

158

THIRD-ORDER LEVELING
NATIONAL GEODETIC VERTICAL DATUM OF 1929

35-081-43
GLEN ALPINE QUADRANGLE
158 NORTH CAROLINA
N3530-W8145/15
DIAGRAM NI 17-2
CHARLOTTE

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

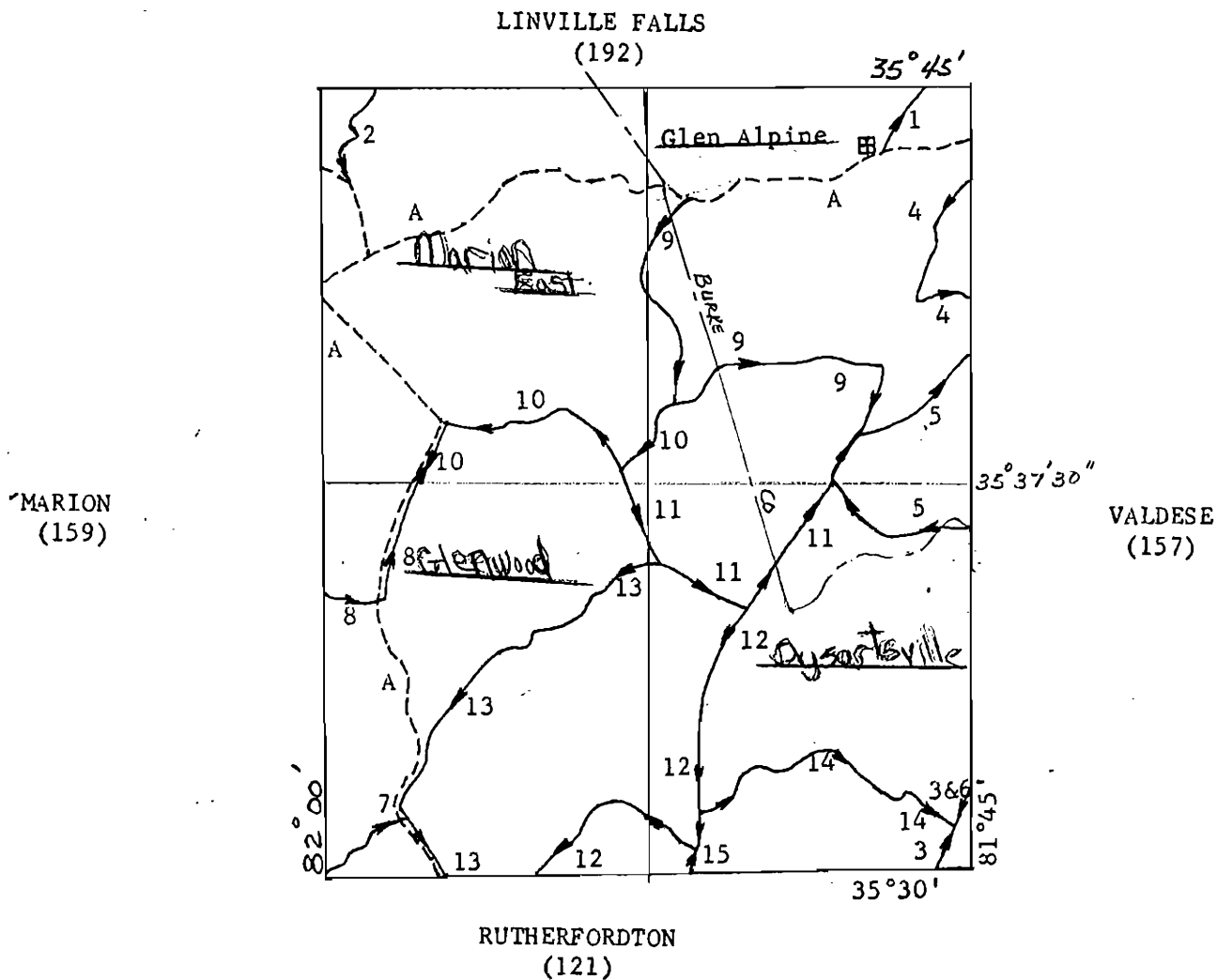
Burke, McDowell, and Rutherford
Counties

