTA"	2, 416. 854
South Beaver Creek, 1.8 miles west of, west edge of valley, at foot of hills; iron post stamped "2315 MALTA"	2, 322. 003
Miller's ranch, 4.2 miles south of, 1 mile east of creek, top of slight ridge; iron post stamped "2332 MALTA"	2, 339. 000
Miller's ranch, 1.2 miles south of, 130 feet west of fence corner; iron post stamped "2296 MALTA"	2, 303. 139
Miller's ranch, 0.8 mile north of, 0.2 mile south of dam, 17 feet west of ford on Beaver Creek; iron post stamped "2282 MALTA"	2, 289. 016
Miller's ranch, 4 miles north of, 0.5 mile south of new house, 12 feet north of lone tree, 0.2 mile west of creek, 50 feet north of slough; iron post stamped "2270 MALTA"	2, 276. 899
T. 28 N., R. 32 E., near southwest corner of sec. 18, in open flat, 0.5 mile west of creek, 0.5 mile east of road; iron post stamped "2260 MALTA"	2, 266. 790
Canal line, 1.5 miles south of, 1,800 feet west of Beaver Creek, south bank of slough, 4 feet east of road; iron post stamped "2248 MALTA"	2, 254. 774
McCreary's ranch house, 0.8 mile northwest of, 400 feet southwest of canal station 374, 500 feet west of creek and 20 feet west of road, in small valley; iron post stamped "2243 MALTA"	2, 249. 649

**McCreary's ranch east along road 3 miles.**

McCreary's ranch, 3 miles east of, 100 feet south of road, south side of coulee, point of ridge; iron post stamped "2402 MALTA"	2, 409. 491
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**Point 9 miles northeast of "B" canal line north and east along township line to northeast corner of T. 31 N., R. 32 E.**

T. 32 N., R. 31 E., 4 feet north of quarter corner on south side of sec. 33, 100 feet east of road; iron post stamped "2391 MALTA"	2, 398. 425
T. 32 N., R. 31 E., 6 feet north of southeast corner of sec. 36, on flat southeast of Lone Tree Lake; iron post stamped "2114 MALTA" (stamped wrong)	2, 221. 018
T. 31 N., R. 32 E., northwest corner sec. 3, about 2,700 feet east of lake, on top of hill; iron post stamped "2223 MALTA"	2, 230. 12

**Ashfield southwest along south side of Great Northern Ry. to northeast end of Brady reservoir dam.**

T. 31 N., R. 32 E., 1,630 feet southwest from northeast corner of sec. 34, at northeast end of proposed Bowdoin dam, on knoll; iron post stamped "2246 MLT"	2, 253. 282
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**Ashfield north to sec. 36, T. 32 N., R. 32 E. (Bowdoin North canal).**

T. 31 N., R. 32 E., 635 feet northwest of southeast corner of sec. 15, 1 mile northwest of Ashfield, station 66, on north side of slough; iron post stamped "2201 MLT".....	Feet. 2, 208. 066
T. 32 N., R. 32 E., 1,957 feet northeast of southwest corner of sec. 36, station 144; iron post stamped "2193 MLT".....	2, 200. 081

**VALLEYTOWN 30' QUADRANGLE.**

**Southwest corner of sec. 32, T. 32 N., R. 34 E., north along section line to iron bridge across Milk River, thence east down north side of Milk River to south side of T. 31 N., R. 32 E., near Tanner's ranch.**

T. 32 N., R. 34 E., near northwest corner of sec. 18, 300 feet south of iron bridge, 150 feet south of road, in granite outcrop; aluminum tablet stamped "2192 MALTA".....	2, 199. 101
T. 32 N., R. 34 E., about 0.1 mile west of center of SW. $\frac{1}{4}$ sec. 14, 0.5 mile west of Davis ranch, 3 feet south of road, at gate in corner of wire fence; iron post stamped "2174 MALTA".....	2, 181. 146
T. 32 N., R. 35 E., 0.3 mile east of center of sec. 20, 0.3 mile north of Grove's ranch house, 300 feet northwest of round lake (dry), 3 feet west of road; iron post stamped "2162 MALTA".....	2, 169. 190

**Northeast corner of sec. 1, T. 32 N., R. 32 E., east along township line to sec. 5, T. 32 N., R. 36 E., thence south and west to southwest corner of T. 32 N., R. 36 E.**

T. 32 N., R. 32 E., northeast corner of sec. 1, closing corner; iron post stamped "2278 MALTA".....	2, 285. 272
T. 32 N., R. 33 E., 200 feet east of closing corner at northwest corner of sec. 3, in coulee, 5 feet east of road; iron post stamped "2251 MALTA".....	2, 258. 270
T. 32 N., R. 33 E., closing corner at northeast corner of sec. 1; iron post stamped "2324 MALTA".....	2, 331. 272
T. 32 N., R. 34 E., 90 feet east of northwest corner of sec. 31, closing corner; iron post stamped "2333 MALTA".....	2, 339. 718
T. 32 N., R. 35 E., 700 feet east of northwest corner of sec. 6, closing corner at top of bluff; iron post stamped "2392 MALTA".....	2, 399. 800
T. 32 N., R. 35 E., 0.4 mile west of closing corner of northeast corner of sec. 2, on line, at top of ridge; iron post stamped "2594 MALTA".....	2, 600. 814
Rock Creek triangulation station, about 700 feet southwest of quarter corner on east side of sec. 35, T. 33 N., R. 35 E.; iron post stamped "2722 MALTA".....	2, 729. 264
T. 32 N., R. 36 E., 800 feet north of quarter corner on east side of sec. 5, 1,000 feet south of flat draw; iron post stamped "2478 MALTA".....	2, 484. 884
T. 32 N., R. 36 E., 600 feet north of quarter corner on east side of sec. 29; iron post stamped "2411 MALTA".....	2, 417. 820

**T. 32 N., R. 32 E., east and southeast to sec. 28, T. 32 N., R. 33 E.**

T. 32 N., R. 33 E., 1,630 feet south of northeast corner of sec. 28, station 220; iron post stamped "2185 MLT".....	2, 192. 486
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**Avery, Bearpaw Mountains, Cherry Ridge, Dodson, Gildford, Hays, Lonesome Lake, Soose Mountains, Thibedeau Lake, and Zurich Quadrangles.**

**CHOUTEAU COUNTY.**

The elevations in the following list were determined by primary leveling forming part of a net extending from Fort Benton to the mouth of Milk River north of Missouri River. To the original values

referred to Havre datum corrections of about 6 feet have been added. The values now given are believed to accord with those computed in 1911 for Butte on the Coast and Geodetic Survey precise level line. The Missouri River Commission elevations, as published in the 1894 Report of the Chief of Engineers, are accepted without correction east of Milk River in Montana, but between Milk River and Kismet there is a probable discrepancy of 4 feet. Therefore, between Kismet and Fort Benton 4 feet has been added to the values therein given.

The leveling by the United States Geological Survey was done in the Avery quadrangle in 1903 by M. S. Bright; in the Bearpaw Mountains quadrangle in 1902 by M. S. Bright and J. T. Stewart, and in 1904 by L. H. Brady; in the Cherry Ridge quadrangle in 1902 by M. S. Bright and H. F. Burkhart, in 1903 by M. S. Bright and H. F. Daniels, in 1909 by W. R. Winstead, and in 1910 by A. C. Leonard; in the Dodson quadrangle in 1903 by M. S. Bright and H. F. Daniels; in the Gildford quadrangle in 1902 by H. F. Burkhart, and in 1904 by L. H. Brady; in the Hays quadrangle in 1903 by H. F. Daniels; in the Lonesome Lake quadrangle in 1904 by L. H. Brady, Fred McLaughlin, J. O. Watts, and H. L. Baldwin; in the Soose Mountains quadrangle in 1904 by Fred McLaughlin; additional leveling was done in the Cherry Ridge, Dodson, Hays, Lonesome Lake, and Soose Mountains quadrangles in 1904, and in the Lonesome Lake, Soose Mountains, Thibedean Lake, and Zurich quadrangles in 1903, by the Reclamation Service; in Thibedean Lake quadrangle in 1902 by M. S. Bright and H. F. Burkhart, and in 1909 by W. R. Winstead; and in the Zurich quadrangle in 1902 by M. S. Bright and H. F. Burkhart.

#### AVERY QUADRANGLE.

Southeast corner of T. 33 N., R. 24 E., east along standard parallel to southeast corner of T. 33 N., R. 26 E., thence south to southwest corner of Sec. 19, T. 32 N., R. 27 E.

	Feet.
T. 33 N., R. 25 E., standard corner of secs. 31 and 32; stone.....	2,699.93
T. 33 N., R. 25 E., standard corner of secs. 32 and 33; stone.....	2,766.55
T. 33 N., R. 25 E., southeast corner of; stone.....	2,856.69
T. 33 N., R. 25 E., standard corner of secs. 35 and 36; stone.....	2,867.70
T. 33 N., Rs. 25 and 26 E., 300 feet west of standard corner of, at top of ridge; iron post stamped "2876 HAVRE".....	2,882.452
T. 33 N., R. 26 E., standard corner of secs. 31 and 32; stone.....	2,785.38
T. 33 N., R. 26 E., standard corner of secs. 32 and 33; stone.....	2,857.79
T. 33 N., R. 26 E., standard corner of secs. 33 and 34, 2 feet east of stone; iron post stamped "2865 HAVRE".....	2,871.627
T. 33 N., R. 26 E., standard corner of secs. 34 and 35; stone.....	2,841.62
T. 32 N., R. 26 E., standard corner of secs. 1 and 2; stone.....	2,876.81
T. 33 N., Rs. 26 and 27 E., standard corner of, 1 foot east of stone; iron post stamped "2806 HAVRE".....	2,812.626
T. 32 N., R. 27 E., 1 mile south of standard parallel, top of sharp ridge; paint point on boulder outcrop.....	2,820.54

T. 32 N., Rs. 26 and 27 E., 400 feet south of corner of secs. 13, 18, 19, and 24; iron post stamped "2677 HAVRE".....	2, 683. 874
T. 32 N., Rs. 26 and 27 E., at corner of secs. 19, 24, 25, and 30; stone.....	2, 639. 27

**BEARPAW MOUNTAINS QUADRANGLE.**

**Sec. 34, T. 32 N., R. 13 E., east and south to Box Elder.**

T. 31 N., R. 13 E., southwest corner of sec. 1; iron post stamped "2800 HAVRE".....	2, 805. 868
T. 31 N., R. 13 E., southwest corner of sec. 24; iron post stamped "2759 HAVRE".....	2, 764. 854
T. 30 N., R. 13 E., southwest corner of sec. 1; iron post stamped "2639 HAVRE".....	2, 644. 770

**Sec. 25, T. 32 N., R. 16 E., southeast and northeast to point 1.5 miles south of Bice's coal mine.**

T. 32 N., R. 17 E., 1.5 miles south of Bice's coal mine, on road from Havre to Stanton's coal mine, in first coulee west of Little Box Elder Creek, on knoll; iron post stamped "2827 HAVRE".....	2, 832. 993
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**CHERRY RIDGE 30' QUADRANGLE.**

**Northwest corner of sec. 4, T. 34 N., R. 21 E., east and south along township and section lines to Harlem.**

Tps. 34 and 35 N., R. 21 E., 300 feet west of quarter corner between secs. 3 and 34, on west bank of Parallel Creek; iron post stamped "2854 HAVRE".....	2, 860. 206
Tps. 34 and 35 N., R. 22 E., 0.2 mile west of corner of secs. 5, 6, 31, and 32, on top of ridge; iron post stamped "2955 HAVRE".....	2, 961. 162
Tps. 34 and 35 N., R. 22 E., 900 feet northeast of quarter corner between secs. 2 and 35, on top of flat butte, 500 feet north of line; iron post stamped "3299 HAVRE".....	3, 305. 386
T. 34 N., Rs. 22 and 23 E., 50 feet south of corner of secs. 7, 12, 13, and 18, on line; iron post stamped "3196 HAVRE".....	3, 202. 385
T. 34 N., R. 22 E., 325 feet north of southeast corner of, at summit of ridge; iron post stamped "2881 HAVRE".....	2, 887. 369
T. 33 N., Rs. 22 and 23 E., 890 feet south of quarter corner between secs. 13 and 18, on top of ridge; iron post stamped "2701 HAVRE".....	2, 707. 229
T. 33 N., R. 23 E., 650 feet north of southwest corner of, on top of flat ridge; iron post stamped "2640 HAVRE".....	2, 646. 379

**Harlem west along Great Northern Ry. to Zurich.**

Harlem, northeast corner of New England Hotel, at edge of sidewalk; iron post stamped "2366 HAVRE".....	2, 372. 496
Harlem, 3.2 miles west of, 250 feet southwest of milepost 391, south side of public road, 4 feet east of gate; iron post stamped "2356 HAVRE".....	2, 362. 451
Madras siding, 40 feet north of railroad track and 20 feet west of wagon road, near telegraph pole; iron post stamped "2365 HAVRE".....	2, 371. 393
Harlem, 9.2 miles west of, at milepost 397, 50 feet south of track, at north side of wagon road, near wire fence; iron post stamped "2372 HAVRE".....	2, 378. 383

**Sec. 33, T. 34 N., R. 21 E., east along township line to range line between Rs. 22 and 23.**

T. 34 N., R. 21 E., 350 feet west of southeast corner of sec. 33; iron post stamped "2722 HAVRE".....	2, 728. 121
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T. 34 N., R. 22 E., 120 feet north of southeast corner of sec. 31; iron post stamped "2737 HAVRE".....	Feet. 2,743.183
T. 34 N., R. 22 E., 500 feet east of southeast corner of SW. $\frac{1}{4}$ sec. 34, on prominent knoll; iron post stamped "2791 HAVRE".....	2,797.143

**Harlem south and west along township and section lines to southeast corner of sec. 22,  
T. 32 N., R. 21 E.**

T. 32 N., R. 22 E., southeast corner of sec. 24, 5 feet north of fence corner; iron post stamped "2344 HAVRE".....	2,350.429
T. 32 N., R. 22 E., 60 feet east of southeast corner of sec. 20; iron post stamped "2421 HAVRE".....	2,427.335
T. 32 N., R. 21 E., 250 feet south of southeast corner of sec. 22, on top of prominent knoll; iron post stamped "2580 HAVRE".....	2,586.414

**Harlem east along Great Northern Ry. 5 miles.<sup>1</sup>**

Harlem, east of station, in corner post of fence directly south of cattle guard; spike on south side.....	2,365.53
Harlem, 50 feet south of third cattle guard east of station; end of iron post at southwest corner of wire fence.....	2,356.98
Harlem, 1.6 miles east of, in north side of bridge over Noon Creek; end of projecting plank.....	2,357.27
Harlem, 2 miles east of, south side of right of way; nail in tenth fence post east of crossing.....	2,353.14
Harlem, 3-miles east of, 50 feet south of right of way, east of post in wire fence; iron post stamped "2342 HAVRE".....	2,348.302
Harlem, 4 miles east of, 250 feet west of milepost, south side of right of way; spike in fence post.....	2,338.43
Harlem, 5 miles east of, 100 feet west of crossroads, south of right of way; spike in signal post.....	2,332.14
Montauk, 75 feet east of trestle 531, south of right of way; iron post stamped "2323 HAVRE".....	2,329.089

**Sec. 8, T. 32 N., R. 21 E., southeast to vicinity of sec. 23, T. 32 N., R. 22 E.**

Harlem, 8 miles southwest of, sec. 14, T. 32 N., R. 21 E., 100 feet east of telephone line, station 720; iron post stamped "2374 HAVRE".....	2,379.961
Fort Belknap, 2.5 miles northwest of, Reclamation Service canal survey station 1167, 6 feet south of main hill road; iron post stamped "2364 HAVRE".....	2,370.222

**Southeast corner of T. 34 N., R. 22 E., east to southeast corner of sec. 33, T. 34 N., R. 23 E., thence north to T. 35 N., thence west along north boundary of T. 34 N. to southeast corner of T. 35 N., R. 22 E.**

Tps. 33 and 34 N., Rs. 22 and 23 E., corner of; iron post stamped "2881 HAVRE".....	2,887.369
Tps. 33 and 34 N., R. 23 E., at corner of secs. 5, 6, 31, and 32; stone.....	2,807.296
Tps. 33 and 34 N., R. 23 E., corner of secs. 4, 5, 32, and 33; stone.....	2,827.64
Tps. 33 and 34 N., R. 23 E., 1 foot east of corner of secs. 3, 4, 33, and 34; iron post stamped "2826 HAVRE".....	2,832.061
Tps. 33 and 34 N., R. 23 E., corner of secs. 2, 3, 34, and 35; stone.....	2,833.57
Tps. 33 and 34 N., R. 23 E., corner of secs. 1, 2, 35, and 36; stone.....	2,864.60
Tps. 33 and 34 N., Rs. 23 and 24 E., 1 foot east of stone at corner of iron post stamped "2928 HAVRE".....	2,934.094
Tps. 33 and 34 N., R. 24 E., corner of secs. 5, 6, 31, and 32; stone.....	2,883.19
Tps. 33 and 34 N., R. 24 E., corner of secs. 4, 5, 33, and 34; stone.....	2,949.13

<sup>1</sup> The first 3 miles are checked by return line.

Tps. 33 and 34 N., R. 24 E., 1 foot east of stone at corner of secs. 3, 4, 33, and 34; iron post stamped "2935 HAVRE".....	2, 941. 084
T. 34 N., R. 24 E., corner of secs. 27, 28, 33, and 34; stone.....	3, 014. 23
T. 34 N., R. 24 E., corner of secs. 21, 22, 27, and 28; stone.....	3, 183. 25
T. 34 N., R. 24 E., 150 feet north of corner of secs. 15, 16, 21, and 22, at top of butte; iron post stamped "3226 HAVRE".....	3, 231. 940
T. 34 N., R. 24 E., corner of secs. 9, 10, 15, and 16; stone.....	3, 152. 07
Tps. 34 and 35 N., R. 24 E., 255 feet west of corner of secs. 3, 4, 33, and 34; iron post stamped "3150 HAVRE".....	3, 155. 863
Tps. 34 and 35 N., R. 24 E., witness corner to secs. 5, 6, 31, and 32; stone..	3, 136. 29
Tps. 34 and 35 N., Rs. 23 and 24 E., 125 feet east of stone at corner of secs. 1, 6, 31, and 36, on slight ridge; iron post stamped "3191 HAVRE".....	3, 196. 981
Tps. 34 and 35 N., R. 23 E., corner of secs. 1, 2, 35, and 36; stone.....	3, 208. 72
Tps. 34 and 35 N., R. 23 E., corner of secs. 2, 3, 34, and 35; stone.....	3, 166. 45
Tps. 34 and 35 N., 120 feet west of corner of secs. 3, 4, 33, and 34; iron post stamped "3209 HAVRE".....	3, 214. 999
Tps. 34 and 35 N., R. 23 E., corner of secs. 4, 5, 32, and 33; stone.....	3, 241. 21
T. 34 N., R. 23 E., at northwest corner of; stone.....	3, 287. 34
Tps. 34 and 35 N., R. 23 E., corner of secs. 5, 6, 31, and 32; stone.....	3, 290. 47

**Southwest corner of T. 33 N., R. 23 E., east along standard parallel to standard township corner, T. 33 N., Rs. 24 and 25 E.**

T. 33 N., R. 23 E., standard corner of secs. 31 and 32; corner stone.....	2, 592. 15
T. 33 N., R. 23 E., standard corner of secs. 32 and 33; corner stone.....	2, 589. 93
T. 33 N., R. 23 E., 1 foot east of standard corner of secs. 33 and 34, at north edge of flat stone; iron post stamped "2598 HAVRE".....	2, 604. 098
T. 33 N., R. 23 E., at standard corner of secs. 34 and 35; stone.....	2, 602. 96
T. 33 N., R. 23 E., at standard corner of secs. 35 and 36; stone.....	2, 562. 58
T. 33 N., R. 23 and 24 E., 80 feet west of standard stone corner of, at south point of ridge, west of east fork of Wayne Creek; iron post stamped "2563 HAVRE".....	2, 569. 206
T. 33 N., R. 24 E., standard corner of secs. 31 and 32; stone.....	2, 670. 40
T. 33 N., R. 24 E., standard corner of secs. 32 and 33; stone.....	2, 702. 74
T. 32 N., R. 24 E., stone at closing corner of secs. 2 and 3, 1 foot east of; iron post stamped "2715 HAVRE".....	2, 721. 121
T. 33 N., R. 24 E., south corner of secs. 34 and 35; stone.....	2, 678. 37
T. 33 N., R. 24 E., 200 feet west of creek, at south corner of secs. 35 and 36; stone.....	2, 579. 66
T. 33 N., Rs. 24 and 25 E., 1 foot east of standard corner stone; iron post stamped "2677 HAVRE".....	2, 683. 305

**Sec. 5, T. 37 N., R. 21 E., east along United States and Canada boundary line 5 miles, thence south to sec. 31, T. 35 N., R. 22 E.**

T. 37 N., R. 21 E., about sec. 4, 1 mile west of Cherry Ridge Hills, on United States and Canada boundary line, 80 feet south of Canadian section corner, north edge of coulee; iron post stamped "3106".....	3, 111. 823
T. 37 N., R. 21 E., about sec. 3, at foot of steep hill, point on iron pin (Canadian section corner) marked "3246".....	3, 251. 91
T. 37 N., R. 21 E., about sec. 2 (unbounded), on United States and Canada boundary line, in small coulee; point on iron pin (Canadian section corner) marked "3342".....	3, 347. 77
T. 37 N., R. 21 E., about sec. 1 (unbounded), on United States and Canada boundary line; southwest corner of monument, marked "3379".....	3, 385. 01

T. 37 N., R. 21 E., about northeast corner of, on United States and Canada boundary line, in small valley, 70 feet south of Canadian section corner; iron post stamped "3327".....	Feet. 3, 333. 573
T. 37 N., R. 21 E., about center of east side of, on range line, 0.4 mile south of creek, 1 mile southeast of ranch, 0.8 mile west of second ranch, on prominent knoll; iron post stamped "3151".....	3, 157. 303
T. 36 N., R. 22 E., near quarter corner of sec. 6 (probably), 1.2 miles northeast of ranch, marked by large pile of stone; iron post stamped "3304".....	3, 310. 099
T. 36 N., R. 22 E., 300 feet west of quarter corner between secs. 18 and 19, 500 feet west of road, 0.7 mile southwest of ranch; iron post stamped "3419".....	3, 424. 742
T. 35 N., R. 22 E., 300 feet south of quarter corner on north side of sec. 6, on north bank of deep coulee; iron post stamped "3315".....	3, 321. 547
T. 35 N., R. 22 E., 600 feet south of quarter corner on north side of sec. 19; 1 mile north of creek, on prominent knoll; iron post stamped "3091".....	3, 096. 852
T. 35 N., R. 22 E., 0.2 mile west of southeast corner of sec. 31, at top of ridge; iron post stamped "2955 HAVRE".....	2, 961. 162
 <b>Section line between secs. 2 and 35, Tps. 34 and 35 N., R. 22 E., north to Canadian line, thence east along line to corner of secs. 1, 2, 35, and 36, Tps. 37 and 38 N., R. 24 E., thence southeast to Tps. 36 and 37 N., Rs. 24 and 25 E., thence south along range line to Tps. 34 and 35 N., Rs. 24 and 25 E., thence west along township line to corner of secs. 3, 4, 33, and 34, Tps. 34 and 35 N., R. 24 E.</b>	
Tps. 34 and 35 N., R. 22 E., 900 feet northeast of quarter corner between secs. 2 and 35, 500 feet north of township line, top of flat butte; iron post stamped "HAVRE 3299".....	3, 305. 386
T. 35 N., R. 22 E., quarter corner on east side of sec. 25; stone.....	3, 337. 19
T. 35 N., R. 22 E., 300 feet north of southeast corner of sec. 24, on top of high round butte; iron post stamped "3383 HAVRE".....	3, 388. 925
T. 35 N., R. 23 E., northwest corner of sec. 19, on range line; top of corner stone.....	3, 328. 67
T. 35 N., Rs. 22 and 23 E., on range line on west side of road leading from Snyder's ranch across range line to Murphy's Coulee; stone painted "3358".....	3, 363. 93
T. 35 N., R. 23 E., northwest corner of sec. 7, in bottom of Murphy's Coulee; corner stone.....	3, 312. 42
T. 35 N., R. 22 E., 200 feet west of quarter corner on east side of sec. 1, north of Murphy's Coulee; iron post stamped "HAVRE 3347".....	3, 353. 095
Tps. 35 and 36 N., Rs. 22 and 23 E., at township corner, on top of ridge; stone painted "3394".....	3, 400. 48
T. 36 N., R. 23 E., northwest corner of sec. 31; corner stone painted "3333".....	3, 339. 10
T. 36 N., R. 23 E., west quarter corner of sec. 30, near springs; post painted "3257".....	3, 262. 74
T. 36 N., R. 22 E., SE $\frac{1}{4}$ of sec. 24, 1,000 feet southwest of quarter corner of secs. 19 and 24, 500 feet northwest of lake bed, on top of terrace; iron post stamped "HAVRE 3288".....	3, 293. 430
T. 36 N., R. 23 E., southwest corner of sec. 7 at top of divide between Woody Island Coulee and branch coulee; corner stone painted "3223".....	3, 228. 98
T. 36 N., R. 23 E., quarter corner on west side of sec. 7, on top of divide, painted "3215".....	3, 220. 72
T. 36 N., R. 23 E., southwest corner of sec. 6, north of Woody Island Coulee, south side of slope; corner stone painted "3225".....	3, 230. 73
T. 36 N., Rs. 22 and 23 E., 9th standard paralld, 35 feet southeast of township corner, on top of divide; iron post stamped "HAVRE 3228".....	3, 233. 563

	Feet.
T. 37 N., Rs. 22 and 23 E., 1.8 miles north of, on 9th standard parallel, on flat 100 feet east of a small round hill; stone painted "3189".....	3, 194. 44
T. 37 N., Rs. 22 and 23 E., 3 miles north of township corner of, on 9th standard parallel, on divide between coulees, at top of small sand hill; iron post stamped "HAVRE 3190".....	3, 195. 852
T. 37 N., R. 22 E., quarter corner on east side of sec. 12; stone painted "3143".....	3, 149. 08
T. 37 N., R. 23 E., 0.5 mile northeast of quarter corner on west side of sec. 7, on top of ridge between two coulees; stone.....	3, 111. 47
T. 37 N., Rs. 22 and 23 E., township corner, on Canadian boundary line; iron post stamped "HAVRE 3162".....	3, 167. 758
T. 37 N., R. 23 E., 1.6 miles east of northwest township corner, on Canadian boundary line at boundary post; stone painted "3007".....	3, 012. 82
T. 37 N., R. 23 E., northeast corner of sec. 5, on Canadian boundary line; stone painted "2999".....	3, 005. 36
T. 37 N., R. 23 E., northeast corner of sec. 4, on Canadian boundary line, bottom of large coulee; iron post stamped "HAVRE 3016".....	3, 021. 625
T. 37 N., R. 23 E., northeast corner of sec. 3, on Canadian boundary line; stone painted "3085".....	3, 091. 10
T. 37 N., R. 23 E., northeast corner of sec. 2, on Canadian boundary line; stone painted "3103".....	3, 108. 60
T. 37 N., Rs. 23 and 24 E., township corner, on Canadian boundary line, 100 feet east of large hill, edge of dry lake; iron post stamped "HAVRE 3072".....	3, 076. 864
T. 37 N., R. 24 E., 1 mile east of northwest township corner, on Canadian boundary line, 200 feet southeast of Canadian section corner; stone painted "3117".....	3, 121. 28
T. 37 N., R. 24 E., 2 miles east of northwest township corner, on Canadian boundary line, 200 feet southeast of Canadian section corner; stone painted "3077".....	3, 081. 73
T. 37 N., R. 24 E., 3 miles east of northwest township corner, on Canadian boundary line, 600 feet east of Canadian section corner, 500 feet east of dry lake, on small hill; iron post stamped "HAVRE 3045".....	3, 049. 269
T. 37 N., R. 24 E., 4 miles east of northwest township corner, on Canadian boundary line, 800 feet southeast of Canadian section corner; stone painted "3030".....	3, 034. 41
T. 37 N., R. 24 E., 5 miles east of northwest township corner, Canadian boundary line, 300 feet southeast of Canadian section corner; iron post stamped "HAVRE 3045".....	3, 049. 623
T. 37 N., R. 24 E., on hill, 1 mile west of range line, 1 mile south of Canadian boundary line; stone painted "3027".....	3, 031. 26
T. 37 N., R. 24 E., 0.8 mile west of range line, 2 miles south of Canadian boundary line, on ridge, 400 feet south of small lake; large stone painted "2987".....	2, 991. 65
T. 37 N., R. 24 E., 0.5 mile west of range line, 3 miles south of Canadian boundary line, on top of hill; iron post stamped "HAVRE 2984".....	2, 988. 091
T. 37 N., R. 24 E., 4 miles south of Canadian boundary line, bottom of large coulee, at northeast corner of fence; stone painted "2880".....	2, 884. 09
T. 37 N., R. 25 E., 5 miles south of Canadian boundary line, south of large coulee, on bench at west edge of branch coulee; stone painted "2934".....	2, 938. 98
T. 36 N., R. 25 E.; northeast corner of sec. 6, on 9th standard parallel, on flat; stone painted "3064".....	3, 068. 44
T. 36 N., Rs. 24 and 25 E., closing township corner, on 9th standard parallel, on flat; iron post stamped "HAVRE 3088".....	3, 092. 805
T. 36 N., R. 24 E., southeast corner of sec. 1; stone painted "3071".....	3, 075. 04

	Feet.
T. 36 N., R. 24 E., southeast corner of sec. 12; stone painted "3076" . . . . .	3, 080. 32
T. 36 N., R. 24 E., southeast corner of sec. 13, 300 feet east of house, on flat; iron post stamped "HAVRE 3078" . . . . .	3, 082. 502
T. 36 N., R. 24 E., southeast corner of sec. 24; stone painted "3069" . . . . .	3, 073. 42
T. 36 N., R. 24 E., southeast corner of sec. 25; stone painted "3063" . . . . .	3, 067. 93
Tps. 35 and 36 N., Rs. 24 and 25 E., township corner, on flat; iron post stamped "HAVRE 3067" . . . . .	3, 071. 027
T. 35 N., R. 24 E., southeast corner of sec. 1; stone painted "3083" . . . . .	3, 087. 61
T. 35 N., R. 24 E., stone at southeast corner of sec. 12; top of stone . . . . .	3, 106. 25
T. 35 N., R. 24 E., southeast corner of sec. 13, on flat; iron post stamped "3109" . . . . .	3, 113. 660
T. 35 N., R. 24 E., southeast corner of sec. 24; stone painted "3123" . . . . .	3, 127. 65
T. 35 N., R. 24 E., southeast corner of sec. 25; stone painted "3107" . . . . .	3, 111. 20
Tps. 34 and 35 N., Rs. 24 and 25 E., township corner; stone painted "3150" . . . . .	3, 154. 45
T. 35 N., R. 24 E., 800 feet northwest of southeast corner of sec. 35, 800 feet south of house; stone painted "3155" . . . . .	3, 158. 99
Tps. 34 and 35 N., R. 24 E., corner of secs. 34, 35, 2, and 3; stone painted "3144" . . . . .	3, 148. 52
Tps. 34 and 35 N., R. 24 E., 255 feet west of corner of secs. 3, 4, 33, and 34; iron post stamped "3150 HAVRE" . . . . .	3, 155. 863

#### DODSON QUADRANGLE.

**Southeast corner of sec. 25, T. 32 N., R. 26 E., south to point 3.2 miles west of Dodson.**

T. 32 N., Rs. 26 and 27 E., corner of secs. 25, 30, 31, and 36; stone . . . . .	2, 611. 77
Tps. 31 and 32 N., Rs. 26 and 27 E., 1 foot east of stone at corner of; iron post stamped "2582 HAVRE" . . . . .	2, 588. 863
T. 31 N., Rs. 26 and 27 E., corner of secs. 1, 6, 7, and 12; stone . . . . .	2, 523. 028
T. 31 N., Rs. 26 and 27 E., corner of secs. 7, 12, 13, and 18; stone . . . . .	2, 474. 41
T. 31 N., Rs. 26 and 27 E., 325 feet south of corner of secs. 13, 18, 19, and 24; iron post stamped "2501 HAVRE" . . . . .	2, 508. 036
T. 31 N., Rs. 26 and 27 E., corner of secs. 19, 24, 25, and 30; stone . . . . .	2, 440. 80
T. 31 N., Rs. 26 and 27 E., corner of secs. 25, 30, 31, and 36; nail on top of loose stake . . . . .	2, 291. 06

#### Point near Savoy east along Great Northern Ry. to Wagner.

Savoy, 2.5 miles east of, 300 feet west of old road crossing, on south side of public road, in eighth post from fence corner; spike . . . . .	2, 335. 70
Coburg, 1.5 miles west of, north of white and blue house, 50 feet east of signboard marked "518 2/10," south of railway embankment; circle on rock . . . . .	2, 322. 05
Coburg, 0.5 mile west of, south side of public road, south of hand-car stand on railroad; spike in fence post . . . . .	2, 307. 63
Coburg, at northwest corner of station; iron post stamped "2303 HAVRE" . . . . .	2, 309. 816
Coburg, 1 mile east of, at road crossing; spike in signpost . . . . .	2, 307. 41
Eureka, 3.1 miles east of, at water tank dam site, 100 feet south of right of way of Great Northern Ry., 100 feet north of Milk River; iron post stamped "2306" . . . . .	2, 313. 296
Dodson, T. 31 N., R. 27 E., sec. 32, 200 feet east of section house, 75 feet north of railroad; iron post stamped "2287" . . . . .	2, 293. 402
Dodson, 3.5 miles east of, at corner of fence near gate in front of Errickson's house, near Great Northern Ry.; iron post stamped "2288" . . . . .	2, 294. 497
Wagner, opposite third telegraph pole west of station, 200 feet north of track; iron post . . . . .	2, 283. 957

Coburg south to mouth of White Bear Creek, thence east along south side of Milk River to point near Malta.

Fort Belknap agency, 17 miles east of, station 2575, on spur of ridge at east side of mouth of White Bear Creek Valley, 150 feet south of road; iron post stamped "2340 HAVRE".....	Feet. 2,345.958
Fort Belknap agency, 20 miles east of, station 2802; iron post stamped "2332 HAVRE".....	2,338.310
Dodson, 7.2 miles southwest of, 24 miles east of Fort Belknap, 1 mile west of Peoples Creek, on end of ridge 25 feet east of station 3015; iron post stamped "2333 HAVRE".....	2,339.225
Dodson, 3.2 miles west of, at water tank dam site, on south side of river, edge of bank at ford by old water tank; iron post stamped "2281".....	2,288.231

**GILDFORD QUADRANGLE.**

**Burnham west along south side of T. 33 N.**

T. 33 N., R. 13 E., southwest corner of sec. 31, 0.75 mile south of Kremlin siding; iron post stamped "2877 HAVRE".....	2,882.994
T. 33 N., R. 12 E., southwest corner of sec. 34; iron post stamped "2950 HAVRE".....	2,955.918
T. 33 N., R. 12 E., southwest corner of sec. 31; iron post stamped "2871 HAVRE".....	2,877.037

**Southwest corner of T. 33 N., R. 13 E., north to Milk River.**

T. 33 N., R. 13 E., 180 feet north of northwest corner of sec. 19; iron post stamped "2722 HAVRE".....	2,728.054
T. 33 N., R. 13 E., 16 feet north of northwest corner of sec. 6; iron post stamped "2684 HAVRE".....	2,690.092
T. 34 N., R. 13 E., 20 feet north of northwest corner of sec. 19; iron post stamped "2684 HAVRE".....	2,690.142

**Southwest corner of T. 33 N., R. 12 E., north to Milk River.**

T. 33 N., R. 12 E., southwest corner of sec. 18; iron post stamped "2861 HAVRE".....	2,866.925
T. 34 N., R. 12 E., southwest corner of sec. 31, in draw running east and west; iron post stamped "2867 HAVRE".....	2,872.846
T. 34 N., R. 12 E., southwest corner of sec. 18, 1,000 feet west of small reservoir; iron post stamped "2758 HAVRE".....	2,763.900
T. 35 N., R. 12 E., southwest corner of sec. 31, north side of draw east and west; iron post stamped "2744 HAVRE".....	2,749.909
T. 35 N., R. 12 E., southwest corner of sec. 18; iron post stamped "2734 HAVRE".....	2,739.797
T. 36 N., R. 12 E., southwest corner of sec. 31; iron post stamped "2731 HAVRE".....	2,736.818

**Kremlin south along west side of R. 13 E. to sec. 18.**

T. 32 N., R. 13 E., southwest corner of sec. 18; iron post stamped "2868 HAVRE".....	2,873.985
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**Southwest corner of T. 33 N., R. 12 E., south to northwest corner of sec. 19, T. 32 N., R. 12 E.**

Holden's ranchhouse, 0.4 mile south of, 500 feet east of northwest corner of sec. 19; iron post stamped "2753 HAVRE".....	2,759.024
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**Point 3.5 miles west of Fresno northeast along section and quarter section line to Sprague ranch (portion of line).**

	Feet.
Burnham, 7.5 miles west of, west end of Burnham base line, southwest of road crossing, on top of knoll; iron post stamped "2793 HAVRE".....	2,798.969
T. 33 N., R. 13 E., near southeast corner of sec. 10, Chain Lake triangulation station, on large knoll east of Chain Lake; iron post stamped "2731 HAVRE".....	2,737.394

**John Brown's ranch up Milk River to international boundary line.**

T. 34 N., R. 13 E., north of southeast corner of sec. 22; iron post stamped "2554 HAVRE".....	2,560.110
T. 34 N., R. 13 E., NW. $\frac{1}{4}$ sec. 17, 50 feet south of Tom Watson's ranch; iron post stamped "2566 HAVRE".....	2,572.002
T. 35 N., R. 12 E., south side of sec. 35, 80 feet south of Patrick Connolly's ranch, on north side of Milk River; iron post stamped "2577 HAVRE".....	2,581.591
Connolly's ranch, 4 miles northwest of, 300 feet west of Percy Wilson's ranch, 100 feet east of river bank; iron post stamped "2591 HAVRE".....	2,595.571
Connolly's ranch, 7.5 miles northwest of, 1 mile north of spring coulee, 150 feet west of river bank, 75 feet north of cut bank on west bank of river, at south end of third bottom south of Simpson Bros.' ranch; iron post stamped "2591 HAVRE".....	2,595.644
Connolly's ranch, 12 miles northwest of, 15 feet west of road from Havre to Simpson Bros.' ranch, 0.2 mile southwest of ranch, 100 feet west of river on west bank; iron post stamped "2615 HAVRE".....	2,619.716
Connolly's ranch, 16 miles northwest of, at south end of third river bottom south of Johnson's ranch, 500 feet north of north point where river runs against second cut bank north of Simpson Bros.' ranch, 400 feet west of river bank; iron post stamped "2629 HAVRE".....	2,633.619
Connolly's ranch, 20 miles northwest of, 900 feet northeast of Peter Johnson's ranch, at mouth of coulee (road from Chester to Johnson's ranch runs through coulee 500 feet south of river bank); iron post stamped "2660 HAVRE".....	2,664.705

NOTE.—The remainder of this line is a single spur.

