

POLK COUNTY

CENTRAL IOWA AREA MAPPING GROUP
(C.I.A.M.)

MULTI-PARTICIPANT LAND BASE

GPS SURVEY DATA

U.S. SURVEY FOOT DATA CONVERSION

VERIFIED BY DAVID NESS ON 5-15-96 OF M.J. HARDEN

10-5-93

U.S. SURVEY
FOOT
VERIFIED BY DAVID
NESS 5/15/96
SCALE PLANE COORDS

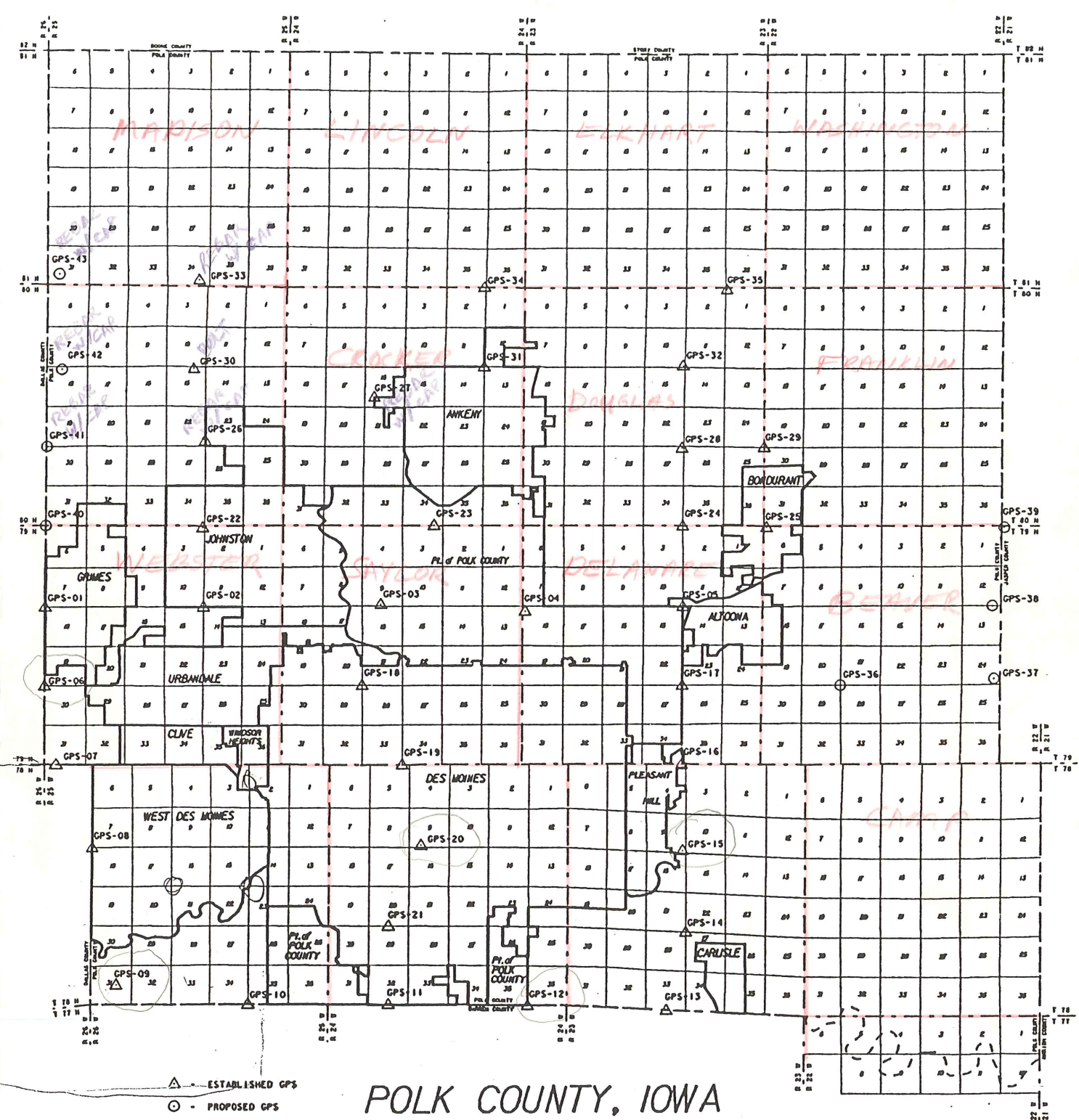
Steve East - GIS Coordinator
for polk Co. - 286-3003,
relayed this GPS Data is on
a 2 x 6 mile grid with 1:100,000
closure. Further data on how
information was collected can be
obtained from Ron Lampe of
M.J. Harden - 1-816-842-0141
extension 136.



