



Base prepared by the Army Map Service (AMS), Corps of Engineers, U. S. Army, Washington, D. C. Compiled in 1953 by photogrammetric methods and by reference to Iowa County Highway Maps, 1950; Minnesota County Highway Maps, 1947-50. Horizontal and vertical control by USC&GS, 1950; and C.E. Aerial photography 1949-50. Map field checked, 1954.

### HORIZONTAL CONTROL

**Coast & Geodetic Survey**

- Monumented Point - First Order
- Monumented Point - Second Order
- Monumented Point - Third Order
- Located Object - Third Order
- See separate index for names of numbered stations
- Station reported not recovered
- Measured Base - Electronic or Taped
- Line of triangulation observed
- Line of triangulation observed from one end only
- Measured Length - Electronic or Taped
- Theodolite Traverse - Electronic Distance
- Transit Traverse - Taped Distance Third Order
- Transit Traverse and Leveling Third Order

**Geological Survey**

- Monumented Point - First Order
- Monumented Point - Second Order
- Monumented Point - Third Order
- Located Object - Third Order
- See separate index for names of numbered stations
- Station reported not recovered
- Measured Base - Electronic or Taped
- Line of triangulation observed
- Line of triangulation observed from one end only
- Measured Length - Electronic or Taped
- Theodolite Traverse - Electronic Distance
- Transit Traverse - Taped Distance Third Order
- Transit Traverse and Leveling Third Order

### VERTICAL CONTROL

**Coast & Geodetic Survey**

- First Order
- Second Order
- Third Order

**Geological Survey**

- First Order
- Second Order
- Third Order

### STATE SURVEY CONTROL

- Horizontal or Vertical

Scale 1:250,000

0 5 10 15 20 25 30 Statute Miles

0 5 10 15 20 25 30 Kilometers

### SECTIONIZED TOWNSHIP

6	5	4	3	2	1
7	8	9	10	11	12
13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28	29	30
31	32	33	34	35	36

### TRANSVERSE MERCATOR PROJECTION

TOWNSHIP OR RANGE LINE

LAND GRANT BOUNDARY

### LEGEND

**ROADS**

- Hard surface, heavy duty
- More than two lanes wide
- Two lanes wide; Federal route marker
- Hard surface, medium duty
- More than two lanes wide
- Two lanes wide; State route marker
- Improved light duty
- Unimproved dirt
- Trail

**RAILROADS**

- Single track
- Double or Multiple
- Standard gauge
- Narrow gauge

**BOUNDARIES**

- International
- State
- County
- Park or reservation

**Landmarks:** School, Church, Other, etc.

**Horizontal control points:** 1 - 1

**Spot elevation in feet:** 100

**Mark or swamp:** 100

**Intermittent or dry stream:** 100

**Power line:** 100

### COAST AND GEODETIC SURVEY THIRTY MINUTE QUADRANGLE DESIGNATION

INDEX TO COUNTY BOUNDARIES

43 093 4	43 093 1	43 092 4	43 092 1
43 093 3	43 093 2	43 092 3	43 092 2
43 093 5	43 093 6	43 092 5	43 092 6

ORDER CONTROL DATA IN BLACK BY 30 MINUTE QUADRANGLE UNITS FROM DIRECTOR, COAST AND GEODETIC SURVEY, WASHINGTON 25, D. C.

### GEOLOGICAL SURVEY FIFTEEN MINUTE QUADRANGLE DESIGNATION

INDEX TO COUNTY BOUNDARIES

1	2	3	4	5	6	7	8	9	10	11	12
13	14	15	16	17	18	19	20	21	22	23	24
25	26	27	28	29	30	31	32	33	34	35	36
37	38	39	40	41	42	43	44	45	46	47	48
49	50	51	52	53	54	55	56	57	58	59	60

ORDER CONTROL DATA IN RED BY 15 MINUTE QUADRANGLE UNITS FROM DIRECTOR, GEOLOGICAL SURVEY, WASHINGTON 25, D. C.

### 100,000-FOOT PLANE COORDINATE GRID TICK SYMBOLS

IOWA NORTH - MINNESOTA SOUTH

### INDEX TO COUNTY BOUNDARIES

(See county designations list for county identification)

1	2	3	4	5	6	7	8	9	10	11	12
13	14	15	16	17	18	19	20	21	22	23	24
25	26	27	28	29	30	31	32	33	34	35	36
37	38	39	40	41	42	43	44	45	46	47	48
49	50	51	52	53	54	55	56	57	58	59	60

PLANE COORDINATE ZONES

IOWA NORTH MINNESOTA SOUTH

U. S. DEPT. OF COMMERCE  
 COAST AND GEODETIC SURVEY  
 WASHINGTON, D. C.  
 FORM - 6471 (1-63)  
 DATE JUL 1966

# INDEX TO NUMBERED HORIZONTAL CONTROL STATIONS

by the  
 Coast and Geodetic Survey

QUADS 430921-2-3-4 & 430931-2-3-4  
 IOWA-MINN  
 LATITUDE 43° 00' TO 44° 00'  
 LONGITUDE 92° 00' TO 94° 00'  
 DIAGRAM NK 15-2 MASON CITY