Final adjustment of 1975

Edition of 7/31/78

PR: WSM/kp

NGVD 29
Elevations



NGS (USC&GS) VERTICAL CONTROL DATA

A. Quadrangle 350814

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NGVD 29
 Elevations

	<u>Feet</u>
ISOLATED BENCH MARKS (By W. C. Hall, 1869; Book A6201)	
Glen Alpine; 73 ft N. rail; SE. corner of brick basement of Hennessee & Co's store; standard tablet stamped "1215"	1213.754
Bridgewater, 0.4 mi E. of; bridge seat at W. end of bridge over Muddy Creek; 2 ft S. of S. rail; copper bolt stamped "USGS 1091 FT BM" (Tied by NGS, 1934)	1089.342
Nebo; 134 ft N. of N. rail; 1 ft from E. front of J. D. Pitt's store; in S. basement wall; standard tablet stamped "1298" (Tied by NGS, 1934) (Reported destroyed, 1960)	1296.467
By C. A. Clunet, 1900; Book 7530	
Sinclair's Mill; on S. side of Muddy Creek; in rock; standard tablet stamped "1198 ASH"	1196.659
Dysortville; in chimney on W. side of residence of Dr. Simmon; standard tablet stamped "1264 ASH"	1263.505
Hutchin's Store; Hutchin's house at fork of Morganton and Bridgewater Roads; in W. side of large rock in chimney; standard tablet stamped "1257 ASH" (Reported destroyed, 1958)	1257.399
Bridgewater, 0.4 mi E. of RR. station; in bridge seat at W. end of bridge over Muddy Creek; copper bolt stamped "1091 MC"	1089.342
Dysortville, 0.5 mi NW. of; 0.15 mi SW. of farm gate; 300 ft N. of South Muddy Creek; in solid rock N. of rd.; standard tablet stamped "1182 ASH"	1184.182
Fairview Church; N. of rd. at top of hill; in foundation on W. side of building; standard tablet stamped "1247 ASH"	1246.713
<u>LINE 1.</u>	
By W. S. Monk, 1948; Book AV 48	
"T 60 B 1934" (NGS)	1183.439
U.E., Glen Alpine, 1.4 mi N. of; at steel girder bridge over Catawba River; on NE. corner of N. concrete tier; chiseled square	1055.51

1948

LINE 2.NGVD 29
ElevationsFeet

By W. S. Monk, 1948; Book AV 48

South Mt. Institution, 6.9 mi SW. of; 2.1 mi SE of Hankins; at steel girder bridge over Catawba River; at SW. end of bridge; in concrete tier; standard stamped "13 WSM 1948 1219"

1218.082

"R 60 1934" (NGS)

1280.942

LINE 3.

By R. L. Beitle, 1949; Book AV 90

Reference mark; 115 ft SW. of tablet; 30 ft NW. of centerline of rd.; 23 ft NE. of centerline of driveway NW.; on top of hwy. boundary post; chiseled U

1117.56

Golden Valley School, 1.0 mi SW. of, along hwy. to Forest City; 93 ft N. and 15 ft W. of crossroads; 16.5 ft NW. of centerline of hwy.; in top of W. concrete headwall; 16 in. SW. of NE. end of culvert; standard tablet stamped "LISEN 1948 1113"

1113.422

Golden Valley School, 3.2 mi NW. of, thence 2.4 mi NE. of Duncan Crook Church; in NE. quadrant of crossroads; 41 ft N. of intersection of paved T-rd. S. and on prolongation of centerline; 31 ft E. of centerline of forks leading N.; 4 ft S. of prolongation of S. face of school building; in concrete post; standard tablet stamped "65 RLB 1949 1115" (Not found, 1958)

1114.599

Reference mark; 106 ft SE. of tablet; 30 ft S. of centerline of rd.; on top of hwy. boundary post; chiseled U

1119.24

LINE 4.

By W. S. Monk, 1950; Book AV 138

Morganton, 2.2 mi SW. of, along Highways 64 and 70, thence 1.7 mi SW. along macadam rd.; 0.5 mi S., thence 3.7 mi N. of Hopewell Church; 148 ft SW. of SW. corner of one-story brick house; 31 ft SE. of centerline of rd.; 35 ft SW. of corner of woods; in concrete post; standard tablet stamped "1 WSM 1950 1124"

1124.105

Reference mark; 40 ft NE. of tablet; in root on SW. side of 7-in. hickory tree; copper nail and washer

1122.60

NGVD 29
ElevationsLINE 4 (Cont'd)Feet

- Glen Alpine, 2.5 mi SE. of; 0.5 mi S., thence 1.5 mi NW. of Hopewell Church; 40 ft NW. of centerline of intersection of T-rd. N; 19 ft SW. of centerline of rd. N.; 4 ft S. of centerline of wooden bridge over stream; in concrete post; standard tablet stamped "2 WSM 1950 1048" (Not found, 1960) 1048.135
- Reference mark; 300 ft E. of tablet; in face on N. side of 14-in. oak tree; rail spike 1047.30

LINE 5.