Kennedy's Coulee, 9.5 miles southeast of, 300 feet northeast of south end of third cut bank northwest of Johnson's ranch, southwest of small shanty on north bank of river, 0.5 mile northwest of large coulee which empties into river on north bank, 200 feet south of river bank; iron post stamped "2659 HAVRE".....	2,663.678
Kennedy's Coulee, 6.5 miles southeast of, 120 feet west of Alex Swain's house, 400 feet north of river bank, 0.5 mile southwest of monument on international boundary line; iron post stamped "2684 HAVRE".....	2,688.706
Kennedy's Coulee, 3 miles southeast of, 250 feet northwest of John B. Wasesha's ranch, at northwest corner of garden fence, 10 feet south of road in river valley; iron post stamped "2694 HAVRE".....	2,698.618
Kennedy's Coulee, near mouth of, 600 feet north of log cabin, 80 feet south of ditch on south side of river (Spencer's winter ranch is on north side of river on Canadian territory); iron post stamped "2713 HAVRE".....	2,717.614

## HAYS QUADRANGLE.

Point near Montauk east along Great Northern Ry. to point 1.5 miles east of Savoy.

	Feet.
Wayne Creek, 0.5 mile east of, south right of way fence; iron post stamped "2341 HAVRE".....	2, 347. 661
Savoy, 1.5 miles west of, first crossroads west of village, 50 feet south of south right of way fence; circle on rock.....	2, 332. 68
Savoy, 0.5 mile west of, directly south of trestle 524; circle on northeast corner of wagon bridge.....	2, 323. 44
Savoy, 0.5 mile east of, 200 feet west of trestle 520, beside rail driven in ground, 50 feet south of railroad; iron post stamped "2319 HAVRE"...	2, 325. 961

Sec. 28, T. 32 N., R. 22 E., southeast along Chinook Canal line to White Bear Creek.

Fort Belknap agency, 0.75 mile southeast of, at station 1383, 600 feet north of stock yards; iron post stamped "2361 HAVRE".....	2, 367. 026
Fort Belknap agency, 4 miles east of, at station 1635, on hillside, 500 feet south of main road; iron post stamped "2356 HAVRE".....	2, 362. 070
Fort Belknap agency, 8 miles east of, at station 1860, on hillside, east side of 3 mile coulee; iron post stamped "2351 HAVRE".....	2, 357. 230
Fort Belknap agency, 12 miles southeast of, 1,000 feet southwest of point where agency ditch strikes foothills, at station 2085; iron post stamped "2346 HAVRE".....	2, 352. 259
Fort Belknap agency, 16 miles southeast of, 800 feet east of White Bear Creek, station 2322; iron post stamped "2342 HAVRE".....	2, 347. 986

## LONESOME LAKE QUADRANGLE.

Box Elder southwest along Great Northern Ry. to Missouri River Commission bench mark 17/2, near Virgelle.

Big Sandy, 0.2 mile south of station, 0.3 mile north of milepost 32, 100 feet west of railroad at north road crossing, in corner of fence; iron post.....	2, 701. 588
Verona, about 8 miles southwest of Big Sandy, on top of small knoll; iron post.....	2, 716. 935
Verona, 2 miles south of, 1,000 feet north of switch signal, on west side of track, 150 feet south of road crossing, 50 feet east of track; iron post.....	2, 712. 915
Cairo, 1 mile southeast of reservoir, 2 miles northwest of railroad, 10 feet south of fence; iron post.....	2, 730. 173
Cairo, 2.4 miles from reservoir, 1 mile west of railroad, 1,500 feet southwest of sheep shed, 250 feet southeast of station 492, 10 feet south of corner of fence; iron post.....	2, 713. 150
Virgelle, 0.5 mile below station, on left bank of river, 600 feet east of sheep shed, 0.2 mile from V. Blankenbaker's ranch; subsurface mark under iron post (Missouri River Commission bench mark 17/2).....	2, 534. 132

Black Coulee east to Big Sandy (Marías subproject levels).

Lonesome Prairie, 10 miles west of Big Sandy, 0.5 mile west of "Twelve Mile" Coulee, 15 feet south of road from Big Sandy to Black Coulee; iron post.....	2, 861. 990
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Virgelle west along Lower Marías preliminary canal route to southwest corner of T. 27 N., R. 10 E.

Tps. 26 and 27 N., R. 11 E., 10 feet north of quarter corner between secs. 33 and 4; iron post stamped "2805".....	2, 817. 767
T. 26 N., R. 11 E., 10 feet west of quarter corner between secs. 5 and 6; iron post stamped "2835".....	2, 847. 678

T. 26 N., R. 10 E., NE. $\frac{1}{4}$ NE. $\frac{1}{4}$ sec. 13, on south bank at large coulee, 800 feet south of quarter corner in north line of sec. 13; iron post stamped "2854" .....	Feet. 2, 866. 699
T. 26 N., R. 10 E., SW. $\frac{1}{4}$ NE. $\frac{1}{4}$ sec. 16, top of small round hill in southeast slope at range between Missouri River and Marias River, 900 feet south of Fort Benton road, at point where it crosses ridge; iron post stamped "2980" .....	2, 992. 768
<b>Southwest corner of sec. 18 T. 32 N., R. 13 E., south along west line of R. 13 E. to Big Sandy.</b>	
T. 32 N., R. 13 E., southwest corner of sec. 31; iron post stamped "2795 HAVRE" .....	2, 800. 877
T. 31 N., R. 13 E., southwest corner of sec. 18; iron post stamped "2728 HAVRE" .....	2, 733. 960
T. 31 N., R. 13 E., southwest corner of sec. 31; iron post stamped "2788 HAVRE" .....	2, 793. 972
T. 30 N., R. 13 E., southwest corner of sec. 18; iron post stamped "2752 HAVRE" .....	2, 758. 000
T. 30 N., R. 13 E., southwest corner of sec. 31; iron post stamped "2791 HAVRE" .....	2, 796. 870
T. 29 N., R. 13 E., southwest corner of sec. 18; iron post stamped "2704 HAVRE" .....	2, 709. 927
T. 28 N., R. 13 E., northwest corner of sec. 6; iron post stamped "2872 HAVRE" .....	2, 877. 894
<b>Southwest corner of T. 32 N., R. 13 E., east to sec. 34.</b>	
T. 32 N., R. 13 E., southwest corner of sec. 34; iron post stamped "2837 HAVRE" .....	2, 842. 964
<b>Northwest corner of sec. 19 south along west side of R. 12 E. and east along south side of T. 29 N., R. 12 E.</b>	
T. 32 N., R. 12 E., southwest corner of sec. 31; iron post stamped "2876 HAVRE" .....	2, 881. 979
T. 31 N., R. 12 E., southwest corner of sec. 18; iron post stamped "2844 HAVRE" .....	2, 850. 050
T. 31 N., R. 12 E., southwest corner of sec. 31; iron post stamped "2844 HAVRE" .....	2, 850. 043
T. 30 N., R. 12 E., southwest corner of sec. 18; iron post stamped "2852 HAVRE" .....	2, 858. 016
T. 30 N., R. 12 E., southwest corner of NW. $\frac{1}{4}$ sec. 31; iron post stamped "2852 HAVRE" .....	2, 857. 982
T. 29 N., R. 12 E., southwest corner of N.W. $\frac{1}{4}$ sec. 18, west end of lake bed of Lonesome Lake, east end of fence of Armentrout's ranch; iron post stamped "2753 HAVRE" .....	2, 758. 905
T. 29 N., R. 12 E., southwest corner of NW. $\frac{1}{4}$ sec. 31; iron post stamped "2851 HAVRE" .....	2, 857. 028
T. 29 N., R. 12 E., southwest corner of SE. $\frac{1}{4}$ sec. 33; 150 feet northeast of wagon road from Ihmsen's ranch to Big Sandy; iron post stamped "2851 HAVRE" .....	2, 856. 961
T. 28 N., R. 13 E., northwest corner of sec. 6, 3 miles north of Big Sandy; iron post stamped "2872 HAVRE" .....	2, 877. 894

**Northwest corner T. 28 N., R. 12 E., south along west side of R. 12 E. and along section lines in R. 12 E. to Missouri River Commission bench mark 17/2.**

T. 28 N., R. 12 E., southwest corner of sec. 18; iron post stamped "2913 HAVRE".....	Feet. 2,918.886
T. 28 N., R. 12 E., southwest corner of sec. 31; iron post stamped "3003 HAVRE".....	3,008.962
T. 27 N., R. 12 E., southeast corner of sec. 7; iron post stamped "2744 HAVRE".....	2,746.546
Verona, in front of rail rest; top of spike (Great Northern Railway bench mark).....	2,723.6
T. 27 N., R. 12 E., southeast corner of sec. 20; iron post stamped "2657 HAVRE".....	2,662.762

**Along south and west sides of T. 28 N., R. 11 E., to Lonesome Prairie Marias canal bench mark in T. 29 N., R. 11 E.**

T. 28 N., R. 11 E., southwest corner of sec. 34; iron post stamped "3031 HAVRE".....	3,036.973
T. 28 N., R. 11 E., southwest corner of sec. 31; iron post stamped "2987 HAVRE".....	2,992.432
T. 28 N., R. 11 E., northwest corner of sec. 19; iron post stamped "2917 HAVRE".....	2,922.683
T. 28 N., R. 11 E., northwest corner of sec. 6; iron post stamped "2859 HAVRE".....	2,864.451

**Around Tps. 29 and 30 N., R. 10 E., via east, north, and west sides to Marias canal and to southwest corner T. 29 N., R. 10 E.**

T. 29 N., R. 11 E., northwest corner of sec. 19; iron post stamped "2848 HAVRE".....	2,853.567
T. 29 N., R. 11 E., northwest corner of sec. 6; iron post stamped "2867 HAVRE".....	2,873.376
T. 30 N., R. 10 E., northeast corner of sec. 24; iron post stamped "2896 HAVRE".....	2,901.853
T. 30 N., R. 10 E., northeast corner of sec. 1; iron post stamped "2956 HAVRE".....	2,961.919
T. 30 N., R. 10 E., northwest corner of sec. 3; iron post stamped "2957 HAVRE".....	2,963.229
T. 30 N., R. 10 E., 700 feet west of northwest corner of sec. 6; iron post stamped "3011 HAVRE".....	3,017.115
T. 30 N., R. 10 E., southwest corner of sec. 18; iron post stamped "2957 HAVRE".....	2,963.316
T. 30 N., R. 10 E., southwest corner of sec. 31; iron post stamped "2864 HAVRE".....	2,870.588
T. 29 N., R. 10 E., southwest corner of sec. 18; iron post stamped "2880 HAVRE".....	2,886.074

**Southwest corner of sec. 31, T. 27 N., R. 10 E., east to Lippards.**

T. 27 N., R. 10 E., southeast corner of sec. 33; iron post stamped "2989 HAVRE".....	2,994.663
T. 26 N., R. 10 E., southwest corner of sec. 15; iron post stamped "2990 HAVRE".....	2,995.980
Lippards, on Great Northern Railway, 400 feet north of Missouri River; Missouri River Commission bench mark 11/2 (reading taken from inside of post at bottom).....	2,561.053
Top of cap of iron post.....	2,565.134

**Lonesome Lake circuit west in T. 29 N., R. 11 E., near contour 2780.**

T. 29 N., R. 11 E., 1.8 miles west of Lonesome Lake, west end of circuit, south side of drain; iron post stamped "2774 HAVRE".....	Feet. 2, 779. 940
T. 29 N., R. 11 E., 3 miles west of Lonesome Lake, on north side of drain; iron post stamped "2773 HAVRE".....	2, 779. 190

**Around Lonesome Lake east and north in T. 27 N., R. 12 E.**

T. 29 N., R. 12 E., 0.5 mile southwest of Johnsons; iron post stamped "2782 HAVRE".....	2, 788. 100
Lonesome Lake, 1.5 miles east of northeast corner of, on hill sloping south; iron post stamped "2779 HAVRE".....	2, 785. 100

**West line of R. 10 E. east to sec. 7, T. 29 N., R. 10 E. (single spur line).**

Black Coulee divide, T. 29 N., R. 10 E., sec. 7, 367 feet south, 13° 27' west of northeast corner, east side of divide, on knoll; iron post stamped "2890".....	2, 895. 036
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**SOOSE MOUNTAINS QUADRANGLE.****Northwest corner of T. 26 N., R. 10 E., west and north along Lower Marias preliminary canal route to point east of Black Coulee in T. 29 N.**

Tps. 26 and 27 N., Rs. 9 and 10 E., corner of; iron post stamped "2963"....	2, 976. 250
T. 26 N., R. 9 E., SW. $\frac{1}{4}$ NW. $\frac{1}{4}$ sec. 11, end of preliminary canal line, station 2059; iron post stamped "2970".....	2, 983. 498
T. 26 N., Rs. 8 and 9 E., secs. 1, 12, 6, and 7, 5 feet west of corner stone; iron post stamped "2967".....	2, 979. 765
T. 27 N., R. 8 E., 4.5 feet west of northeast corner of sec. 25; iron post stamped "3053".....	3, 066. 030
T. 27 N., R. 9 E., 280 feet east of southwest corner of sec. 6; iron post stamped "3035".....	3, 047. 838
T. 27 N., R. 9 E., 120 feet south of town line, 0.2 mile east of northwest corner of sec. 5; iron post stamped "3106".....	3, 119. 176
T. 28 N., R. 9 E., 5 feet east of northwest corner of sec. 28; iron post stamped "2991".....	3, 004. 218
T. 28 N., R. 9 E., 5 feet west of southwest corner of sec. 10; iron post stamped "2965".....	2, 977. 902
T. 28 N., R. 9 E., 5 feet west of northwest corner of sec. 2; iron post stamped "2945".....	2, 961. 129
T. 29 N., R. 9 E., southwest corner of sec. 22, is S. 26° 30' W., 1,626 feet from post which is 30 feet northwest of corner of Godfrey's fence, 35 feet from east edge of Black Coulee; iron post stamped "2884".....	2, 899. 536

**Southwest corner of T. 29 N., R. 10 E., south 12 miles along west side of R. 10 E.**

T. 28 N., R. 10 E., southwest corner of sec. 18; iron post stamped "2918 HAVRE".....	2, 924. 406
T. 28 N., R. 10 E., southwest corner of sec. 31; iron post stamped "2956 HAVRE".....	2, 962. 139
T. 27 N., R. 10 E., southwest corner of sec. 18; iron post stamped "3077 HAVRE".....	3, 082. 966
T. 27 N., R. 10 E., southwest corner of sec. 31; iron post stamped "2970 HAVRE".....	2, 976. 250

Sec. 11, T. 29 N., R. 5 E., east along Marias canal route to west line of R. 10 E.<sup>1</sup>

T. 29 N., R. 6 E., 2 feet west of southeast corner of sec. 16, 0.5 mile northeast of J. C. Quaig's house; iron post.....	2, 787. 143
T. 29 N., R. 7 E., southeast of center of sec. 17, 0.5 mile north of James Townsend's house, at fork of road, below Cottonwood or Sweetgrass Creek; iron post.....	2, 743. 226
Forger's ranch house, 1,000 feet southeast of, at big bend in Marias River, 100 feet southeast of small reservoir, 8 feet north of road, 160 feet north of river, on opposite side of river from goblet-shaped rock, about 800 feet to northwest; iron post.....	2, 697. 260

Sec 17, T. 29 N. R. 7 E., northeast to west line of R. 10 E.<sup>2</sup>

H. Brinkman's place, ford above, on south side of river, southeast of road; nail in cottonwood.....	2, 739. 292
Ranch house formerly owned by C. Brinkman, 400 feet northeast of; nail in root of cottonwood tree 2.5 feet in diameter.....	2, 706. 257
Marias dam site, west end of, on east slope of hill; iron post stamped "2896".	2, 909. 520
Forger's ranch, 0.5 mile above, south side of road, on south side of river; iron post stamped "2684." (This bench mark is thought to be same as one in previous line, though descriptions seem to conflict.).....	2, 697. 260
T. 29 N., R. 8 E., 0.5 mile above Forger's ranch, on north side of river, on hill, corner between secs. 16 and 17; iron post stamped "2887".....	2, 900. 488
Marias River, 0.5 mile north of, 0.8 mile northwest of Thorn's ranch; iron post stamped "2878".....	2, 891. 286
Dutch Henry's ranch, 0.5 mile north of, north side of Marias River, on bluff; iron post stamped "2897".....	2, 910. 302
Black Coulee, west side of, 2,000 feet northwest of cabin, 2 miles from Godfrey's ranch; iron post stamped "2862".....	2, 876. 018
T. 29 N., R. 9 E., 390 feet south, 42° 10' east of northwest corner of sec. 11; iron post stamped "2856".....	2, 870. 295.

## THIBEDEAU LAKE QUADRANGLE.

## Havre west along Great Northern Ry. to Fresno.

Havre, 0.4 mile east of passenger station, southeast corner of foundation of Great Northern Railway water tank; bronze tablet stamped "2483 HAVRE".....	2, 488. 650
Havre, northwest corner of grounds of United States Weather Bureau; iron post stamped "2487 HAVRE".....	2, 493. 024
Havre, 1 mile west of, 40 feet north of road crossing; railroad spike in east end of culvert.....	2, 484. 89
Havre, 3.2 miles west of, at road crossing, 65 feet south of railroad track, west side of wagon road, near wire fence; iron post stamped "2495 HAVRE".....	2, 501. 006
Pacific Junction, south side of track; nail in switch block.....	2, 525. 3
Pacific Junction, 2 miles west of, 270 feet east of Big Sandy Creek, 40 feet north of milepost 967, north side of track, by wire fence; iron post stamped "2500 HAVRE".....	2, 506. 043
Burnham, 1 mile east of, 2,000 feet east of first road crossing east of Burnham, north of milepost 970, on edge of railroad right of way fence; iron post stamped "2610 HAVRE".....	2, 616. 086

<sup>1</sup> These elevations can not be depended upon until supported by further field work, on account of a 2-foot error arbitrarily localized in this line.

<sup>2</sup> On account of a 2-foot error arbitrarily localized at the end of this line, these elevations can not be depended upon until supported by further field work. A central portion of this line was relevelled.

Burnham, 1 mile west of, east end of base line at Burnham, 20 feet north of south fence of railroad right of way; iron post stamped "2645 HAVRE".	2, 651. 265
Fresno, T. 32 N., R. 14 E., near northwest corner of sec. 6 (unbounded), north side of railroad track, northwest corner of right-of-way fence, at road crossing; iron post stamped "2671 HAVRE".....	2, 677. 042

**Havre east along Great Northern Ry. to Toledo.**

Havre, 1 mile east of, bridge 587; bolt in west end of north guard rail.....	2, 487. 72
Havre, 3 miles east of, 100 feet south of track, 250 feet southeast of milepost 427, south side of wagon road, beside wire fence; iron post stamped "2470 HAVRE".....	2, 475. 974
Toledo, west end of switch at road crossing, 120 feet north of track, beside wire fence; iron post stamped "2459 HAVRE".....	2, 465. 014

**Havre north along road and east boundary of R. 15 E., thence southeast along Yantic road to sec. 5, T. 33 N., R. 17 E.**

T. 33 N., R. 15 E., southeast corner of sec. 25, at fence corner; iron post stamped "2745 HAVRE".....	2, 750. 905
Havre, 6 miles north of, 80 feet north of gate; iron post stamped "2882 HAVRE".....	2, 888. 128
Havre, 8 miles north of, southwest corner of T. 34 N., R. 16 E., iron post stamped "2767 HAVRE".....	2, 772. 927
Havre, 11 miles north of, T. 34 N., R. 16 E., southeast corner of sec. 13, T. 34 N., R. 16 E., 450 feet north of Yantic road; iron post stamped "2727 HAVRE".....	2, 733. 216
Havre, 11 miles north of, south quarter corner on north side of sec. 28, T. 34 N., R. 16 E., northwest side of crossroads; iron post stamped "2681 HAVRE".....	2, 686. 979
Yantic, 9.5 miles northwest of, near center of sec. 36, T. 34 N., R. 16 E., on slight ridge, 6 feet south of road; iron post stamped "2589 HAVRE".....	2, 595. 016
T. 33 N., R. 17 E., NE. $\frac{1}{4}$ sec. 5, 12 feet north of road; iron post stamped "2558 HAVRE".....	2, 563. 693

**Pacific Junction southwest along Great Northern Ry. to Assinniboine.**

Assinniboine, 35 feet south of station, 13 feet east of track, near telegraph pole; iron post stamped "2586 HAVRE".....	2, 591. 972
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**Southwest corner of sec. 18, T. 34 N., R. 16 E., north along range line, thence east along north boundary of T. 34 N., to sec. 3, R. 17 E., T. 34 N.**

T. 34 N., R. 16 E., 1,300 feet south of northwest corner, at top of ridge; iron post stamped "2713 HAVRE".....	2, 719. 061
Tps. 34 and 35 N., R. 16 E., 340 feet west of quarter corner, between secs. 3 and 34; iron post stamped "2653 HAVRE".....	2, 659. 016
Tps. 34 and 35 N., R. 17 E., 330 feet east of quarter corner, between secs. 6 and 31; iron post stamped "2723 HAVRE".....	2, 729. 051
Tps. 34 and 35 N., R. 17 E., 330 feet west of the corner of, secs. 3, 4, 33, and 34, at top of ridge; iron post stamped "2717 HAVRE".....	2, 722. 989

**Havre south along public road 3 miles, thence west to Assinniboine.**

T. 32 N., R. 16 E., SW. $\frac{1}{4}$ sec. 20, at northwest corner of intersection of roads; iron post stamped "2735 HAVRE".....	2, 741. 113
T. 32 N., R. 15 E., SW. $\frac{1}{4}$ sec. 24, 0.5 mile north of Ryan's sheep sheds, in southeast corner of crossroads; iron post stamped "2654 HAVRE".....	2, 658. 543

**Point south of Havre southeast along south side of Saddle Mountain to sec. 25, T. 32 N., R. 16 E.**

Havre, 4 miles southeast of, 10 feet east of road running into Stocklan's ranch, 20 feet south of log cabin, at foot of hill, on north side of fence; iron post stamped "2576 HAVRE".....	2, 581. 987
Havre, 5 miles southeast of, north part of sec. 25, T. 32 N., R. 16 E., at forks of roads; iron post stamped "2867 HAVRE".....	2, 873. 128

**Point 3.5 miles west of Fresno northeast to Sprague's ranch (portion of line).**

T. 33 N., R. 13 E., 400 feet south of quarter corner on north side of sec. 23; 20 feet north of road; iron post stamped "2677 HAVRE".....	2, 683. 027
T. 33 N., R. 13 E., near northeast corner of sec. 13, 17 miles northwest of Havre, 60 feet west of D. D. Sprague's ranch, on Milk River; iron post stamped "2528 HAVRE".....	2, 534. 069

**Sprague's ranch north along east line of R. 13 E. to sec. 12, T. 34 N., R. 13 E., thence east 6 miles, south 5 miles, and east to southeast corner of T. 34 N., R. 15 E.**

T. 33 N., R. 13 E., sec. 1, 50 feet south of John Brown's ranch house; iron post stamped "2536 HAVRE".....	2, 542. 067
T. 34 N., R. 13 E., 900 feet southwest of southeast corner of NW. $\frac{1}{4}$ sec. 25, on prominent knoll; iron post stamped "2703 HAVRE".....	2, 709. 127
T. 34 N., R. 13 E., 130 feet northwest of quarter corner on east side of sec. 12, on prominent knoll; iron post stamped "2830 HAVRE".....	2, 836. 088
T. 34 N., R. 14 E., 50 feet northeast of southeast corner of sec. 9; iron post stamped "2895 HAVRE".....	2, 901. 077
T. 34 N., R. 14 E., 120 feet northwest of southeast corner of sec. 12; iron post stamped "2828 HAVRE".....	2, 834. 156
Red Rock triangulation station, T. 34 N., R. 14 E., 273 feet east of quarter corner south side of sec. 25, on a prominent knoll, on divide between Milk River and Red Rock Coulee, 5 miles north of Milk River and 0.6 mile south of Havre Road; iron post stamped "2945 HAVRE".....	2, 951. 095
T. 33 N., R. 14 E., 500 feet northeast of southeast corner of sec. 1, at bottom of coulee; iron post stamped "2801 HAVRE".....	2, 807. 203
T. 33 N., R. 15 E., 30 feet east of southwest corner of sec. 3, about 500 feet north of east and west ridge, in red granite boulder 18 by 24 by 6 inches above surface; bronze tablet stamped "2858 HAVRE".....	2, 863. 770

**Sec. 25, T. 34 N., R. 13 E., north along range line to northwest corner of sec. 1, T. 37 N., R. 13 E., thence east along boundary line between United States and Canada to northwest corner of sec. 1, T. 37, R. 15 E., thence south to point between secs. 31 and 6, Tps. 34 and 35 N., R. 16 E.**

T. 24 N., R. 13 E., 900 feet southwest of southeast corner of NW. $\frac{1}{4}$ sec. 25, on prominent knoll; iron post stamped "2703 HAVRE".....	2, 709. 127
T. 34 N., R. 13 E., 130 feet north west of southeast corner of sec. 12, on prominent knoll; iron post stamped "2830 HAVRE".....	2, 836. 55
T. 35 N., R. 13 E., 1,500 feet west of northwest corner of sec. 25, 0.4 mile east of gate, 0.5 mile southeast of lake, 600 feet north of fork of road, on prominent knoll; iron post stamped "2849".....	2, 854. 507
T. 35 N., Rs. 13 and 14 E., corner of secs. 7, 18, 12, and 13; iron post stamped "2917".....	2, 922. 677
T. 36 N., R. 13 E., in sec. 25, 1.2 miles south of fence corner, at reservoir, on prominent knoll; iron post stamped "2993".....	2, 998. 879

T. 36 N., R. 13 E., in sec. 13, 1,500 feet north of dry lake on range line, on prominent knoll; iron post stamped "3038".....	Feet. 3,044.759
T. 37 N., R. 13 E., 900 feet northeast of southwest corner of sec. 25, near old dry lake bed; iron post stamped "2793".....	2,798.511
T. 37 N., R. 13 E., 600 feet south of northwest corner of sec. 13, 1 mile southeast of Phifer's ranch, on old road; iron post stamped "2798".....	2,803.920
T. 37 N., Rs. 13 and 14 E., 3 feet south of corner, on United States and Canada boundary line; iron post stamped "2821".....	2,827.326
T. 37 N., R. 14 E., in sec. 4, 1 mile east of monument on United States and Canada boundary line, 700 feet north of coulee running northwest-southeast, on top of hill; iron post stamped "2835".....	2,840.847
T. 37 N., R. 14 E., about northeast corner of sec. 1, 1 mile east of monument on United States and Canada boundary line, 0.4 mile east of and 0.2 mile north of coulee; iron post stamped "2849".....	2,855.106
T. 37 N., R. 15 E., about NE. $\frac{1}{4}$ sec. 5, monument on United States and Canada boundary line; stake in ground marked "2807".....	2,812.87
T. 37 N., R. 15 E., about NW. $\frac{1}{4}$ sec. 3, 0.4 mile east of monument, 0.8 mile east of road, on United States and Canada boundary line; iron post stamped "2781".....	2,786.903
T. 37 N., R. 15 E., about NE. $\frac{1}{4}$ sec. 2, at corner of fence by monument on United States and Canada line, 600 feet west of West Fork Creek; Canadian bench mark, concrete plate with iron bolt in center, marked "2738 C".....	2,757.930
T. 37 N., R. 15 E., in vicinity of sec. 2, 1 mile south of United States and Canada boundary line, 0.8 mile west of West Fork Creek, 600 feet south of small coulee; iron post stamped "2745".....	2,751.334
T. 37 N., R. 15 E., in vicinity of southwest corner of sec. 13, 3 miles south of United States and Canada boundary line, 1 mile north of Creedmans Coulee, on top of hill; point on rock marked "2744"; location marked by big pile of rock.....	2,750.33
T. 37 N., R. 15 E., about northwest corner of sec. 25, 4 miles south of Canadian line, north bank of Creedmans Coulee, 1.3 miles southeast of house, and 1 mile west of second house, 0.3 mile north by 0.3 mile and west of wire fence; iron post stamped "2725".....	2,733.378
T. 36 N., R. 15 E., in vicinity of southwest corner of sec. 1, 7 miles south of United States and Canada boundary line, at top of long hill, 3 miles south of big coulee; iron post stamped "2889".....	2,894.849
T. 36 N., R. 15 E., in vicinity of south side of sec. 24, 10 miles south of United States and Canada boundary line, on east side of coulee, 1,000 feet west of dry lake bed, on prominent knoll; iron post stamped "2763".....	2,768.621
T. 35 N., R. 16 E., 0.2 mile northeast of southwest corner of sec. 6, top of hill; iron post stamped "2785".....	2,790.745
T. 35 N., R. 16 E., 700 feet north of quarter corner of secs. 19 and 26; iron post stamped "2715".....	2,721.217
Havre, 13.8 miles north of, 1,300 feet south of corner of T. 35 N., R. 16 E., at top of ridge; iron post stamped "2713 HAVRE".....	2,719.061
<b>Sec. 2, T. 37 N., R. 15 E., east along United States and Canada boundary line to northwest corner of sec. 4, R. 17 E.</b>	
T. 37 N., R. 15 E., about sec. 1 (unbounded), 600 feet east of creek, 10 feet north of coulee, 30 feet south of United States and Canada boundary line, top of hill; point on top of iron pin marked "2763".....	2,769.19
T. 37 N., R. 16 E., about sec. 6 (unbounded), 1 mile east of West Fork Creek, on United States and Canada boundary line, beside loose pile of rocks; iron post stamped "2783".....	2,789.213

T. 37 N., R. 16 E., about NE. $\frac{1}{4}$ sec. 5, 600 feet east of coulee, 20 feet south of monument; point on top of large rock marked "2785".....	Feet. 2, 790. 61
T. 37 N., R. 16 E., about northeast corner of sec. 4 (unbounded), at top of big hill, 4.4 miles east of West Fork Creek, on United States and Canada boundary line, 0.5 feet south of monument; iron post stamped "2812" ..	2, 817. 581
T. 37 N., R. 17 E., northwest corner of sec. 6, 6 feet south of United States and Canada boundary line, 0.4 mile east of coulee, 0.5 mile west of Wood Pile Coulee, 100 feet north of old road; iron post stamped "2824".....	2, 829. 684
T. 37 N., R. 17 E., 0.2 mile east of quarter corner of sec. 6, 0.3 mile east of Wood Pile Coulee, top of hill, at fence corner, 4 feet north of road; point on stone marked "2849".....	2, 854. 83
T. 37 N., R. 17 E., corner of secs. 5 and 6; point on stone marked "2861" ..	2, 867. 29
T. 37 N., R. 17 E., corner of secs. 4 and 5, on United States and Canada boundary line; point on corner stone marked "2880".....	2, 885. 998

## ZURICH 30' QUADRANGLE.

## Toledo east along Great Northern Ry. to Zurich.

Yantic, 2.8 miles west of, at private road crossing, 65 feet south of track, west side of wagon road, by wire fence; iron post stamped "2458 HAVRE".....	2, 463. 944
Yantic, in front of station; top of rail.....	2, 449. 2
Yantic, 600 feet east of station, 50 feet north of track, south side of wagon road at crossing, beside telegraph pole; iron post stamped "2440 HAVRE".....	2, 446. 086
Chinook, 3.8 miles west of, north side of wagon road, 2 feet west of gate entrance to Empire ranch; iron post stamped "2417 HAVRE".....	2, 423. 007
Chinook, northwest corner of Montana Hotel; iron post stamped "2422 HAVRE".....	2, 428. 037
Chinook, 3 miles east of, 90 feet east of milepost 406, 40 feet east of irrigation ditch, south side of road, beside wire fence; iron post stamped "2394 HAVRE".....	2, 400. 464
North Fork, east end of siding, 200 feet northeast of milepost 403, north side of wagon road, by fence corner; iron post stamped "2388 HAVRE" ..	2, 394. 362
Zurich, 150 feet west of switch stand, 150 feet north of railroad, north side of public road; iron post stamped "2382 HAVRE".....	2, 388. 555

## Sec. 5, T. 33 N., R. 17 E., east along north boundary of T. 33 N. and south to Chinook.

Tps. 33 and 34 N., R. 17 E., corner of secs. 1, 2, 35, and 36; iron post stamped "2594 HAVRE".....	2, 600. 092
T. 33 N., R. 18 E., northwest corner of sec. 5; iron post stamped "2622 HAVRE".....	2, 627. 996
T. 34 N., R. 18 E., northwest corner of sec. 36; iron post stamped "2721 HAVRE".....	2, 727. 051
Chinook, 3 miles northwest of, 150 feet east of southwest corner of sec. 8, T. 33 N., R. 19 E.; iron post stamped "2476 HAVRE".....	2, 482. 093

## Northeast corner of sec. 4, T. 34 N., R. 17 E., east along township line to northwest corner of T. 35 N., R. 21 E.

Tps. 34 and 35 N., R. 18 E., quarter corner of secs. 6 and 31; iron post stamped "2664 HAVRE".....	2, 670. 113
Tps. 34 and 35 N., R. 18 E., 800 feet east of corner of secs. 3, 4, 33, and 34, on east bank of West Fork Creek, on line; iron post stamped "2606 HAVRE".....	2, 612. 034
T. 35 N., R. 18 E., southeast corner of; iron post stamped "2554 HAVRE" ..	2, 560. 016

Tps. 34 and 35 N., R. 19 E., 950 feet east of quarter corner of secs. 3 and 34, on line; iron post stamped "2656 HAVRE".....	Feet. 2,662.141
Tps. 34 and 35 N., R. 20 E., quarter corner of secs. 6 and 31; iron post stamped "2789 HAVRE".....	2,795.184
Tps. 34 and 35 N., R. 20 E., at quarter corner of secs. 3 and 34, 8 feet east of Gibb's road; iron post stamped "2838 HAVRE".....	2,844.190
T. 35 N., R. 21 E., 1,300 feet east of northwest corner, at top of ridge, on line; iron post stamped "2781 HAVRE".....	2,787.228

**Point 1.5 miles south of Bice coal mine east and north to Toledo.**

T. 32 N., R. 17 E., 170 feet northeast of southeast corner of sec. 24, on top of prominent knoll; iron post stamped "2912 HAVRE".....	2,918.157
T. 32 N., R. 18 E., 150 feet west of southeast corner of sec. 21, section corner marked with mound of rock; iron post stamped "2802 HAVRE".....	2,807.097
T. 32 N., R. 18 E., 300 feet south of northeast corner of sec. 25; iron post stamped "2769 HAVRE".....	2,775.251
T. 32 N., R. 19 E., quarter mile south of center of sec. 21, 600 feet west of county road running south from Chinook to Rhoeder's coal mine; iron post stamped "2727 HAVRE".....	2,733.300

**Toledo south, east, and north to Chinook.**

Chinook, 3 miles south of, near northeast corner of sec. 15, T. 32 N., R. 19 E., 15 feet east of road, on prominent knoll; iron post stamped "2605 HAVRE".....	2,611.380
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**Southwest corner of T. 34 N., R. 19 E., east along township line to southeast corner of T. 34 N., R. 20 E.**

T. 34 N., R. 19 E., 40 feet east of southeast corner of sec. 33, on south side of fence line; iron post stamped "2494 HAVRE".....	2,499.969
T. 34 N., R. 19 E., 0.2 mile south of sec. 36, North Fork triangulation signal; iron post stamped "2693 HAVRE".....	2,699.394
T. 34 N., R. 20 E., 100 feet northeast of southeast corner of sec. 33; iron post stamped "2654 HAVRE".....	2,660.060
T. 34 N., R. 20 E., 350 feet west of southeast corner of sec. 36, on rise of ground; iron post stamped "2675 HAVRE".....	2,681.095

**Southeast corner of sec. 22, T. 32 N., R. 21 E., west to point 5.5 miles south of Chinook.**

T. 32 N., R. 21 E., southeast corner of sec. 19, 0.2 mile east of telephone line from Chinook to Herschburg, on A. Winters's sheep ranch; iron post stamped "2594 HAVRE".....	2,600.366
T. 32 N., R. 20 E., 250 feet northeast of southeast corner of sec. 21, at top of prominent knoll; iron post stamped "2677 HAVRE".....	2,683.290
T. 32 N., R. 19 E., southeast corner of sec. 24, 0.2 mile east of road from Chinook to Kerr's coal mine; iron post stamped "2752 HAVRE".....	2,758.322

**Chinook southeast along proposed Chinook canal to sec. 8, T. 32 N., R. 21 E.**

Chinook, 3 miles southeast of, head of proposed Chinook canal, at south end of Winters-Anderson dam on south bank of Milk River; iron post stamped "2398 HAVRE".....	2,403.930
Chinook, 6 miles southeast of, sec. 10, T. 32 N., R. 20 E., station 240, 3 feet north of road; iron post stamped "2384 HAVRE".....	2,390.021
T. 32 N., R. 21 E., sec. 8, 1,000 feet north of hill road running to agency, on hillside at station 453; iron post stamped "2379 HAVRE".....	2,385.165

**Northwest corner of sec. 4, T. 37 N., R. 17 E., east along United States and Canada boundary line to sec. 2, T. 37 N., R. 19 E.**