KEY NO	STATION NAME	QUAD NO	STATION NO
1	EYCTA CHURCH SPIRE	430921	1032
1	EYCTA CONSOLIDATED HIGH SCHOOL CUPOLA	430921	1033
1	EYOTA MUNICIPAL WATER TANK	430921	1015
2	FOUNTAIN CATHOLIC CHURCH SPIRE	430921	1034
2	FOUNTAIN LUTHERAN CHURCH BLACK SPIRE	430921	1035
3	HARMONY GREENFIELD LUTHERAN CHURCH SPIRE	430921	1036
3	HARMONY WATER TANK	430921	1037
4	PRESTON WATER TANK	430921	1039
5	ROCHESTER MEDICINE INSTITUTION WATER TANK	430921	1040
6	SPRING VALLEY CATHOLIC CHURCH SPIRE	430921	1045
6	SPRING VALLEY SCHOOLHOUSE SPIRE	430921	1043
6	SPRING VALLEY WATER TANK	430921	1044
7	SPRING VALLEY LUTHERAN CHURCH SPIRE	430921	1042
8	AUSTIN CATHOLIC CHURCH SPIRE	430924	1007
9	AUSTIN PACKING CO SMOKESTACK	430924	1008
9	AUSTIN WATER TANK	430924	1009
9	HORMEL MHD	430924	1028
9	HURMEL STACK	430924	1029
10	GRAY CHURCH SPIRE WHITE BELFRY	430924	1011
11	NEW HAMPTON ST JOSEPHS CATH CH SPIRE	430922	1019
12	CRESCO RM 3	430922	1002
13	NEW HAMPTON MUNI WATER WORKS STACK	430922	1017
13	NEW HAMPTON MUNI WATER WORKS TANK	430922	1018
13	NEW HAMPTON ST MARYS CATH CH SPIRE	430922	1020
13	NEW HAMPTON ST PAULS EV LUTH CH SPIRE	430922	1021
14	PRCTIVIN MUNICIPAL WATER TANK	430922	1024
14	PRCTIVIN TRINITY CATH CH SPIRE	430922	1022
15	CRESCO FARMERS CREAMERY CO STACK	430922	1009
15	CRESCO INTERSTATE POWER CO STACK	430922	1012
15	CRESCO MUNICIPAL TANK	430922	1013
16	CRESCO COUNTY COURTHOUSE STEEPLE	430922	1011
16	CRESCO HIGH SCHOOL CUPOLA	430922	1010
16	CRESCO RADIO STATION KAB 264 MAST	430922	1033
16	CRESCO ST JOSEPHS CATH CH SPIRE	430922	1014
17	BIXBY CABLE ELEVATOR	430931	1005
18	ELLENDALE MUNICIPAL WATER TANK	430931	1045
18	ELLENDALE WHITE CHURCH GRAY STEEPLE	430931	1012
19	WELLS CATHOLIC CHURCH SPIRE	430934	1030
19	WELLS HIGH SCHOOL CUPOLA	430934	1033
19	WELLS METHODIST CHURCH SPIRE	430934	1034

KEY NO	STATION NAME	QUAD NO	STATION NO
19	WELLS SMOKESTACK	430934	1035
20	ALBERT LEA COURTHOUSE SPIRE	430931	1019
20	ALBERT LEA INTERSTATE POWER CO STACK 1926	430931	1021
20	ALBERT LEA INTERSTATE POWER CO STACK 1963	430931	1021
20	ALBERT LEA LAUNDRY SMOKESTACK	430931	1022
20	ALBERT LEA LUTHERAN CHURCH SPIRE	430931	1024
21	ALBERT LEA GAS MACHINE CO WATER TANK	430931	1020
21	ALBERT LEA MUN WT MHD	430931	1047
21	ALBERT LEA PACKING CO SMOKESTACK	430931	1025
21	ALBERT LEA PACKING CO WATER TANK	430931	1026
21	ALBERT LEA WATERWORKS STANDPIPE	430931	1027
22	ALBERT LEA LUTHER COLLEGE SPIRE	430931	1023
23	JOICE FARMERS ELEVATOR EAST GARLE	430932	1011
23	JOICE WHEELERS ELEVATOR EAST GARLE	430932	1012
24	FOREST CITY STANDPIPE	430933	1009
24	FOREST CITY WALDORF COLLEGE CHIMNEY	430933	1010
25	CLEAR LAKE FARMERS COOP ASSOC FLAGPOLE	430932	1008
25	CLEAR LAKE STANDPIPE	430932	1009
26	VENTURA FARMERS ELEVATOR	430932	1021
26	VENTURA W AND W BIRCH ELEVATOR	430932	1022
27	MASON CITY AMERICAN SUGAR BEET CO CHIMNEY	430932	1015
28	MASON CITY PEOPLES GAS AND LIGHT CHIMNEY	430932	1018
29	MASON CITY MBA BLDG FLAGPOLE	430932	1017
30	MASON CITY NATIONAL CLAY PROD WATER TANK	430932	1019
31	CERRO GURDO COUNTY FARM WATER TANK	430932	1007
32	ARM MHD	430931	1013
33	PICK MHD	430934	1001
34	QUINT MHD	430934	1002
35	ALDEN MHD	430934	1003
36	ALDEN MUNICIPAL WATER TANK	430934	1004
37	JONES AZIMUTH MARK MHD	430934	1009
38	UNION PRAIRIE LUTHERAN CHURCH SPIRE	430921	1041
39	WEST FREEBORN LUTHERAN CHURCH SPIRE	430931	1032
40	STEWARTVILLE CATHOLIC CHURCH SPIRE	430921	1014
40	STEWARTVILLE MUNICIPAL WATER TANK	430921	1013
41	ALBERT LEA NORTH MUNICIPAL WATER TANK	430931	1040
42	ALBERT LEA SW MUNICIPAL WATER TANK	430931	1042
43	ALBERT LEA REA RADIO MAST	430931	1043