By W. S. Monk, 1950; Book AV 138

- U.E., at sharp curve in rd.; 20 ft E. of C.C.C. rd.; on rock headwall of culvert; chiseled square 2635.74
- Horse Ridge Fire Tower, 2.5 mi S., thence 8.3 mi NW.; 4.3 mi SE. of junction of C.C.C. rd. and U. S. Highway 64; 38 ft N. of intersection of woods rd. NE.; 13 ft E. of main rd. N.; 17 ft NW. of centerline of woods rd.; in concrete post; standard tablet stamped "32 WSM 1950 2441" 2441.458
- Reference mark; 25 ft W. of tablet; in face on E. side of 12-in. poplar tree; rail spike 2440.66
- Horse Ridge Fire Tower, 2.5 mi S., thence 10.6 mi NW. of; 2.0 mi E. of junction of C.C.C. rd. and U. S. Highway 64; 51 ft N. of centerline of wooden bridge over stream; about center of U-curve; 17 ft E. of centerline of rd.; in concrete post; standard tablet stamped "33 WSM 1950 1502" (Reported destroyed, 1962) 1502.588
- Reference mark; 15 ft S. of tablet; in root on S. side of 10-in. hickory tree; copper nail and washer 1502.47
- Horse Ridge Fire Tower, 2.5 mi S. of, thence 12.6 mi NW. along C.C.C. rd.; 11.0 mi SW. of Morganton along U. S. Highway 64; 77 ft E. of junction of U. S. Highway 64 and C.C.C. rd.; 34 ft NE. of centerline of C.C.C. rd.; 31 ft SW. of SW. corner of store building; in concrete post; standard tablet stamped "34 WSM 1950 1221" (Reported disturbed, 1958) 1220.661
- Reference mark; 200 ft SW. of tablet; in root on E. side of 12-in. poplar tree; copper nail and washer 1225.50
- U.E., on SE. end of headwall of small concrete bridge over stream; chiseled square 1190.00

NGVD 29
ElevationsLINE 5 (Cont'd)Feet

U.E., 50 ft N. and 100 ft E. of junction of U. S. Highway 64 and drive N.; 150 ft NW. of store; on SW. corner of concrete hwy. marker; chiseled square	1180.29
Reference mark; 240 ft W. of tablet; on W. end of concrete headwall of culvert; chiseled square	1153.29
Morganton, 9.1 mi SW. of, along U. S. Highway 64; 1.9 mi SW. of Denton's Church; 333 ft E. of junction of T-rd. N.; 29 ft S. of centerline of drive S.; in concrete post; standard tablet stamped "35 WSM 1950 1158" (<u>Not found, 1958</u>)	1158.049
U.E., 20 ft N. and 40 ft E. of junction of U. S. Highway 64 and drive N. to brick school; at E. end of school; on N. end of concrete headwall of culvert; chiseled square	1186.62
U.E., 20 ft N. and 125 ft E. of junction of U. S. Highway 64 and rd. to Pleasant Ridge Church; on W. end of concrete headwall of culvert; chiseled square	1163.09
U.E., 20 ft S. and 75 ft W. of junction of U. S. Highway 64 and rd. S.; on E. end of concrete headwall of small bridge over stream; chiseled square	1112.32
Denton's Church; 138 ft S. of SE. corner; 47 ft SW. of centerline of driveway; 92 ft W. of center of intersection of drive and U. S. Highway 64 on high bank; in concrete post; standard tablet stamped "36 WSM 1950 1240" (<u>Reported destroyed, 1958</u>)	1239.770
Reference mark; 15 ft E. of tablet; in root on N. side of 19-in. twin oak trees; copper nail and washer	1241.00

LINE 6.

By W. S. Monk, 1950; Book AV 138'

"65 RLB 1949 1115" (Described in line 3) 1114.599

LINE 7.