M.J. HARDEN ASSOCIATES, INC.

720 Troost ■ Kansas City, MO. 64106 ■ 816-842-0141

MAPPING THE COURSE FOR CREATIVE SOLUTIONS.



POLK COUNTY, IOWA

LAND CORNERS AND HORIZONTAL CONTROL POINTS

DATE 3-5-90 M. J. HARDEN ASSOC., INC. A.P.I. JOB NO _____

M.J.H. JOB NO. 6805-00

POINT NAME OR DESIGNATION GPS-1

POINT NO. _____, SEC. 07, T 79 N, R 25 W

ESTABLISHED BY: M.J. HARDEN ASSOC. DATE: APRIL 1987

RECOVERED BY: _____ DATE: _____

COORDINATES: N 604368.827, E 1554482.914 (NAD 1983)
 (IOWA STATE PLANE COORDINATE SYSTEM, SOUTH ZONE)

COORDINATES: N _____, E _____
 (_____ STATE PLANE MODIFIED GRID COORDINATE SYSTEM _____ ZONE)

COORDINATES: N _____, E _____
 (INDEPENDENT GRID COORDINATE SYSTEM)

ELEVATION FACTOR _____ SCALE FACTOR _____

COMBINED ADJUSTMENT FACTOR _____

REF. PT.	AZIMUTH	DISTANCE	REFERENCES
No. 1	E.S.E.	55.82'	"X" NAILS IN N.E. FACE OF FENCE POST
No. 2	S.E.	48.47'	"X" NAILS IN N.W. FACE OF POWER POLE
No. 3	S.E.	65.55'	"X" NAILS IN N.E. FACE OF GATE POST
No. 4	S.W.	45.64'	"X" NAILS IN S.E. FACE OF POWER POLE
No. 5	W.S.W.	56.03'	"X" NAILS IN N. FACE OF BRACE FENCE POST
No. 6	W.N.W.	40.85'	"X" NAILS IN S.E. FACE OF POWER POLE (BRACE POLE)
No. 7	N.W.	46.60'	"X" NAILS IN S.E. FACE OF GATE POST
No. 8	N.N.W.	65.80'	"X" NAILS IN N.E. FACE OF GATE POST

DESCRIPTION	SKETCH
MARK: <u>5/8" REBAR & CAP</u>	
LOCATION: <u>IN INTERSECTION OF</u>	
<u>N.W. 54TH AVE. & N.W. 142ND ST.</u>	
<u>0.8' BELOW GRAVEL SURFACE</u>	
<u>(OVER CM)</u>	
<u>CLOTH TARGET</u>	<div style="border: 1px solid black; width: 50px; height: 50px; display: flex; align-items: center; justify-content: center;"> SW COR. 07-79-25 </div>

LAND CORNERS AND HORIZONTAL CONTROL POINTS

DATE 3-5-90 M. J. HARDEN ASSOC., INC. A.P.I. JOB NO _____

M.J.H. JOB NO. 6805-000

POINT NAME OR DESIGNATION GPS-2

POINT NO. _____, SEC. 11, T. 79 N, R. 25 W

ESTABLISHED BY: M.J. HARDEN ASSOC. DATE: APRIL 1987

RECOVERED BY: _____ DATE: _____

COORDINATES: N 604289.110, E 1575807.491 (NAD 1983)
 (IOWA STATE PLANE COORDINATE SYSTEM, SOUTH ZONE)