T. 37 N., R. 17 E., 6 feet south of corner of secs. 3 and 4, on United States and Canada boundary line, 1,000 feet east of monument; iron post stamped "2876".....	2, 881. 405
T. 37 N., R. 17 E., corner of secs. 2 and 3, on United States and Canada boundary line; point on corner stone marked "2866".....	2, 870. 86
T. 37 N., R. 17 E., north quarter corner of sec. 2, at top of hill, 10 feet south of monument; point on stone marked "2882".....	2, 887. 47
T. 37 N., R. 17 E., corner of secs. 1 and 2, on United States and Canada boundary line, 10 feet west of monument; point on corner stone marked "2860".....	2, 864. 27
T. 37 N., Rs. 17 and 18 E., north corner of, 1,500 feet west of North Fork Creek, 40 feet south of corner stone, 700 feet west of monument; iron post stamped "2803".....	2, 806. 924
T. 37 N., R. 18 E., 2.1 miles east of northwest corner, 100 feet south of coulee, 0.5 mile east of monument, at Canadian section corner; top of iron pin marked "2858".....	2, 862. 14
T. 37 N., R. 18 E., 3 miles east of northwest corner, 1,300 feet east of monument, 600 feet west of Canadian section corner, 40 feet north of road, 30 feet south of Canadian line, near lake bed; iron post stamped "2885"....	2, 888. 802
T. 37 N., R. 18 E., about 0.6 mile west of northeast corner, top of hill, 1,500 feet north of reservoir, on United States and Canada boundary line 10 feet south of monument; iron post stamped "2894".....	2, 898. 201
T. 37 N., R. 19 E., about 0.5 mile east of northwest corner, top of hill, on United States and Canada boundary line, 10 feet south of monument, at triangulation signal; iron post stamped "2909".....	2, 913. 312
T. 37 N., R. 19 E., about 2 miles east of northwest corner, 100 feet east of Canadian section corner, on top of hill; point on rock marked "2898;" location marked by pile of rock.....	2, 902. 11
T. 37 N., R. 19 E., about sec. 13, 0.6 mile east of East Fork Creek, at top of hill, on United States and Canada boundary line, near fence corner; iron post stamped "2844".....	2, 850. 529
T. 37 N., R. 19 E., about sec. 33, at top of hill, on United States and Canada boundary line, triangulation signal; iron post stamped "2859".....	2, 864. 659
T. 37 N., R. 19 E., about sec. 2, on United States and Canada boundary line, 600 feet east of monument; iron post stamped "2844".....	2, 849. 810

**Northwest corner of sec. 1, T. 37 N., R. 17 E., south to quarter corner between secs. 6 and 31, Tps. 34 and 35 N., R. 18 E.**

T. 37 N., R. 17 E., corner of secs. 1, 2, 11, and 12; point on section stone marked "2771".....	2, 775. 36
T. 37 N., R. 17 E., corner of secs. 11, 12, 13, and 14; point on section stone marked "2763".....	2, 766. 90
T. 37 N., R. 17 E., corner of secs. 13, 14, 23, and 24, 4 feet south of section corner; iron post stamped "2753".....	2, 756. 737
T. 37 N., R. 17 E., quarter corner between secs. 23 and 24; point on section stone marked "2761".....	2, 764. 86
T. 37 N., R. 17 E., quarter corner between secs. 35 and 36; top of corner stone marked "2716".....	2, 720. 19
T. 36 N., R. 17 E., about sec. 1, 4 feet south of standard corner secs. 35 and 36 of surveyed township 37; iron post stamped "2695".....	2, 698. 809
T. 36 N., R. 17 E., 1 mile south of northeast corner, top of hill, 400 feet south of coulee; point on top of stone marked "2700".....	2, 703. 75

T. 36 N., R. 18 E., about SW. $\frac{1}{4}$ sec. 18, on range line, top of big hill; iron post stamped "2688" .....	Feet. 2, 693. 380
T. 36 N., R. 18 E., about SW. $\frac{1}{4}$ sec. 31, 0.6 mile south of road, 0.3 mile north of road, 300 feet east of coulee; iron post stamped "2622" .....	2, 626. 910
T. 35 N., R. 18 E., about SW. $\frac{1}{4}$ sec. 18, 0.3 mile south of West Fork Creek, top of hill near wire fence; iron post stamped "2607" .....	2, 611. 460
Tps. 34 and 35 N., R. 18 E., quarter corner between secs. 6 and 31; iron post stamped "2664 HAVRE" .....	2, 670. 113
<b>Quarter corner between secs. 6 and 31, Tps. 34 and 35 N., R. 20 E., north along range line to sec. 2, T. 37 N., R. 19 E.</b>	
Tps. 34 and 35 N., R. 20 E., quarter corner between secs. 6 and 31; iron post stamped "2789 HAVRE" .....	2, 795. 184
Tps. 34 and 35 N., Rs. 19 and 20 E., top of township corner stone .....	2, 770. 80
T. 35 N., R. 19 E., 1,000 feet west of quarter corner on east side of sec. 24, 800 feet north of old road; iron post stamped "2712" .....	2, 718. 346
T. 35 N., R. 19 E., 0.5 mile southwest of northeast corner of sec. 1, 0.6 mile north of Choteau Coulee, at top of hill; iron post stamped "2724" .....	2, 730. 271
T. 36 N., R. 19 E., about center of sec. 24, 300 feet northeast of small coulee; iron post stamped "2709" .....	2, 715. 485
T. 36 N., R. 19 E., about south side of sec. 1, 0.4 mile north of Corral Coulee, 0.2 mile south of lake; iron post stamped "2719" .....	2, 724. 863
T. 37 N., R. 19 E., about sec. 23, near wire fence, 900 feet southwest of east corner of, 530 feet south of big coulee; iron post stamped "2746" ..	2, 751. 727
<b>Sec. 2, T. 37 N., R. 19 E., east along Canadian line to sec. 5, T. 37 N., R. 21 E.</b>	
T. 37 N., R. 20 E., about sec. 6, 60 feet north of United States and Canada boundary line; point on top of iron pin (Canadian section corner) marked "2813" .....	2, 819. 50
T. 37 N., R. 20 E., about sec. 5, on United States and Canada boundary line; southwest corner of monument, marked "2794" .....	2, 800. 39
T. 37 N., R. 20 E., about sec. 5, on United States and Canada boundary line, 60 feet south of Canadian section corner; iron post stamped "2790" ..	2, 796. 074
T. 37 N., R. 20 E., about sec. 4, on United States and Canada boundary line, 0.3 mile west of monument; point on iron stake (Canadian section corner) marked "2804" .....	2, 810. 48
T. 37 N., R. 20 E., about center of north side of, on United States and Canada boundary line; southwest corner of monument, marked "2815" ..	2, 820. 87
T. 37 N., R. 20 E., about sec. 3, on United States and Canada boundary line, 0.6 mile east of monument; point on iron pin (Canadian section corner) marked "2829" .....	2, 835. 19
T. 37 N., R. 20 E., about sec. 2, 600 feet east of coulee, on prominent knoll, on United States and Canada boundary line, 6 feet south of monument; iron post stamped "2883" .....	2, 888. 807
T. 37 N., R. 21 E., about sec. 6, 0.7 mile west of monument; point on iron pin (Canadian section corner) marked "2962" .....	2, 967. 80

**Denton, Dog Creek, Judith, and Lewiston Quadrangles.**

**FERGUS COUNTY.**

The elevations in the following list are based on bench mark 33/1 of the Missouri River Commission at Judith Landing, the elevation of which is accepted as 2,420.506 feet, a figure 4 feet higher than that published in the annual report of the Chief of Engineers, United States Army, for 1894. Orthometric corrections have been applied.

The leveling was done in 1905 by F. E. Fellows.

## DENTON QUADRANGLE.

Point near Kendall electric power house along road northwest to Denton, thence northeast to open prairie.

Kendall, 5.3 miles northwest of electric power house, 600 feet southeast of schoolhouse, 130 feet south of Grinnel's house, north of road; iron post stamped "3597 BUTTE".....	Feet. 3, 600. 208
Kendall, 7.5 miles northwest of electric power house, south side of forks of road, 80 feet south of gate of Bank ranch; iron post stamped "3547 BUTTE".....	3, 550. 193
Deerfield, 2.9 miles northwest of, 160 feet northwest of bridge crossing Judith River, 70 feet north of road, 20 feet east of gate; iron post stamped "3232 BUTTE".....	3, 235. 183
Deerfield, 5.8 miles northwest of, 0.3 mile southeast of summit, 25 feet south of road; iron post stamped "3666 BUTTE".....	3, 669. 187
Denton, 2.7 miles southeast of, 1 mile west of log cabin, 30 feet north of road; iron post stamped "3594 BUTTE".....	3, 597. 172
Denton, 0.4 mile northeast of, jog in fence line on east side of road, at fence corner; iron post stamped "3512 BUTTE".....	3, 515. 161
Denton, 3.6 miles northeast of, 0.2 mile south of log house, 15 feet east of road; iron post stamped "3586 BUTTE".....	3, 589. 158
Denton, 6.6 miles northeast of, 20 feet east of road, top of mesa; iron post stamped "3737 BUTTE".....	3, 740. 151
Denton, 10.1 miles northeast of, 10 feet east of road, top of mesa; iron post stamped "3671 BUTTE".....	3, 674. 139
Denton, 13.6 miles northeast of, 25 feet west of road, top of mesa; iron post stamped "3628 BUTTE".....	3, 631. 124

## DOG CREEK QUADRANGLE.

Point 7 miles southeast of Judith south to open prairie.

Judith, 9.9 miles southeast of, 200 feet west of top of ridge, 20 feet north of road, in top of sandstone boulder; bronze tablet stamped "3451 BUTTE".....	3, 453. 945
Judith, 12.8 miles southeast of, 1 mile north of Brown's ranch, 20 feet northeast of road; iron post stamped "3387 BUTTE".....	3, 390. 029
Judith, 16 miles southeast of, 25 feet west of road, in open prairie; iron post stamped "3441 BUTTE".....	3, 444. 034
Judith, 19.9 miles southeast of, 470 feet west of log house, 170 feet west of gate; iron post stamped "3277 BUTTE".....	3, 280. 049
Judith, 22.7 miles southeast of, 20 feet west of road, in open prairie, iron post stamped "3459 BUTTE".....	3, 462. 079

## JUDITH QUADRANGLE.

Judith southeast along roads 7 miles via Christina to Horseshoe Bar ranch.

Judith Landing, in northwest corner of J. R. Norris's front yard on right bank of river; inside iron post, at bottom (Missouri River Commission bench mark 33/1).....	2, 420. 506
Judith, 3.8 miles southeast of, 200 feet west of head of gulch, 15 feet south of road; iron post stamped "3150 BUTTE".....	3, 152. 993
Judith, 7 miles southeast of, 20 feet east of road, 8 feet east of gate, 2 feet north of wire fence; iron post stamped "3247 BUTTE".....	3, 249. 997

## Open prairie north along highway to Judith.

Denton, 16.6 miles northeast of, 25 feet east of road, in open prairie; iron post stamped "3570 BUTTE".....	Feet. 3, 573. 112
Everson, 4.2 miles south of, 1 foot west of corner of secs. 22, 23, 26, and 27, T. 21 N., R. 15 E., 50 feet south of corner of wire fence; iron post stamped "3551 BUTTE".....	3, 554. 098
Everson, 0.2 mile southwest of, 400 feet south of coulee, 20 feet east of road, in sandstone 6 by 12 by 20 inches set 16 inches in ground; bronze triangulation tablet stamped "3298 BUTTE".....	3, 301. 092
Everson, 3.3 miles northeast of, 650 feet southeast of corner of wire fence, in sandstone 12 by 16 by 16 inches; aluminum tablet stamped "2793 BUTTE".....	2, 796. 079
Everson, 6.6 miles northeast of, 0.2 mile west of Judith River, 600 feet north of mouth of coulee; iron post stamped "2525 BUTTE".....	2, 528. 082
Judith, 2.5 miles southwest of, 150 feet east of irrigating ditch, 20 feet east of road, on point of bench; iron post stamped "2484 BUTTE".....	2, 487. 068

## LEWISTON QUADRANGLE.

## Open prairie south along road to point 2 miles west of Kendall electric plant.

Judith, 26 miles southeast of, 25 feet east of road, 10 feet west of wire fence, 0.5 mile north of Stevens's ranch, east point of ridge; iron post stamped "3391 BUTTE".....	3, 394. 090
Judith, 29.2 miles southeast of, 0.5 mile northwest of Cook ranch house, 50 feet east of road, top of slight ridge; iron post stamped "3481 BUTTE".....	3, 484. 099
Christina, 1.1 miles north of, 800 feet northwest of board shack, 400 feet south of drain, 30 feet east of road; iron post stamped "3561 BUTTE".....	3, 564. 117
Christina, 1.6 miles south of, 250 feet south of gate, 30 feet west of road; iron post stamped "3641 BUTTE".....	3, 644. 115
Christina, 4.9 miles south of, 0.5 mile west of cabin, 40 feet west of road; iron post stamped "3778 BUTTE".....	3, 781. 037
Christina, 8.6 miles south of, 0.2 mile north of forks of road leading west to Kendall, top of ridge, 2 feet east of wire fence; iron post stamped "4205 BUTTE".....	4, 208. 150
Christina, 11.6 miles south of, 0.2 mile north of forks of road, 25 feet south of gate, 20 feet east of road; iron post stamped "4069 BUTTE".....	4, 072. 169
Log schoolhouse, 0.2 mile southeast of, east of road, turn in telephone line at forks of road, 1 foot west of wire fence; iron post stamped "4036 BUTTE".....	4, 039. 179
Horseshoe Bar ranch house, 0.5 mile southeast of, 150 feet south of forks of road, at northeast corner of white house; iron post stamped "3776 BUTTE".....	3, 779. 098
Kendall, 2.2 miles west of electric power house, 100 feet south of irrigating canal, 20 feet south of gate at forks of road; iron post stamped "3693 BUTTE".....	3, 696. 116

**Blackfoot, Chouteau, Collins, Conrad, Cutbank, Dupuyer, Galata, Goodale, Heart Butte, Hogan, Saypo, and Sweetgrass Quadrangles.**

## CASCADE, LEWIS AND CLARK, AND TETON COUNTIES.

The elevations in the following list were determined by primary leveling forming part of a net extending from Butte to the United States and Canada boundary line. They accord with preliminary

adjustment values of 1911 for bench marks of the Coast and Geodetic Survey precise-level line in the vicinity of Butte. An orthometric correction has been applied between Butte and the boundary.

The leveling by the United States Geological Survey was done in the Blackfoot quadrangle in 1901 by Goyne Drummond and in 1907 by H. G. Parry; in the Chouteau quadrangle in 1901 by S. H. Martin; in the Collins quadrangle in 1900 by S. H. Martin; in the Cutbank quadrangle in 1907 and 1909 by H. G. Parry; in the Dupuyer quadrangle in 1901 by S. H. Martin; in the Goodale quadrangle in 1900 by S. H. Martin; in the Heart Butte quadrangle in 1904 by G. H. Kendall; in the Hogan quadrangle in 1900 and 1901 by S. H. Martin; and in the Saypo quadrangle in 1901 by S. H. Martin. Leveling by the Reclamation Service was done in 1901 in the Blackfoot and Sweet-grass quadrangles; in 1901, 1902, and 1905 in the Cutbank quadrangle; in 1903 in the Conrad and Galata quadrangles; and in 1905 in the Blackfoot, Chouteau, Collins, Hogan, and Saypo quadrangles; leveling by the United States and Canada Boundary Survey in 1910 in the Blackfoot and Cutbank quadrangles.

#### BLACKFOOT QUADRANGLE.

**Browning east along highway to Blackfoot, thence northwest along main road to Greasewood Creek.**

	Feet.
Browning, 3.8 miles east of agency, 0.4 mile south of road, 30 feet north of house; iron post stamped "4243 GN".....	4, 252. 880
Blackfoot, 150 feet south of water tank; iron post stamped "4149 GN"....	4, 158. 808
Blackfoot, 3 miles northwest of, 2 miles north of forks of road, 60 feet east of road; iron post stamped "4259 GN".....	4, 268. 697
Blackfoot, 6 miles northwest of, 400 feet south of Cutbank Creek, 150 feet east of house; iron post stamped "4181 GN".....	4, 190. 893

**Greasewood Creek east to southeast corner of T. 34 N., R. 11 W., thence north 6 miles, east 12 miles, north 12 miles, and west 15 miles to T. 37 N., R. 11 W.**

T. 33 N., R. 11 W., northeast corner of; iron post stamped "4201".....	4, 203. 544
T. 34 N., R. 11 W., quarter corner on east side of sec. 13, 2 feet south of corner stone; iron post stamped "4354".....	4, 356. 051
T. 34 N., R. 11 W., 3 feet east of northeast corner of; iron post stamped "4399".....	4, 401. 064
T. 34 N., R. 10 W., near northeast corner of sec. 4, 300 feet west of creek, 1,500 feet southwest of corral; iron post stamped "4210".....	4, 211. 982
T. 34 N., R. 10 W., northeast corner of; iron post stamped "4246".....	4, 247. 742
T. 34 N., R. 9 W., northeast corner of sec. 4; iron post stamped "4413".....	4, 415. 232
T. 34 N., R. 9 W., northeast corner of; iron post stamped "4215".....	4, 217. 304
T. 35 N., R. 9 W., northeast corner of sec. 24, in corner stone; aluminum tablet stamped "4403".....	4, 404. 807
T. 35 N., R. 9 W., northeast corner of; iron post stamped "4126".....	4, 128. 328
T. 36 N., R. 9 W., northeast corner of sec. 13; iron post stamped "4140".....	4, 141. 997
T. 37 N., R. 9 W., southeast corner of, standard corner at intersection of second guide meridian and 9th standard parallel; iron post stamped "4256".....	4, 258. 429

T. 36 N., R. 9 W., northeast corner of, closing corner at intersection of second guide meridian and 9th standard parallel; iron post stamped "4235".....	Feet. 4, 236. 679
T. 37 N., R. 9 W., southeast corner of sec. 34; iron post stamped "4128" ..	4, 129. 960
T. 36 N., R. 10 W., northeast corner of, closing corner of 9th standard parallel; iron post stamped "4172".....	4, 173. 788
T. 37 N., R. 10 W., southeast corner of, standard corner of 9th standard parallel; iron post stamped "4163".....	4, 165. 368
T. 37 N., R. 11 W., southeast corner of; iron post stamped "4525".....	4, 526. 613

**Northeast corner of T. 35 N., R. 9 W., east 5 miles, thence south 0.3 mile to Reclamation Service bench mark 700 feet northwest of fork of coulee.**

T. 35 N., R. 8 W., northeast corner of sec. 4; iron post stamped "4023"....	4, 024. 932
T. 35 N., R. 8 W., about sec. 2, 700 feet northwest of fork of coulee, 3 miles southeast of Clay Butte; iron post.....	4, 017. 388

**Northeast corner of sec. 2, T. 35 N., R. 8 W., east 3 miles.**

T. 35 N., R. 8 W., northeast corner of; iron post stamped "3995.6".....	3, 997. 574
T. 35 N., R. 7 W., 3 feet east of northeast corner of sec. 4; iron post stamped "3993".....	3, 994. 913

**Northeast corner of T. 32 N., R. 7 W., west along township line to Blackfoot.**

T. 33 N., R. 7 W., 3 feet east of southeast corner of sec. 32; iron post stamped "3956".....	3, 959. 468
T. 32 N., R. 8 W., northeast corner of, closing corner of 8th standard parallel; iron post stamped "4007".....	4, 010. 510
T. 33 N., R. 8 W., southeast corner of, standard corner of 8th parallel; General Land Office iron post stamped "3987".....	3, 990. 118
T. 33 N., R. 8 W., 520 feet S. 40° E. of southeast corner of sec. 34, on side of hill 500 feet north of large lake; iron post stamped "3973".....	3, 976. 412
T. 32 N., R. 9 W., northeast corner of, closing corner of 8th standard parallel; iron post stamped "4183".....	4, 186. 119
T. 33 N., R. 9 W., southeast corner of, standard corner of 8th standard parallel; iron post stamped "4161".....	4, 164. 467
T. 33 N., R. 9 W., 315 feet S. 39° 30' E. from southeast corner of sec. 33 (magnetic bearing), in large conglomerate stone; aluminum tablet stamped "4194".....	4, 197. 487
T. 32 N., R. 10 W., northeast corner of, closing corner of 8th standard parallel; iron post stamped "4105".....	4, 108. 409
T. 33 N., R. 10 W., southeast corner of, standard corner of 8th standard parallel; iron post stamped "4111".....	4, 114. 226

**Standard bench marks in the Blackfoot quadrangle established by the Reclamation Service.**

T. 36 N., R. 10 W., sec. 19, 0.6 mile south of South Fork of Milk River, 600 feet west of McLeod road; iron post stamped "4418 GN".....	4, 428. 472
T. 36 N., R. 10 W., sec. 22, 1.3 miles south of South Fork of Milk River, 3 miles east of McLeod road; iron post stamped "4414 GN".....	4, 424. 524
T. 36 N., R. 9 W., sec. 16, 600 feet south of divide between South Fork of Milk River and Cutbank Creek, 20 feet east of Croff's ranch road to Browning; iron post stamped "4400 GN".....	4, 410. 406
T. 36 N., R. 8 W.; sec. 21, about 4 miles south of Landslide triangulation station, 0.6 mile north of Chalk Buttes; iron post stamped "4183 GN" ..	4, 193. 554
T. 37 N., R. 7 W., sec. 32, on top of head of west bluff of Rocky Coulee, 2 miles south of South Fork of Milk River; iron post stamped "4170 GN" ..	4, 180. 687

**Point 6 miles northwest of Blackfoot east along Cutbank Creek to Allison ranch  
(unadjusted line closing 1 foot low).**

Blackfoot, 6 miles northwest of, 400 feet south of Cutbank Creek, 150 feet east of house; iron post stamped "4181 GN".....	Feet. 4, 190. 893
T. 34 N., R. 8 W., sec. 31, along trail on flat between Cabell's and Perrine's ranches, 0.9 mile west of Perrine's house, on east side of north and south fence; iron post.....	3, 924. 540
T. 35 N., R. 8 W., about sec. 2, 2,700 feet northwest of fork of coulee, 3 miles southeast of Clay Butte; iron post.....	4, 017. 388

**Divide between Little and Big Rocky coulees west to sec. 8, T. 35 N., R. 7 W.**

T. 35 N., R. 7 W., about NW. $\frac{1}{4}$ sec. 9, 1 mile northeast of Little Rocky Coulee, 1 mile southwest of divide; iron post.....	3, 937. 545
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**Sec. 2, T. 37 N., R. 11 W., east along United States and Canada boundary to sec. 3,  
T. 37 N., R. 7 W.**

T. 37 N., R. 11 W., sec. 1, 10 feet west of monument 370; standard Boundary Survey post.....	4, 298. 363
T. 37 N., R. 10 W., northwest corner of sec. 6; General Land Office standard post.....	4, 306. 872
T. 37 N., R. 10 W., northwest corner of sec. 5; point on section stone.....	4, 388. 46
T. 37 N., R. 10 W., north side of sec. 5, at monument 369A, in south side of foundation; bronze tablet.....	4, 513. 109
T. 37 N., R. 10 W., northwest corner of sec. 4; top of section stone.....	4, 597. 61
T. 37 N., R. 10 W., sec. 4, in south side of foundation of monument 369; bronze tablet.....	4, 492. 470
T. 37 N., R. 10 W., northwest corner of sec. 3; point on top of section stone.....	4, 472. 27
T. 37 N., R. 10 W., sec. 2, in south side of foundation of monument 368A; bronze tablet.....	4, 486. 211
T. 37 N., R. 10 W., northwest corner of sec. 1, south of corner stone; top of iron stake.....	4, 437. 25
T. 37 N., R. 9 W., 800 feet west of northeast corner of sec. 6, in south side of foundation of monument 368; bronze tablet.....	4, 448. 526
T. 37 N., R. 9 W., northwest corner of sec. 6; iron post.....	4, 431. 696
T. 37 N., R. 9 W., northwest corner of sec 5, south of section stone; iron stake.....	4, 352. 96
T. 37 N., R. 9 W., sec. 5, in south side of foundation of monument 367B; bronze tablet.....	4, 369. 710
T. 37 N., R. 9 W., northwest corner of sec. 4; point on top of section stone..	4, 342. 84
T. 37 N., R. 9 W., sec. 4, in south side of foundation of monument 367A; bronze tablet.....	4, 340. 162
T. 37 N., R. 9 W., northwest corner of sec. 3; point on top of section stone..	4, 338. 60
T. 37 N., R. 9 W., northeast corner of sec. 2; top of section stone.....	4, 333. 84
T. 37 N., R. 9 W., 990 feet west of northeast corner of sec. 3, at monument 367; iron post.....	4, 349. 686
T. 37 N., R. 9 W., quarter corner on north side of sec. 6; iron stake.....	4, 145. 89
T. 37 N., R. 9 W., sec. 1, south side of foundation of monument 366A; iron post.....	4, 123. 142
T. 37 N., R. 8 W., northwest corner of sec. 6; General Land Office iron post.....	4, 059. 751
T. 37 N., R. 8 W., northwest corner of sec. 5; top of section stone.....	4, 023. 00

	Feet.
T. 37 N., R. 8 W., sec. 5, south side of foundation of monument 366; Boundary Survey iron post.....	4, 059. 171
T. 37 N., R. 8 W., northwest corner of sec. 4; top of section stone.....	3, 986. 90
T. 37 N., R. 8 W., sec. 4, south side of foundation of monument 365A; Boundary Survey iron post.....	4, 007. 605
T. 37 N., R. 8 W., northwest corner of sec. 3; top of section stone.....	4, 005. 42
T. 37 N., R. 8 W., northwest corner of sec. 2; top of section stone.....	3, 992. 23
T. 37 N., R. 8 W., sec. 2, in south side of foundation of monument 365; Boundary Survey iron post.....	4, 053. 488
T. 37 N., R. 8 W., northwest corner of sec. 1; top of section stone.....	3, 995. 99
T. 37 N., R. 8 W., sec. 31, in south side of monument 364A; Boundary Survey iron post.....	3, 985. 947
T. 37 N., Rs. 7 and 8 W., secs. 1 and 6, at township corner; iron post.....	3, 951. 517
T. 37 N., R. 7 W., northwest corner of sec. 5; top of section stone.....	3, 929. 55
T. 37 N., R. 7 W., near northwest corner of sec. 5, south side of monument 364; Boundary Survey iron post.....	3, 925. 969
T. 37 N., R. 7 W., 2,450 feet east of northwest corner of sec. 5, at foot of hill, west bank of Milk River, north side of lane; point on large stone.....	3, 893. 22
T. 37 N., R. 7 W., northwest corner of sec. 4; top of section stone.....	3, 931. 62
T. 37 N., R. 7 W., in south side of foundation of monument 363A; bronze tablet.....	3, 966. 589
T. 37 N., R. 7 W., northwest corner of sec. 3; point on section stone.....	3, 974. 14
T. 37 N., R. 7 W., 1,600 feet east of northwest corner of sec. 3; point on stone.....	3, 967. 43

#### CHOUTEAU QUADRANGLE.

##### Bellevue east along highway to Chouteau.

Bellevue, at large gate entrance to C. W. Gray's residence and post office; iron post stamped "4343 BUTTE".....	4, 346. 058
Bellevue, 2.8 miles east of, corner of fenced ranch, at angle of road near point where road leaves Willow Creek; iron post stamped "4260 BUTTE".....	4, 262. 877
Bellevue, 6 miles east of, on open prairie at foot of grade east side of hill; iron post stamped "4141 BUTTE".....	4, 144. 223
Chouteau, 6.25 miles west of, top of small hill, on north side of road, at angle; iron post stamped "4105 BUTTE".....	4, 108. 145
Chouteau, 3.25 miles west of, near top of grade going west from Chouteau; iron post stamped "4000 BUTTE".....	4, 003. 213
Chouteau, at left entrance to Teton County jail; iron post stamped "3810 BUTTE".....	3, 813. 226

##### Chouteau south along wagon road to Augusta.

Chouteau, 1.5 miles south of, at top of southeast steel pier of iron bridge across Teton River; chiseled cross.....	3, 779. 34
Chouteau, 3.8 miles south of, in corner of fence, at foot of bluff; iron post stamped "3959 BUTTE".....	3, 962. 262
Chouteau, 7.5 miles south of, top of grade on top of big butte south of Chouteau; iron post stamped "4501 BUTTE".....	4, 504. 307
Chouteau, 10.66 miles south of, east side of road, south of coulee; iron post stamped "4560 BUTTE".....	4, 563. 214
Chouteau, 13.8 miles south of, east of road, south of coulee; iron post stamped "4617 BUTTE".....	4, 620. 520
Augusta, 10.35 miles north of, 300 feet east of small lake, northeast corner of fenced ranch; iron post stamped "4368 BUTTE".....	4, 371. 142

Augusta, 6.8 miles north of, west side of road, about 1,000 feet from grade crossing of flat; iron post stamped "4247 BUTTE".....	Feet. 4, 250. 171
Augusta, 4.2 miles north of, 75 feet north of north end of bridge across North Fork of Sun River; iron post stamped "3973 BUTTE".....	3, 976. 391
Augusta, 2.66 miles north of, east side of road near top of grade; iron post stamped "4130 BUTTE".....	4, 133. 136

**Bynum south along stage road to Chouteau.**

Bynum, 500 feet in front of general store and post office, at fence corner; iron post stamped "3981 BUTTE".....	3, 983. 981
Bynum, 3 miles south of, at corner of fenced ranch; iron post stamped "3960 BUTTE".....	3, 963. 649
Bynum, 6.3 miles south of, about 1,200 feet south of large irrigating ditch; iron post stamped "4022 BUTTE".....	4, 024. 919
Chouteau, 5.2 miles north of, top of grade, at point where road comes out of Teton River Valley, corner of section line; iron post stamped "4005 BUTTE".....	4, 007. 645
Chouteau, 1.2 miles north of, north end of fence corner of ranch in valley between Spring Creek and Teton River, west side of road; iron post stamped "3894 BUTTE".....	3, 896. 459

**Sun River project, Teton slope canal line, located in Tps. 23 and 24 N., Rs. 3, 4, and 5 W., by Reclamation Service.<sup>1</sup>**

T. 23 N., R. 5 W., along wire fence line, 75 feet north of corral; iron post stamped "BUTTE 3897".....	3, 900. 049
T. 23 N., Rs. 4 and 5 W., east quarter corner between secs. 12 and 7; iron post stamped "BUTTE 3882".....	3, 885. 186
T. 23 N., R. 4 W., third telephone post, fifth post up fence from angle; iron post stamped "BUTTE 3846".....	3, 849. 304
T. 23 N., R. 4 W., at east gate post, 50 feet south of flume; iron post stamped "BUTTE 3820".....	3, 823. 209
T. 23 N., R. 4 W., corner of secs. 2, 3, 10, and 11; iron post stamped "BUTTE 3797".....	3, 800. 446
T. 23 N., R. 4 W., corner between secs. 1 and 2; iron post stamped "BUTTE 3795".....	3, 797. 924
Tps. 23 and 34 N., R. 4 W., corner of secs. 35, 36, 1, and 2; iron post stamped "BUTTE 3858".....	3, 860. 830
T. 24 N., R. 3 W., southwest corner of sec. 31; iron post stamped "BUTTE 3825".....	3, 828. 105
T. 24 N., R. 3 W., quarter corner between secs. 32 and 33; iron post stamped "BUTTE 3829".....	3, 832. 128

**Sun River project, north side diversion line.<sup>1</sup>**

T. 22 N., R. 7 W., 1,500 feet west and 1,530 feet north of southeast corner of sec. 3; iron post stamped "BUTTE 4376".....	4, 379. 198
T. 22 N., R. 7 W., quarter corner between secs. 23 and 24, 0.5 mile north of Christian's shearing shed, on line stone of Johnnie reservoir No. 2; iron post stamped "BUTTE 4330".....	4, 333. 017

<sup>1</sup> A correction of 3.1 feet has been added to the Reclamation Service values.

## COLLINS QUADRANGLE.

Augusta east to Great Falls (portion of line).<sup>1</sup>

Hefler, in front of post office, at gate entrance to dwelling; iron post.....	3, 591. 790
Hefler, 3 miles east of, gate at west entrance to fenced portion of Fort Shaw Indian Reservation, 200 feet south of Sun River; iron post.....	3, 536. 694
Fort Shaw Indian school, in jamb of south door of blacksmith shop of manual training shop; aluminum tablet.....	3, 501. 916
Fort Shaw, 3 miles east of, on Great Falls-Augusta road, north side of road north, west of mouth of gulch and small bridge; iron post.....	3, 459. 147
Sun River, in center of plaster base of Sun River Mercantile Co.'s store; aluminum tablet.....	3, 409. 442
Sun River, 3.2 miles east of, in front of P. H. Row's residence; iron post..	3, 381. 827
Sunnyside, 65 feet southeast of Sunnyside Store Co.'s store building; iron post.....	3, 346. 890
Sunnyside, 3 miles east of, south foot of hill, between telephone poles 306 and 307; iron post.....	3, 380. 707

Sun River project, Teton slope canal line, located in T. 24 N., Rs. 1 E., 1, 2, and 3 W., by Reclamation Service.<sup>2</sup>

T. 24 N., R. 3 W., quarter corner between secs. 21 and 22; iron post stamped "BUTTE 3787".....	3, 789. 750
T. 24 N., R. 3 W., corner of secs. 16, 15, 21, and 22; iron post stamped "BUTTE 3768".....	3, 771. 374
T. 24 N., R. 3 W., corner of secs. 10, 11, 14, and 15; iron post stamped "BUTTE 3791".....	3, 793. 849
T. 24 N., Rs. 2 and 3 W., quarter corner between secs. 13 and 18; iron post stamped "BUTTE 3795".....	3, 797. 714
T. 24 N., R. 2 W., corner of secs. 17, 18, 19, and 20; iron post stamped "BUTTE 3801".....	3, 803. 859
T. 24 N., R. 2 W., quarter corner between secs. 15 and 16; iron post stamped "BUTTE 3798".....	3, 801. 101
T. 24 N., R. 2 W., quarter corner between secs. 13 and 14; iron post stamped "BUTTE 3787".....	3, 789. 697
T. 24 N., R. 1 W., quarter corner between secs. 17 and 18; iron post stamped "BUTTE 3784".....	3, 787. 593
T. 24 N., R. 1 W., quarter corner between secs. 16 and 17; iron post stamped "BUTTE 3778".....	3, 781. 021
T. 24 N., R. 1 W., corner of secs. 14, 15, 22, and 23; iron post stamped "BUTTE 3779".....	3, 782. 107
T. 24 N., R. 1 W., 68 feet south of corner of secs. 23, 24, 25, and 26; iron post stamped "BUTTE 3777".....	3, 780. 014
T. 24 N., R. 1 W., southeast corner of sec. 25; iron post stamped "BUTTE 3704".....	3, 707. 513
T. 24 N., R. 1 E., quarter corner between secs. 31 and 32; iron post stamped "BUTTE 3736".....	3, 739. 254

## CONRAD QUADRANGLE.

## Shelby east along Great Northern Ry. 4 miles and south along highway to Conrad, thence east to sec. 32, T. 31 N., R. 1 E.

Shelby, 4 miles east of, 6 miles north of Farrell, 50 feet north of Great Northern Railway; iron post stamped "3365 GN".....	3, 375. 903
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<sup>1</sup> This line is based upon adjusted elevation at Augusta, and is not adjusted on account of closure error of -5.727 feet upon corrected elevations at Great Falls.

<sup>2</sup> A correction of 3.1 feet has been added to the Reclamation Service values.