By W. D. Leech, 1956; Book AV 492

Thermal City, 2.0 mi SW. of; in NE. angle of rd. fork N.; 40 ft E. of junction; in concrete post; standard tablet stamped "70 WDL 1956 1024" ^{.959} 1024.959

Reference mark; 370 ft W. of tablet; on SW. concrete wingwall of bridge; chiseled square 1021.72

LINE 7 (Cont'd)

"P 76 1935" (NGS) (Reported destroyed, 1958)

NGVD 29
ElevationsFeet

976.642

LINE 8.

By W. D. Leech, 1956; Book AV 492

Sugar Hill, 4.2 mi E. of; at Mudcut; 150 ft W. of crossroads at
U. S. Highway 221 N.-S.; N. of rd.; on W. end of concrete headwall
of culvert; standard tablet stamped "75 WDL 1956 1282"

1282.156

Reference mark; 60 ft SE. of tablet; on E. end of headwall of culvert;
chiseled square

1281.29

U.E., 100 ft S. of rd. crossing; on SE. wingwall of bridge; chiseled
square

1270.40

"T 76 1935" (NGS)

1237.648

LINE 9.

By D. R. Deane, 1958; Book AV 636

1 1 0.00 "G 155 1935" (NGS)

1093.869

1 3 1.26 U.E., on SW. end of concrete headwall culvert;
chiseled square

1086.73

1 5 2.67 Glen Alpine, 5.9 mi W. of, along U. S. Highway
70 from overpass, thence 1.9 mi S. along graveled
rd.; 84 ft S. and 23 ft E. of T-rd. S.; 40 ft S. of
stop sign; in concrete post; standard tablet stamped
"1 DRD 1958 1109"

1109.086

1 5 2.67 Reference mark; on NE. corner at E. end of sidewalk
to residence of N. E. Branton

1110.01

1 12 5.61 Glen Alpine, 5.9 mi W. of, along U. S. Highway 70
from overpass, thence 1.9 mi S. to T-rd. W., thence
2.9 mi S. of T-rd. E.; 68 ft NE. and 24 ft NW. from
intersection of rd. and drive NE. to residence of
James; 34 ft SW. of fence corner; in concrete post;
standard tablet stamped "2 DRD 1958 1160"

1160.050

LINE 9 (Cont'd)Feet

1	18	8.45	Glen Alpine, 1.5 mi S. of, from caution light at T-rd. and Y-rd. intersection, thence left, S. at Y-intersection for 5.4 mi to T-rd. W. (Bennett Road), thence 0.3 mi W. to Y-rd. intersection, thence 2.2 mi SW.; 32 ft E. and 38 ft N. of E. end of easternmost of two small wooden bridges; in concrete post; standard tablet stamped "20 DRD 1958 1127"	1126.901
1	17	8.45	Reference mark No. 2; 40 ft NE. of NE. end of bridge; on top of flat rock outcrop; chiseled square	1121.09
1	20	9.24	U.E., at Mount Olive Church; on top of wall at NE. end of third step at sidewalk entrance; chiseled square	1238.12
1	23	10.67	Glen Alpine, 1.5 mi S. of, from caution light to T-rd. and Y-rd. intersection, thence left, S. at Y-intersection for 5.4 mi to T-rd. W. (Bennett Road), thence 0.3 mi W. to Y-rd.; 44 ft W. of E. end of bank at Y-intersection; 28 ft S. of rd. NW.; 23 ft N. of rd. SW.; in concrete post; standard tablet stamped "21 DRD 1958 1302"	1302.411
1	23	10.67	Reference mark No. 1; 30 ft W. of tablet; in S. root of pine tree; copper nail and washer	1300.94
1	28	12.28	Morganton, 8.3 mi SW. of, along U. S. Highway 64 from its intersection with U. S. Highway 70; about 150 ft E. of T-rd. NE.; in center of N. headwall of concrete culvert; standard tablet stamped "22 DRD 1958 1153"	1153.083
1	26	12.28	Reference mark; chiseled square (Described in line 5)	1153.29

LINE 10.