COORDINATES: N _____, E _____
 (_____ STATE PLANE MODIFIED GRID COORDINATE SYSTEM _____ ZONE)

COORDINATES: N _____, E _____
 (INDEPENDENT GRID COORDINATE SYSTEM)

ELEVATION FACTOR _____ SCALE FACTOR _____

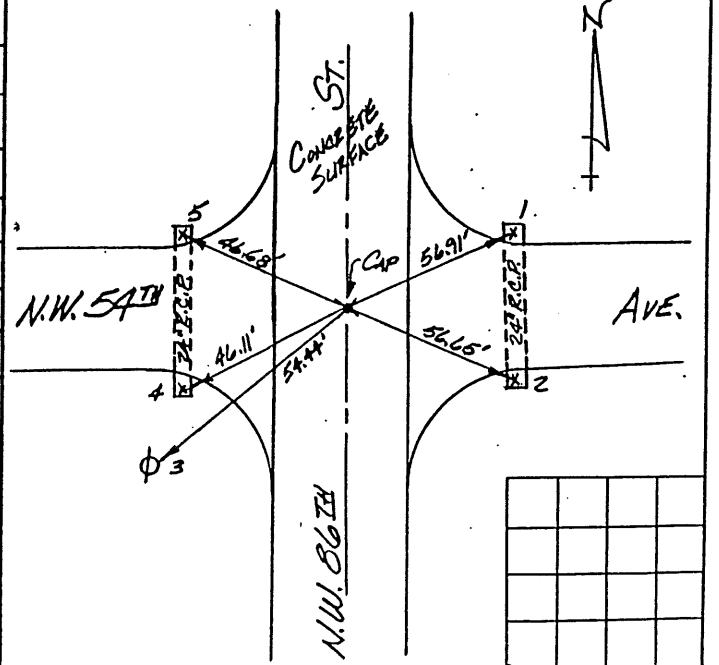
COMBINED ADJUSTMENT FACTOR _____

REF. PT.	AZIMUTH	DISTANCE	REFERENCES
No. 1	N.E.	56.91'	"X" CUT IN TOP OF N. END OF 24" R.C.P.
No. 2	S.E.	56.65'	"X" CUT IN TOP OF S. END OF 24" R.C.P.
No. 3	S.W.	54.44'	"X" NAILS IN S.E. FACE OF POWER POLE
No. 4	W.S.W.	46.11'	"X" CUT IN TOP OF S. END OF 24" R.C.P.
No. 5	N.W.	46.68'	"X" CUT IN TOP OF N. END OF 24" R.C.P.

DESCRIPTION

MARK: "CAP" IN CONC. PAVEMENT
 LOCATION: IN INTERSECTION OF
N.W. 54TH AVE. & N.W. 86TH ST.

SKETCH



PAINTED TARGET

LAND CORNERS AND HORIZONTAL CONTROL POINTS

DATE 3-6-90 M. J. HARDEN ASSOC., INC. A.P.I. JOB NO. _____

M.J.H. JOB NO. 6805-00

POINT NAME OR DESIGNATION GPS-3

POINT NO. _____, SEC. 09, T. 79, R. 24

ESTABLISHED BY: M.J. HARDEN ASSOC. DATE: APRIL 1987

RECOVERED BY: _____ DATE: _____

COORDINATES: N 604364.011, E 1599476.046 (NAD 1983)
 (IOWA STATE PLANE COORDINATE SYSTEM, SOUTH ZONE)

COORDINATES: N _____, E _____
 (_____ STATE PLANE MODIFIED GRID COORDINATE SYSTEM _____ ZONE)

COORDINATES: N _____, E _____
 (INDEPENDENT GRID COORDINATE SYSTEM)