Bridge 96, Great Falls & Canada division, Great Northern Railway, south side of, at west end; 60-penny nail on cap.....	Fect. 3, 128. 30
Conrad, at sectionhouse, sec. 8, T. 30 N., R. 1 W.; spike in telephone pole.....	3, 046. 22
Conrad, 1,000 feet north of water tank, on hill; iron post.....	3, 089. 928
T. 31 N., R. 1 E., sw. $\frac{1}{4}$ sw. $\frac{1}{4}$ sec. 32; 0.3 mile north of Barney & Marsh ranch; iron post.....	3, 092. 956

**CUTBANK QUADRANGLE.**

**Northeast corner of sec. 4 east 3 miles, thence south 1 mile to point near northeast corner of sec. 12, T. 35 N., R. 7 W.**

T. 35 N., R. 7 W., northeast corner of; General Land Office iron post stamped "3930".....	3, 931. 728
T. 35 N., R. 7 W., 400 feet south of northeast corner of sec. 12, 300 feet east of road, 20 feet west of creek, in Big Rocky Coulee; iron post stamped "3838" (set by Reclamation Service).....	3, 840. 246

**Northeast corner of T. 31 N., R. 6 W., north 6 miles, thence west along eighth standard parallel to T. 32 N., R. 7 W.**

T. 32 N., R. 6 W., N. 7° W. from southeast corner of sec. 13, on flat 0.5 mile west of Cutbank Creek, 100 feet south of coulee, in top of stone 20 by 14 by 12 inches; aluminum tablet stamped "3665"; location marked by large monument.....	3, 668. 885
T. 32 N., R. 6 W., northeast corner, closing corner of 8th standard parallel; General Land Office iron post stamped "3712".....	3, 715. 638
T. 33 N., R. 6 W., southeast corner, standard corner of 8th standard parallel; General Land Office iron post stamped "3712".....	3, 715. 157
T. 33 N., R. 6 W., southeast corner of sec. 33, in top of section stone; aluminum tablet stamped "3735".....	3, 738. 752
T. 32 N., R. 7 W., northeast corner of, closing corner of 8th standard parallel; General Land Office iron post stamped "3859".....	3, 862. 680
T. 33 N., R. 7 W., southeast corner of, standard corner of 8th standard parallel; General Land Office iron post stamped "3862".....	3, 865. 778

**Allison's ranch east down Cutbank Creek to Cutbank, thence southeast along Great Northern Ry. to point near Ethridge.**

Cutbank, sec. 1, T. 33 N., R. 6 W., 600 feet north of station, 600 feet southeast of house on north side of track; iron post.....	3, 751. 363
Baltic, 0.5 mile north of, sec. 17, T. 33 N., R. 5 W., on top of divide 500 feet north of railroad; iron post.....	3, 897. 700
T. 33 N., R. 5 W., sec. 23, 500 feet northwest of west end of snow fence, on small butte between two coulees; iron post.....	3, 752. 980
T. 33 N., R. 4 W., about south side of sec. 35, 1 mile west of water tank, 0.75 mile south of big cut, 600 feet north of track; iron post.....	3, 598. 988

**Allison's ranch north up Little Rocky Coulee 3.5 miles.**

T. 35 N., R. 7 W., 3.5 miles north of Cutbank Creek, on Little Rocky Coulee; iron post.....	3, 799. 611
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**Upper Big Rocky Coulee north from mouth to northeast corner of sec. 12, T. 35 N., R. 7 W., thence west to divide.**

T. 34 N., R. 6 W., north side of sec. 9, on left side of draw entering Big Rocky Coulee where coulee makes turn to east; iron post.....	3, 776. 944
T. 35 N., R. 6 W., NE. $\frac{1}{4}$ sec. 21, on small flat 800 feet from creek opposite mouth of big coulee coming in from right; iron post.....	3, 859. 483

T. 35 N., R. 7 W., 400 feet south of northeast corner of sec. 12, 700 feet southeast of small butte, 1 mile north of bend, 1,000 feet west of gap, 300 feet east of road, 20 feet west of creek; iron post.....	Feet. 3, 840. 246
Coyote Springs, 0.5 mile northwest of, 300 feet northwest of fork of creek, on point of small butte; iron post.....	3, 877. 877
<b>Reservation line east along section line 1 mile north of south boundary of T. 34 N. to quarter corner on south side of sec. 26, T. 34 N., R. 5 W.</b>	
T. 34 N., R. 5 W., 500 feet west of quarter corner on south side of sec. 26, on top of small butte on north side of sec. 35, marked by pile of rocks; iron post.....	3, 919. 882
<b>Reservation line east along south side of T. 35 N. to quarter corner on south side of sec. 33, T. 35 N., R. 5 W., thence north 1 mile to sec. 28, T. 35 N., R. 5 W. (unadjusted spur).</b>	
T. 35 N., R. 5 W., south side of sec. 33, on point of small butte 350 feet northeast of quarter corner on right side of coulee; iron post.....	3, 945. 911
T. 35 N., R. 5 W., sec. 28, near center, on canal line surveyed in 1902 by Drummond; iron post. (Drummond's elevation 3,963.209 feet; uncorrected elevation. Record of his 1902 line lost in mail) .....	3, 971. 904
<b>T. 37 N., R. 7 W., east along Milk River canal route to point on railroad south of Coutts.</b>	
T. 36 N., R. 6 W., 600 feet north of quarter corner on east side of sec. 8, 4 miles south of Emerson's ranch, 100 feet west of road to Cutbank; iron post stamped "4025 GN".....	4, 035. 759
T. 36 N., R. 6 W., sec. 14, 30 feet northeast of Don Leach's house; iron post stamped "4023 GN".....	4, 033. 557
T. 37 N., R. 4 W., sec. 32, 1,000 feet north of township line, 2 miles north of Fitzpatrick's ranch, 20 feet west of road to Coutts, Canada; iron post stamped "3949 GN" (redetermined in 1909).....	3, 959. 768
<b>Sec. 32, T. 33 N., R. 4 W., east 4 miles to northwest corner of T. 32 N., R. 3 W., thence north along highways to northwest corner of T. 36 N., R. 3 W., thence west to sec. 32, T. 37 N., R. 4 W.</b>	
T. 33 N., R. 4 W., south side of sec. 35, 1 mile west of water tank, 0.8 mile south of big cut, 600 feet north of track; iron post.....	3, 598. 988
Ethridge, 0.5 mile northeast of water tank, at head of dry lake; point on sandstone boulder 24 by 24 by 12 inches; marked by reference monument.....	3, 530. 73
T. 33 N., R. 4 W., quarter corner of sec. 34; top of corner stone.....	3, 522. 45
T. 33 N., R. 4 W., standard corner of secs. 34 and 35; top of stone.....	3, 524. 28
T. 32 N., R. 4 W., closing corner of secs. 3 and 4; top of stone.....	3, 516. 14
T. 33 N., R. 4 W., 30 feet S. 70° W. of standard quarter corner of sec. 35; point on sandstone 8 by 14 by 4 inches above ground; marked by reference monument.....	3, 525. 50
T. 33 N., R. 4 W., standard corner of secs. 35 and 36; top of stone.....	3, 520. 28
T. 32 N., R. 4 W., closing corner of secs. 1 and 2; top of stone.....	3, 516. 98
T. 33 N., R. 4 W., 20 feet north of standard quarter corner of sec. 36; top of granite boulder; monument.....	3, 527. 31
T. 33 N., Rs. 3 and 4 W., standard corner; top of stone.....	3, 522. 94
T. 32 N., Rs. 3 and 4 W., corner of; iron post stamped "3514".....	3, 515. 625
T. 33 N., R. 4 W., quarter corner between secs. 36 and 31; top of stone....	3, 517. 94
T. 33 N., Rs. 3 and 4 W., corner of secs. 25, 36, 30, and 31; top of corner stone.....	3, 523. 90

T. 33 N., Rs. 3 and 4 W., quarter corner between secs. 25 and 30; top of stone .....	Feet. 3, 523. 71
T. 33 N., Rs. 3 and 4 W., corner of secs. 24, 25, 19, and 30; top of corner stone.....	3, 479. 78
T. 33 N., Rs. 3 and 4 W., 2 feet south of corner of secs. 18, 24, 13, and 19; iron post stamped "3382".....	3, 383. 885
T. 33 N., Rs. 3 and 4 W., corner of secs. 12, 13, 7, and 18; top of corner stone.	3, 318. 57
T. 33 N., Rs. 3 and 4 W., quarter corner between secs. 12 and 7; top of corner stone.....	3, 306. 31
T. 33 N., Rs. 3 and 4 W., corner of secs. 1, 12, 6, and 7; top of corner stone.	3, 289. 74
T. 33 N., Rs. 3 and 4 W., quarter corner between secs. 1 and 7; top of corner stone.....	3, 299. 85
Ts. 33 and 34 N., Rs. 3 and 4 W., corner of; iron post stamped "3295"....	3, 296. 926
T. 34 N., Rs. 3 and 4 W., corner of secs. 25, 26, 30, and 31; top of corner stone.....	3, 323. 08
T. 34 N., Rs. 3 and 4 W., corner of secs. 13, 24, 18 and 19; iron post stamped "3374".....	3, 375. 910
T. 34 N., Rs. 3 and 4 W., corner of secs. 12, 13, 7, and 18; top of corner stone.	3, 394. 70
T. 34 N., Rs. 3 and 4 W., quarter corner between secs. 1 and 7; top of corner stone.....	3, 388. 72
Tps. 34 and 35 N., Rs. 3 and 4 W., corner of; iron post stamped "3427"...	3, 428. 919
Tps. 33 and 34 N., R. 4 W., 6 feet south of quarter corner between secs. 2 and 35; top of granite rock.....	3, 502. 78
Davidson's ranch, 1 mile north of, on road 1 mile south of Big Spring, 0.5 mile south of road crossing in coulee, in top of boulder; aluminum tablet stamped "3707" and marked by reference monument .....	3, 708. 708
Davidson's ranch, 1.8 miles north of, on road to Big Spring, on point of bluff, 1,000 feet south and 10° east of, 20 feet west of road; top of granite rock 14 by 18 by 16 inches above ground.....	3, 788. 21
T. 35 N., R. 4 W., quarter corner between secs. 2 and 3; top of corner stone.	4, 187. 92
Tps. 35 and 36 N., R. 4 W., corner of secs. 2, 3, 34, and 35; top of corner stone.....	4, 185. 85
Tps. 35 and 36 N., R. 4 W., quarter corner between secs. 2 and 35; top of corner stone.....	4, 178. 32
Tps. 35 and 36 N., R. 4 W., corner of secs. 35, 36, 2, and 1; top of corner stone.....	4, 155. 10
Tps. 35 and 36 N., Rs. 3 and 4 W., corner of secs. 36, 31, 1, and 6; iron post stamped "4191".....	4, 192. 689
T. 36 N., Rs. 3 and 4 W., quarter corner between secs. 31 and 36; top of corner stone.....	4, 206. 93
T. 36 N., Rs. 3 and 4 W., corner of secs. 25, 30, 36, and 31; top of corner stone.....	4, 195. 33
T. 36 N., Rs. 3 and 4 W., quarter corner between secs. 25 and 30; top of corner stone.....	4, 181. 21
T. 36 N., Rs. 3 and 4 W., corner of secs. 24, 19, 30, and 35; top of corner stone.....	4, 120. 15
T. 36 N., Rs. 3 and 4 W., quarter corner between secs. 19 and 24; top of corner stone.....	4, 059. 66
T. 36 N., Rs. 3 and 4 W., corner of secs. 13, 18, 19, and 24; iron post stamped "4029".....	4, 030. 632
T. 36 N., Rs. 3 and 4 W., quarter corner between secs. 13 and 18; top of corner stone.....	3, 987. 59

T. 36 N., Rs. 3 and 4 W., corner of secs. 12, 7, 18, and 13; top of corner stone.....	Feet. 3,966.97
T. 36 N., Rs. 3 and 4 W., corner of secs. 1, 6, 7, and 12; top of corner stone.....	3,949.38
T. 36 N., Rs. 3 and 4 W., closing corner; iron post stamped "3936".....	3,937.715
T. 37 N., R. 4 W., standard corner; top of corner stone.....	3,898.02
T. 37 N., R. 4 W., quarter corner between secs. 36 and 1; top of corner stone.....	3,872.62
T. 36 N., R. 4 W., closing corner of secs. 1 and 2; top of corner stone.....	3,882.05
T. 37 N., R. 4 W., standard corner of secs. 35 and 36; top of corner stone..	3,846.28
T. 37 N., R. 4 W., quarter corner between secs. 35 and 2; top of corner stone.....	3,879.52
T. 36 N., R. 4 W., closing corner of secs. 2 and 3; top of corner stone.....	3,863.59
T. 37 N., R. 4 W., standard corner of secs. 34 and 35; top of corner stone..	3,898.87
T. 37 N., R. 4 W., quarter corner between secs. 34 and 3; top of corner stone.....	3,927.83
T. 36 N., R. 4 W., closing corner of secs. 3 and 4; top of corner stone.....	3,977.02
T. 37 N., R. 4 W., standard corner of secs. 33 and 34; iron post stamped "3974".....	3,975.28
T. 36 N., R. 4 W., closing corner of secs. 4 and 5; top of corner stone.....	4,047.43
T. 37 N., R. 4 W., standard corner of secs. 32 and 33; top of corner stone..	4,066.38

**Sec. 35, T. 35 N., R. 4 W., west to sec. 36, T. 35 N., R. 5 W.**

Tps. 34 and 35 N., R. 4 W., corner of secs. 2, 3, 34, and 35; top of corner stone.....	3,531.03
Tps. 34 and 35 N., R. 4 W., quarter corner between secs. 34 and 3; top of corner stone.....	3,570.4
Tps. 34 and 35 N., R. 4 W., 4 feet west of corner of secs. 3, 4, 33, and 34, iron post stamped "3554".....	3,556.173
Tps. 34 and 35 N., R. 4 W., corner of secs. 4, 5, 32, and 33; top of corner stone.....	3,563.35
Tps. 34 and 35 N., R. 4 W., corner of secs. 5, 6, 31, and 32; top of corner stone.....	3,617.69
Tps. 34 and 35 N., Rs. 4 and 5 W., corner of; iron post stamped "3689" ..	3,690.593
Tps. 34 and 35 N., Rs. 4 and 5 W., 0.5 mile north 10° west of corner of, 0.2 mile southwest of sheep ranch, 400 feet west of and 0.5 mile north of wagon road; iron post stamped "3741" (set by G. Drummond, of Reclamation Service, in 1902; his value not known).....	3,752.417

**Sec. 32, T. 33 N., R. 4 W., west to corner of Tps. 32 and 33 N., Rs. 4 and 5 W. (double spur line).**

T. 33 N., R. 4 W., south side of sec. 35, 1 mile west of water tank, 0.8 mile south of big cut, 600 feet north of track; iron post.....	3,598.988
T. 32 N., R. 4 W., closing corner of secs. 5 and 6; top of corner stone.....	3,620.95
T. 33 N., R. 4 W., standard corner of secs. 31 and 32; top of corner stone..	3,622.57
T. 33 N., Rs. 4 and 5 W., point of ridge running east-west, 0.5 mile east of township corner; point on boulder 8 by 10 by 14 feet above ground; marked by reference monument.....	3,681.48
T. 32 N., Rs. 4 and 5 W., closing corner; top of stone.....	3,750.17
T. 33 N., Rs. 4 and 5 W., standard corner of; iron post.....	3,782.598

**Sec. 3, T. 37 N., R. 7 W., east along United States and Canada boundary to sec. 4, T. 37 N., R. 3 W.**

T. 37 N., R. 7 W., in south side of foundation of monument 363; iron post.	4,028.664
T. 37 N., R. 7 W., northwest corner of sec. 1; point on section stone.....	3,999.21

T. 37 N., R. 7 W., sec. 1, in south side of foundation of monument 362A; bronze tablet stamped "4024".....	Feet. 4, 026. 125
T. 37 N., R. 6 W., northwest corner of sec. 6, township corner; iron post stamped "4003".....	4, 005. 913
T. 37 N., R. 6 W., in south side of foundation of monument 362; iron post stamped "4025".....	4, 028. 130
T. 37 N., R. 6 W., northwest corner of sec. 4; top of section stone.....	4, 193. 39
T. 37 N., R. 6 W., in south side of foundation of monument 361; bronze tablet stamped "4407".....	4, 409. 316
T. 37 N., R. 6 W., northwest corner of sec. 3; point on section stone.....	4, 273. 85
T. 37 N., R. 6 W., northwest corner of sec. 2; point on section stone.....	4, 289. 10
T. 37 N., R. 6 W., in south side of foundation of monument 360A; iron post stamped "4282".....	4, 284. 525
T. 37 N., R. 6 W., 60 feet east of northwest corner of sec. 1; point on stone.....	4, 267. 44
T. 37 N., R. 6 W., in south side of concrete foundation of monument 360; bronze tablet stamped "4282".....	4, 284. 461
T. 37 N., R. 5 W., northwest corner of sec. 6; point on section stone.....	4, 190. 67
T. 37 N., R. 5 W., northwest corner of sec. 5; point on section stone.....	4, 053. 37
T. 37 N., R. 5 W., in south side of concrete foundation of monument 359A; iron post stamped "4069".....	4, 071. 763
T. 37 N., R. 5 W., northwest corner of sec. 4; point on section stone.....	3, 998. 70
T. 37 N., R. 5 W., in south side of concrete foundation of monument 359; bronze tablet stamped "3963".....	3, 965. 322
T. 37 N., R. 5 W., northwest corner of sec. 3; point on section stone.....	3, 865. 94
T. 37 N., R. 5 W., in south side of concrete foundation of monument 358A; iron post stamped "3899".....	3, 901. 768
T. 37 N., R. 5 W., northwest corner of sec. 2; point on section stone.....	3, 886. 99
T. 37 N., R. 5 W., northwest corner of sec. 1; point on section stone.....	3, 764. 36
T. 37 N., R. 5 W., in south side of concrete foundation of monument 358; bronze tablet stamped "3763".....	3, 765. 486
T. 37 N., R. 4 W., northwest corner of sec. 6; point on section stone.....	3, 731. 35
T. 37 N., R. 4 W., northwest corner of sec. 5; point on section stone.....	3, 638. 05
T. 37 N., R. 4 W., in south side of concrete foundation of monument 357B; iron post stamped "3634".....	3, 636. 729
T. 37 N., R. 4 W., northwest corner of sec. 4; point on section stone.....	3, 634. 22
T. 37 N., R. 4 W., in south side of concrete foundation of monument 357A; iron post stamped "3663".....	3, 665. 940
T. 37 N., R. 4 W., northwest corner of sec. 3; point on section stone.....	3, 650. 39
T. 37 N., R. 4 W., northwest corner of sec. 2; point on section stone.....	3, 639. 87
T. 37 N., R. 4 W., in south side of concrete foundation of monument 357; iron post stamped "3648".....	3, 651. 002
T. 37 N., R. 4 W., northwest corner of sec. 1; point on section stone.....	3, 600. 32
T. 37 N., R. 4 W., in south side of concrete foundation of monument 356A; bronze tablet stamped "3587".....	3, 589. 798
T. 37 N., R. 3 W., northwest corner of sec. 6; point on section stone.....	3, 551. 61
T. 37 N., R. 3 W., northwest corner of sec. 5; point on section stone.....	3, 573. 20
T. 37 N., R. 3 W., in south side of concrete foundation of monument 356; iron post stamped "3571".....	3, 573. 745
T. 37 N., R. 3 W., northwest corner of sec. 4; point on section corner.....	3, 536. 06

**DUPUYER QUADRANGLE.****Dupuyer southeast to Bynum.**

Dupuyer, at southwest corner of crossing of principal street and street east-west past the Morton House, in rock set in ground; bronze tablet stamped "4121".....	4, 124. 080
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Dupuyer, 3 miles south of, top of hill, north side of valley, on east side of road; iron post stamped "4282" .....	Feet. 4, 284. 560
Dupuyer, 5.75 miles south of, on top of ridge between two coulees; iron post stamped "4284" .....	4, 287. 209
Bynum, 8.12 miles north of, top of small ridge on east side of road; iron post stamped "4566" .....	4, 568. 974
Bynum, 6 miles north of, at mouth of coulee where road goes on top of butte just north of ranch; iron post stamped "4298" .....	4, 301. 520
Bynum, 3 miles north of, on telegraph line; iron post stamped "4077" ..	4, 080. 079

Northwest to corner of sec. 3, T. 30 N., R. 7 W., east to northeast corner of sec. 1; T. 30 N., R. 6 W.

T. 30 N., R. 7 W., northeast corner, in west side of small neck of large shallow lake, dry most of season; General Land Office iron post stamped "3786" .....	3; 789. 631
T. 30 N., R. 6 W., 46 feet east of northwest corner of sec. 3, on rolling prairie; iron post stamped "3792" .....	3, 795. 570
T. 30 N., R. 6 W., northeast corner of; General Land Office iron post stamped "3517" .....	3, 520. 788

Sec. 10, T. 31 N., R. 7 W., east 6 miles, thence southeast to southeast corner of sec. 13, T. 31 N., R. 6 W., thence south to southeast corner of sec. 36, T. 31 N., R. 6 W.

T. 31 N., R. 6 W., northeast corner of sec. 9, in top of section stone; aluminum tablet stamped "3703" .....	3, 706. 565
T. 31 N., R. 6 W., 800 feet N. 60° W. from southeast corner of sec. 13, 0.75 mile south of Two Medicine Creek, top of ridge, at top of rock 18 by 12 by 12 inches; aluminum tablet stamped "3733" .....	3, 736. 845

Southeast corner of sec. 13, T. 31 N., R. 6 W., north to northeast corner of sec. 1, T. 31 N., R. 6 W.

T. 31 N., R. 6 W., northeast corner of sec. 1, 2 miles north of Two Medicine Creek; General Land Office iron post stamped "3715" .....	3, 718. 449
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#### GALATA QUADRANGLE.

Sec. 32, T. 31 N., R. 1 E., east along road down Marias River to sec. 11, T. 29 N., R. 5 E.,

T. 30 N., R. 2 E., southwest corner of sec. 16; top of corner stone .....	3, 243. 04
T. 30 N., R. 2 E., NE. $\frac{1}{4}$ SE. $\frac{1}{4}$ sec. 19, north side of Marias River, 1,000 feet northwest of sheep shed, 50 feet west of road, 0.5 mile north of Barney & Marsh ranch, at mouth of draw; iron post .....	3, 001. 003
T. 30 N., R. 2 E., sec. 24; nail in northwest corner post of Pier's stockyard ..	2, 964. 72
T. 30 N., R. 3 E., SW. $\frac{1}{4}$ SW. $\frac{1}{4}$ sec. 18, 150 feet northeast of Wood's ranch house at base of hill; iron post .....	2, 967. 050
Beatrice, NE. $\frac{1}{4}$ NW. $\frac{1}{4}$ sec. 24, T. 30 N., R. 3 E., southwest corner of J. C. Turner's yard, 50 feet from house; iron post .....	2, 914. 465
T. 30 N., R. 4 E., SE. $\frac{1}{4}$ SW. $\frac{1}{4}$ sec. 14, north of mouth of Willow Creek; 300 feet east of James Cockrill's ranch; iron post .....	2, 887. 087
T. 29 N., R. 5 E., SW. $\frac{1}{4}$ NW. $\frac{1}{4}$ sec. 11, 100 feet west of gate of Pugsley's ranch; iron post .....	2, 831. 120

#### GOODALE QUADRANGLE.

Augusta east to Great Falls (portion of line).<sup>1</sup>

Great Falls, 7 miles west of, at east foot of alkali hill, about 200 feet north of telephone line, opposite telephone pole 183; iron post .....	3, 400. 651
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<sup>1</sup> This line is based upon adjusted elevation at Augusta, and is not adjusted on account of closure error of -5.727 feet upon corrected elevations at Great Falls

Great Falls, 4 miles west of, on telephone line, near telephone pole 82; iron post .....	Feet. 3, 324. 416
Great Falls, 2 miles west of, about 700 feet north of coal chutes, at angle of telephone line, near telephone pole 26; iron post.....	3, 339. 421
Great Falls, on upstream end of pier; copper bolt leaded vertically in capstone; Missouri River Commission bench mark. (The adjusted elevation of this bench mark is 3,322.012, which is 3.915 feet greater than given by the Missouri River Commission).....	3, 316. 285

## HEART BUTTE QUADRANGLE.

**Browning south along road to Fish Lake, thence southeast to point 9.3 miles west of Dupuyer.**

Browning, 2.9 miles south of, N. $\frac{1}{4}$ sec. 35, T. 32 N., R. 11 W., on road to crossing of Two Medicine Creek about 2,000 feet south of small stream, on top of south grade of coulee; iron post stamped "4745".....	4, 748. 451
T. 31 N., R. 11 W., SW. $\frac{1}{4}$ sec. 12, about 1 mile north of Two Medicine Creek, near top of ridge where canyon of Two Medicine Creek can be seen on road from Browning south across stream; iron post stamped "4715" .....	4, 717. 887
T. 31 N., R. 10 W., near center of sec. 31, on road from Browning to Upper Badger Valley between the Two Medicine Creek and Little Badger, on top of hill near small lake, on top of small rock; aluminum tablet stamped "4587" .....	4, 590. 290
Browning, 16.25 miles south of, on south bank of first canyon south of Little Badger Creek, about 5 miles east of foot of mountain and 800 feet east of sudden rise on south side of canyon, in bowlder 2 feet high; aluminum tablet stamped "4562" .....	4, 564. 280
T. 29 N., R. 10 W., northeast corner of sec. 5, in valley of Badger Creek on a tributary 1 mile south of main stream, 0.5 mile east of Bullhill's cabin, near a small lake, and west of two large lakes, in prominent bowlder; bronze tablet stamped "4511".....	4, 513. 780
T. 29 N., R. 10 W., sec. 22, 9 miles north of Fish Lake, on highest ridge between South and North Fork of Whitetail River and on lowest point between Heart Butte and flat-topped butte east of Heart Butte, in small bowlder 8 inches above ground; aluminum tablet stamped "5037".....	5, 040. 036
T. 28 N., R. 10 W., NE. $\frac{1}{4}$ NE. $\frac{1}{4}$ sec. 13, 2.85 miles north of Fish Lake, on north side of road leading from Griff Jones's place to Blackfeet Indian Reservation, near grove, 1,000 feet southwest of a small dry lake and about 0.5 mile north of Birch Creek, on bowlder; bronze tablet stamped "4895".....	4, 897. 644
Fish Lake, 1,000 feet north of, 200 feet south of C. D. Punester's cabin, cemented vertically in large bowlder; bronze tablet stamped "4760".....	4, 762. 896
Fish Lake, 4.5 miles southeast of, 0.25 mile northwest of Gordon's house, 1,200 feet south of Sheep Creek, on roadside, 30 feet north of fence, on top of large rock; aluminum tablet stamped "4780".....	4, 782. 557
Fish Lake, 7.37 miles southeast of, 9.33 miles west of Dupuyer, at north end of lane between John Chase's and Timothy Connor's ranches; iron post stamped "4693" .....	4, 696. 019

**Raymond north 10 miles, thence east to Dupuyer.**

Raymond, about 45 feet in front of J. L. Collins's house; iron post stamped "4671" .....	4, 674. 034
Raymond, 5 miles north of, 50 feet south of Adolph Aman's ranch house; iron post stamped "4869".....	4, 872. 150

Raymond, 8 miles north of, on east line of Lewis and Clark National Forest, T. 27 N., R. 8 W.; iron post stamped "4779".....	Feet. 4, 781. 896
Dupuyer, 7.87 miles west of, top of knoll 300 feet east of small graveyard north of road about 0.12 mile from Seloway's ranch; iron post stamped "4523".....	4, 526. 030
Dupuyer, 3.37 miles west of, north side of road at south end of lane between Dennis and Leach ranches; iron post stamped "4285".....	4, 287. 975
<b>NE. <math>\frac{1}{4}</math> sec. 13, T. 28 N., R. 10 W., northeast to east boundary of R. 9 W. in T. 29 N., thence to northeast corner of T. 29 N., R. 9 W., thence southwest to sec. 22, T. 29 N., R. 10 W.</b>	
T. 28 N., R. 9 W., NW. $\frac{1}{4}$ sec. 4, 1 mile west of gate leading to Geo. Schultz's place, on hillside 8 feet south of road, in large flint rock with flat sloping top; aluminum tablet stamped "4677".....	4, 680. 448
T. 29 N., R. 9 W., 500 feet north of southeast corner of sec. 24, 2.3 miles east of gate leading to Geo. Schultz's place, 300 feet west of corner of residence fence, 2 feet north of reservation fence; iron post stamped "4414".....	4, 417. 283
T. 29 N., R. 9 W., sec. 1, Sita triangulation station, top of highest point between Whitetail and Blacktail Creeks, 0.25 mile west of range line of ranges 8 and 9 W.; iron post stamped "4790.6".....	4, 794. 084
T. 29 N., R. 9 W., northeast corner of, 500 feet west of road, 1 mile north- east of Sita triangulation station; iron post stamped "4320".....	4, 323. 646
T. 29 N., R. 9 W., 0.25 mile southwest of northeast corner of sec. 5, 8 feet south of road from Piegan to Heart Butte, on southeast side of White- tail Creek, 0.5 mile east of road forks and creek crossing, on knoll; iron post stamped "4430".....	4, 433. 306
<b>Bench mark in T. 29 N., R. 10 W.</b>	
T. 29 N., R. 10 W., northeast corner of; iron post stamped "4445".....	4, 448. 649
<b>Northeast corner of T. 29 N., R. 9 W., north 6 miles, thence west to northeast corner of T. 30 N., R. 11 W.</b>	
T. 30 N., R. 9 W., 400 feet southeast of northeast corner of sec. 12, at top of long rocky ridge 1,000 feet west of road, 1.5 miles north of lake, in large rock; aluminum tablet stamped "4202".....	4, 205. 171
T. 30 N., R. 9 W., northeast corner of, on south side of valley of Badger Creek, west of road from Piegan to lake; iron post stamped "4098".....	4, 101. 740
T. 30 N., R. 10 W., 132 feet east of northwest corner of sec. 3, 0.5 mile northwest of Badger, 200 feet north of road, at first position of reestab- lished corner; iron post stamped "4112".....	4, 115. 431
T. 30 N., R. 10 W., northeast corner of, top of high ridge between Big and Little Badger creeks; General Land Office iron post stamped "4461"....	4, 464. 382
T. 30 N., R. 10 W., northeast corner of sec. 4, 11 miles west of Piegan, top of small boulder 12 by 6 inches; aluminum tablet stamped "4678" marked by large monument.....	4, 681. 459
T. 30 N., R. 11 W., northeast corner of; General Land Office iron post stamped "4519".....	4, 522. 964
<b>Northeast corner of T. 29 N., R. 9 W., east 6 miles, thence north 6 miles, thence east 3 miles to northwest corner of sec. 3, T. 30 N., R. 7 W.</b>	
T. 29 N., R. 8 W., 5 feet from section stone at northeast corner of sec. 4, 300 feet south of Blacktail Creek, on slope 500 feet west of pointed clay hill; iron post stamped "3990".....	3, 993. 344

T. 30 N., R. 8 W., 800 feet north of quarter corner on east side of sec. 24, 200 feet south of Blacktail Creek, on large rocky ledge, west end of rocky cut bank facing creek, 800 feet west of road crossing of creek, in sandstone boulder 3 by 2 by 1.5 feet; aluminum tablet stamped "3909".....	Feet. 3,912.480
T. 30 N., R. 8 W., northeast corner of, 0.75 mile southwest of Twin Buttes, 300 feet north of dry creek, on small knoll; General Land Office iron post stamped "4056".....	4,059.885
T. 30 N., R. 7 W., 390 feet east of northwest corner of sec. 3, on west slope of small knoll, 6 feet north of township line, in red granite rock 20 by 8 inches, 6 inches out of ground, marked by mound; aluminum tablet stamped "3923".....	3,926.795

Northeast corner of T. 30 N., R. 9 W., northeast to sec. 1, T. 31 N., R. 8 W., thence southeast to sec. 10, T. 31 N., R. 7 W.

Piegan, sec. 18, T. 31 N., R. 8 W., 10 feet north of south gate, 4 feet west of stockade; iron post stamped "3897".....	3,900.458
Piegan, 4.8 miles east of, north line of sec. 11, T. 31 N., R. 8 W., north side of Rocky Bluff, 25 feet above road and 100 feet south of it, 130 feet south of creek; iron post stamped "3816".....	3,819.427
T. 31 N., R. 8 W., 1,500 feet southwest of northeast corner of sec. 1, 700 feet southeast of forks of Badger and Two Medicine Rivers, 800 feet north of Steve Eneault's log cabin, northeast corner of corral; iron post stamped "3723".....	3,726.422
T. 31 N., R. 7 W., near southwest corner of sec. 10, 1 mile east of Mott's ranch, west end of cut bank, north side of small knoll, 40 feet above and 240 feet south of Two Medicine River, on creek bank near road, in top of stone 4 feet by 2 feet and 4 inches above ground; aluminum tablet stamped "3690;" location marked by reference monument with base 2 feet higher than tablet.....	3,693.289

#### HOGAN QUADRANGLE.

Point near Landers Fork northeast over Lewis and Clark Pass to Stearns.

Patterson's ranch, 1.3 miles west of, north side of Indian trail in park, 50 feet east of timber, in stone 2 feet by 2 feet and 12 inches above ground; aluminum tablet stamped "5634 BUTTE".....	5,636.136
Patterson's ranch, at southwest corner of yard fence; iron post stamped "5328 BUTTE".....	5,330.339
Patterson's ranch, 3.7 miles north of, west side of trail on small open ridge at mouth of ravine from west; iron post stamped "5461 BUTTE".....	5,463.424
Lewis and Clark Pass, Continental Divide; ground elevation.....	6,422.
Lewis and Clark Pass over Continental Divide, 900 feet southeast of point where trail crosses summit, 200 feet south of pack trail, 300 feet east of wagon trail, mound of rock on sandstone ledge; bronze tablet stamped "6380 BUTTE".....	6,382.479
Lewis and Clark Pass, 2.7 miles east of summit of, 200 feet north of fork of Green Creek, north side of road; iron post stamped "4778 BUTTE".....	4,780.225
Steinbach's ranch, 1.5 miles southwest of, on small ridge near east road fence; iron post stamped "4925 BUTTE".....	4,927.421
Steinbach's ranch, 2 miles southeast of, in corner of fence near point where road leaves ridge; iron post stamped "4492 BUTTE".....	4,494.290
Stearns (Borho's ranch), 20 feet east of post office, inside garden fence; iron post stamped "4124 BUTTE".....	4,126.675

**Stearns east along highway to Craig.**

Stearns, 5.7 miles east of, about 0.7 mile north of Wolf Creek, on county road, west side of south fork of Dearborn River, 150 feet south of Renig Bros.' ranch, at corner of fence; iron post stamped "4096 BUTTE".....	Feet. 4, 098. 931
Fulton, 3 miles north of, on reef of rocks where road turns west to Big Flats; aluminum tablet stamped "4221 BUTTE" .....	4, 223. 897
Craig, 9.7 miles northwest of, east side of road, at turn toward Stearns post office, at gate entrance to Gillette's ranch; iron post stamped "3984 BUTTE" .....	3, 987. 218
Craig, 6.5 miles northwest of, 1 mile east of telephone line, north side of road at corner of pasture; iron post stamped "4138 BUTTE" .....	4, 140. 871
Craig, 3.7 miles west of, right side of road, foot of grade, corner of fence to pasture; iron post stamped "3728 BUTTE" .....	3, 730. 909
Craig, 700 feet north of station, crossroads, at point where road turns west to Augusta, on south side of road opposite schoolhouse; iron post stamped "3454 BUTTE" .....	3, 457. 104
Craig, about 125 feet southeast of station, on west bank of Missouri River; Missouri River Commission bench mark No. 29:	
Top of cap of iron post.....	3, 457. 515
Subsurface mark.....	3, 453. 484

(The elevations by Missouri River Commission are 3,453.634 and 3,449.603, respectively.)

**Stearns north along Wolf Creek-Augusta road via Clemens to Augusta.**

Stearns, 40 feet in front of house, in garden; iron post stamped "4124 BUTTE" .....	4, 126. 675
Stearns, 3.8 miles west of, south side of road, at entrance to Bennett's ranch; iron post stamped "4447 BUTTE" .....	4, 449. 638
Clemens, 3.3 miles southeast of, west side of North Fork of Dearborn Canyon, top of grade; iron post stamped "4727 BUTTE" .....	4, 730. 245
Clemens; iron post stamped "4673 BUTTE" .....	4, 676. 239
Clemens, 2 miles northwest of, west side of road, top of first flat near Mike Connor's ranch; iron post.....	4, 588. 803
Augusta, 8 miles southeast of, east end of Hog Back Butte, on east side of road at angle of fence; iron post stamped "4361 BUTTE" .....	4, 363. 370
Augusta, 4.84 miles south of, at point where road turns east over hill; iron bench mark post stamped "4268 BUTTE" .....	4, 271. 014
Augusta, 1.84 miles south of, about 0.8 mile southwest of Craig-Augusta stage line, west side of road; iron post stamped "4121 BUTTE" .....	4, 124. 153
Augusta, 0.5 mile south of, bridge across South Fork of Sun River; nail in southwest corner post.....	4, 093. 15
Augusta, northeast corner of livery barn; iron post stamped "4064 BUTTE" .....	4, 067. 323

**Augusta northwest 6 miles.**

Augusta, 6.1 miles northwest of, south side of road, opposite Herbert Sherman's residence, at gate to field; iron post stamped "4274 BUTTE".....	4, 276. 691
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**Augusta east to Great Falls (portion of line).<sup>1</sup>**

Augusta, 3.1 miles northeast of, on Augusta-Great Falls road, in front of Philip Mayer's residence; iron post.....	3, 968. 736
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<sup>1</sup> This line is based upon adjusted elevation at Augusta; the first 6 miles is checked by Reclamation Service levels, but the remainder is unadjusted on account of a closure error of -5.727 feet on corrected elevation at Great Falls.

Augusta, 6 miles northeast of, on south side of Augusta-Great Falls road, just east of creek; iron post.....	3, 886. 913
Rhoner, near gate entrance to Lang's residence, Augusta-Great Falls road; iron post.....	3, 824. 749
Rhoner; at entrance to John Rhoner's residence, near schoolhouse; iron post.....	3, 769. 174
Hefler, 6 miles west of, on north side of Augusta-Great Falls road, at mouth of Gulch; iron post.....	3, 716. 524
Hefler, 2 miles west of, on south side of Augusta-Great Falls road, about opposite Flume's home ranch, corner of field; iron post.....	3, 691. 197

**SAYPO QUADRANGLE.**

**Point 6 miles northwest of Augusta north along highway to Saypo, thence east to Belleview.**

Augusta, 9 miles northwest of, north end of fenced portions of road at angle; iron post stamped "4328 BUTTE".....	4, 331. 029
Augusta, 12.2 miles northwest of, northwest end of valley, 1,000 feet west of culvert, at angle of road; iron post stamped "4317 BUTTE".....	4, 320. 170
Augusta, 15.5 miles northwest of, on coal mine road, 2,000 feet north of branch of canyon road, just east of lake at mouth of Coulee; iron post stamped "4337 BUTTE".....	4, 340. 145
Augusta, 18 miles northwest of, north side of North Fork of Sun River, north side of road, 1,500 feet from coal mine, at point where road cuts through sandstone reef; bronze tablet stamped "4343 BUTTE".....	4, 345. 999
Elizabeth, 2.33 miles south of, at point where road branches off toward Choteau, at gate of Caldwell's ranch; iron post stamped "4840 BUTTE".....	4, 843. 424
Elizabeth, southeast corner of wagon shed; iron post stamped "4806 BUTTE".....	4, 809. 052
Saypo, 6.5 miles south of, top of grade at crossing of Deep Creek, on Saypo-Elizabeth mail route; iron post stamped "4855 BUTTE".....	4, 858. 968
Saypo, 3 miles southwest of, 65 feet in front of Robert Twig's residence; iron post stamped "4812 BUTTE".....	4, 815. 010
Saypo, southeast corner of dwelling; iron post stamped "4646 BUTTE"....	4, 648. 892
Saypo, 2.6 miles east of, at gate of D. C. Craig's ranch; iron post stamped "4473 BUTTE".....	4, 476. 136

**Saypo north along wagon road to Raymond.**

Saypo, 3 miles north of, at gate entrance to Fisher's residence; iron post stamped "4622 BUTTE".....	4, 625. 481
Saypo, 6.75 miles north of, on north bank of Teton River, about 1 mile east of Teton River forks, at point where road goes down from flat into valley of river; iron post stamped "4836 BUTTE".....	4, 839. 098
Saypo, 9.2 miles north of, at gap in east and west ridge, south end of open prairie; iron post stamped "4831 BUTTE".....	4, 833. 829
Raymond, 4.25 miles south of, at north gate to Clark Bros. upper ranch, about 2.5 miles west of Clark's home ranch; iron post stamped "4649 BUTTE".....	4, 652. 008

**Sun River project, north side diversion line.<sup>1</sup>**

T. 22 N., R. 9 W., near southeast corner (unsurveyed) 3,300 feet west of east boundary of forest reserve, on north side of river, in rock cliff half way between wall and water; aluminum tablet stamped "BUTTE 4489".....	4, 491. 892
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<sup>1</sup> A correction of 3.1 feet has been added to the Reclamation Service values.