By D. R. Deane, 1958; Book AV 636

2	6	2.63	Dysortville, 2.1 mi NE. of, along State Highway 26 from crossroads; 34 ft NE. and 22 ft NW. of T-rd. NE.; in NE. end of concrete culvert; standard tablet stamped "3 DRD 1958 1328"	1327.526
2	11	5.53	Dysortville, 5.0 mi NE. of, along State Highway 26 from crossroads; 26 ft E. and 17 ft N. of drive N. to brick and shingle house; 10 ft NW. of State Highway sign 26; in W. headwall of L-shaped concrete culvert; standard tablet stamped "4 DRD 1958 1247"	1247.403

LINE 10 (Cont'd): Feet

2	18	8.71	Dysortville, 5.6 mi NW. of, along State Highway 26 from crossroads to Y-rd. W., thence 2.2 mi W. to T-rd. SE., thence 0.4 mi S. to Clinchfield RR. crossing; 47 ft E. and 38 ft S. of centerline of RR. crossing; 8 ft W. of large oak tree; in concrete post; standard tablet stamped "5 DRD 1958"	1228.156
2	20	9.61	"T 76 1935" (NGS) (Also in line 8)	1237.648

LINE 11.

By D. R. Deane, 1958; Book AV 636

2	22	0.00	"3 DRD 1958 1328" (Described in line 10)	1327.526
2	24	1.02	U.E., at T-rd. SW.; on SW. corner of large concrete culvert; chiseled square	1225.19
2	26	2.08	Dysortville; at intersection of State Highway 26 and paved rd. SW. to Vein Mt. (Vein Mt. Road); 34 ft E. and 18 ft N. of intersection; in W. end of concrete culvert headwall; standard tablet stamped "6 DRD 1958 1257"	1257.030
2	26	2.08	Reference mark; 90 ft SW. of tablet; 6 ft NW. of fenceline; top of concrete slab; chiseled square	1256.69
2	28	3.32	U.E., 400 ft N. of paved T-rd. E.; 40 ft N. of farm T-rd. W.; on S. end of W. headwall of concrete culvert; chiseled square	1180.72
2	30	4.51	Dysortville, 2.4 mi SE. of, along State Highway 26 to intersection of U. S. Highway 64; in center of NE. wingwall of hwy. bridge over U. S. Highway 64; standard tablet stamped "7 DRD 1958 1095"	1094.911
2	30	4.51	Reference mark; on end of NW. bridge curbing; chiseled square	1095.19
2	35	7.03	Morganton, 12.2 mi SW. of intersection of U. S. Highways 70 and 64; 650 ft NE. of rd. SE. of old State Highway 26; 20 ft E. of centerline of hwy.; 6 ft S. of rd. sign "Morganton 13"; in S. end of W. headwall of L-shaped culvert; standard tablet stamped "8 DRD 1958 1259"	1259.350
2	38	8.98	U.E., at NW. corner of unused service station; on top of concrete sign base about 4 ft high; chiseled square	1229.11

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Elevations

LINE 11 (Cont'd)

Feet

2	39	9.51	Morganton, 9.7 mi SW. of, along U. S. Highway 64 from intersection with U. S. Highway 70; about 500 ft N. of T-rd. W. (Mt. Olive Road); 36 ft N. of fence corner; 24 ft E. of centerline of hwy.; in N. end of E. headwall of concrete culvert; standard tablet stamped "9 DRD 1958 1215"	1214.539
2	41	10.89	Reference mark; chiseled square (Described in line 5) (Also in line 9)	1153.29

LINE 12.

By D. R. Deane, 1958; Book AV 636

2	42	0.00	"7 DRD 1958 1095" (Described in line 11)	1094.911
2	45	2.56	Dysortville, 2.4 mi SE. of, along State Highway 26 to U. S. Highway 64, thence 2.5 mi SW. along U. S. Highway 64; 77 ft S. of Rutherford-McDowell County line; 16 ft W. of centerline of rd.; in center of W. headwall of concrete culvert; standard tablet stamped "10 DRD 1958 985"	984.886
2	47	3.86	U.E., at T-rd. E. to Cane Creek Baptist Church; on N. end of W. headwall of concrete culvert; chiseled square	952.11
2	47	4.94	Dysortville, 2.4 mi SE. of, along State Highway 26 to U. S. Highway 64, thence 4.9 mi S. along U. S. Highway 64 to Y-rd. NW. (Camp Creek Road); 50 ft N. and 21 ft W. of intersection; in center of W. headwall of concrete culvert; standard tablet stamped "11 DRD 1958 957"	956.825
2	49	6.05	U.E., about 10 ft SW. of centerline of rd.; on top of rock ledge; chiseled square	1001.63
2	54	8.19	Union Mills, 0.5 mi S. of, from RR. crossing to T-rd. E., thence 1.6 mi E. to T-rd. SE., thence 3.9 mi NE. along Camp Creek Road; 75 ft NE. and 36 ft NW. of drive NW.; 5 ft SW. of REA pole 68-10; in concrete post; standard tablet stamped "12 DRD 1958 1070"	1069.940
2	55	9.24	U.E., at fence corner; 150 ft NW. of drive to residence of J. M. Clement; on top of old mill stone; chiseled square	1028.56