ELEVATION FACTOR _____ SCALE FACTOR _____

COMBINED ADJUSTMENT FACTOR _____

REF. PT.	AZIMUTH	DISTANCE	REFERENCES
No. 1	S.E.	113.42'	N.E. COR. SMALL WOOD BUILDING
No. 2	S.E.	107.27'	N.W. COR. SMALL WOOD BUILDING
No. 3	S.S.E.	104.24'	N.E. COR. SMALL WOOD BUILDING
No. 4	S.S.E.	57.29'	"X" NAILS IN E. FACE OF POWER POLE
No. 5	S.S.E.	101.49'	N.W. COR. SMALL WOOD BUILDING
No. 6	S.S.W.	103.09'	"X" NAILS IN E. FACE OF POWER POLE
No. 7	S.S.W.	169.20'	N.E. COR. CONC. BLOCK BUILDING
No. 8	S.W.	210.45'	N.W. COR. CONC. BLOCK BUILDING
No. 9	W.S.W.	1158.32'	R.R. SPIKE IN INTER. OF N.W. 26 TH ST. & 54 TH AVE.

DESCRIPTION

MARK: CONC. MON. WITH CAP

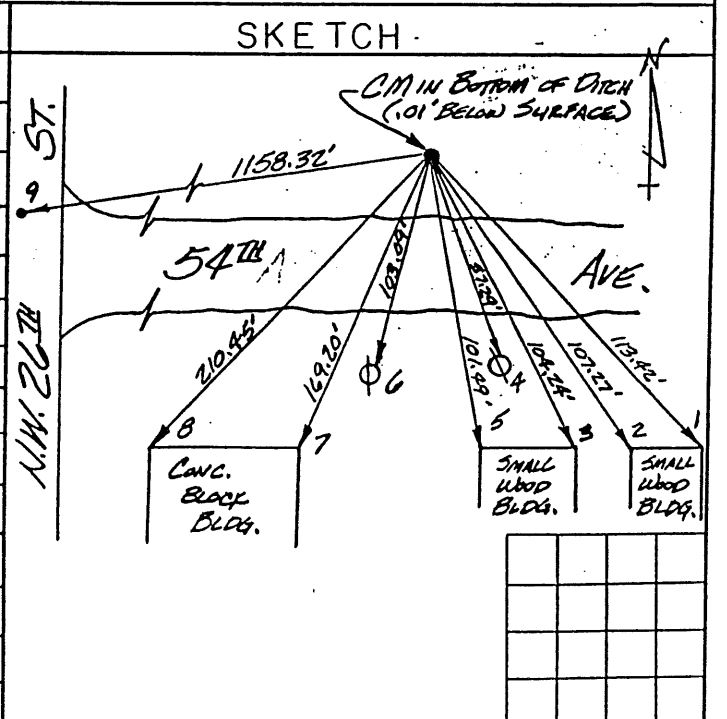
LOCATION: IN BOTTOM OF DITCH

N. OF 54TH AVE. E. OF

N.W. 26TH ST. - .01' BELOW

DITCH SURFACE

CLOTH TARGET



LAND CORNERS AND HORIZONTAL CONTROL POINTS

DATE 3-6-90 M. J. HARDEN ASSOC., INC. A.P.I. JOB NO _____

M. J. H. JOB NO. 6805-00

POINT NAME OR DESIGNATION GPS-4

POINT NO. _____, SEC. 18, T. 79, R. 23

ESTABLISHED BY: M.J. HARDEN ASSOC. DATE: APRIL 1987

RECOVERED BY: _____ DATE: _____

COORDINATES: N 603988.398, E 1618247.587 (NAD 1983)
 (IOWA STATE PLANE COORDINATE SYSTEM, SOUTH ZONE)

COORDINATES: N _____, E _____
 (_____ STATE PLANE MODIFIED GRID COORDINATE SYSTEM _____ ZONE)