T. 22 N., R. 8 W., 700 feet east of west quarter corner of sec. 31; iron post stamped "BUTTE 4448".....	Feet. 4, 450. 970
T. 22 N., R. 8 W., 625 feet east and 175 feet south of corner of secs. 29, 30, 31, and 32; iron post stamped "BUTTE 4440".....	4, 442. 994
T. 22 N., R. 8 W., 660 feet west and 300 feet south of corner of secs. 20, 21, 28, and 29; iron post stamped "BUTTE 4442".....	4, 445. 416
T. 22 N., R. 8 W., 1,275 feet west of southeast corner of sec. 16; iron post stamped "BUTTE 4449".....	4, 451. 711
T. 22 N., R. 8 W., 600 feet north of west quarter corner of sec. 23; iron post stamped "BUTTE 4456".....	4, 458. 610
T. 22 N., R. 8 W., 1,800 feet east and 250 feet south of west quarter corner of sec. 13; iron post stamped "BUTTE 4447".....	4, 450. 319
T. 22 N., R. 8 W., 1,490 feet west and 78 feet north of east quarter corner of sec. 13; iron post stamped "BUTTE 4379".....	4, 382. 257
T. 22 N., R. 7 W., corner of secs. 7, 8, 17, and 18; iron post stamped "BUTTE 4401".....	4, 404. 019
T. 22 N., R. 7 W., 1,320 feet north of east quarter corner of sec. 8; iron post stamped "BUTTE 4387".....	4, 390. 464

#### SWEETGRASS QUADRANGLE.

##### Point near Coutts south along highway and branch of Great Northern Ry. to Shelby.

Coutts, 3 miles south of, 20 feet west of Coutts-Shelby road, 0.7 mile northeast of ranch, 0.5 mile west of Great Northern Railway; iron post stamped "3405 GN".....	3, 415. 585
Milepost 130, seventh telegraph pole north of; spike.....	3, 379. 78
Milepost 121; spike.....	3, 346. 07
T. 33 N., R. 3 W., northwest corner of sec. 1, 1.5 miles east of Great Northern Railway; corner stone.....	3, 325. 10
Shelby, H. L. Guth's store, northeast corner of foundation of cellar; bronze tablet stamped "3285 GN".....	3, 296. 326

##### Sec. 4, T. 37 N., R. 3 W., east along United States and Canadian boundary to Coutts, thence south 3 miles.

T. 37 N., R. 3 W., Canadian section corner; point on rock at foot of corner post.....	3, 493. 02
T. 37 N., R. 3 W., in south side of concrete foundation of monument 355A; bronze tablet stamped "3495".....	3, 498. 069
T. 37 N., R. 3 W., northwest corner of sec. 2; point on section stone.....	3, 554. 42
T. 37 N., R. 3 W., 4 feet north of monument 355; point on concrete.....	3, 553. 52
T. 37 N., R. 3 W., 80 feet east of track, in south side of concrete foundation of monument 354B; iron post stamped "3466".....	3, 469. 546
United States and Canada boundary, at station; top of rail.....	3, 471. 00
Sweetgrass, 1.2 miles south of, southeast end of culvert on Great Northern Railway; bolt 1 foot from top.....	3, 442. 23

##### Browning, Chief Mountain, Kalispel, Kintla Lakes, Midvale, Nyack, and Ural Quadrangles.

#### FLATHEAD AND TETON COUNTIES.

The elevations in the following list were determined by primary leveling forming part of a net extending from Butte to the United States and Canada boundary. They accord with preliminary values

in the vicinity of Butte, computed in 1911 for the Coast and Geodetic Survey precise level line. Orthometric corrections have been applied.

The leveling was done in the Browning quadrangle in 1900 and 1901 by Goyne Drummond and by the Reclamation Service, and in 1909 and 1910 by the United States and Canada Boundary Survey; in the Chief Mountain quadrangle in 1900 by Goyne Drummond, and in 1901 by J. T. Stewart; in the Kalispel quadrangle in 1901 by J. T. Stewart, and in 1904 by G. H. Kendall; in the Kintla Lakes quadrangle in 1901 by J. T. Stewart, and in 1903 by A. E. Franklin and the United States and Canada Boundary Survey; in the Midvale quadrangle in 1900 by Goyne Drummond, and in 1901 by J. T. Stewart; in the Nyack quadrangle in 1901 by J. T. Stewart, and in 1907 by C. H. Hartmann; and in the Ural quadrangle in 1903 by A. E. Franklin and the United States and Canada Boundary Survey.

#### BROWNING QUADRANGLE.

##### Browning northwest along road via Wetzel ranch to Main.

	Feet.
Browning, sec. 3, T. 32 N., R. 11 W., 6 feet south of hospital; iron post stamped "4366 GN".....	4, 375. 759
T. 33 N., R. 11 W., NW. $\frac{1}{4}$ sec. 15, 0.25 mile north of Cutbank Creek, 20 feet east of road; iron post stamped "4457 GN".....	4, 467. 438
T. 34 N., R. 12 W., near quarter corner on south side of sec. 12, on divide between Greasewood Creek and South Fork of Milk River, 0.7 mile northwest of triangulation station; iron post stamped "5007 GN".....	5, 017. 244
T. 34 N., R. 11 W., sec. 18, Cutbank triangulation station, 0.5 mile east of road, 16 miles from Blackfoot, 12.8 miles from Browning; aluminum plug unmarked (on side line; not checked).....	5, 106. 363
T. 35 N., R. 12 W., NW. $\frac{1}{4}$ sec. 34, 150 feet southeast of Wetzel's house, near fence; iron post stamped "4739 GN".....	4, 748. 638
T. 36 N., R. 12 W., sec. 19, 1.2 miles north of Middle Fork of Milk River, in fork of road, on divide; iron post stamped "4893 GN".....	4, 902. 873
Duck Lake; surface of water.....	5, 021
T. 36 N., R. 13 W., near northwest corner of sec. 22, 200 feet south of Duck Lake, 0.4 mile from east end of lake, 60 feet south of road; iron post stamped "5049 GN".....	5, 058. 666
T. 36 N., R. 13 W., S. $\frac{1}{2}$ sec. 19, 120 feet south of house; iron post stamped "5036 GN".....	5, 046. 410
Main, 600 feet southeast of, sec. 15, T. 36 N., R. 14 W., 20 feet south of road, on bench; iron post stamped "4461 GN".....	4, 471. 223

##### Main south along road to Upper St. Marys Lake.

T. 36 N., R. 14 W., near south line of sec. 27, 2.2 miles south of Main, 30 feet east of lower (north) end of Lower St. Marys Lake, 300 feet south of ford, 10 feet west of road; iron post stamped "4477 GN".....	4, 487. 298
T. 35 N., R. 14 W., sec. 33, 60 feet east of Upper St. Marys Lake and 800 feet southeast of outlet; iron post stamped "4478 GN" (on side line; not checked).....	4, 488. 351
Upper St. Marys Lake; surface of water, July 17, 1900.....	4, 483

## Point near Main southeast across country to Two Medicine Lake.

T. 35 N., R. 14 W., near east line of sec. 12, 0.25 mile west of divide, 60 feet south of road, by flag station mound; iron post stamped "5784 GN".....	5, 792. 796
T. 35 N., R. 13 W., near quarter corner on east side of sec. 28, on divide between Livermore Creek and Middle Fork of Milk River, about 0.5 mile west of point where Browns road crosses divide, 20 feet north of road running west; iron post stamped "5324 GN".....	5, 332. 347
T. 34 N., R. 13 W., S. $\frac{1}{4}$ sec. 10, at pass on top of divide between Fox and Livermore Creeks, about 0.5 mile north of Little Creek; iron post stamped "5244 GN".....	5, 252. 483
T. 34 N., R. 13 W., SW. $\frac{1}{4}$ sec. 27, on edge of bench land, on South Fork of Milk River, 500 feet north of creek; iron post stamped "5229 GN".....	5, 237. 491
T. 33 N., R. 13 W., sec. 9, near east line, on top of divide between North Fork of Cutbank Creek and South Fork of Milk River; iron post stamped "5554".....	5, 562. 622
T. 33 N., R. 13 W., NW. $\frac{1}{4}$ sec. 26, on top of divide between North Fork and South Fork of Cutbank Creek; iron post stamped "5395 GN".....	5, 403. 713
T. 32 N., R. 13 W., near southwest corner of sec. 1, 170 feet east of Henry Merchants house, 50 feet south of South Fork of Cutbank Creek; iron post stamped "4927 GN".....	4, 935. 676
T. 32 N., R. 13 W., NW. $\frac{1}{4}$ sec. 25, 2 miles east of Two Medicine Lake, 20 feet south of road, near divide; iron post stamped "5651 GN".....	5, 659. 386

## Browning northwest to sec. 27, T. 34 N., R. 13 W., on South Fork of Milk River.

T. 33 N., R. 12 W., SW. $\frac{1}{4}$ sec. 25, 2 miles east of "Shorty Whitegrass" house, 500 feet south of Cutbank Creek, top of bluff, east angle of forks of road; iron post stamped "4644 GN".....	4, 654. 262
T. 33 N., R. 12 W., N. $\frac{1}{2}$ sec. 4, 3 miles north of Cutbank Creek; 100 feet south of three cabins on Upper Greasewood Creek; iron post stamped "4941 GN".....	4, 950. 856

## Main southwest up Swift Current Creek to crossing.

T. 36 N., R. 14 W., near north line of sec. 32, 2.7 miles west of Main 60 feet north of Swift Current Creek crossing, 30 feet north of road; iron post stamped "4633 GN".....	4, 643. 214
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## Browning southwest across prairie to Durham.

Browning, 2.4 miles southwest of, 0.5 mile north of track, 5 feet north of new grade, in telegraph pole marked "4487.07;" spike. (Great Northern Railway bench mark). .....	4, 497. 07
Durham, in front of station; top of rail. ....	4, 552. 7

## Browning agency south along road via Browning station to Durham triangulation station.

Browning, in front of station; top of rail. ....	4, 467. 8
Browning, 60 feet west of station, 30 feet north of track; iron post stamped "4458 GN".....	4, 468. 208
Durham, 0.75 mile south of, Durham triangulation station, near south line, sec. 21, T. 32 N., R. 11 W., on high point of ridge, in rock; copper plug stamped "4879 GN".....	4, 889. 349

**Greasewood Creek north along road via Bird's ranch to top of divide between north and south forks of Milk River.**

T. 34 N., R. 11 W., sec. 28, 500 feet south of road crossing of North Fork of Greasewood Creek, 50 feet east of forks of road; iron post stamped "4344 GN" .....	Feet. 4, 353. 988
T. 35 N., R. 11 W., SW. $\frac{1}{4}$ sec. 33, top of divide between Greasewood Creek and South Fork of Milk River, 50 feet west of forks of road; iron post stamped "4788 GN" .....	4, 897. 075
T. 35 N., R. 11 W., sec. 20, 3 miles south of Bird's ranch, top of spur, 50 feet west of road; iron post stamped "4761 GN" .....	4, 770. 931
T. 35 N., R. 11 W., near center of sec. 8, in yard at southeast corner of Bird's ranch, 50 feet southeast of house; iron post stamped "4546 GN" .....	4, 556. 037
T. 36 N., R. 11 W., sec. 27, 250 feet south of Middle Fork of Milk River, 60 feet west of road; iron post stamped "4424 GN" .....	4, 433. 964
T. 36 N., R. 11 W., near west side of sec. 10, 3 miles north of Middle Fork of Milk River, top of ridge between two small creeks, 120 feet west of road; iron post stamped "4612 GN" .....	4, 621. 893
T. 37 N., R. 11 W., SW. $\frac{1}{4}$ sec. 35, top of divide between North Fork and South Fork of Milk River, 50 feet west of road; iron post stamped "4672 GN" .....	4, 681. 955

**Main northeast along road and canal to Spider Lake, thence east to Halls ranch, northeast to Emigrant Gap, and southeast to junction of North Fork and South Fork of Milk River (Reclamation Service bench marks).**

T. 37 N., R. 14 W., sec. 36, 0.4 mile northeast of Powell's ranch and 0.4 mile east of ford; iron post stamped "4467 GN" .....	4, 477. 077
T. 37 N., R. 13 W., sec. 30, 5.7 miles northeast of Main, 1 mile west of Spider Lake, 20 feet north of road; iron post stamped "4473 GN" .....	4, 482. 981
Spider Lake; surface of water .....	4, 447
T. 37 N., R. 13 W., near northwest corner of sec. 23, 1 mile east of Spider Lake, on bluff on south side of ravine, about 800 feet south of road; iron post stamped "4462 GN" .....	4, 472. 666
T. 37 N., R. 12 W., sec. 19, 1.5 miles southwest of Galbreath's ranch, 100 feet east of road; iron post stamped "4493 GN" .....	4, 503. 569
T. 37 N., R. 13 W., near south side of sec. 25, Galbreath triangulation station, on Galbreath's ranch, on east end of ridge dividing Galbreath's Basin from North Fork of Milk River, 0.5 mile west of low divide, in stone 2 feet in ground; aluminum bolt stamped "5196 GN" (on side line; not checked) .....	5, 206. 486
T. 37 N., R. 12 W., sec. 32, Hall's ranch, 15 feet south of house, in yard; iron post stamped "4565 GN" (on side line; not checked) .....	4, 575. 469
T. 37 N., R. 12 W., sec. 21, 2 miles east of Galbreath's ranch, 2 miles east of ridge, 2 miles south of lake; iron post stamped "4452 GN" .....	4, 462. 488
Emigrant Gap, NW. $\frac{1}{4}$ sec. 8, T. 37 N., R. 11 W., 60 feet east of road; iron post stamped "4473 GN" .....	4, 483. 247
T. 37 N., R. 11 W., NE. $\frac{1}{4}$ sec. 21, 0.7 mile south of North Fork of Milk River, 30 feet east of McLeod road; iron post stamped "4436 GN" .....	4, 446. 557

The following elevations in the Browning quadrangle were determined by the United States and Canada boundary survey:

**Point 2.5 miles southeast of Galbreath's ranch west and north to Canadian boundary, thence east and southwest to Emigrant Gap.**

	Feet.
Monument 373, United States and Canada Boundary Survey; tablet.....	4, 680. 195
Monument 372, United States and Canada Boundary Survey; tablet.....	4, 221. 787

	Feet.
Monument 372, 500 feet east of, top of section corner; post.....	4, 203. 33
T. 37 N., Rs. 11 and 12 W.; iron section post.....	4, 290. 34
Monument 371, 10 feet west of; iron post.....	4, 630. 455

**Galbreath's ranch north to Canadian boundary, thence west to Pike Lake, thence southeast to sec. 36, T. 37 N., R. 14 W.**

T. 37 N., Rs. 12 and 13 W., at public land corner, on line 0.5 mile west of monument 373; iron post.....	4, 431. 10
Monument 374; iron post.....	4, 411. 191
T. 37 N., R. 13 W., northwest corner of sec. 2; point on section stone....	4, 314. 08
Monument 375, 45 feet west of, on line, in solid rock; tablet stamped "4430".....	4, 432. 005
Monument 376, 10 feet west of; iron post.....	4, 723. 672
Monument 377; tablet.....	4, 616. 920
Pike Lake; surface of water, July 9, 1909.....	4, 530. 3
Smith's ranch house, 0.5 mile northeast of, 60 feet from old road on uphill side, 0.3 mile east of small lake; iron post stamped "U. S. & C. B. Survey".....	4, 570. 905
Main, 3.5 miles northeast of, 0.4 mile northeast of Powell's ranch, 0.4 mile east of ford; iron post stamped "4467 GN".....	4, 477. 077

**Monument 371 east to sec. 2, T. 37 N., R. 11 W.**

Monument 371, 10 feet west of; iron post.....	4, 630. 455
T. 37 N., R. 11 W., northwest corner of sec. 3; point on section stone.....	4, 472. 52
T. 37 N., R. 11 W., north side of sec. 3, in south side of foundation of monument 370A; bronze tablet.....	4, 417. 838
T. 37 N., R. 11 W., northwest corner of sec. 2; point on top of section stone.....	4, 342. 90

**CHIEF MOUNTAIN QUADRANGLE.**

**Swift Current Creek crossing west to Swift Current Pass (leveled twice).**

Lower Sherburne Lake, narrows, 50 feet north of water edge, 15 feet south of road; iron post stamped "4741 GN".....	4, 750. 982
Upper Sherburne Lake; surface of water.....	4, 736
Upper Sherburne Lake, 500 feet northeast of, on spur 40 feet south of road, 60 feet east of Little Creek; iron post stamped "4776 GN".....	4, 786. 038
Altyn, 30 feet east of Harris's house; iron post stamped "4774 GN" (on side line; not checked).....	4, 784. 609
Bullhead cabin, 300 feet west of, in rim rock; bronze tablet stamped "5068 GN".....	5, 078. 651
Lake south of Bullhead cabin; surface of water.....	5, 042
Swift Current Pass, at foot on east side, 3 feet west of trail, 50 feet west of creek, in south end of rim rock; bronze tablet stamped "5278 GN".....	5, 288. 751

**Belton northwest to Apgars, thence northeast along road to Swift Current Pass.**

Belton, in front of station; top of rail.....	3, 213. 7
Belton, 10 feet southwest of post office; iron post stamped "3200 GN".....	3, 210. 283
Apgars, lower end of McDonald Lake, 100 feet south of steamboat landing, 30 feet east of east log house at Apgar's Hotel, 20 feet west of road; iron post stamped "3154 GN".....	3, 163. 526
McDonald Lake; surface of water, July 9, 1901.....	3, 154
Glacier Hotel, 40 feet northwest of, 150 feet northeast of steamboat landing; iron post stamped "3167 GN".....	3, 177. 015

Glacier Hotel, 3.4 miles northeast of, 20 feet east of trail, 2 feet above ground, in vertical face of limestone rock 10 feet wide by 10 feet high; bronze tablet stamped "3346 GN".....	Feet. 3, 355. 420
Glacier Hotel, 6 miles north of, 125 feet east of waterfall in McDonald Creek, east side of trail, a red rock 4 by 6 feet and 30 inches high; bronze tablet stamped "3436 GN".....	3, 445. 274
Glacier Hotel, 9 miles northeast of, north side of small slide, west side of trail, rock 4 by 6 feet and 15 inches high; bronze tablet stamped "3523 GN".....	3, 533. 465
Glacier Hotel, 12.2 miles northeast of, highest point on big slide crossed by trail, east side of trail, granite rock 2 by 4 feet by 20 inches high; bronze tablet stamped "3732 GN".....	3, 742. 480
McDonald Creek, at foot of Swift Current Pass; surface of water.....	3, 804. 2
Glacier Hotel, 15 miles northeast of, 40 feet east of forks of trail, at foot of ascent to Swift Current Pass from west, in limestone ledge at surface of ground; bronze tablet stamped "3859 GN".....	3, 869. 488
Swift Current Pass, top of Continental Divide, south side of trail, in limestone outcrop; bronze tablet stamped "7176 GN".....	7, 185. 851

**Swift Current Pass south 0.4 mile (single spur line).**

Swift Current Pass, 0.4 mile south of summit, south end of rocky ridge, 470 feet higher than pass; bronze tablet stamped "7647 GN".....	7, 656. 749
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**KALISPEL QUADRANGLE.**

**Belton along Great Northern Ry. to Columbia Falls (double run line).**

Belton, 3.5 miles southwest of, near northeast end of Lake Five, in rock cut on north side of track and level with rail; aluminum tablet stamped "3262 GN".....	3, 271. 568
Coram, south end of east abutment of railroad bridge over Flathead River, top of abutment level with bridge seat; aluminum tablet stamped "3127 GN".....	3, 136. 734
Coram, 3 miles southwest of, 500 feet west of tunnel 5, 2 feet higher than rail at foot of cliff, north of track; aluminum tablet stamped "3109 GN".....	3, 119. 276
Columbia Falls, 60 feet north of center of station; iron post stamped "3097 GN".....	3, 107. 085

**Columbia Falls southwest along Kalispel branch, Great Northern Ry., to Somers (double-run line).**

Daly's spur, opposite signboard, 3 miles southwest of Columbia Falls, at C. E. Burgoyne's place, on west slope of hill through which railroad cuts, middle of first curve at east end of long tangent, 50 feet south of track, opposite mileboard 1214, 5 feet south of fence; iron post stamped "3016 GN".....	3, 026. 624
La Salle, 500 feet southwest of section house, 1,000 feet southwest of Kalispel North Base triangulation station, 50 feet west of milepost 1217, 40 feet north of railroad track, 1,200 feet northeast of Amos Root's place, 40 feet east of wagon road; iron post stamped "2963 GN".....	2, 973. 624
La Salle, Kalispel North Base triangulation station, 500 feet northeast of section house, 35 feet east of east rail of Great Northern Ry.; iron post set in cement (three other posts are set as reference marks 10 feet east, 20 feet north, and 15 feet west).....	2, 971. 109
La Salle, 1.2 miles southwest of, 40 feet northwest of milepost 1220, 70 feet north of railroad track, 700 feet west of small house, 200 feet northwest of large barn and houses, 20 feet south of wagon road, 50 feet southwest of 18-inch fir; iron post stamped "2932 GN".....	2, 942. 663

Kalispel, 4.5 miles northeast of, Kalispel South Base triangulation station, 35 feet east of east rail Great Northern R.y.; iron post set in cement (three other posts are set as reference marks 10 feet east, 20 feet south, and 12 feet west).....	Feet. 2,929.031
Kalispel, 2.2 miles northeast of, near B. & M. Lumber Co.'s spur No. 1, 100 feet south of railroad track, at end of wagon road, 150 feet southwest of headblock of switch, 3 feet northeast of 2-foot fir tree; iron post stamped "2908 GN".....	2,918.617
Kalispel, 100 feet east of station, at southeast corner of building, 5 feet west of walk; iron post stamped "2945 GN".....	2,955.593
Kalispel, 3 miles south of, 50 feet east of track at Joe Gauger's slaughterhouse, 10 feet west of water tank, just outside right of way fence, 1,500 feet south of road crossing; iron post stamped "2924 GN".....	2,934.690
Kalispel, 6 miles south of, in southwest corner of Mitton's barnyard, east side of track, 300 feet from barn, 5 feet from gate; iron post stamped "2905 GN".....	2,915.733
Somers, 200 feet east of planing mill, 150 feet east of railroad track, near switch to sawmill, 15 feet east of road; iron post stamped "2900 GN"....	2,910.882
Flathead Lake; surface of water, August 17, 1904.....	2,884.1

#### KINTLA LAKES QUADRANGLE.

**Appgars, at lower end of McDonald Lake, northwest along wagon road to North Fork of Flathead River at mouth of Logging Creek, thence up river to international boundary line (mean of two lines).**

McGee's meadow, north side of, 30 feet east of abandoned cabin, 30 feet west of road; aluminum tablet stamped "3855 GN".....	3,864.394
Camas Creek, 300 feet north of, 75 feet northwest of road fork to Christensen ranch, 20 feet east of road; aluminum tablet stamped "3779 GN".....	3,788.311
Dutch Creek, 0.2 miles northwest of crossing of, in small bowlder 75 feet east of road, on side hill; aluminum tablet stamped "3707 GN".....	3,716.189
Anaconda Creek, 0.6 mile northwest of crossing of, 15 feet north of road, west side of small park; aluminum tablet stamped "3585 GN".....	3,594.615
Logging Creek, 0.4 mile northwest of crossing of, in small bowlder 20 feet east of road; aluminum tablet stamped "3443 GN".....	3,453.098
Quartz Creek, 0.7 mile northwest of crossing of, in small bowlder 20 feet east of road; aluminum tablet stamped "3489 GN".....	3,499.030
Bowman Creek, 1.3 miles southwest of crossing of, in large bowlder on east side of road; aluminum tablet stamped "3692 GN".....	3,701.107
Herrick's cabin, 0.6 mile north of, in small bowlder on west side of road; aluminum tablet stamped "3578 GN".....	3,587.470
Round Prairie, near northeast side of, 700 feet southwest of point where road starts up hill, east side of old trail, in rock; aluminum tablet stamped "3681 GN".....	3,690.228
Kintla Oil Co. well, 0.2 mile east of, 10 feet north of road; iron post stamped "3800".....	3,810.847
Kintla Creek, 0.2 mile north of mouth of, 150 feet northwest of bridge; iron post stamped "3841".....	3,851.724
Starvation Creek, 60 feet southeast of mouth of; iron post stamped "3835"....	3,845.501
Kishenehn trail and Flathead trail, 10 feet north of junction; iron post stamped "3886".....	3,896.027
International Boundary Line, 3 miles west of Sage Creek, 15 feet west of monument; iron post stamped "4068".....	4,078.340

**North Fork of Flathead River northeast up Logging Creek to Logging Lake.**

Flathead road, 1.3 miles northeast of, west side of trail, in top of bowlder; bronze tablet stamped "3676".....	Feet. 3, 686. 091
Logging Lake, 150 feet southeast of outlet, 260 feet northwest of cabin; iron post stamped "3809".....	3, 819. 153

**North Fork of Flathead River along trail up Bowman Creek to Bowman Lake, thence by trail to Lower Quartz Lake.**

Bowman Lake, 2.2 miles southwest of, southwest side of trail, in large rock; aluminum tablet stamped "4030".....	4, 040. 115
Bowman Lake, 0.2 mile northwest of outlet, 50 feet west of bank at end of trail; iron post stamped "4046".....	4, 055. 717
Bowman Lake; water surface, Aug. 15, 1903.....	4, 030. 2
Bowman Lake, 2 miles east of, 25 feet north of summit; iron post stamped "5116".....	5, 125. 916
Quartz Lake, 200 yards southeast of outlet, 10 feet southwest of trail, in top of large bowlder; bronze tablet stamped "4231".....	4, 240. 444
Lower Bunch Grass Park, 300 feet northeast of exit, in top of bowlder; bronze tablet stamped "3780".....	3, 791. 101

**North Fork of Flathead River along trail up Kintla Creek to Kintla Lake.**

Kintla Lake; surface of water, July 25, 1903.....	4, 009. 2
Kintla Lake, 100 feet northwest of outlet, 50 feet west of shore; iron post stamped "4008 GN".....	4, 017. 739

**MIDVALE QUADRANGLE.****Two Medicine Lake south to Midvale, thence northeast along Great Northern Ry. to Durham.**

Two Medicine Lake; surface of water.....	4, 862
Two Medicine Lake, 100 feet south of, about 900 feet west of outlet; iron post stamped "4864 GN" (on a side line not checked).....	4, 872. 799
Midvale, 2.8 miles north of, 440 feet north of bridge over Two Medicine Creek, in forks of road; iron post stamped "4812 GN".....	4, 821. 132
Midvale, in front of station, top of rail.....	4, 796. 7
Midvale, 100 feet north of water tank, 175 feet west of section house; iron post stamped "4786 GN".....	4, 796. 091

**Midvale southwest along Great Northern Ry. to Java.**

Midvale, steel bridge over Middle Fork of Two Medicine River, top of pier of east end.....	4, 800. 11
Midvale, 4.6 miles southwest of, 0.6 mile southwest of snow shed 4, 0.1 mile east of mile board 1143, 100 feet east of deep shale rock cut, 50 feet northwest of track, in north end of ledge of rock; bronze tablet stamped "4963 GN".....	4, 973. 146
Summit, 4.2 miles east of, 0.3 mile east of trestle 106, 25 feet south of track, 100 feet southeast of crossing of track by rail, in bowlder 3 by 2 feet by 12 inches high; bronze tablet stamped "5051 GN".....	5, 060. 567
Summit, at water tank; top of rail.....	5, 214. 3
Summit, 125 feet east of section house, 125 feet south of water tank, in conglomerate bowlder 4 feet square; bronze tablet stamped "5205 GN"....	5, 215. 026
Summit, 4 miles west of, 300 feet east of trestle 112, north of track, near center of rock cut, 300 feet east of milepost 1155; iron bolt cemented in rock stamped "4902 GN".....	4, 912. 171

	Feet.
Bear Creek, at water tank; top of rail.....	4, 684. 6
Bear Creek, 1 mile southwest of, 1,000 feet east of tunnel 1, 30 feet north of track, in large red rock; bronze tablet stamped "4595 GN".....	4, 605. 506
Bear Creek, 3.9 miles southwest of, 0.4 mile west of mile board 1161, 10 feet north of track, in rock cut, 1.5 feet higher than rail; iron bolt cemented in rock stamped "4325 GN".....	4, 335. 397

#### NYACK QUADRANGLE.

##### Java northwest along Great Northern Ry. to Belton.

Java, 500 feet north of section house, south end of railway bridge over Middle Fork of Flathead River, east end of top of pier level with bridge seat; bronze tablet stamped "3970 GN".....	3, 979. 879
Java, bridge over Flathead River; top of rail.....	3, 987. 6
Essex, at water tank; top of rail.....	3, 870. 4
Essex, 0.3 mile north of section house, 250 feet east of railroad track, in southeast part of large bluish white outcrop of rock, 3 feet above ground; bronze tablet stamped "3851 GN".....	3, 860. 885
Essex, 3.5 miles west of, 0.5 mile west of mile board 1172, near center of red rock cut, south of track, level with rail; iron bolt cemented in rock stamped "3755 GN".....	3, 765. 319
Paola, in front of section house; top of rail.....	3, 701. 5
Paola, 1.4 miles west of, 400 feet east of tunnel 2, 75 feet south of track, in white rock 4 feet high in foot of steep bank; bronze tablet stamped "3671 GN".....	3, 680. 845
Paola, 6.2 miles west of, near west end of rock cut, north of track, 2 feet higher than rail, 650 feet west of mile board 1180; iron bolt cemented in rock stamped "3523 GN".....	3, 532. 808
Nyack, 0.9 mile east of, 150 feet east of water tank, south side of track, at foot of rock cut; bronze tablet stamped "3373 GN".....	3, 383. 077
Nyack, at water tank; top of rail.....	3, 380. 5
Nyack, 4.1 miles west of, at mile board 1189, south of track, level with rail, at foot of rock ledge; iron bolt stamped "3282 GN".....	3, 292. 279
Belton, 3.7 miles east of, 0.2 mile west of milepost 1192, in rock cut south of track, 5 feet higher than rail; bronze tablet stamped "3251 GN".....	3, 260. 763

##### Coram southeast up South Fork of Flathead River 33 miles (single spur line).

Coram, 2.7 miles southeast of, on knoll, west side of trail and 50 yards south of Clayton's cabin, 1 mile south of town road; iron post stamped "3341".....	3, 351. 360
Coram, 4 miles southeast of, east side of trail, 0.2 mile west of creek; nail in root of tamarack tree.....	3, 330. 48
Coram, 7.1 miles southeast of, 0.5 mile north of small brook, 10 feet west of trail; nail in root of hemlock tree.....	3, 632. 24
Coram, 9.6 miles southeast of, 20 feet above and 100 feet south of trail, 200 feet north of Homjanz Horse hut, southwest edge of isolated ridge, in projecting ledge of rock, 20 feet southwest of large pine; aluminum tablet stamped "3301".....	3, 311. 530
Coram, 12 miles southeast of, 0.2 mile north of large brook and 200 yards south of small brook, on west side of trail; nail in root of spruce tree....	3, 534. 56
Coram, 14.53 miles southeast of, 50 feet north of intersection of trail leading to Spring Meadow and river bank, 0.2 mile east of Spring Meadow, east side of trail; iron post stamped "3247".....	3, 257. 289

Coram, 17.5 miles southeast of, 150 feet south of entrance to Riverside Park, 300 feet south of creek, east side of trail; iron post stamped "3220".	Feet. 3, 230. 064
Coram, 20.5 miles southeast of, about 1 mile south of small meadow, east side of trail; nail in root of birch tree.....	3, 385. 62
Coram, 22.6 miles southeast of, 65 feet above and 200 feet north of creek, 5 feet south of trail, on top of embankment; iron post stamped "3403"....	3, 413. 255
Coram, 25.6 miles southeast of, 1 mile north of large creek, 0.2 mile west of small meadow, east side of trail; nail in root of balsam tree.....	3, 497. 89
Coram, 28.5 miles southeast of, 1 mile north of Trout Lake, west side of trail, at south end of Skunk Root Meadow; iron post stamped "3593".....	3, 603. 402
Coram, 30 miles southeast of, 0.5 mile south of Trout Lake, west side of trail; nail in root of white pine tree.....	3, 703. 14
Coram, 33 miles southeast of, 75 feet north of Coal Creek, east side of trail, 50 feet east from river bank and 0.7 mile south of "Coal Bank;" iron post stamped "3365".....	3, 375. 332

#### URAL QUADRANGLE.

##### Gateway via Great Northern Ry. to Rexford.<sup>1</sup>

Gateway, 90 feet west of customhouse, on international boundary line; iron post stamped "2355".....	2, 365. 450
Gateway, 0.2 mile south of international boundary line, top of granite base line post, on upper half of letter B; bronze tablet stamped "2371".	2, 380. 895
Gateway, 1.2 miles south of international boundary line, on top of granite base line post, on upper half of letter B; bronze tablet stamped "2362".	2, 372. 683
Hayden, 50 feet west of Great Northern Railway water tank, 2 feet east of fence; iron post stamped "2301".....	2, 311. 522
Rexford, 100 feet east of Great Northern Railway (Jennings Branch), opposite town site office; iron post stamped "2277".....	2, 287. 181

#### Flathead Lake, Horse Plains, Libby, Pend Oreille, Quartz, Ravalli, Thompson, and Trout Creek Quadrangles.

##### FLATHEAD, MISSOULA, AND SANDERS COUNTIES.

The elevations in the following list were determined by primary leveling. The leveling along the Northern Pacific Railway is adjusted to accord with the elevation at Spokane, Wash., as given in Bulletin 457, and with the elevation at Missoula as computed in 1911, by distributing an excessive error of 3 feet. The leveling up Flathead Valley is part of a net between Butte and the Canadian boundary.

The leveling was done in the Horse Plains, Libby, Pend Oreille, Quartz, Thompson, and Trout Creek quadrangles in 1899 by H. S. Crowe; in the Flathead Lake quadrangle in 1904 by G. H. Kendall; and in the Ravalli quadrangle in 1899 by H. S. Crowe, in 1904 by G. H. Kendall, and in 1907 by N. W. Pilger.

##### FLATHEAD LAKE QUADRANGLE.

##### Polson south along stage road to point near Ronan.

Polson, 1,200 feet south of steamboat wharf, 60 feet north of Allard & Seaman's store and post office, 150 feet west of barn; iron post stamped "2908 GN".....	Feet. 2, 919. 138
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<sup>1</sup> The elevations given on this line are computed through railroad cut-off levels from Columbia Falls, corrected for orthometric error.

Polson, 2.7 miles south of, 50 feet south of road forks between roads to Ronan and to Ravalli; iron post stamped "3185 GN" .....	Feet. 3, 196. 063
Polson, 4 miles south of, 100 feet west of road to Selish, 1.5 miles west of small ranches, 1.5 miles northwest of woods, 300 feet west of small dry pond; point on rock 6 feet high.....	3, 187. 726
Polson, 5.5 miles south of, on second rise from ridge south of Polson, on south slope near top, 25 feet west of road; iron post stamped "3194 GN" ..	3, 205. 163
Polson, 8 miles south of, northwest corner of Stinger's ranch, 0.5 mile north of ranch house, 1,000 feet north of fence corner, 30 feet east of road, at top of rise; iron post stamped "3081 GN" .....	3, 092. 195
Polson, 13 miles south of, at Bell's place, 1,200 feet northwest of house, opposite gate to field, 30 feet west of road; iron post stamped "2952 GN" ..	2, 962. 467

**HORSE PLAINS QUADRANGLE.**

Weeksville southeast along Northern Pacific Ry. to Plains.

Milepost "H. 92, HLNA. 206," 55 feet southwest of, 18 feet west of center of track; iron post stamped "2454 T" .....	2, 452. 854
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**LIBBY QUADRANGLE.**

Idaho-Montana line southeast along Northern Pacific Ry. to Noxon.

Heron, 150 feet east of east end of station, 20 feet south of center of track; iron post stamped "2256 T" .....	2, 256. 083
Smeads, opposite milepost "H. 29, HLNA. 269," 30 feet south of center of track, 100 feet west of east head block of switch; iron post stamped "2169 T" .....	2, 168. 755

**PEND OREILLE QUADRANGLE.**

At Idaho-Montana boundary line.

Idaho-Montana boundary line, at signboard, 15 feet north of track; iron post stamped "2212 T" .....	2, 212. 182
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**QUARTZ QUADRANGLE.**

Plains southeast along Northern Pacific Ry. to milepost "H 118."

Plains, in front of telegraph office; top of rail.....	2, 473. 8
Plains, 3 feet north of northeast corner of fence around railroad roadmaster's residence, 94 feet west of center of track; iron post stamped "2473 T" ..	2, 472. 009
Paradise, 4 feet east of southeast corner of fence at section house, 27 feet north of center of track; iron post stamped "2490 T" .....	2, 488. 413
Olive, 1,000 feet south of Mrs. Lynch's house, 50 feet north of center of track, 4 feet east of telegraph pole; iron post stamped "2499 T" .....	2, 497. 187
Milepost "H. 113, HLNA. 185," 12 feet northeast of, 15 feet south of center of track; iron post stamped "2502 T" .....	2, 500. 439
Milepost "H. 118, HLNA. 180," 72 feet southwest of, 24 feet south of railroad track; iron post stamped "2508 T" .....	2, 506. 079

**RAVALLI QUADRANGLE.**

Milepost "H 118" along Northern Pacific Ry. southeast to Ravalli, thence south to Evaro.