GLEN ALPINE

158 NORTH CAROLINA

D. R. Deane

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1958

LINE 13.Feet

By D. R. Deane, 1958; Book AV 636

NGVD 29
Elevations

3	1	0.00	"6 DRD 1958 1257" (Described in line 11)	1257.030
3	5	2.80	U.E., 25 ft E. of drive N.; on E. end of concrete culvert; chiseled square	1325.51
3	6	3.28	Dysortville, 3.3 mi SW. of, along Vein Mt. Road from its intersection with State Highway 26; at SE. end of bridge over Muddy Creek; on inside bridge curbing; standard tablet stamped "14 DRD 1958 1253"	1252.907
3	6	3.28	Reference mark; inside bridge curbing at NW. end of bridge; chiseled square	1252.91
3	8	4.38	U.E., about 180 ft W. of Y-rd.; on E. end of culvert; cross cut	1308.18
3	9	5.18	Dysortville, 5.2 mi SW. of, along Vein Mt. Road from its intersection with State Highway 26; 18 ft W. of centerline of rd.; in N. end of L-shaped culvert; standard tablet stamped "15 DRD 1958 1213"	1212.594
3	12	7.35	Dysortville, 7.0 mi SW. of, along Vein Mt. Road from its intersection with State Highway 26, thence 0.3 mi S.; at S. end of small lake; 50 ft E. of centerline of rd.; 13 ft SW. of two large sycamore trees; about 28 ft SW. of lake edge; in granite rock ledge; standard tablet stamped "16 DRD 1958 1026"	1026.341
3	12	7.35	Reference mark; 12 ft S. of tablet; on top of rock ledge; chiseled square	1026.80
3	16	10.45	Union Mills, 1.6 mi N. and E. of, along graveled rd. from RR. crossing to Clinchfield RR. crossing; 160 ft S. of crossing; in NW. corner of concrete base of RR. signal light; standard tablet stamped "17 DRD 1958 971"	971.210

GLEN ALPINE

LINE

D. R. Deane

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1958 NGVD 29
Elevations

4.

Feet

By D. R. Deane, 1958; Book AV 636

3	24	2.72	Golden Valley School, from crossroads 0.1 mi S., thence 3.3 mi NW. along State Highway 26 to T-rd. W., thence 2.0 mi W. along graveled rd.; in NW. corner of front yard of farmhouse; 34 ft S. and 22 ft E. of drive S.; 8 ft NW. of large oak tree; in concrete post; standard tablet stamped "17 DRD 1958 1287"	1287.468
3	24	2.27	Reference mark No. 2; in NW. root of oak tree in NW. corner of yard at farm residence	1287.80
3	29	4.85	Golden Valley School, 0.1 mi SW. of, to State Highway 26, thence 3.1 mi NW. along State Highway 26; about 400 ft SE. of T-rd. SW.; 18 ft SW. of centerline of hwy.; in S. end of W. headwall of large concrete culvert; standard tablet stamped "18 DRD 1958 1119"	1118.812
3	29	4.85	Reference mark; on S. end of E. headwall of culvert; chiseled square	1119.07
3	32	6.41	U.E., on NE. wingwall of hwy. bridge; chiseled square	1110.72
3	33	7.09	Golden Valley School, 0.1 mi S. to State Highway 26, thence 0.9 mi NW.; 12 ft SE. and 18 ft NE. of drive N.; in SE. end of L-shaped concrete culvert; standard tablet stamped "19 DRD 1958 1148"	1147.753
3	34	7.95'	U.E., in NE. corner of crossroads; on N. end of L-shaped culvert; chiseled square	1098.82
3	35	8.90	"LISEN 1948 1113" (Described in line 3)	1113.422

LINE 15.

By W. D. Kelly, 1963; Book AV 944

1	35	7.09	"11 DRD 1958 957" (Described in line 11)	956.825
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