Milepost "H. 123, HLNA. 175," 480 feet west of, 15 south of center of track; iron post stamped "2510 T" .....	2, 508. 071
Joco, 1 foot north of fence opposite station, 240 feet south of center of track; iron post stamped "2521 T" .....	2, 519. 462
Joco, in front of station; top of rail.....	2, 520. 1

Milepost "H. 134, HLNA. 164," 60 feet east of, 40 feet south of center of track; iron post stamped "2643 T".....	2, 641. 595
Ravalli, in front of telegraph office; top of rail.....	2, 702. 12
Milepost "H. 140, HLNA. 159," 70 feet west of, 21 feet north of track; iron post stamped "2815 T".....	2, 813. 052
Arlee, in front of telegraph office; top of south rail.....	3, 082. 2
Arlee, 85 feet west of west corner of Chinese bunk house, 100 feet south of center of track, 165 feet southwest of milepost "H. 146, HLNA. 152;" iron post stamped "3093 T".....	3, 091. 005
Milepost "H. 151, HLNA. 147," 240 feet east of, 15 feet north of track; iron post stamped "3561 T".....	3, 558. 946
Evaro, at center of station; top of south rail.....	3, 955. 7
Evaro, 0.25 mile east of, 58 feet northwest of road crossing, 30 feet south of center of track, 200 feet southwest of milepost "H. 157, HLNA. 141;" iron post stamped "3957 T".....	3, 955. 439

**Point 1 mile south of Frenchtown east to point 2.2 miles west of Ninemile.**

Frenchtown, 600 feet southwest of Northern Pacific Railway station, 120 feet west of bridge across stream, 30 feet north of road, in boulder; aluminum tablet stamped "3034".....	3, 036. 359
Frenchtown, 2.5 miles west of, 600 feet northeast of Bramen Lavoier's ranch house, south side of road, in boulder; aluminum tablet stamped "3025".....	3, 028. 137
Huson, 1 mile west of, 400 feet southwest of Peter Shafer's cabin, 500 feet southwest of bridge across Sixmile Creek, 5 feet south of road, in rock; aluminum tablet stamped "3006".....	3, 008. 557
Ninemile, 80 feet south of post office and hotel, 10 feet northeast of road, in small boulder; aluminum tablet stamped "2992".....	2, 994. 785
Ninemile, 1.8 miles west of, 0.2 mile east of Eddy's ranch house, 15 feet northwest of road, in boulder; aluminum tablet stamped "3022".....	3, 024. 838

**Near Ronan south along stage road to Ravalli.**

Polson, 17.5 miles south of, on second rise south from Crow Creek, 18 feet west of stage road; iron post stamped "3003 GN".....	3, 014. 423
Post Creek, 4 miles north of, 15 feet east of wagon road, in middle of level stretch; iron post stamped "2933 GN".....	2, 943. 912
Post Creek, 1.5 miles north of, 20 feet east of road, on south slope toward creek, 20 feet northwest of large rock; iron post stamped "2849 GN".....	2, 860. 036
Mission Creek, 200 feet south of, 30 feet west of road; iron post stamped "2739 GN".....	2, 750. 480
Ravalli, 1 mile north of, south of summit of ridge, 90 feet north of fork of stage road to Polson, and road to Indian Mission; iron post stamped "3104 GN".....	3, 115. 461

**THOMPSON QUADRANGLE.**

**White Pine southeast along Northern Pacific Ry. to Weeksville.**

White Pine, 12 feet west of car house, 18 feet east of corner of fence, 25 feet north of center of track; iron post stamped "2583 T".....	2, 582. 317
Milepost "H. 62, HLNA. 236," 365 feet northwest of, 21 feet south of center of track; iron post stamped "2527 T".....	2, 526. 496
Belknap, in front of station; base of rail.....	2, 402. 5
Milepost "H. 66, HLNA. 232," 240 feet east of, at end of through cut, 25 feet north of center of railroad track, 360 feet east of east end of bridge 280 over Clark Fork; iron post stamped "2389 T".....	2, 387. 767

Thompson Falls, 40 feet east of east end of station, 16 feet south of center of track, 6 feet east of telegraph pole; iron post stamped "2439 T".....	Feet. 2, 437. 912
Milepost "H. 76, HLNA. 222," 1 mile east of, 22 feet south of center of track; iron post stamped "2433 T".....	2, 431. 620
Eddy, 27 feet west of west end of telegraph office, 15 feet south of center of track, 30 feet east of milepost "H. 82, HLNA. 216;" iron post stamped "2428 T".....	2, 426. 927
Milepost "H. 87, HLNA. 211," 22 feet east of, 24 feet north of center of track; iron post stamped "2444 T".....	2, 443. 366

**TROUT CREEK QUADRANGLE.****Noxon southeast along Northern Pacific Ry. to White Pine.**

Noxon, in front of telegraph office; top of rail.....	2, 180. 0
Noxon, 40 feet east of east corner of station, 13 feet north of center of track; iron post stamped "2182 T".....	2, 181. 516
Milepost "H. 38, HLNA. 260," 420 feet southeast of, 30 feet south of track; iron post stamped "2210 T".....	2, 209. 000
Tuscor, 33 feet southeast of southeast corner of section house, 49 feet west of center of track; iron post stamped "2232 T".....	2, 231. 408
Trout Creek, 16 feet west of west end of telegraph office, 18 feet from center of track, 18 feet east of milepost "H. 48, HLNA. 250;" iron post stamped "2371 T".....	2, 370. 298
Vermilion, 150 feet east of road crossing at west end of through cut, south side of railroad, 18 feet north of center of track; iron post stamped "2482 T".....	2, 481. 317

**Bonner, Drummond, Gibbons Pass, Hamilton, Missoula, Ovando, Philipsburg, Sapphire, and Trapper Peak Quadrangles.****DEERLODGE, GRANITE, MISSOULA, POWELL, AND RAVALLI COUNTIES.**

The elevations in the following list were determined by primary leveling as adjusted in 1911.

The leveling was done in the Bonner quadrangle in 1898 by F. B. Whitlock, in 1900 by J. T. Stewart, and in 1905 and 1906 by F. E. Fellows; in the Drummond quadrangle in 1898 by F. B. Whitlock, in 1900 by J. T. Stewart, in 1904 by G. H. Kendall, and in 1905 by F. E. Fellows; in the Hamilton quadrangle in 1897 by C. M. Kurtz and in 1906 by F. E. Fellows; in the Missoula quadrangle in 1898 by F. B. Whitlock, in 1899 by H. S. Crowe, and in 1900 by J. T. Stewart; in the Philipsburg quadrangle in 1905 by F. E. Fellows; in the Sapphire quadrangle in 1905 and 1906 by F. E. Fellows; and in the Trapper Peak and Gibbons Pass quadrangles in 1897 by C. M. Kurtz.

**BONNER QUADRANGLE.****Missoula east along Northern Pacific Ry. to Nimrod (double-run line).**

	Feet.
Missoula, in front of station; top of rail.....	3, 206. 8
Missoula, First National Bank building, southeast corner of Higgins Avenue and Front Street, right side of entrance; bronze tablet stamped "3201 T".....	3, 199. 400
Missoula, Montana State University building, left side of main entrance; bronze tablet stamped "3225 T".....	3, 223. 415

	Fect.
Missoula, Montana State University grounds; south meridian mark stamped "3220 MSLA" .....	3, 217. 974
Missoula, Montana State University grounds; north meridian mark stamped "3220 MSLA" .....	3, 218. 155
Missoula, 4 miles east of, at fork of county and toll roads, 100 feet west of railroad; iron post stamped "3249 MSLA" .....	3, 246. 490
Bonner, southeast corner of Margaret Hotel grounds; iron post stamped "3297 MSLA" .....	3, 295. 429
Turah, southeast corner of section house; iron post stamped "3325 MSLA" ..	3, 323. 395
Clinton, 3 miles west of, 20 feet north of road at railroad crossing; iron post stamped "3416 MSLA" .....	3, 414. 363
Clinton, northeast corner of Federation of Labor hall, 200 feet west of rail- road track, opposite milepost 107; iron post stamped "3467 MSLA" ....	3, 465. 359
Clinton, 3 miles southeast of, 1,000 feet south of milepost 104, 50 feet east of crossing of railroad and wagon road; iron post stamped "3509 MSLA" ..	3, 507. 324
Scepter spur, 100 feet south of county bridge over Hell Gate River; iron post stamped "3544 MSLA" .....	3, 542. 324
Bonita, southeast corner of post office, in road in front of Mr. Cook's resi- dence; iron post stamped "3582 MSLA" .....	3, 580. 292
Bonita, 3 miles east of, south side of road, at gate to Will's ranch, 300 feet north of old corduroy bridge over Hell Gate River; iron post stamped "3648 MSLA" .....	3, 646. 299
Nimrod, 200 feet north of section house, north side of road; iron post stamped "3696 MSLA" .....	3, 694. 262

**Missoula up Rattlesnake Canyon (double spur line).**

Missoula, 3 miles north of, north and west side of road, at angle in road; iron post stamped "3436 MSLA" .....	3, 434. 548
Missoula, 5.5 miles north of, 600 feet west of Effenger's house, 300 feet east of bridge across Rattlesnake Canyon; iron post stamped "3648 MSLA" ..	3, 646. 410

**Bonner east via Blackfoot River to Gilbert's ranch (double-run line as far  
as Potomac).**

Bonner, 3 miles east of, 10 feet west of the north end of county bridge over Blackfoot River; iron post stamped "3288 MSLA" .....	3, 286. 428
Bonner, 6 miles northeast of, 10 feet from north end of old county bridge, 20 feet south of road; iron post stamped "3350 MSLA" .....	3, 348. 263
Twin Creeks, southeast corner of M. R. Stairs's house, 20 feet north of road; iron post stamped "3411 MSLA" .....	3, 409. 424
Potomac, 4 miles west of, 15 feet north of road, at gate leading to J. Davis's ranch; iron post stamped "3519 MSLA" .....	3, 517. 423
Potomac, 100 feet west of post office; iron post stamped "3619 MSLA" ..	3, 617. 418
Gilbert's ranch, 15 feet southwest of intersection of roads; iron post stamped "3759 MSLA" .....	3, 757. 075

**Scepter Spur up Rock Creek via Quigley and Ranch Creek (double-run line).**

Gilbert Gulch, mouth of, fork of road to Johnson's sawmill; iron post stamped "3646 MSLA" .....	3, 643. 424
Quigley, corner of Emmons Avenue and Third Street; iron post stamped "3834 MSLA" .....	3, 832. 299
Quigley, 3 miles south of, near mouth of Ranch Creek, northeast corner of Paul's house; iron post stamped "3960 MSLA" .....	3, 958. 332
Ranch Creek, 2.5 miles southeast of mouth of, 50 feet west of crossing of Ranch Creek by wagon trail, at south side of trail; iron post stamped "4189 MSLA" .....	4, 186. 999

Quigley, 5 miles southwest of, 0.5 mile northeast of mouth of Welcome Gulch, opposite small stream from west, 15 feet south of trail, 75 feet southeast of Rock Creek; iron post stamped "3965 MSLA".....	Feet. 3,963.297
Quigley, 8 miles southwest of, 2.5 miles southwest of Welcome Gulch, 50 feet east of Rock Creek, 25 feet above water, west side of trail, in boulder 4 by 3 feet and 2.5 feet high; aluminum tablet stamped "4067 MSLA" ..	4,064.789

**Point 8 miles southwest of Quigley southwest to point 0.2 mile south of Ford 20, on Rock Creek.**

Ford 20, Rock Creek, 0.2 mile south of, 0.6 mile north of log cabin, 6 feet east of trail, 220 feet west of creek, in large quartzite boulder; aluminum tablet stamped "MSLA 4196".....	4,193.374
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**Quigley southeast to Willow Creek.**

Quigley, 2.5 miles southeast of, 40 feet south of Brewster Creek, 5 feet south of road; iron post stamped "MSLA 4127".....	4,125.457
Quigley, 5.9 miles southeast of, 30 feet east of road, 150 feet east of gulch, west face of rock ledge; bronze tablet stamped "MSLA 5137".....	5,135.344
Quigley, 7.6 miles southeast of, at forks of road leading to Jumbo mines, south side of road, north side of rock ledge; bronze tablet stamped "MSLA 6095".....	6,093.441
Quigley, 9.6 miles southeast of, 4 feet west of road, 300 feet north of forks of road on summit; iron post stamped "MSLA 7117".....	7,115.439
Quigley, 12.6 miles southeast of, 0.4 mile southeast of summit, 6 feet south of road; iron post stamped "MSLA 7056".....	7,053.434
Quigley, 15.4 miles southeast of, 1 mile west of Willow Creek, 4 feet south of road; iron post stamped "6189 MSLA".....	6,187.436

**Dwyer's ranch to Threemile Creek.**

Dwyer's ranch, 3.7 miles northeast of, north side of road; iron post stamped "3912 MSLA".....	3,910.208
Cleveland mine, on divide between Bitterroot Valley and Rock Creek, 300 feet east of head of Threemile Creek and Welcome Gulch, north side of trail; iron post stamped "7182 MSLA" (unchecked).....	7,180.637

**Dwyer's ranch southeast along Ridge road north of Ambrose Creek to Richard's ranch.**

Threemile schoolhouse, 0.8 mile south of, 100 feet northwest of fork of road, north side of road near fence; iron post stamped "3553 MSLA".....	3,551.224
Richard's ranch, 1.4 miles southeast of, southwest bank of timbered ravine, 30 feet south of road; iron post stamped "4653 MSLA".....	4,651.143

**Hayes siding up Miller Creek road to Hayes's sawmill (double-run line).**

Deberge (or Belgian) ranch, 75 feet southwest of, north side of road near fence; iron post stamped "3764 MSLA".....	3,761.887
Davis's ranch, 400 feet southwest of, 700 feet west of site of upper setting of Hayes's sawmill, north side of road near fence; iron post stamped "4037 MSLA".....	4,034.994

**DRUMMOND QUADRANGLE.**

**Nimrod east along Northern Pacific Ry. to Garrison.**

Nimrod, 3 miles east of, opposite milepost "89 HLNA", 500 feet east of road crossing, outside right of way, south of track, 20 feet north of road, 50 feet north of small log bridge; iron post stamped "3727 MSLA".....	3,725.016
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Bearmouth, 2 miles west of, 2,449 feet southeast of northwest corner of sec. 21, T. 11 N., R. 14 W., south of track; iron post stamped "3788 MSLA" (as reset by railroad company, 2.33 ft. higher than original position).....	Fect. 3, 788. 485
Bearmouth, 1 mile east of, 0.25 mile east of milepost "83 HLNA", 60 feet south of track, inside fence, west of cut, east of fill; iron post stamped "3821 MSLA".....	3, 819. 052
Hellgate, 1 mile west of, 400 feet southwest of milepost "80 HLNA", 140 feet southeast of track, on southwest side of knoll in Howe's place; iron post stamped "3853 MSLA" (position as reset by railroad company, but elevation may not be correct).....	3, 850. 897
Hellgate, 2 miles east of, at milepost "77 HLNA", on top of bank northeast of track, on fence line; iron post stamped "3926 MSLA".....	3, 923. 931
Drummond, 2 miles west of, 1,000 feet east of milepost "74 HLNA", 1 foot north of fence, 100 feet north of track, in low level place 500 feet south of road; iron post stamped "3914 MSLA".....	3, 911. 909
Drummond, 1 mile east of, opposite milepost "71 HLNA", 50 feet south of track, 2 feet south of fence in field; iron post stamped "3962 MSLA".....	3, 959. 888
Drummond, 4 miles east of, opposite milepost "68 HLNA", north of track, 2 feet north of fence, 300 feet south of road; iron post stamped "4014 MSLA".....	4, 011. 904
Haskell, east end of siding, opposite milepost "65 HLNA", 100 feet north of track, in field, 700 feet northwest of switch stand; iron post stamped "4079 MSLA".....	4, 077. 001

**Point near Potomac northeast along highway to Clearwater schoolhouse.**

Gilbert's ranch, 3.1 miles northeast of, south side of road, northeast side of small circular marshy flat in ravine; iron post stamped "4012 MSLA"....	4, 010. 472
Sunset Valley, 300 feet west of Clem's ranch, north side of road at corner of fence; iron post stamped "3765 MSLA".....	3, 763. 079
Sunset schoolhouse, 1.5 miles northeast of, 3 miles southwest of Clearwater post office, top of divide between Elk Creek and Big Blackfoot River, 200 feet southeast of road, in red rock 6 by 8 feet and 1 foot high, bronze tablet stamped "3965 MSLA".....	3, 963. 509
Clearwater, 300 feet southeast of post office; 300 feet northeast of bridge over Blackfoot River, east side of road near fence; iron post stamped "3775 MSLA".....	3, 773. 031
Clearwater, 1.5 miles northeast of schoolhouse, in edge of timber east of road; iron post stamped "3846 MSLA".....	3, 844. 094

**Drummond via Flint to Philipsburg.**

Drummond, 2.7 miles south of, at forks of road 0.3 mile west of Northern Pacific Ry. crossing, southwest corner of fence in field, 10 feet west of irrigating ditch, in top of small boulder; bronze tablet stamped "MSLA 4049".....	4, 047. 044
New Chicago, 2.5 miles southeast of, small summit at triangulation station of that name, 6 feet south of signal, on small boulder, aluminum tablet stamped "MSLA 4513".....	4, 510. 619
New Chicago, 2.5 miles southeast of New Chicago triangulation station; iron post stamped "4514 MSLA".....	4, 511. 893
Hall, 2 miles northeast of, 250 feet east of Pat Brogan's house, 20 feet north of gate, in field, 2 feet west of corner of fence, on small boulder; bronze tablet stamped "MSLA 4148".....	4, 145. 876
Hall, 2.3 miles southeast of, 150 feet west of Frank Johnson's house, 30 feet east of creek, west side of road; iron post stamped "MSLA 4236".....	4, 233. 901

Stone, 2.5 miles north of, 30 feet east of road, 100 feet north of stone cellar, 700 feet northeast of log house, 50 feet west of quartz ledge, in top of quartz boulder; bronze tablet stamped "4370 MSLA" .....	Feet. 4, 367. 911
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**GIBBONS PASS QUADRANGLE.****Fork Bridge southeast up East Fork to Ross Hole.**

Sula, 0.25 mile north of post office, 7 feet east of blazed stump west of road; highest point of 12 by 18 inch rock.....	4, 430. 18
Ross Hole, 3.5 feet north of corner of sections 8, 9, 16, and 17, T. 1 N., R. 19 W.; iron post stamped "4384" .....	4, 432. 723

**HAMILTON QUADRANGLE.****Hamilton via Northern Pacific Ry. to Grantsdale.**

Hamilton, in top of astronomical pier of United States Geological Survey; on east side of Northern Pacific Ry., opposite station; bronze tablet, stamped "3524" .....	3, 573. 077
Grantsdale, in front of baggage-room door; top of rail nearest station.....	3, 641. 3
Grantsdale, north side of schoolhouse, 11 feet 8½ inches from northeast corner; bronze tablet stamped "3627" .....	3, 676. 032

**Grantsdale via Como and Darby to Fork Bridge.**

Grantsdale, 2.5 miles south of, at road fork, 3 feet inside of rail fence and 2 feet 10 inches southwest of signpost reading "9 miles to Weeping Child Hot Springs"; iron post stamped "3636" .....	3, 684. 885
Sheep Flat, on river side of road, 50 feet north of sharp bend 3 miles south of Grantsdale; T cut in higher part of granite boulder.....	3, 702. 77
Como, 0.8 mile north of, east of road; small circular projection on large piece of granite.....	3, 801. 52
Harlans Bridge, beam on lower side of east abutment; head of driftbolt.....	3, 789. 83
Harlans Bridge, 0.1 mile above, at junction of road from Lost Horse with main road in a field on north side of road 3 feet from fence and 47 feet S. 50° W. (magnetic) from large pine tree in same field; iron post stamped "3731" .....	3, 779. 476
Rock Creek Bridge, 1 mile south of, west side of road; head of nail in bench cut in large pine tree (N. P. Ry. bench mark).....	3, 816. 52
T. 4 N., R. 21 W., 35 feet west and 20 feet north of corner of secs. 34 and 35; iron post stamped "3802" .....	3, 850. 467
Darby, northeast corner of Darby drug store; head of nail in plug.....	3, 879. 68
Darby, 4 feet 8 inches east and 17½ feet north of northwest corner of fence in yard of Hammond's Hotel; iron post stamped "3832" .....	3, 880. 733

**West up Rock Creek valley to Lake Como.**

Lake Como, in a large boulder on bank of lake, between hotel and cattle corral, and 75 feet south of the road; copper bolt stamped "U. S. G. S. 4167" .....	4, 215. 812
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**Hamilton east to foothills and south along foothills to Skalkaho Creek and Hamilton waterworks reservoir, thence west to Grantsdale.**

Bitterroot stock farm, water tank at foot of hill east of, on most easterly part of a large boulder 70 feet west of largest of a clump of pine trees; highest point.....	3, 931. 73
Hamilton waterworks reservoir, in north wall, 130 feet east of the northwest corner; iron post stamped "3776" .....	3, 824. 688

**Hamilton north along Northern Pacific Ry. to Woodside.**

Blodgett Creek, near trestle over, in small fir stump 60 feet west of track; head of nail in bench cut . . . . . Feet.  
3, 500. 17

**Woodside east along road via Corvallis to foothills, thence north along east edge of valley to Stevensville.**

Corvallis, under front wing on south side of northwest corner of foundation of schoolhouse; bronze tablet stamped "3428" . . . . . 3, 476. 269  
T. 7 N., R. 20 W., 3 feet northwest of southeast corner of sec. 15; iron post stamped "3537" . . . . . 3, 585. 201  
T. 8 N., R. 20 W., southwest corner of SE.  $\frac{1}{4}$  sec. 34; 4 feet north of fence on township line; iron post stamped "3375" . . . . . 3, 423. 146  
T. 8 N., R. 20 W., 30 feet 7 inches north of south corner between secs. 14 and 15; iron post stamped "3322" . . . . . \*3, 370. 583

**Stevensville south on west side of Bitterroot River to Woodside.**

Tps. 8 and 9, R. 20 W., where township line crosses Northern Pacific Railway, in large pine tree 70 feet east of track; head of nail in bench cut . . 3, 294. 25  
Curlew mine, at northwest corner of office; iron post stamped "3533" . . . . 3, 581. 455  
T. 8 N., R. 21 W., 9 feet northeast of south corner of secs. 34 and 35; iron post stamped "3614" . . . . . 3, 662. 634  
Woodside, 3 miles north of, 33 feet from southwest corner of sec. 18, T. 7 N., R. 20 W., 8 feet north of section line; iron post stamped "3423" . . . . . 3, 471. 575

**Rock Creek west along road via sand basin to Corvallis (portion of line).<sup>1</sup>**

Corvallis, 5.2 miles southeast of, 600 feet east of C. Boucher's ranch house, 250 feet east of bridge, center of road, in top of granite boulder; aluminum tablet stamped "MSLA 4102" . . . . . 4, 099. 948

**MISSOULA QUADRANGLE.****O'Keefe trestle south along Northern Pacific Ry. to Missoula (part of double-rodged line from Pasco, Wash.).**

Desmet, 30 feet west of road crossing in front of station, 45 feet south of main track; iron post stamped "3225 T" . . . . . 3, 222. 984  
Desmet, in front of station; top of rail . . . . . 3, 224. 6  
McLeod's siding, 0.5 mile east of, opposite cemetery, 4 feet east of telegraph pole, 50 feet southwest of center of track; iron post stamped "3186 T" . . . . . 3, 184. 242

**Missoula south along Bitterroot branch of Northern Pacific Ry. to Stevensville.**

Bitterroot, 0.5 mile north of station, 35 feet northwest of road crossing, 400 feet south of milepost 3; iron post stamped "3172 MSLA" . . . . . 3, 169. 876  
Buckhouse ranch, 600 feet southeast of, 75 feet northwest of west end of wagon bridge, 150 feet east of road crossing; iron post stamped "3140 MSLA" (U. S. G. S. Water Resources Branch station) . . . . . 3, 137. 762  
Hayes siding, 225 feet southwest of Miller Creek, wagon road crossing; wire nail in root of 30-inch pine tree . . . . . 3, 133. 860  
Kennedy's ranch, 0.5 mile north of, 150 feet south of milepost 9, 90 feet west of railroad, west side of wagon road, near fence; iron post stamped "3143 MSLA" . . . . . 3, 141. 062  
Lolo, 65 feet west of station, north side of road near fence, 74 feet west of railroad, 200 feet southwest of milepost 11; iron post stamped "3185 MSLA" . . . . . 3, 183. 151

<sup>1</sup> This is an unadjusted line closing 1.1 feet low.

McClain's ranch, 400 feet southeast of, 325 feet west of railroad, east side of wagon road, near fence; iron post stamped "3173 MSLA".....	3, 170. 937
Carlton, 85 feet west of station, south side of county road, near fence; iron post stamped "3199 MSLA".....	3, 197. 202
Florence, 85 feet south of schoolhouse, 300 feet west of railroad, north side of wagon road, near fence; iron post stamped "3271 MSLA".....	3, 269. 161
Stevensville, 2.5 miles north of, 45 feet southwest of Stevensville and Florence wagon-road crossing, near fence corner; iron post stamped "3264 MSLA".....	3, 262. 138
Stevensville, 100 feet east of station, corner of fence north of road; iron post stamped "3310 MSLA".....	3, 307. 961
Stevensville, in wall at southeast corner of old courthouse building; bronze tablet stamped "3271 N. P.".....	3, 319. 631

**Stevensville east to Dwyer's ranch.**

Smith's ranch, 40 feet northwest of, 3.5 miles northeast of Stevensville, 1,250 feet east of county road, at mouth of small timbered gulch; iron post stamped "3330 MSLA".....	3, 327. 987
Dwyer's ranch, 15 feet north of yard gate, east of road near fence; iron post stamped "3397 MSLA".....	3, 395. 269

**Hayes siding up Miller Creek road to Williams's ranch.**

Williams's ranch, 50 feet south of, 250 feet east of intersection of short road to Missoula with Miller Creek Road; iron post stamped "3388 MSLA".....	3, 386. 074
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**Desmet northwest to point 1 mile south of Frenchtown.**

Desmet, 2.5 miles west of, 1 mile west of Barrett's ranch house, 10 feet west of road, in gneiss boulder; aluminum tablet stamped "3217".....	3, 219. 983
Desmet, 6 miles west of, 0.2 mile west of Bourgon's ranch house with red roof, 150 feet north of road, on hillside, in gneiss boulder 3 feet by 2 feet; aluminum tablet stamped "3169".....	3, 165. 707

**Lothrop south along Petty Creek over divide and along Grave Creek to its junction with Lolo Creek, thence east along Lolo Creek to Lolo.**

Lothrop, 50 feet north of Northern Pacific Railway station, 5 feet east of sidewalk, midway between station and Hotel Lothrop, in boulder; aluminum tablet stamped "2958".....	2, 960. 502
Lothrop, 3 miles south of, up Petty Creek, 900 feet north of vacant cabin, 300 feet south of creek ford, 15 feet west of road, in boulder 4 feet high; aluminum tablet stamped "3207".....	3, 209. 499
Lothrop, 5.5 miles south of, up Petty Creek, 600 feet up creek from a bridge, 10 feet north of road, in rock near log painted "3425;" aluminum tablet stamped "3423".....	3, 425. 702
Lothrop, 9 miles south of, 2 miles south of Schmitz Bros.' sawmill on Petty Creek, 0.5 mile north of log cabin, 5 feet east of road, in boulder; aluminum tablet stamped "3677".....	3, 679. 744
Lothrop, 12.1 miles south of road crossing over divide between Petty and Grave creeks, 0.8 mile north of south side of road, in root of fir tree; nail with aluminum tag marked "4181".....	4, 183. 18
Lothrop, 15 miles south of, on road summit over divide between Petty and Grave creeks, 5 feet east of road, in boulder; aluminum tablet stamped "4416".....	4, 418. 695

Junction of Lolo and Grave creeks, 3.5 miles north of, midway between upper two bridges on west fork of Grave Creek, 5 feet east of road, in boulder 3 feet high; aluminum tablet stamped "4027".....	Feet. 4, 029. 759
Lolo Hot Springs, 9.5 miles east of, at the confluence of Grave and Lolo Creeks, 150 feet west of log stable, 10 feet north of road, 100 feet west of Grave Creek ford, in rock; aluminum tablet stamped "3784".....	3, 786. 393
Lolo Hot Springs, 12 miles east of, in root of tree on which a 12-inch sign is nailed 6 feet above bench-mark point; nail marked "3700".....	3, 702. 77
Lolo Hot Springs, 12.2 miles east of, 1.2 miles west of Schmitz ranch, on north side of Lolo Creek, about 400 feet east of grade summit north of road; aluminum tablet stamped "3712" (description is of new location after bench mark was moved on account of railroad construction).....	3, 714. 264
Lolo Hot Springs, 14 miles east of, 0.8 mile east of Schmitz ranch, on Lolo Creek, 50 feet west of 14-mile sign, in root of tree on east side of road; aluminum tag stamped "3630".....	3, 632. 23
Lolo Hot Springs, 15 miles east of, 500 feet west of L. Lubecke's ranch house, on Lolo Creek, south side of road, 30 feet north of gate, in boulder; aluminum tablet stamped "3583".....	3, 585. 933
Halfway House (Woodmen), 2 miles east of, 8 miles west of Lolo, 0.5 mile west of Anderson's ranch house, 600 feet west of a peculiar cornered log house, 10 feet south of road between road and irrigating ditch, in rock; aluminum tablet stamped "3462".....	3, 465. 704
Lolo, 5 miles west of, 60 feet south of flume, in root of pine tree on south side of road; nail; aluminum tag in side of tree stamped "3358".....	3, 360. 51
Lolo, 5 miles west of, 0.5 mile east of Thomas Moyer's ranch, near road summit on hill grade, 10 feet west of road, 0.5 mile west of Thompson's ranch, in rock; aluminum tablet stamped "3406".....	3, 408. 507
Lolo, 3 miles west of, 600 feet southwest of large white house 20 feet north of road, in rock; aluminum tablet stamped "3266".....	3, 268. 216
Lolo, 65 feet west of station, north of road near fence, 75 feet west of railroad, 200 feet south of 11-mile post; iron post stamped "3185 MSLA".....	3, 183. 151
<b>Junction of Grave and Lolo creeks west along Lolo Creek to Lolo Hot Springs and return (double spur line).</b>	
Lolo Hot Springs, 6 miles east of, 200 feet west of 6-inch sign, 25 feet south of road, in boulder, "U. S. B. M." painted on rock near by; aluminum tablet stamped "3896".....	3, 898. 749
Lolo Hot Springs, 5.5 miles east of, north side of road, in root of 3-foot tree; nail with aluminum tag stamped "3897".....	3, 899. 61
Lolo Hot Springs, 0.5 mile east of, east side of road between road and creek, in log; nail marked "4093".....	4, 095. 02
Lolo Hot Springs, in top of first large boulder up creek, 400 feet northwest of post office; aluminum tablet stamped "4168".....	4, 170. 980
James Martin's ranch on Lolo Creek, 70 feet north of house, southeast side of creek, 2.5 miles east of Lolo Hot Springs, in rock; aluminum tablet stamped "4054".....	4, 056. 814
Lolo Hot Springs, 2.8 miles east of, 0.8 mile east of Martin's ranch, top of a small rise in road, 15 feet north of road, in boulder; aluminum tablet stamped "4032".....	4, 034. 665
<b>Buckhouse Bridge northwest to Bisson's ranch, near Desmet.</b>	
McCloy's ranch, 0.1 mile northwest of, 20 feet west of road, near fence, in boulder; aluminum tablet stamped "3191".....	3, 193. 570
R. Sharp's ranch house, 200 feet northeast of, west of road, 40 feet north of gate, in boulder; aluminum tablet stamped "3088".....	3, 090. 811

H. A. Jacghin's ranch house, 0.8 mile down river from, 5 feet east of road, 100 feet north of turn out, in rock; aluminum tablet stamped "3120"....	Feet. 3, 122. 263
Deep Creek Ferry across Missoula River, 0.5 mile south of, east side of road at top of hill; nail in root of pine tree; marked by aluminum tag stamped "3262" in side of tree.....	3, 264. 83
Deep Creek Ferry across Missoula River, 0.2 mile south of, 70 feet west of log corral, 120 feet southeast of log cabin, 30 feet west of road, in rock; aluminum tablet stamped "3150".....	3, 152. 241
De Show ranch, 400 feet south of house, on south side of a Coeur d'Alene railroad bridge; bothhead with circle of paint, marked "3088".....	3, 089. 97
Frenchtown, 5.5 miles east of, on mail road from Missoula, 400 feet north of Thomas Lovous's ranch house, east of road, 25 feet south of telephone pole, in nest of boulders; aluminum tablet stamped "3060".....	3, 062. 272

#### OVANDO QUADRANGLE.

##### Clearwater schoolhouse east along highway to Lynn ranch.

Sperry's ranch, 1.1 miles southwest of, 700 feet from Blackfoot River, east of road; iron post stamped "3883 MSLA".....	3, 881. 059
Zaya's ranch, 1.3 miles northeast of, 1.2 miles northeast of bridge over Cottonwood Creek, south of east and west road; iron post stamped "3974 MSLA".....	3, 972. 096
Monture Creek schoolhouse, 100 feet north of, 275 feet west of Monture Creek, south of road; iron post stamped "4029 MSLA".....	4, 027. 105
Ovando, 250 feet east of post office, 50 feet east of Moser's yard gate; iron post stamped "4101 MSLA".....	4, 099. 1
Terrell's ranch, 600 feet west of, 1,100 feet west of bridge over North Fork of Blackfoot River, north side of track, in road, in flat granite rock 4 by 5 feet; aluminum tablet stamped "4087 MSLA".....	4, 085. 612
Terrell's ranch, 3.4 miles southeast of, 3.3 miles southeast of iron bridge over North Fork of Blackfoot River, west of chain of lakes, south of road; iron post stamped "4347 MSLA".....	4, 345. 201

#### PHILIPSBURG QUADRANGLE.

##### Willbur Creek southeast to Philipsburg.

Philipsburg, 22.4 miles northwest of, 1 mile north of Maloney's cabin, 4 feet east of road; iron post stamped "MSLA 5748".....	5, 745. 435
Philipsburg, 19.5 miles northwest of, 1,800 feet north of forks of road leading to Philipsburg, 15 feet northeast of gate to Grant's house; iron post stamped "MSLA 5489".....	5, 486. 426
Philipsburg, 13.1 miles northwest of, 600 feet east of Willow Creek, 40 feet west of road, east side of rail fence, mouth of gulch; iron post stamped "MSLA 5105".....	5, 102. 445
Philipsburg, 8.9 miles northwest of, 15 feet northwest of road, top of divide between Marshall and Rock Creeks; iron post stamped "MSLA 6050".....	6, 047. 405
Philipsburg, 6.1 miles northwest of, at forks of road 60 feet west of creek, 100 feet northwest of fence corner; iron post stamped "MSLA 5370".....	5, 367. 389
Philipsburg, 2.8 miles west of, forks of road 60 feet north of creek, at corner of fence; iron post stamped "MSLA 5207".....	5, 204. 402
Philipsburg, high-school building, east side of northeast corner, in granite foundation; aluminum tablet stamped "MSLA 5273".....	5, 270. 377

## Stone south along highway to Phillipsburg.

Stone, 1.1 miles south of, 100 feet south of blacksmith shop, 150 feet south of Wickburg's house, 60 feet east of Northern Pacific Railway, 50 feet west of road, in top of granite bowlder; bronze tablet stamped "4623 MSLA".	Feet. 4,620.960
Flint, 100 feet south of saloon, 80 feet south of forks of road leading up Boulder Creek, 50 feet west of stable, 10 feet west of road, in granite bowlder; bronze tablet stamped "4857 MSLA".....	4,855.044
Flint, 3.4 miles south of, 30 feet east of Northern Pacific Railway, 100 feet east of creek, 0.25 mile southeast of log cabin, in top of bowlder; bronze tablet stamped "4911 MSLA".....	4,909.033
Phillipsburg, 4.8 miles north of, 200 feet east of Northern Pacific Railway, 10 feet east of road, 0.5 mile south of house; iron post stamped "MSLA 5005".....	5,002.998
Phillipsburg, 3.3 miles north of, 300 feet north of house, 300 feet north of forks of road leading west to Black Pine, 450 feet northeast of crossing of Black Pine road and Northern Pacific Railway, 50 feet north of road, in bowlder; bronze tablet stamped "MSLA 5036".....	5,034.010

## Anaconda west along highway to Carey ranch.

Anaconda, 6 miles northeast of, 0.25 mile west of schoolhouse, 200 feet southeast of unpainted house, south of road; iron post stamped "5605 MSLA".....	5,602.572
Anaconda, 9 miles northwest of, 0.75 mile west of road to Olesons Gulch, south side of road, top of small summit; iron post stamped "5867 MSLA".	5,864.578
Anaconda, 11.5 miles northwest of, 0.5 mile west of blacksmith shop, 200 feet southeast of log house; iron post stamped "5994 MSLA".....	5,991.582
Anaconda, 14.25 miles northwest of, 500 feet west of log house, 800 feet north of creek, north side of road; iron post stamped "6398 MSLA".....	6,395.594
Anaconda, 16.5 miles northwest of, 300 feet west of Silver Lake, 0.5 mile southwest of hotel, 0.5 mile southeast of Gold Coin mill, 4 feet south of road, at summit, in top of granite bowlder; aluminum tablet stamped "6443 MSLA".....	6,440.623
Anaconda, 19 miles northwest of, 300 feet east of Georgetown Lake, 0.5 mile northeast of log house, 150 feet north of point of pine timber, 10 feet east of road; iron post stamped "6381 MSLA".....	6,378.542
Anaconda, 22.4 miles northwest of, 1.5 miles west of Georgetown Lake, 15 feet west of road, summit between Georgetown Lake, Rock Creek, and Trout Creek; iron post stamped "6794 MSLA".....	6,791.545

## Carey ranch north along highway to Phillipsburg (double-run line).

Anaconda, 25.4 miles northwest of, 1 mile northwest of Carey ranch, 30 feet west of road in small valley; iron post stamped "5921 MSLA".....	5,918.452
Anaconda, 28.7 miles northwest of, at forks of Rock Creek and Trout Creek roads, 70 feet east of dry creek and 800 feet west of Trout Creek; iron post stamped "5417 MSLA".....	5,414.340
Anaconda, 31.4 miles northwest of, at forks of Georgetown and Trout Creek roads, east side of road, 5 feet east of irrigating ditch, 350 feet south of Snavly's house, 1,000 feet east of log schoolhouse; iron post stamped "5404 MSLA".....	5,401.404
Phillipsburg, 3 miles south of, summit in road intersection of telegraph line and road, west side of road, at west base of butte; iron post stamped "MSLA 5324".....	5,321.368

**Forks of road 3 miles south of Cable via Georgetown and Rumsey to Phillipsburg.**

	Feet.
Cable, 1 mile southeast of, 150 feet south of creek, 150 feet east of forks of road, 30 feet north of road; iron post stamped "6459 MSLA" . . . . .	6,456.640
Georgetown, 300 feet west of house, corner of rail fence; iron post stamped "6467 MSLA" . . . . .	6,464.787
Georgetown, 3.2 miles north of, 300 feet west of creek, 0.8 mile south of log stable, 20 feet east of large granite bowlder; on east side of road, in west side of large granite bowlder; bronze tablet stamped "6767 MSLA" . . . . .	6,764.908
Red Lion, junction of road and trail, 150 feet north of road forks, 50 feet southeast of old office, 60 feet southwest of old boarding house, 200 feet west of creek; iron post stamped "7341 MSLA" . . . . .	7,338.991
Red Lion, 1.1 miles west of, 300 feet east of lake, 35 feet north of trail, on summit of pass, in south face of quartz ledge; aluminum tablet stamped "8074 MSLA" . . . . .	8,072.047
Rumsey, 1.8 miles southeast of, 300 feet north of old dam site, east of trail, 25 feet west of creek, in granite bowlder; bronze tablet stamped "7155 MSLA" . . . . .	7,153.072
Rumsey, 200 feet west of mill, 400 feet north of creek, 150 feet east of forks of road, in south side of granite bowlder; bronze tablet stamped "5748 MSLA" . . . . .	5,746.143

**Red Lion northwest to Red Lion triangulation station (single spur line).**

Red Lion triangulation station, in south side of quartz bowlder; aluminum tablet stamped "8773 MSLA" . . . . .	8,771.070
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**Point 11.8 miles west of Phillipsburg south and east via Rock Creek and Wilma to road forks 1 mile south of Carey ranch (portion of line).**

Phillipsburg, 11.8 miles west of, 10 feet east of corner of fence at bend of road 1 mile west of road forks, 0.5 mile north of Jenkins's house; iron post stamped "5233 MSLA" . . . . .	5,230.348
Wilma, 2.3 miles west of, 900 feet southeast of creek forks, 150 feet southeast of bridge crossing Rock Creek, 40 feet east of road, in granite bowlder; aluminum tablet stamped "MSLA 5399" . . . . .	5,396.186
Wilma, 2.5 miles southeast of, 600 feet west of Quinlan's house, 50 feet south of road, 40 feet east of creek; bronze tablet stamped "5623 MSLA" . . . . .	5,620.165
Wilma, 6.1 miles east of, 2,000 feet west of log cabin, 100 feet north of road, 2.5 miles west of summit, in top of granite bowlder; bronze tablet stamped "5967 MSLA" . . . . .	5,964.087

**Quinlan's ranch south up Meadow Creek (double spur line).**

Quinlan's ranch, 3.1 miles southeast of, 380 feet south of gate, 80 feet north of creek, 70 feet east of road in small valley, in quartz bowlder; bronze tablet stamped "5914 MSLA" . . . . .	5,911.111
Quinlan's ranch, 7 miles south of, 4 feet east of road, 12 feet west of Meadow Creek, 40 feet east of ravine, in quartz bowlder; bronze tablet stamped "6596 MSLA" . . . . .	6,593.085

**Flint to Royal (double spur line).**

Flint, 3.1 miles southeast of, 300 feet north of Maywood's house, 15 feet south of road, in granite bowlder; bronze tablet stamped "5168 MSLA" . . . . .	5,166.010
Princeton, 0.9 mile southeast of, 200 feet south of creek, south of road in granite bowlder; bronze tablet stamped "5571 MSLA" . . . . .	5,569.095
Royal, 2.2 miles southwest of, 300 feet east of creek, 6 feet east of road, in granite bowlder; aluminum tablet stamped "6689 MSLA" . . . . .	6,687.053

Royal, forks of road 60 feet south of log cabin, 150 feet east of log cabin, 300 feet south of abandoned post office, 300 feet north of Royal mill, in granite boulder; aluminum tablet stamped "7458 MSLA"..... 7, 456. 054 Feet.

**Point 1.5 miles west of Wilma south to Moose Lake (double spur line, continued in Sapphire quadrangle).**

Dearborn ranch house, 1.1 miles northwest of, 10 feet east of road, 800 feet east of creek, in top of granite boulder; aluminum tablet stamped "MSLA 5604"..... 5, 602. 007  
 Dearborn ranch house, 1.5 miles south of, 300 feet south of gate, 10 feet west of road, in top of granite boulder; aluminum tablet stamped "MSLA 5776"..... 5, 774. 060

**SAPPHIRE QUADRANGLE.**

**Bench marks on east side of the Sapphire quadrangle on lines completing circuits in the Phillipsburg quadrangle.**

T. 8 N., R. 15 W., approximately at north line of sec. 32, 30 feet east of road, 0.5 mile north of log house, near Miners Gulch, 1,000 feet east of Willow Creek, 200 feet south of mouth of coulee; iron post stamped "MSLA 5238"..... 5, 235. 434  
 T. 7 N., R. 16 W., south side of sec. 25, 70 feet west of Rock Creek Bridge, at forks of road; iron post stamped "MSLA 4913"..... 4, 910. 327  
 T. 6 N., R. 15 W., north of southwest corner of sec. 8, 100 feet east of gate and road, 10 feet north of creek, 600 feet northeast of log house, south side of fence in surveyed but unused county road; iron post stamped "MSLA 5079"..... 5, 076. 287  
 T. 6 N., R. 15 W., sec. 31, 1.7 miles southwest of Elkhorn (Brown's) ranch house, north entrance of gap, 90 feet west of Rock Creek, 20 feet west of road, east base of rocky cliff, east side of large quartzite boulder; aluminum tablet stamped "MSLA 5236"..... 5, 233. 235

**Dearborn ranch house southwest to Moose Lake and sagebrush cabin.**

Watson's ranch house, 1.3 miles southeast of, 10 feet east of road, 0.9 mile north of forks of road, granite boulder; aluminum tablet stamped "MSLA 5887"..... 5, 885. 019  
 Moose Lake, 150 feet northeast of forest ranger's cabin, 20 feet east of road, 150 feet east of lake, in top of granite boulder; aluminum tablet stamped "MSLA 6034"..... 6, 031. 536  
 At forks of road leading to Moose Lake frog pond, 200 feet east of bridge crossing creek, 600 feet east of John Kinney's cabin; top of boulder... 5, 913. 14  
 Kinney cabin, 2.9 miles southwest of, 20 feet west of small road summit east of Copper Creek, in top of boulder; aluminum tablet stamped "MSLA 6182"..... 6, 179. 098  
 Sage Brush cabin, 100 feet east of, 120 feet northeast of log stable, 6 feet north of road, northwest of Copper Creek, in top of boulder; aluminum tablet stamped "MSLA 6214"..... 6, 212. 436

**Point in Eagle Canyon 4.5 miles northwest of Wilma west along west fork of Rock Creek via Sand Basin to Corvallis.<sup>1</sup>**

Junction of Ross road and West Fork road, 0.3 mile west of, 600 feet east of log cabin, 2 feet south of road; paint point top of boulder..... 5, 280. 05

<sup>1</sup> This line is not adjusted and closes 1 foot low.

Emerine ranch house, 0.7 mile south of, 60 feet north of forks of road, in top of large quartzite boulder 6 feet east of road; aluminum tablet stamped "MSLA 5432".....	Feet. 5,430.207
Sapphire boarding house, 1.6 miles west of, 10 feet north of road, 0.5 mile southeast of canyon, in top of boulder; aluminum tablet stamped "MSLA 5718".....	5,716.001
Sapphire boarding house, 3.6 miles west of, 80 feet west of creek, 100 feet north of West Fork, 2 feet south of trail, in canyon, top of boulder; aluminum tablet stamped "MSLA 5956".....	5,954.077
West end of canyon, 1.2 miles east of, 180 feet west of creek, south side of trail, in granite boulder; aluminum tablet stamped "MSLA 6289".....	6,286.935
Log cabin, 0.2 mile west of, 10 feet south of trail, 10 feet north of creek, in granite boulder; aluminum tablet stamped "MSLA 6438".....	6,435.942
Sand Basin, 10 feet west of trail, west side of basin, at top of granite boulder; paint point.....	6,488.71
Sand Basin, 0.8 mile south of, at forks of creek, 0.1 mile south of old cabin, 60 feet west of creek, east of trail, in top of granite boulder; aluminum tablet stamped "MSLA 6517".....	6,514.988
Small lake, 100 feet south of, 30 feet south of trail, in top of boulder; aluminum tablet stamped "MSLA 6727".....	6,820.000
Mud Lake; surface of water.....	7,016.7
Divide between West Fork and Skalkaho Creeks, 25 feet south of trail, top of small boulder; aluminum tablet stamped "7258 MSLA".....	7,255.528
Divide between Skalkaho and Burnt Fork Creeks, 90 feet north of trail, 300 feet west of saddle, at top of outcropping rock ledge; aluminum tablet stamped "MSLA 7853".....	7,850.944
Divide between Skalkaho and Burnt Fork Creeks, 80 feet east of saddle, 20 feet south of trail; nail in base of 12-inch piñon stump.....	7,934.15
Skalkaho Lake; surface of water.....	7,629.9
Skalkaho Lake, 0.2 mile west of, 10 feet south of trail, in top of rock ledge; aluminum tablet stamped "7754 MSLA".....	7,752.000
Skalkaho Lake, 2.6 miles west of, top of divide between Willow and Gird Creeks, 20 feet north of trail, top of boulder; aluminum tablet stamped "MSLA 8021".....	8,018.933
Peyton ranch house, 3.5 miles east of, 100 feet west of saddle, south side of trail, at top of rock ledge; aluminum tablet stamped "MSLA 6881".....	8,679.099
Peyton ranch house, 0.5 mile south of, on sharp ridge sloping north 4 feet east of trail, in top of rock ledge; aluminum tablet stamped "MSLA 5648".....	5,645.967

**Rock Creek Bridge northwest through canyon to point 8 miles southwest of Zingle.<sup>1</sup>**

H. Weyman ranch house, 0.2 mile northwest of, 20 feet south of road, 100 feet south of creek, in east side of sandstone boulder; aluminum tablet stamped "MSLA" 4789.....	4,786.874
F. Weyman ranch house, 0.3 mile west of, 1 foot south of road; paint point top of boulder.....	4,763.55
Peterson ranch house, 1.4 miles west of, 10 feet west of road, 4 feet west of rail fence, 600 feet west of log stable, in top of boulder; aluminum tablet stamped "MSLA 4656".....	4,653.761
Neil McCaulley ranch house, 0.3 mile east of, 1 foot south of road; paint point top of boulder.....	4,614.87
Nigger Ann ranch house, 0.7 mile west of, first hogback on east side of creek, 160 feet northeast of ford 5 of Rock Creek, in ledge; aluminum tablet stamped "MSLA 4532".....	4,529.843

<sup>1</sup> An excessive error adjusted in this line.

Goat ranch house, 0.4 mile northwest of, 4 feet east of road, 100 feet east of creek; paint point top of boulder.....	Feet. 4,462.77
Forest Service cabin, 300 feet south of, 40 feet east of road, west side of rocky ledge; aluminum tablet stamped "MSLA 4437".....	4,434.533
Forest Service cabin, 1.8 miles northwest of, 8 feet east of trail, 90 feet east of creek; head of spike at base of leaning fir.....	4,360.59
Ford 12 of Rock Creek, 60 feet east of, 5 feet east of trail at base of point of ridge in boulder; aluminum tablet stamped "4325 MSLA".....	4,322.596
Ford 17 of Rock Creek, 400 feet north of north side of creek, in creek bed; paint point top of boulder.....	4,235.95

**TRAPPER PEAK QUADRANGLE.****Fork Bridge up West Fork to Rombo Flats.**

Sirra's ranch, 0.25 mile south of, in large pine tree at road intersection; head of nail in bench cut.....	4,021.62
Trapper Creek Bridge, 0.25 mile north of, in stump west side of road; head of nail in bench cut (old railroad bench mark).....	4,133.19
Bakers, south of, in fir tree, south side of road; head of nail in bench cut.	4,220.48
Cameron's ranch, near summit of hill above, at corner of secs. 33 and 34, T. 2 N., and 3 and 4 T. 1 N., R. 21 W.; iron post stamped "4326".....	4,374.098
South Fork, mouth of, in fir tree on west side of road near junction of west and south forks; head of nail in bench cut.....	4,392.97
Rombo Flats, at south corner of secs. 36, T. 1 N., R. 22 W., and sec. 31, T. 1 N., R. 21 W.; iron post stamped "4382".....	4,430.582

**Darby south along road to Fork Eridge.**

Fork bridge, 91.5 feet west of west end of approach to bridge, west of road at junction of East Fork and West Fork roads, in line with south truss of bridge; iron post stamped "3903".....	3,951.310
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**Fork Bridge southeast up East Fork to Sula.**

Evelyn, just north of, 174 feet west of the west abutment of first bridge over East Fork; iron post stamped "4033".....	4,081.676
T. 1 N., R. 20 W., sec. 2, 70 feet east of schoolhouse and 40 feet from east-west road; iron post stamped "4194".....	4,242.584

**Fort Logan and Helena 1° Quadrangles.****CLARK, DEERLODGE, JEFFERSON, POWELL, AND SILVERBOW COUNTIES.**

The elevations in the following list were determined by primary leveling and accord with values at Butte resulting from a preliminary adjustment made by the Coast and Geodetic Survey in 1911.

Bench marks were established in the city of Butte (in the county courthouse and in the Owsley block) and at Woodville in 1896. Between the Woodville bench mark and Rocker a level line was run in 1899. In order to determine the amount of settling of various points in the city, a number of new bench marks were established in 1904 by carefully checked lines. A comparison of the early records with the later ones shows an apparent settling between 1896 and 1904 of about 1.6 feet at the courthouse and 0.7 foot at the Owsley block, with respect to Woodville, and between 1899 and 1904 of 0.3

foot at the Owsley block, with respect to Rocker. Eleven of the bench marks of this group were redetermined in 1907 by the Coast and Geodetic Survey, with results which agreed within a small range at 7 of them, but which show settling between 1904 and 1907 of about 0.7 foot at the courthouse, 0.4 foot at Owsley block, 0.9 foot at the Government building, and 0.8 foot at the Florence Hotel.

For all bench marks determined by the Coast and Geodetic Survey the values from the preliminary adjustment of 1911 have been adopted. A mean correction has been applied to the other bench marks of the 1904 net in order to refer them to the 1911 datum. The 1904 values have also been given for the marks showing settlement.

The leveling was done in the Fort Logan quadrangle in 1897 by F. B. Whitlock and in 1899 by A. E. Franklin; in the Helena quadrangle in 1897 and 1898 by F. B. Whitlock, in 1899 by A. E. Riedel and A. E. Franklin, in 1900 by J. T. Stewart, in 1904 by R. H. Chapman and G. H. Kendall, and in 1905 by F. E. Fellows.

#### FORT LOGAN QUADRANGLE.

##### Boulder Hot Springs southeast to Finn station, thence north along Elkhorn branch of Northern Pacific Ry. to Elkhorn (double-run line).

Finn, 1 mile west of station, 5 miles east of Hot Springs; iron post stamped "4689 BUTTE".....	Feet. 4, 691.962
Ivy's ranch, 1 mile north of, 225 feet east of Elkhorn Creek, 450 feet north-east of Northern Pacific Ry. bridge 16, west side of highway; iron post stamped "5206 BUTTE".....	5, 209.537
Queen's siding, 90 feet east of, 9 feet east of highway; iron post stamped "5694 BUTTE".....	5, 697.260
Elkhorn, in front base of Northern Pacific Ry. watertank; aluminum tablet stamped "6571 BUTTE".....	6, 574.727
Elkhorn, at north corner of oil house, New Elkhorn Mining Co.'s bench mark; iron pipe set in ground.....	6, 619.612

##### Hartwell northeast along Great Northern Ry. to Montana City.

Alhambra, in front of station; top of rail.....	4, 270
Clancy, at northeast corner of H. M. Hill's garden fence; iron post stamped "BUTTE 4247".....	4, 250.125
Rhorbaugh; in front of station; top of rail.....	4, 119.8
Montana City, 60 feet in rear of Great Northern R'y section house; iron post stamped "BUTTE 4064".....	4, 067.135

##### Montana City north along Great Northern Ry. to East Helena.

East Helena, opposite smelter; nail in head block in track.....	3, 927.8
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##### East Helena west along Great Northern Ry. to Helena.

Helena, 2.2 miles east of, in the northeast corner of old halfway house between Helena and East Helena; bronze tablet stamped "BUTTE 3934".....	3, 937.286
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Point 6 miles north of Helena east to Gamer triangulation station, thence north and east to Pugh's ranch.

	Feet.
Helena, 8.75 miles northeast of, Gamer triangulation station; copper bolt in granite post.....	3, 665. 190
Helena, 9 miles northeast of, 0.25 mile north of Gamer triangulation station, 50 feet in front of G. Reed's ranch house; iron post stamped "BUTTE 3666".....	3, 668. 844
T. 11 N., R. 3 W., NW. $\frac{1}{4}$ sec. 23, corner of G. W. Pugh's ranch; iron post stamped "BUTTE 3658".....	3, 661. 708

**Helena northeast along highway via Cram's ranch to Pugh's ranch.**

Helena, 2.5 miles northeast of, near Wallace Breck's ranch, in Prickly Pear Valley, at intersection of Boulevard and Stubbs Ferry roads; iron post stamped "BUTTE 3738".....	3, 741. 157
Helena, 4 miles northeast of, in southwest corner of Valley schoolhouse; bronze tablet stamped "BUTTE 3738".....	3, 740. 893
Helena, 5 miles northeast of, south side of gate leading to H. L. Cram's ranch; iron post stamped "BUTTE 3715".....	3, 717. 735
Helena, 7.5 miles northeast of, in front of D. Beach's ranch; iron post stamped "3660".....	3, 662. 761

**Pugh's ranch east 2.5 miles, thence south 10.5 miles to East Helena.**

East Helena, 8 miles north of, 1 mile north of Geary ranch, 30 feet east of bridge over Prickly Pear Creek at mouth of canyon; iron post stamped "BUTTE 3634" <sup>1</sup> .....	3, 636. 839
East Helena, 6 miles north of, at southeast corner of Harmony schoolhouse; iron post stamped "BUTTE 3722".....	3, 724. 868
East Helena, 2.5 miles northeast of, on Canyon Ferry road at Gratten's ranch; iron post stamped "BUTTE 3784".....	3, 786. 153
East Helena, 2 miles east of, sec. 29, T. 10 N., R. 2 W., 100 feet in front of Joseph Kenck's ranch house; iron post stamped "BUTTE 3858".....	3, 860. 841
East Helena, in southeast corner of schoolhouse; bronze tablet stamped "BUTTE 3886".....	3, 888. 811
East Helena, 1.5 miles south of, in southwest corner of barn at Childs ranch; bronze tablet stamped "BUTTE 3956".....	3, 958. 860
East Helena, 1 mile west of, east end of base line, in stone 9 inches square; bronze tablet stamped "BUTTE 3921".....	3, 924. 246

**Montana City west 3 miles (on circuit to Helena).**

Montana City, 3 miles west of, in 4 by 4 by 6 foot granite boulder, 60 feet south of reservoir at head of Clarke's Creek, 0.25 mile east of Cutter's ranch, at forks of road leading to Clancy and Helena, 30 feet from lone fir tree; bronze tablet stamped "BUTTE 4589".....	4, 591. 866
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**Kleinsmidt's ranch northeast to Missouri River.**

Missouri River, south bank, just north of mouth of Prickly Pear Creek; iron post stamped "BUTTE 3600".....	3, 603. 067
Missouri River at El Dorado Bar, north bank; top of cast-iron cap of Missouri River Commission bench 21. (Uncorrected Missouri River Commission value, 3,627.840 feet).....	3, 631. 821

<sup>1</sup> C. H. Jordan reports (Feb. 27, 1911) that this bench mark will soon be under Hauser Lake.

## HELENA 1° QUADRANGLE.

**Butte and vicinity; Florence Hotel via courthouse and North Main Street to Walkerville triangulation station.**

Florence Hotel, East Broadway and Thornton Avenue, in coping under sill of second window west of main entrance, 18 inches below sill and 18 inches above sidewalk; aluminum tablet stamped "5716 RHC 04":	Feet.
Elevation by leveling of 1904.....	5, 718. 590
Elevation by Coast and Geodetic Survey in 1907.....	5, 717. 804
Owsley Block, northeast corner Main and Park streets, in corner stone facing Park Street, 1.5 feet above sidewalk; copper bolt stamped "5712":	
Elevation by leveling of 1904.....	5, 715. 429
Elevation by Coast and Geodetic Survey in 1907 (apparent settlement 0.4 foot).....	5, 715. 015
Courthouse, West Granite Street, in wall facing south, 2 feet above turf, west of entrance; bronze tablet stamped "5767 R.H.C. 04":	
Elevation by leveling of 1904.....	5, 769. 485
Elevation by Coast and Geodetic Survey in 1907 (apparent settlement 0.7 foot).....	5, 768. 755
United States Government Building, corner of Main Street, in block, corner of coping, northwest corner of building, 10 feet northwest of; aluminum tablet stamped "5811 R.H.C. 04":	
Elevation by leveling of 1904.....	5, 808. 597
Elevation by Coast and Geodetic Survey in 1907 (apparent settlement of 0.866 foot).....	5, 807. 731
Government Building, northeast corner of, top of coping; corner of wall (elevation by leveling of 1904).....	<sup>1</sup> 5, 804. 564
Government Building, southwest corner of; sidewalk (elevation by leveling of 1904).....	<sup>1</sup> 5, 794. 266
Government Building, southeast corner of, close to wall, north of gutter; cement shoulder (elevation by leveling of 1904).....	<sup>1</sup> 5, 793. 075
Government Building, northwest corner of north balustrade; sidewalk (elevation by leveling of 1904).....	<sup>1</sup> 5, 803. 739
Government Building, southwest corner of south balustrade; sidewalk (elevation by leveling of 1904).....	<sup>1</sup> 5, 798. 437
Centerville, Blaine public school, North Main Street, in sill of first window north of entrance; aluminum tablet stamped "R.H.C. 04".....	6, 150. 933
Walkerville, Bryan's store on corner Main and Daly streets, in sill of first window north of entrance; aluminum tablet stamped "R.H.C. 04".....	6, 186. 840
Walkerville, 100 yards east of Jackson School (closed), 20 yards north from road east from schoolhouse to Valdmere Hoist, in granite boulder; aluminum tablet stamped "R.H.C. 04".....	6, 361. 716
Walkerville, 0.25 mile north of brick school house, at Walkerville triangulation station, 0.5 mile northeast of shaft house at Alice mine, 25 feet north of prospect hole on First Stake claim, 250 feet east of Butte-Stringtown road, in granite boulder; aluminum tablet stamped "R.H.C. 04".....	6, 467. 432
<b>Butte and vicinity; Owsley Block west to McKinley School.</b>	
Lincoln School, West Broadway, in balustrade south of steps; aluminum tablet stamped "5714 R.H.C. 04".....	5, 717. 393
McKinley School, West Park Street, west of Excelsior Street, in coping east of entrance close to iron grill decoration; aluminum tablet stamped "5702 R.H.C. 04".....	5, 705. 350

<sup>1</sup> Value not determined in 1907.

**Butte and vicinity; Owsley Block south via Butte Reduction Works to Butte Butchering Co. plant.**

Colorado Street School, in top of block at foot of balustrade on north side of steps; aluminum tablet stamped "5631 R.H.C. 04" .....	Feet. 15, 633. 552
Webster School, on West Aluminum Street, one-half block west of Montana Street, in top of block at foot of east balustrade; aluminum tablet stamped "5563 R.H.C. 04" .....	15, 566. 294
Butte Reduction Works, inside fence around smelting plant, 35 feet north of east gate, 70 feet south of boiler house on electric light plant, 40 feet west of line of telephone poles on west side of Montana Street, in granite block 6 by 8 by 36 inches, set 24 inches in ground and mounded to top; aluminum tablet stamped "5441 R.H.C. 04" .....	15, 444. 116
Timber Butte, 1 mile north of, 0.5 mile southeast of end of Cemetery trolley line at south end of Montana Street, 10 feet east of wood road from Butte Butchering Co. plant, 46 feet west of boulder upon which lies a weathered boulder resembling an alligator, set in flat boulder; aluminum tablet stamped "5535 R.H.C.04" .....	5, 538. 368

**Butte and vicinity; Florence Hotel east to B. & B. smelter, thence southwest via South Butte to Butte Reduction Works.**

Braund House, Talbot Avenue, in sill of smaller door on Talbot Avenue front; bronze tablet stamped "R.H.C. 04" .....	15, 568. 821
South Butte, 75 yards south of south line of East Front Street, 73 yards west of west end of bridge where trolley line passes under Northern Pacific Ry. track, north of railway track, in 6 by 8 by 36 inch granite block, 30 inches in ground, mounded to top; aluminum tablet stamped "5485 R.H.C. 04" ..	15, 488. 408

**B. & B. smelter east along highway and up Park Canyon northeast to Woodville Summit (Elk Park Pass).**

Pittsmont smelter, 0.5 mile north of, north side of road up Park Canyon, in line with poles of power line, 185 yards east of crossing with track connecting Farrell shafts 2 and 3, 10 feet east of pole 3017; iron post stamped "5613 R.H.C. 04" .....	5, 615. 527
Park Canyon, 100 yards west of Monitor tunnel, point of rocky ridge, 50 yards north of road, 10 yards east of bottom of small gulch in rock ledge; bronze tablet stamped "5968 R.H.C. 04" .....	5, 971. 179
Elk Park Pass (Woodville Summit), about 80 feet south of highest point of pass, east of railroad track, 40 feet east of ditch, 10 feet west of road from Butte, in granite boulder; copper bolt stamped "6376" .....	6, 379. 268
Elk Park Pass (Woodville Summit), 0.5 mile east of, 25 feet south of wood road at point of ridge, in granite boulder; bronze tablet stamped "6413 R.H.C. 04" .....	6, 415. 580

**B. & B. smelter along highway and railroad to Mountain Junction, thence southeast to Woodville Summit.**

Meaderville, corner of Main and Colusa streets, 3.5 feet north of northeast corner of Methodist Episcopal Church; iron post stamped "5555 R. H. C. 04" .....	5, 557. 788
Meaderville, 0.25 mile west of, 50 feet east of Great Northern Ry. track, 30 feet north of road near B. & M. settling tanks, north of West Colusa mine; iron post stamped "5678 R. H. C. 04" .....	5, 680. 569
Mountain Junction, 300 paces southwest of, 12 feet west of Great Northern Ry. track, in granite boulder; tablet stamped "5882 R. H. C. 04" .....	5, 885. 132

<sup>1</sup> As redetermined by Coast and Geodetic Survey in 1907.

Mountain Junction, 1 mile southeast of, 25 paces east of track, 50 paces south of sign (J. 1 M.) in granite boulder; bronze tablet stamped "6013 R. H. C. 04" .....	Feet. 6, 015. 495
Tunnel 10, 450 feet east of east end of, 50 feet north of track about 20 feet above it, in solid ledge of rock; bronze tablet stamped "6233 R. H. C. 04" .....	6, 236. 324

**Woodville northeast along highway via Elk Park to Bernice.**

Woodville, 2 miles east of, 3 feet west of old cabin east of road from Woodville to Jack Clinton's placer mine; iron post stamped "6509" .....	6, 512. 677
Woodville, 3 miles north of, near flagstaff in front of Gagner's house on west side of road between Woodville and Elk Park; iron post stamped "6363" .....	6, 366. 493
Elk Park, 4 miles south of station, 75 feet from Great Northern Ry. track at point where road from Elk Park to Butte crosses (first crossing south of Elk Park); iron post stamped "6268" .....	6, 271. 367
Elk Park, north side of Great Northern Ry. track between station and water tank; iron post stamped "6229" .....	6, 232. 578
Bison Creek canyon, on last bent at north end of Great Northern Ry. bridge 140; nail .....	6, 151. 9
Bison Creek canyon, on cap of first bent at south end of Great Northern Ry. bridge 135; nail .....	6, 062. 3
Lake Wilder, at station; platform .....	5, 737. 5
Lake Wilder, 30 feet in front of pavilion, on road between Basin and Butte, west of Bison Creek; iron post stamped "5650" .....	5, 653. 217
Bernice, in front of station; top of rail .....	5, 541. 4

**Bernice west and south up Lowland Creek and over divide to Butte.<sup>1</sup>**

Calvin, Northern Pacific Ry. station, in dooryard of Calvin's ranch, 25 feet southeast of house; iron post stamped "5555" .....	5, 558. 635
Bernice, 7 miles west of, in bunk house, near old sawmill on east side of Lowland Creek; nail .....	5, 915. 30
Bernice, 7 miles southwest of, near northeast corner of Lavatelle's house on west side of Lowland Creek and west of road to Butte; iron post stamped "6008" .....	6, 011. 250
Bernice, 10 miles southwest of, in flagpole, near office of Flume Co., on Lowland Creek; nail .....	6, 059. 9
Walkerville, 10 miles north of, 60 feet south of forks of road and 6 feet from road to Walkerville, about 1 mile north of J. Edward's house; iron post stamped "6724" .....	6, 727. 505

**Bernice east along Great Northern Ry. to Boulder (double-run line)**

Basin, 1.8 miles west of, on cap of first bent at south end of Great Northern Ry. bridge 127; nail .....	5, 413. 34
Basin, in front of Northern Pacific Ry. station; top of rail .....	5, 348. 5
Basin, Dennis Driscoll & Co.'s store, north face of corner stone at northwest corner of building, about 18 inches above sidewalk; bronze tablet stamped "5351" .....	5, 354. 810
Basin, in front of Great Northern Ry. station; top of rail .....	5, 337. 3
Basin, 2 miles east of, in sill of middle bent of Great Northern Ry. bridge 121, crossing Northern Pacific Ry. track; nail .....	5, 180. 23
Boulder, in stone foundation near northwest corner of public school building south of courthouse; bronze tablet stamped "4904" .....	4, 907. 328

<sup>1</sup> The error distributed in this line is excessive.

**Regiment placer mine west to mouth of Cottonwood Creek.**

Lowland Creek, mouth of, at forks of Basin-Deerlodge and Basin-Butte (via Lowland Creek) roads, near Gopher mine; iron post stamped "5804".	Feet. 5, 807. 318
Cottonwood Creek, mouth of, 150 feet west of bridge over Cottonwood Creek near its junction with the Boulder River, near Basin and Deerlodge road; iron post stamped "6045.5".	6, 048. 827

**At Thunderbolt Mountain (single spur line north of Thunderbolt Creek).**

Thunderbolt Mountain, 1.25 miles west of Continental Divide triangulation station, 3 feet south of hunter's cabin in park, near head of Cottonwood Creek, 5 miles north of bridge over Cottonwood Creek near its mouth on Boulder River; iron post stamped "7302".	7, 305. 155
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**Boulder south along Whitehall road to sec. 21, T. 3 N., R. 4 W. (double-run line).**

Boulder Hot Springs, 0.7 mile west of, on Whitehall road, at corner of fence south side of road to hot springs in yard at G. A. Douglas's place; iron post stamped "4821".	4, 824. 378
Boulder Hot Springs, in front of Northern Pacific Ry. station; top of rail (1899).	4, 807. 3
Boulder, divide 6 miles south of, near Whitehall road, in large granite bowlder about 25 feet east of road, on divide between waters of Little Boulder River and Whitetail Creek; bronze plate stamped "5724".	5, 727. 523
Boulder, 7 miles south of, on east side of road from Boulder to Whitehall; nail on corner of Eberhart's house.	5, 295. 42
Boulder, 8.5 miles south of, at fork of Whitehall and Boulder road and road to State mine; iron post stamped "5210".	5, 213. 236
Whitehall, 13 miles north of, in garden 40 feet from door of Marsh's house on west side of road from Whitehall to Boulder; iron post stamped "4830".	4, 833. 503
Whitehall, 10 miles north of, in sec. 21, T. 3 N., R. 4 W., in yard, 10 feet from J. E. Faulkner's house, on west side of road from Whitehall to Boulder; iron post stamped "4711".	4, 714. 782

**Douglas's ranch, near Boulder, southwest up Little Boulder River 7 miles (double line).**

Boulder, 7 miles southwest of, on granite bowlder 6 by 6 by 7 feet, 5 feet from center of road (north side) up Little Boulder River; bronze tablet stamped "5731".	5, 734. 220
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**Point on Boulder road west via circuit to State mine.**

Boulder, 10 miles southwest of, at State mine, in large granite bowlder 150 feet southwest of hoist and 15 feet east of middle of road; bronze tablet stamped "6945".	6, 948. 671
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**Point on Boulder road west over divide into Little Whitetail Park (single spur line).**

Little Whitetail Park, 2 miles northwest of E. W. Crosby's house, in 40 by 20 foot rock 200 feet south of miner's cabin on east side of creek; x cut.	5, 723. 973
Little Whitetail Park, 150 feet south of E. W. Crosby's house, in granite bowlder 1 by 6 by 6 feet; bronze tablet stamped "5744".	5, 747. 130

**Boulder northeast along Helena and Boulder Valley branch of Northern Pacific Ry. to Hartwell.**

Boulder, 4 miles north of, southeast corner of Amazon smelter; iron post	Feet.
1 foot out of ground stamped "BUTTE 5097".....	5, 100. 427
Summit of divide between Boulder and Jefferson, 20 feet to right of road over tunnel; iron post stamped "BUTTE 5727".....	5, 730. 402
Jefferson, the southwest corner of post-office building, 18 inches above sidewalk; bronze tablet stamped "BUTTE 4554".....	4, 557. 260
Hartwell, at station; top of rail at road crossing.....	4, 376

**Helena southwest along Helena and Red Mountain branch of Northern Pacific Ry. to Rimini.**

Helena, 3.5 miles west of, at northwest corner of Broadwater natatorium; iron post stamped "BUTTE 3962".....	3, 964. 506
Rimini, 9 miles northeast of, 20 feet to left of road to Rimini and 150 feet west of road crossing about 6 miles west of Helena; iron post stamped "BUTTE 4217".....	4, 219. 458
Rimini, 30 feet from north end of railroad station; iron post stamped "BUTTE 5190".....	5, 192. 298

**Rimini south along public road via Pauper's Dream and Buckeye mines to Basin.**

Rimini, 3.7 miles south of, at forks of roads leading to Pauper's Dream and Ontario mines; iron post stamped "BUTTE 6218".....	6, 220. 289
Rimini, 6.5 miles south of, on divide opposite Pauper's Dream mine, 6 feet from road and 150 feet from mine; iron post stamped "BUTTE 7615".....	7, 617. 265
Rimini, 9.5 miles southwest of, at northeast corner of office at Buckeye mine; iron post stamped "BUTTE 7133".....	7, 135. 342
Basin, 8 miles northwest of, in garden, 30 feet in front of H. Winter's house; iron post stamped "BUTTE 6639".....	6, 641. 250
Basin, 6.8 miles northwest of, 30 feet north of bridge over Jacks Creek, left side of road from Basin to H. Winter's camp, 3 miles south of Winter's camp; iron post stamped "BUTTE 6273".....	6, 275. 300
Basin, 5.8 miles northwest of, in granite boulder 40 by 20 feet, 300 feet south of Penn placer, on right side of road; bronze tablet stamped "BUTTE 6188".....	6, 191. 344

**Basin northeast along road via Cataract Creek to Jefferson.**

Basin, 7 miles northeast of, in foundation on east side of Eva May mill; bronze tablet stamped "BUTTE 6545".....	6, 548. 063
Wickes, 5 miles west of, top of divide between Wickes and Eva May mine; iron post stamped "BUTTE 7215".....	7, 218. 042
Wickes, south end of Northern Pacific Ry. station; iron post stamped "BUTTE 5162".....	5, 165. 272
Corbin, 3 miles north of Wickes, southeast corner of William Johnson's saloon, opposite Corbin Hotel; iron post stamped "BUTTE 4766".....	4, 769. 313

**Wickes north and northeast along Gregory and Clancy Creek public road to Clancy.**

Gregory, 3 miles north of Wickes, at southeast corner of schoolhouse; iron post stamped "BUTTE 5450".....	5, 452. 999
Gregory, 2 miles north of, in granite boulder 4 feet square, 500 feet north of Clark's ranch and 200 feet north of road leading up Quartz Gulch, 10 feet to left of road to Clancy; bronze tablet stamped "BUTTE 5048".....	5, 051. 036

Clancy, 5 miles southwest of, southeast corner of Lehman's ranch house; iron post stamped "BUTTE 4677".....	Feet. 4, 680. 129
Clancy, about 2 miles southwest of, 40 feet from gate leading to Strobel's ranch, in granite boulder 8 by 4 feet; bronze tablet stamped "BUTTE 4408".....	4, 411. 175

**Pauper's Dream mine along road west to Monarch mine, thence north to Elliston public road.**

Ontario mine, 10 feet southwest of superintendent's house; iron post stamped "BUTTE 7032".....	7, 034. 287
Old Republic mill site, 1.5 miles west of Ontario mine and 2 miles east of Monarch mine, 150 feet east of bridge crossing Little Blackfoot River; iron post stamped "BUTTE 6308".....	6, 310. 397
Monarch mine, northwest corner of cookhouse; iron post stamped "BUTTE 7243".....	7, 245. 274
Elliston, 11 miles south of, 1,400 feet west of old Hidden Treasure mill, 350 feet west of bridge over creek, 10 feet to left of road to Elliston; iron post stamped "BUTTE 5612".....	5, 614. 374
Elliston, 5 miles southeast of, 0.5 mile from fork of road leading up Little Blackfoot, 20 feet from road leading from Elliston to Ontario mine, 60 feet in front of Felix Senecal's ranch house; iron post stamped "BUTTE 5283".....	5, 285. 454

**Senecal ranch south to Ontario mine.**

Telegraph mine, near, at fork of road; cross on big granite rock.....	6, 242. 94
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**Helena north along Montana Avenue 7 miles.**

Helena, 2 miles north of, in wall, south side of entrance to Orphans' Home; bronze tablet stamped "BUTTE 3843".....	3, 845. 756
Helena, 4.8 miles north of, in southwest corner of university building; bronze tablet stamped "BUTTE 3724".....	3, 726. 989
T. 11 N., R. 3 W., corner of secs. 19, 20, 29, and 30; stone monument.....	3, 725. 55

**Helena south and east via Unionville to Montana City.**

Helena, 0.5 mile west of Northern Pacific Railway station, west end of base line, in stone 9 inches square; bronze tablet stamped "BUTTE 3957.5".....	3, 960. 607
Helena, in wall right side of west entrance to Armory Hall; bronze tablet stamped "BUTTE 4013".....	4, 015. 940
Helena, granite sill of Brown Block (Northern Pacific Ry. bench mark; railway elevation, 4121.6).....	4, 135. 59
Helena, courthouse, left side of north entrance, 2 feet above ground; bronze tablet stamped "BUTTE 4157".....	4, 160. 005
Helena, city hall, left side of engine-house door; bronze tablet stamped "BUTTE 4108".....	4, 110. 992
Park City, 300 feet north of Henry's mill, at forks of roads to Unionville, Helena, and Nelson Gulch; iron post stamped "BUTTE 4916".....	4, 919. 038
Unionville, 0.5 mile west of, at summit of divide; iron post stamped "BUTTE 5053".....	5, 055. 930
Unionville, northeast corner of Constance's garden fence; iron post stamped "BUTTE 4911".....	4, 913. 888
Unionville, 1.5 miles east of, 50 feet from northwest corner of Hale's reservoir at head of Dry Gulch, 10 feet to left of road to Unionville; iron post stamped "4946".....	4, 948. 936

Unionville, 1.8 miles east of, in 3 by 3 foot granite rock 50 feet to left of road on divide between Tucker Gulch and Dry Creek; bronze tablet stamped "BUTTE 5119".....	Feet. 5, 121. 822
Unionville, 3.5 miles east of, in granite boulder 3 by 4 by 2 feet, on top of divide between Tucker Gulch and Indian Creek; bronze tablet stamped "BUTTE 5258".....	5, 260. 898
<b>Northeast corner of sec. 19, T. 11 N., R. 3 W., west to Silver Creek, thence south over divide to Sevenmile Creek, thence southeast to Broadwater Natatorium.</b>	
Helena, 8 miles north of, at northeast corner of sec. 19, T. 11 N., R. 3 W., on Montana Avenue; iron post stamped "BUTTE 3749".....	3, 751. 884
T. 11 N., R. 4 W., southwest corner of sec. 13, southeast corner of school-house; iron post stamped "BUTTE 3854".....	3, 856. 867
Helena, 10 miles northwest of, at side of road to Silver City, 20 feet west of bridge crossing Silver Creek; iron post stamped "BUTTE 3998".....	4, 000. 805
Helena, 8.5 miles northwest of, on summit of divide between Silver Creek and Sevenmile Creek; iron post stamped "BUTTE 4454".....	4, 456. 822
Helena, 7 miles northwest of, opposite old saloon near Sevenmile Creek, on Marysville road; iron post stamped "4088".....	4, 090. 703
Fort Harrison, in administration building; bronze tablet stamped "BUTTE 4004".....	4, 006. 940
<b>Silver west along wagon road to Marysville, thence south along Northern Pacific Ry. to Sampson's siding.</b>	
Silver, 0.25-mile west of, 45 feet north of highway to Marysville via Race Track, 150 feet north of abandoned railroad fill; iron post stamped "4344 BUTTE".....	4, 346. 848
Cyanide plant, 115 feet east of, south of road; iron post stamped "4684 BUTTE".....	4, 687. 238
Marysville, in front of Montana Mining Co.'s office; iron post stamped "5364 BUTTE".....	5, 366. 704
Marysville, 3.2 miles south of, on Continental Divide between Sawmill and American gulches, 30 feet west of road; iron post stamped "6539 BUTTE".....	6, 542. 233
Dogtown, 1,500 feet north of sawmill site, 75 feet north of highest placer ditch, 30 feet east of unused highway to Blossburg; iron post stamped "5956 BUTTE".....	5, 958. 693
Blossburg, 0.7 mile northwest of station, on west line of highway, 1,500 feet north of Northern Pacific Railway crossing at spur to brickyard; iron post stamped "5611 BUTTE".....	5, 613. 568
<b>Silver via Prickly Pear Valley and Proctor's and Sanford's ranches to Marysville.</b>	
Trinity, 0.5 mile east of, 60 feet west of county highway, 2 miles northwest of Silver station on Great Northern Railway; iron post stamped "4374 BUTTE".....	4, 376. 690
Canyon Creek road, at junction with Little Prickly Pear Creek road, 100 feet west of Canyon Creek road and 30 feet north of Little Prickly Pear Creek road; iron post stamped "4377 BUTTE".....	4, 380. 249
Sanford's ranch, 0.33 mile southwest of house; 90 feet southwest of gateway of drive to house, 45 feet south of highway; iron post stamped "4623 BUTTE".....	4, 626. 334
Deer Creek, 250 feet northeast of crossing of Big Ox highway over, 1 mile south of Big Ox stamp mill, east of highway, in face of ledge; aluminum tablet stamped "4987".....	4, 989. 657

**Sampson's siding, Northern Pacific Ry., southeast along highway to Tenmile Creek via McDonald Pass.**

McDonald Pass, 2.5 miles west of summit, 800 feet west of abandoned saw-mill, 25 feet north of road on small ridge; iron post stamped "5650 BUTTE".....	Feet. 5,652.846
McDonald Pass, summit of Continental Divide, 40 feet south of road, in flat granite rock 10 by 8 feet and 18 inches high; aluminum tablet stamped "6334 BUTTE".....	6,336.999
Old Toll Gate, southeast corner of, on north side of road; iron post stamped "4812 BUTTE".....	4,814.910

**Sampson's siding west along Northern Pacific Ry. to Elliston.**

Sampson's siding, 100 feet southeast of milepost 26; iron post stamped "5235 BUTTE".....	5,238.321
Elliston, 75 feet northeast of station, 45 feet north of track; iron post stamped "5043 BUTTE".....	5,046.418

**Elliston west along Northern Pacific Ry. to Garrison schoolhouse (run twice).**

Aven, 150 feet northwest of station, at fence corner; iron post stamped "4687 BUTTE".....	4,690.119
Bradley siding, 1 mile east of, 10 yards north of track on south side of highway at road crossing; iron post stamped "4566".....	4,569.814
Avon, 8.6 miles west of, at road crossing, 10 yards north of railroad, east side of highway; iron post stamped "4454".....	4,457.622

**Haskell east along Northern Pacific Ry. to Garrison (run twice).**

Haskell, 3 miles east of, opposite milepost "62 HLNA" 60 feet south of track 2 feet south of fence in field; iron post stamped "4141 MSLA".....	4,138.934
Gold Creek, 1,500 feet east of station, 400 feet southeast of section house, 100 feet south of track, 2 feet south of fence; iron post stamped "4198 MSLA".....	4,195.861
Gold Creek, 3.5 miles east of, 100 feet south of milepost "56 HLNA"; iron post stamped "4243 MSLA".....	4,240.865
Garrison, 2.5 miles west of, opposite milepost "53 HLNA," 120 feet north of track in field, 2 feet north of fence; iron post stamped "4293 MSLA"....	4,290.800
Garrison, 200 feet south of schoolhouse, 15 feet north of highway; iron post stamped "4331 BUTTE".....	4,335.363

**Avon northwest along highway to Helmville.**

Avon, 3.3 miles northwest of, beside fence east of road at top of small ridge; iron post stamped "4823 BUTTE".....	4,826.196
Avon, 6.7 miles northwest of, top of divide at head of Nevada Gulch, 25 feet east of road; iron post stamped "5108 BUTTE".....	5,111.075
Avon, 10 miles northwest of, 1.5 miles northeast of P. & P. ranch at side of fence east of road; iron post stamped "4872 BUTTE".....	4,875.071
Washington Gulch, 1 mile south of, west side of road at angle of road; iron post stamped "4836 BUTTE".....	4,838.991
Washington Gulch, 100 feet west of post office, side of fence west of road; iron post stamped "4811 BUTTE".....	4,814.002
Washington Gulch, 2.5 miles west of, 0.3 mile west of Murphy's ranch, beside fence north of road; iron post stamped "4713 BUTTE".....	4,715.861
Washington Gulch, 5.1 miles north west of, 150 feet northeast of Fitzpatrick's lower ranch, near fence, south of road; iron post stamped "4599 BUTTE".....	4,601.974

Helmville, 6.8 miles southeast of, 800 feet southwest of Bierman's ranch, 150 feet east of small creek, on ridge near fence, north of road; iron post stamped "4570 BUTTE".....	Feet. 4, 572. 925
Helmville, 3.5 miles southeast of, 20 feet west of Helborn's yard gate, north side of road; iron post stamped "4426 BUTTE".....	4, 428. 693
Helmville, 100 feet north of post office and Marcum & Lennon's store, near fence, north of road; iron post stamped "4303 BUTTE".....	4, 305. 583

**Blackfoot River south to Helmville.**

Lynn's ranch, 0.2 mile north of, 0.3 mile north of bridge over Blackfoot River, 200 feet east of road, 50 feet south of fence corner; iron post stamped "4268 MSLA".....	4, 266. 182
Blair's ranch, 0.5 mile southwest of, 2.7 miles north of Helmville, south side of road, 50 feet west of swing gate; iron post.....	4, 322. 345

**Helmville northeast along Big Blackfoot River to point 3.5 miles north of mouth of Landers Fork.**

Smith's ranch, 300 feet northwest of, near fence, west of road; iron post stamped "4257 BUTTE".....	4, 259. 541
Smith's ranch, 3.7 miles northeast of, 0.6 mile northeast of sawmill, mouth of Big Blackfoot River canyon, 5 feet west of southwest corner of approach to steel bridge; iron post stamped "4306 BUTTE".....	4, 308. 678
Kershaw's ranch, 500 feet northeast of, side of fence, southwest side of road; iron post stamped "4365 BUTTE".....	4, 367. 448
Mooso's ranch, 800 feet southeast of, at corner of secs. 23, 24, 25, and 26, T. 14 N., R. 10 W., 50 feet west of road; iron post stamped "4405 BUTTE".	4, 407. 516
Lincoln Creek, 400 feet southwest of mouth of, at easternmost outcrop of rock at head of Big Blackfoot River canyon, 25 feet west of road, in flat rock, 4 by 4 feet; bronze tablet stamped "4477 BUTTE".....	4, 479. 398
Lincoln, 275 feet south of post office, west side of road near fence; iron post stamped "4533 BUTTE".....	4, 535. 459
Lincoln; 3 miles northeast of, 3 miles southwest of mouth of Landers Fork, in small park 25 feet southeast of road; iron post stamped "4638 BUTTE"	4, 640. 417
Lincoln, 6 miles northeast of, 1,000 feet east of Landers Fork near its mouth, 25 feet north of road; iron post stamped "4751 BUTTE".....	4, 753. 391
Landers Fork, 3.5 miles north of mouth of, 400 feet east of creek, 25 feet west of road where Indian trail leaves Creek Valley; iron post stamped "4953 BUTTE".....	4, 955. 416

**Garrison south along Northern Pacific Ry. to Race Track (mean of two lines).**

Hanson's ranch, 250 feet south of house, 0.1 mile south of Northern Pacific Ry., 25 feet north of highway, 3.5 miles southeast of Garrison station; iron post stamped "4402 BUTTE".....	4, 406. 021
Moro's ranch, 0.25 mile northeast of house, on east side of highway, 3 miles north of Deerledge; iron post stamped "4451 BUTTE".....	4, 455. 587
Deerledge, 125 feet east of Northern Pacific Ry. station, south side of highway; iron post stamped "4516 BUTTE".....	4, 520. 033
McDaniel's ranch, 0.2 mile southwest of house, west side of highway; iron post stamped "4571 BUTTE".....	4, 582. 600
Race Track schoolhouse, 90 feet northeast of, at northeast corner of school-yard fence, west side of highway; iron post stamped "4654 BUTTE".....	4, 665. 622
Race Track, near station, 60 feet north of crossing, 30 feet east of tracks, north side of highway, 300 feet east of railroad milepost 20; iron post stamped "4687 BUTTE".....	4, 697. 849

**Race Track south along Northern Pacific Ry. to Rocker.<sup>1</sup>**

	Feet.
Milepost 23, 0.1 mile southeast of, 30 feet east of railway south of private road crossing to old John Fifer estate; iron post stamped "4732 BUTTE" . . . . .	4,743. 498
Warm Springs, 300 feet southeast of station, 15 feet east of tracks of Northern Pacific Ry., east side of highway at crossing; iron post stamped "4809 BUTTE" . . . . .	4,819. 826
Stuart, 200 feet southwest of station, 75 feet west of tracks, west side of highway; iron post stamped "4984 BUTTE" . . . . .	4,995. 211
Milepost 30, 0.1 mile northwest of; 30 feet east of rails at private road crossing to James R. Purdee's ranch; iron post stamped "4880 BUTTE" . . . . .	4,890. 261
Gregson, 150 feet east of crossing at station, south side of highway; iron post stamped "5085 BUTTE" . . . . .	5,095. 674
Miles' ranch, 0.1 mile east of house, 300 feet south of railroad crossing, 3 miles west of Silverbow; iron post stamped "5267" . . . . .	5,277. 920
Silverbow, 180 feet south of station, junction of Oregon Short Line R. R. and Northern Pacific Ry., 165 feet south of Oregon Short Line R. R. track, 66 feet west of county road; iron post stamped "5327 BUTTE" (redetermined in 1907 by Coast and Geodetic Survey precise levels) . . . . .	5,337. 473
Rocker, 0.3 mile southeast of water tank, on Butte, Anaconda & Pacific Ry., in fork of road, south of Silverbow Creek, 150 feet south of Northern Pacific Ry., north side of highway; iron post stamped "5388 BUTTE" (redetermined in 1907 by Coast and Geodetic Survey precise levels) . . . . .	5,398. 692

**Deerlodge southeast along highway to Lockhart and Thunderbolt Creek.**

Deerlodge, 3.4 miles southeast of, south side of road; iron post stamped "4918 BUTTE" . . . . .	4,922. 320
Deerlodge, 6.9 miles southeast of; south side of road; iron post stamped "5383 BUTTE" . . . . .	5,387. 310
Deerlodge, 10.5 miles southeast of, near Brown's ore camp, 150 feet southeast of road fork, 20 feet north of road; iron post stamped "5940 BUTTE" . . . . .	5,944. 133
Gospel Mountain, at intersection of roads on northwest side, on west side of road; nail in root of 24-inch pine tree . . . . .	6,495. 419
Champion, 0.5 mile east of, top of Continental Divide, 50 feet east of deserted cabin at forks of road; iron post stamped "7012 BUTTE" . . . . .	7,016. 196
Lockhart's ranch, 0.3 mile northwest of, south side of road at intersection of roads from Champion, Calvin, and Lockhart's house; iron post stamped "6447 BUTTE" . . . . .	6,451. 088

**Warm Springs west along highway to point 3.5 miles west of Anaconda.**

Warm Springs, 3 miles southwest of, 60 feet south of creek, 800 feet east of Green's residence, north side of road; iron post stamped "4927 MSLA" . . . . .	4,924. 519
Warm Springs, 5.5 miles southwest of, 200 feet east of small white house, west side of road, near forks of road; iron post stamped "5055 MSLA" . . . . .	5,052. 512
Anaconda, 2.8 miles east of, 60 feet north of wagon road, east end of base line, at forks of road, iron post stamped "5124 MSLA" . . . . .	5,121. 545
Anaconda, Montana Hotel, in granite base of left pillar at entrance; aluminum tablet stamped "5278 MSLA" . . . . .	5,275. 269
Anaconda, 3.5 miles northwest of, 1,000 feet north of house, at mouth of coulee, south side of road; iron post stamped "5463 MSLA" . . . . .	5,460. 555

<sup>1</sup> An excessive error has been distributed in this line.

## Granite Peak and Red Lodge Quadrangles.

## CARBON COUNTY.

The connection with sea level datum for the elevations in the following list is approximate only.

The elevations in the Granite Peak quadrangle are from unchecked lines, and are therefore unreliable.

The leveling was done in the Red Lodge quadrangle by E. W. Glafcke in 1896, and in the Granite Peak quadrangle by Orr Meredith in 1909.

## RED LODGE QUADRANGLE.

## Red Lodge southwest up Rocky Fork 10.8 miles.

	Feet.
Red Lodge, in stone sill of brick store of Carbon Mercantile Co.; bronze tablet stamped "5548".....	5, 554. 222
Red Lodge, 2.6 miles south of, on southwest corner of bridge over West Branch; large nut marked "4795".....	5, 791. 60
Red Lodge, 4 miles south of, 50 feet north of Rocky Fork, 100 feet west of ranch gate; paint mark on granite boulder marked "5910".....	5, 907. 25
Red Lodge, 4.6 miles south of, 15 feet east of road, opposite high limestone outcrop, in low 3 by 7 by 9 foot boulder; aluminum tablet stamped "5977".....	5, 974. 136
Red Lodge, 5.7 miles south of, 0.2 mile north of forest reserve line, at west margin of road (creek at east margin); paint mark on granite boulder marked "6118".....	6, 114. 73
Red Lodge, 6.6 miles southwest of, 300 feet southwest of ranch house, 0.8 mile south of forest reserve line, 10 feet east of road, in 5 by 10 foot granite boulder; aluminum tablet stamped "6328".....	6, 324. 706
Red Lodge, 7.8 miles southwest of, 1.9 miles south of forest reserve line, at east margin of road, 250 feet southwest of gate across road; paint mark on tip of pyramidal granite boulder marked "6353".....	6, 349. 932
Red Lodge, 8.8 miles southwest of, 1.4 miles south of pond to west of roads, 200 feet south of meadow, at east margin of road, 40 feet west of creek bank; paint mark on granite boulder marked "6419".....	6, 415. 94
Red Lodge, 10.2 miles southwest of, 1 mile northwest of creek forks, 700 feet northeast of fence, 15 feet north of road; paint mark on granite boulder marked "6578".....	6, 575. 44
Red Lodge, 10.8 miles southwest of, 0.4 mile east of forks of Rocky Fork, near west margin of small meadow, 40 feet south of road, in granite boulder; aluminum tablet stamped "6670".....	6, 666. 752
<b>Point 3.6 miles southwest of Chance northwest along highways to point 3.2 miles northwest of Linley.</b>	
Chance, 3.6 miles southwest of, 500 feet northeast of road, 0.2 mile north of conical butte standing by river, 75 feet south of sandstone outcrop, 25 feet north of gully, in sandstone boulder; aluminum tablet stamped "4103".....	4, 100. 058
Chance, 2 miles west of, 150 feet southwest of fence corner, 0.5 mile northwest of river, 15 feet southeast of road; iron staple driven into knot on fence post marked "4062".....	4, 058. 67
Bell's ranch, 1 mile west of Clark Fork of Yellowstone River, on small knoll, at entrance to gap, 100 feet south of county road; iron post stamped "4085".....	4, 091. 579
Red Lodge, 1 mile west of, 0.5 mile east of cemetery, at turn in road to west at center of roadway; highest point on boulder marked "5671".....	5, 668. 40

Red Lodge, 3.3 miles northwest of, 40 feet southwest of Willow Creek, at bridge, 30 feet northwest of road, in granite boulder; aluminum tablet stamped "5511".....	Feet. 5, 507. 782
Red Lodge, 5.4 miles northwest of, 250 feet north of summit, south of vacant house, east of road, 10 feet west of fence; top of limestone boulder marked "5513".....	5, 510. 127
Red Lodge, 6.4 miles northwest of, 1,100 feet north of hilltop, 80 feet east of road, at fence; aluminum tablet stamped "5433".....	5, 429. 621
Red Lodge, 7.8 miles northwest of, 0.3 mile south of Mr. Henry's house, 200 feet south of turn to west, in road at east margin of road; paint mark on top of boulder marked "5143".....	5, 139. 58
Red Lodge, 8.9 miles northwest of, 0.2 mile east of schoolhouse, 40 feet west of road to south, at south margin of roadway; painted square on granite boulder marked "5141".....	5, 137. 79
Red Lodge, 10 miles northwest of, 0.5 mile northwest of C. Schroeder's house, 150 feet east of corner, north side of road, in top of sandstone boulder; aluminum tablet stamped "5216".....	5, 212. 561
Red Lodge, 11.2 miles northwest of, 30 feet west of Teet Creek crossing, below ranch houses, at north margin of roadway; paint mark on granite boulder marked "5194".....	5, 191. 37
Red Lodge, 12.2 miles northwest of, 200 feet north of turn to north in road, 0.2 mile northwest of creek, at east margin of road; paint mark on highest point of granite boulder, marked "5205".....	5, 201. 52
Red Lodge, 12.8 miles northwest of, 3 miles east of Red Lodge Creek, 100 feet northwest of road summit, 30 feet north of road, in sandstone outcrop; aluminum tablet stamped "5187".....	5, 184. 177
Linley, 1.7 miles northeast of, at brink of hill, 5 feet north of road; paint mark on granite boulder marked "5258".....	5, 255. 06
Linley, 0.5 mile east of, 25 feet east of culvert, at north side of road; paint mark on granite boulder marked "5130".....	5, 127. 31
Linley, 35 feet southeast of Linley store building, highest point on 3-foot granite boulder; chiseled square marked "5184".....	5, 181. 47
Linley, 1.1 miles west of, 250 feet west of corner and road to north, at north margin of road; paint mark on granite boulder marked "5265".....	5, 261. 55
Linley, 2.2 miles west of, 2.2 miles west of Red Lodge Creek, 400 feet east of house to north of road, at south side of road; paint mark on granite boulder marked "5374".....	5, 371. 08
Linley, 3.2 miles northwest of, 400 feet west of Butcher Creek bridge, in granite boulder; aluminum tablet stamped "5249".....	5, 245. 647

**Red Lodge via stage road to Clark Fork bridge, at Bell's ranch.**

Red Lodge, 2 miles south of, east edge of mesa, 100 feet west of county road; iron post stamped "5985".....	5, 991. 708
Foster's ranch, 0.2 mile southeast of, near southeast corner of sec. 10, T. 8 N., R. 20 W.; iron post stamped "5665".....	5, 671. 192
Cummings Creek, 150 feet due south of large cottonwood tree, in northeast side of large granite boulder which has large mound of rock piled on top, can be seen for miles; bronze tablet marked "5024;" datum point upper edge of tablet.....	5, 030. 751
Bell's ranch, Clark Fork, 1 mile west of, on small knoll, at entrance to gap, 100 feet south of county road; iron post stamped "4085".....	4, 091. 579
Bell's ranch, 0.2 mile east of, east bank of Clark Fork of Yellowstone River near bridge in fence corner; iron post stamped "3999".....	4, 005. 666

## GRANITE PEAK QUADRANGLE.

**Point 3.5 miles south of Yonce schoolhouse southwest up West Rosebud Creek 7.6 miles (single unchecked spur line).**

Yonce schoolhouse, 3.5 miles south of, 0.5 mile north of deserted ranch house on west bank, in center of old road; paint mark on granite boulder marked "5531".....	Feet. 5, 528. 000
Reeve's ranch, 2.4 miles north of, 0.3 mile south of gate across road, on slope, at east side of road; paint mark on granite boulder marked "5600".	5, 597. 44
Reeve's ranch, west side of road, 0.5 mile west of Rosebud Creek; paint mark on granite boulder marked "5974".....	5, 970. 75
Reeve's house, opposite, 50 feet west of creek, near mouth of West Rosebud Canyon, in granite boulder; aluminum tablet stamped "5834".....	5, 831. 093
Reeve's ranch, 0.8 mile south of, 400 feet south of small creek, at east margin of road; point on granite boulder marked "5862".....	5, 859. 22
Reeve's ranch, 1.8 miles south of, on West Rosebud Creek, 60 feet north of small stream, 20 feet east of road; paint mark on granite boulder.....	5, 947. 69
Reeve's ranch, 3.2 miles southwest of, 60 feet southwest of dry creek; point on granite boulder marked "6216".....	6, 213. 24
Reeve's ranch, 4.3 miles southwest of, 30 feet north of road, 600 feet north of outlet to lower lake on West Rosebud Creek, in 20-foot granite boulder; aluminum tablet stamped "6353".....	6, 350. 122

**Point 3.2 miles northwest of Linley northwest along highways to Nye, thence south along trail to point 3.8 miles west of Cooke.**

Linley, 4.1 miles northwest of, 800 feet east of Dry Butcher Branch, at south side of road; paint mark on granite boulder marked "5361".....	5, 357. 60
Linley, 5.4 miles northwest of, 400 feet southwest of three forks in road, 1.1 miles east of Sand Ford, 30 feet southwest of trail; paint mark on granite boulder marked "5537".....	5, 533. 740
Linley, 6 miles northwest of, 0.5 mile east of Sand Ford of East Rosebud Creek, 400 feet west of Spring Creek, 50 feet north of horseshoe bend in road, in granite boulder; aluminum tablet stamped "5484".....	5, 480. 895
Linley, 7.4 miles northwest of, 0.5 mile north of Sand Ford, 0.2 mile north of section corner, 175 feet west of road, on spur; paint mark on red boulder marked "5442".....	5, 439. 20
Linley, 8.1 miles northwest of, 1.3 miles west of Sand Ford, 1,100 feet west of divide east of Willow Creek, 20 feet north of road, in granite boulder; aluminum tablet stamped "5523".....	5, 520. 486
Linley, 9.5 miles northwest of, 300 feet east of Willow Creek, in center of road; paint mark on granite boulder marked "5461".....	5, 458. 45
Linley, 10.5 miles northwest of, 0.2 mile west of divide between Willow and Ingersoll creeks, 300 feet above knoll with clump of pines; highest point on granite boulder marked "5498".....	5, 494. 813
Linley, 11.4 miles northwest of, 1.1 miles northwest of divide between Willow and Ingersoll creeks, 600 feet southeast of lake, in 10-foot boulder; aluminum tablet stamped "5715".....	5, 711. 927
Yonce schoolhouse, 3.5 miles south of, 30 feet east of road west of Rosebud, 0.5 mile north of deserted ranch house on west bank, in center of old road; paint mark on granite boulder marked "5531".....	5, 528. 00
Red Lodge, 29.3 miles northwest of, 0.5 mile north of cabin on east bank of West Rosebud Creek, 20 feet east of road; chiseled square on large granite boulder marked "5531".....	5, 528. 11

Yonce schoolhouse, 1.2 miles south of, 0.5 mile west of Rosebud Creek, 450 feet north of section corner, 50 feet west of road, in 15-foot granite boulder; aluminum tablet stamped "5312".....	Feet. 5,309.361
Yonce schoolhouse, 0.2 mile south of, 20 feet south of private road, 200 feet east of creek crossing; highest point on granite boulder marked "5160".....	5,157.12
Yonce schoolhouse, 1.5 miles southwest of, on sandstone at south margin of road; chiseled square marked "5257".....	5,253.78
Yonce schoolhouse, 2.2 miles southwest of, 0.3 mile east of D. C. Bedford's ranch house, 10 feet south of road, in sandstone boulder; aluminum tablet stamped "5275".....	5,271.604
Dean, 2.7 miles east of, 0.4 mile east of divide on west margin of road; chiseled point on capstone of culvert marked "5375".....	5,372.41
Dean, 1.2 miles southeast of, 400 feet northwest of Fishtail Creek crossing, 50 feet west of road, in sandstone boulder below sandstone outcrop; aluminum tablet stamped "5314".....	5,311.236
Dean, 500 feet west of, 200 feet east of double culverts, at south margin of road; highest point of small granite boulder marked "5223".....	5,219.717
Dean, 2.7 miles west of, 0.4 mile east of Rock Creek crossing, 50 feet north of road, in sandstone boulder; aluminum tablet stamped "5264".....	5,261.070
Dean, 3.7 miles west of, 0.7 mile west of Rock Creek crossing, at summit, 30 feet south of road; highest point on small granite boulder marked "5136".....	5,132.57
Dean, 5 miles west of, 0.4 mile west of road to north, 40 feet south of road, 1.7 miles east of bridge over Stillwater River; chiseled square on granite boulder marked "4982".....	4,979.43
Nye, 0.5 mile south of, 750 feet west of Stillwater River bridge, 15 feet north of road, in granite boulder; aluminum tablet stamped "4812".....	4,808.732
Nye, 1 mile south of, 300 feet north of river, 40 feet north of road, on granite boulder; chiseled square marked "4844".....	4,840.54
Nye, 2 miles south of, 50 feet southwest of fence, 10 feet south of road; highest point on dark granite boulder marked "4887".....	4,883.723
Nye, 3.3 miles south of, 0.3 mile west of river and cabin, 25 feet west of road, 150 feet east of bank; highest point on granite boulder marked "4859".....	4,856.34
Nye, 4.1 miles south of, 1.5 miles north of Wood's meadow, at south margin of limestone outcrop, 40 feet west of road, in boulder; aluminum tablet stamped "4873".....	4,870.119
Nye, 5.4 miles south of, 85 feet northeast of shop at Dunbar's ranch; paint mark on granite boulder marked "4950".....	4,946.763
Nye, 6.7 miles south of, 1 mile north of Wood's ranch, 40 feet south of small creek, 5 feet east of road; paint mark on small granite boulder marked "5011".....	5,007.567
Nye, 7.7 miles south of, 200 feet north of B. F. Wood's house, in granite boulder; aluminum tablet stamped "5058".....	5,054.531
Nye, 8.7 miles south of, 1 mile south of Wood's ranch, 300 feet south of large boulder below road, 50 feet east of large boulder above road, at east margin of road; paint mark on granite boulder marked "5189".....	5,186.04
Nye, 9.6 miles south of, 2 miles south of Wood's ranch; at east margin of road, on creek bank; paint mark on granite boulder marked "5416".....	5,413.39
Nye, 10.9 miles south of, 3.3 miles south of Wood's ranch, 0.1 mile north of lake, 10 feet north of trail, at margin of woods, in 8-foot granite boulder; aluminum tablet stamped "5704".....	5,700.816
Nye, 11.8 miles south of, 750 feet north of upper end of lake, on shore; chisel mark on granite boulder marked "5650".....	5,647.02

	Feet.
Nye, 12.9 miles south of, 0.9 mile south of lower lake, 200 feet east of summit, at edge of track; paint mark on granite boulder marked "5707".....	5,704.18
Nye, 13.8 miles south of, 60 feet south of Roaring Creek, 10 feet west of trail, in granite boulder; aluminum tablet stamped "5868".....	5,864.751
Nye, 14.9 miles south of, 1 mile south of Roaring Creek, 700 feet south of small bridge, at east side of trail; paint mark on granite boulder marked "5921".....	5,917.80
Nye, 18.3 miles south of, 0.2 mile east of Stillwater River, opposite 300-foot butte, 0.5 mile north of Horseshoe Creek (to west), 600 feet north of small bridge, 5 feet east of trail, in granite boulder; aluminum tablet stamped "6423".....	6,420.378
Nye, 19.6 miles south of, opposite Horseshoe Creek, in small park, 5 feet west of trail; highest point of granite boulder marked "6407".....	6,404.14
Nye, 20.8 miles south of, 1.8 miles south of Horseshoe Creek, 200 feet south of north end of park, 15 feet east of trail, in granite boulder; aluminum tablet stamped "6549".....	6,546.161
Nye, 21.8 miles south of, 0.4 mile south of park, on east side of trail; paint mark on granite boulder marked "6626".....	6,623.222
Nye, 22.9 miles south of, 4 miles south of Horseshoe Creek, 300 feet south of river crossing, center of trail; paint mark on granite boulder marked "6770".....	6,767.07
Nye, 24 miles south of, 5 miles south of Horseshoe Creek, 0.4 mile north of Stillwater Ford, at north end of small park, 15 feet east of trail, in granite boulder; aluminum tablet stamped "6945".....	6,941.669
Nye, 25.3 miles south of, 650 feet south of ford below East Branch, at east margin of trail; paint mark on boulder marked "7009".....	7,006.123
Nye, 26.3 miles south of, 1.3 miles south of East Branch Ford, at east margin of trail; highest point on granite boulder marked "7275".....	7,271.55
Cooke, 12 miles north of, 450 feet north of ranger station 2, district 3, 20 feet west of trail, in granite boulder; aluminum tablet stamped "7306".....	7,303.415
Cooke, 10.7 miles north of, 350 feet south of small park, at west side of trail; highest point on granite boulder marked "7421".....	7,418.27
Cooke, 8.5 miles north of, 150 feet north of Stillwater Forks, 10 feet west of trail, in granite boulder; aluminum tablet stamped "7882".....	7,878.769
Cooke, 7.7 miles north of, 50 feet west of 8-mile cabin; highest point on granite boulder marked "8340".....	8,337.43
Cooke, 6.5 miles north of, 1 mile south of 8-mile cabin, 100 feet south of timber line, 5 feet north of trail; highest point on granite boulder marked "8598".....	8,595.114
Cooke, 5.5 miles north of, 1.5 miles north of pass, 425 feet west of run crossing, 5 feet south of trail; highest point on boulder marked "U. S. B. M. 8894".....	8,891.25
Cooke, 4.5 miles north of, 0.3 mile north of pass, in forks of trail, 100 feet south of creek; highest point on small boulder marked "9379".....	9,375.506
Cooke, 4 miles north of, south of pass, 170 feet west of stamp mill, 10 feet south of road, in copper-bearing rock; aluminum tablet stamped "9605".....	9,602.396
Cooke, 2.7 miles north of, 175 feet northwest of road forks, 10 feet west of road; top of boulder marked "8898".....	8,894.836
Cooke, 1.5 miles northeast of, at road shunt; highest point on red granite boulder marked "8396".....	8,393.481
Cooke, 0.3 mile north of post office, 75 feet west of old Miller Creek road, in granite boulder; aluminum tablet stamped "7651".....	7,648.374
Cooke, 1.1 miles west of, 120 feet west of powder house, 10 feet south of road; highest point on small boulder marked "7483".....	7,479.97

Cooke, 2.2 miles west of, 160 feet west of bridge over creek to south, 15 feet north of road; highest point on small bowlder marked "7434".....	Feet. 7, 430. 534
Cooke, 3.8 miles west of, 40 feet east of National Park line, 20 feet north of road, in volcanic bowlder; aluminum tablet stamped "7378".....	7, 374. 959
Granite Mountain, 12 miles northeast of Cooke, between the headwaters of West Rosebud and East Rosebud creeks and Clark Fork of Yellowstone River; highest point in Montana, elevation by vertical angles from primary levels in mountain pass north of Cooke.....	12, 847

**Fort Custer, Huntley, and St. Xavier Quadrangles.****ROSEBUD AND YELLOWSTONE COUNTIES.**

The bench marks in the following list, except the one in the St. Xavier quadrangle, were originally established by the Reclamation Service in 1904 and redetermined by the Coast and Geodetic Survey in 1909. The elevations given are those furnished by the Coast and Geodetic Survey, based on the preliminary adjustment of 1911.

**HUNTLEY QUADRANGLE.****Huntley along Chicago, Burlington & Quincy R. R. to Anita.**

Huntley, 0.7 miles east of, at first crossing of Huntley main line canal under the Chicago, Burlington & Quincy R. R. track, in center of south coping, 11.5 feet south of the center of the Chicago, Burlington & Quincy R. R. track, 8 inches from the face of head wall; aluminum tablet.....	Feet. 3, 016. 896
Huntley, 1.6 miles east of, 250 feet west of highway bridge over Huntley main line canal, 279.3 feet north of center of the Chicago, Burlington & Quincy R. R. track, 135.5 feet north of north water line of the canal; aluminum tablet.....	3, 012. 772
Huntley, 2.2 miles east of, opposite Chicago, Burlington & Quincy R. R. bridge 483, in a culvert crossing a small stream under the Huntley main line canal, in center of south coping of culvert, 94.5 feet north of the center of Chicago, Burlington & Quincy R. R. track, 0.55 foot from face of head wall; aluminum tablet.....	3, 009. 803
Huntley, 3.5 miles east of, opposite Chicago, Burlington & Quincy R. R. bridge 482, in concrete spillway for a small stream over the Huntley main line canal, at the south end of west parapet wall, 148 feet north of center of the Chicago, Burlington & Quincy R. R. track, 28 feet south of center of canal; bronze tablet.....	3, 016. 429
Ballantine, 3.9 miles west of, in second crossing of Huntley main line canal under the Chicago, Burlington & Quincy R. R., in center of south coping, 11 feet south of center of Chicago, Burlington & Quincy R. R. track, 0.75 foot from face of coping; aluminum tablet.....	3, 010. 150
Ballantine, 2.9 miles west of, opposite Chicago, Burlington & Quincy R. R. bridge 480, in a stream crossing over the Huntley main line canal, in east end of southwest coping, 172 feet south of center of Chicago, Burlington & Quincy R. R. track, 48 feet south of center of canal; aluminum tablet...	3, 011. 778
Ballantine, 2.2 miles west of, in turnout of lateral E from the Huntley main line canal, in center of top of concrete head gate, on north side of canal, 90 feet south of center of Chicago, Burlington & Quincy R. R. track; aluminum tablet.....	3, 001. 851
Ballantine, 183 feet northwest of northwest corner of the platform of the railway station, 146 feet north of center of Chicago, Burlington & Quincy R. R. track; aluminum tablet.....	2, 999. 085

Ballantine, 0.3 miles east of, at third crossing of the Huntley main line canal under the Chicago, Burlington & Quincy R. R., in center of north coping, 11.6 feet north of center of Chicago, Burlington & Quincy R. R. track, 0.65 foot from face of head wall; aluminum tablet.....	Feet. 3,004.480
Ballantine, 1.6 miles east of, at crossing of lateral H. A. and the Chicago, Burlington & Quincy R. R., in center of concrete coping, 11 feet north of center of Chicago, Burlington & Quincy R. R. track, 0.5 inch from face of head wall; aluminum tablet.....	3,036.913
Ballantine, 2.4 miles east of, in crossing of lateral H. B., under the Chicago, Burlington & Quincy R. R., center of coping, 10.5 feet north of center of Chicago, Burlington & Quincy R. R. track, 3 feet above grade; aluminum tablet.....	3,032.501
Ballantine, 3.4 miles east of, at crossing of lateral H. C. and Chicago, Burlington & Quincy R. R., in center of coping, 10.5 feet north of center of the Chicago, Burlington & Quincy R. R. track, 1.6 feet above grade; aluminum tablet.....	3,029.040
Anita, 2 miles west of, in crossing of high line canal, Huntley project, and the Chicago, Burlington & Quincy R. R., in center of coping, 44 feet south of center of Chicago, Burlington & Quincy R. R. track; aluminum tablet..	3,032.372
Anita, opposite station sign, 79 feet northeast of center of Chicago, Burlington & Quincy R. R. track, 3 feet outside of right of way fence, 3 feet below grade; aluminum tablet.....	3,052.007

#### FORT CUSTER QUADRANGLE.

##### Anita along Chicago, Burlington & Quincy R. R. to Toluca.

Corinth, nearly opposite water tank, 125 feet west of center of Chicago, Burlington & Quincy R. R. track, 40 feet west of right of way fence, 200 feet southwest of southwest abutment of water tank; aluminum tablet.....	3,084.186
Toluca, 133 feet south of southeast corner of railroad station, 132 feet southwest of center of Chicago, Burlington & Quincy R. R. main track, 2 feet northeast of right of way fence; aluminum tablet.....	3,243.986

#### ST. XAVIER QUADRANGLE.

##### Bench mark in Rosebud County.<sup>1</sup>

T. 9 S., R. 33 E., 2 miles northwest of Little Bighorn River, at fork of Bald Mountain and Lodgegrass road; iron post stamped "SHER 4553".....	4,562.231
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<sup>1</sup> This bench mark was established in 1899 by the United States Geological Survey and is based on primary leveling from Sheridan, Wyo.

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