COORDINATES: N _____, E _____
 (INDEPENDENT GRID COORDINATE SYSTEM)

ELEVATION FACTOR _____ SCALE FACTOR _____
 COMBINED ADJUSTMENT FACTOR _____

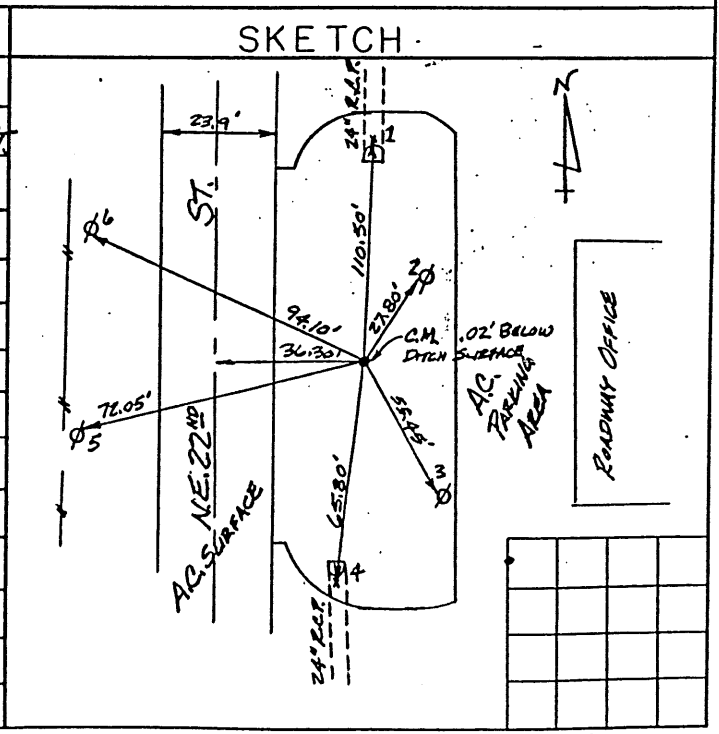
REF. PT.	AZIMUTH	DISTANCE	REFERENCES
No. 1	N.N.E.	110.50'	"X" CUT IN TOP OF S. END OF 24" R.C.P.
No. 2	N.E.	27.80'	"X" NAILS IN N.W. FACE OF POWER POLE
No. 3	S.E.	55.45'	"X" NAILS IN S.W. FACE OF POWER POLE
No. 4	S.S.W.	65.80'	"X" CUT IN TOP OF N. END OF 24" R.C.P.
No. 5	W.S.W.	72.05'	"X" NAILS IN N. FACE OF POWER POLE
No. 6	N.W.	94.10'	"X" NAILS IN S. FACE OF POWER POLE

DESCRIPTION

MARK: CONC. MON. WITH CAP

LOCATION: E. SIDE OF NE 22ND ST
IN FRONT ROADWAY OFFICE IN
BOTTOM OF DITCH - 0.2' BELOW
SURFACE

SKETCH



CLOTH TARGET

LAND CORNERS AND HORIZONTAL CONTROL POINTS

DATE 3-6-90 M. J. HARDEN ASSOC., INC. A.P.I. JOB NO _____

M.J.H. JOB NO. 6805-000

POINT NAME OR DESIGNATION GPS-7

POINT NO. _____, SEC. 1, T. 78, R. 25

ESTABLISHED BY: M.J. HARDEN Assoc. DATE: APRIL 1987

RECOVERED BY: _____ DATE: _____

COORDINATES: N. 583261.911, E. 1555934.280 (NAD 1983)
 (IOWA STATE PLANE COORDINATE SYSTEM, SOUTH ZONE)

COORDINATES: N. _____, E. _____
 (_____ STATE PLANE MODIFIED GRID COORDINATE SYSTEM _____ ZONE)

COORDINATES: N. _____, E. _____
 (INDEPENDENT GRID COORDINATE SYSTEM)

ELEVATION FACTOR _____ SCALE FACTOR _____

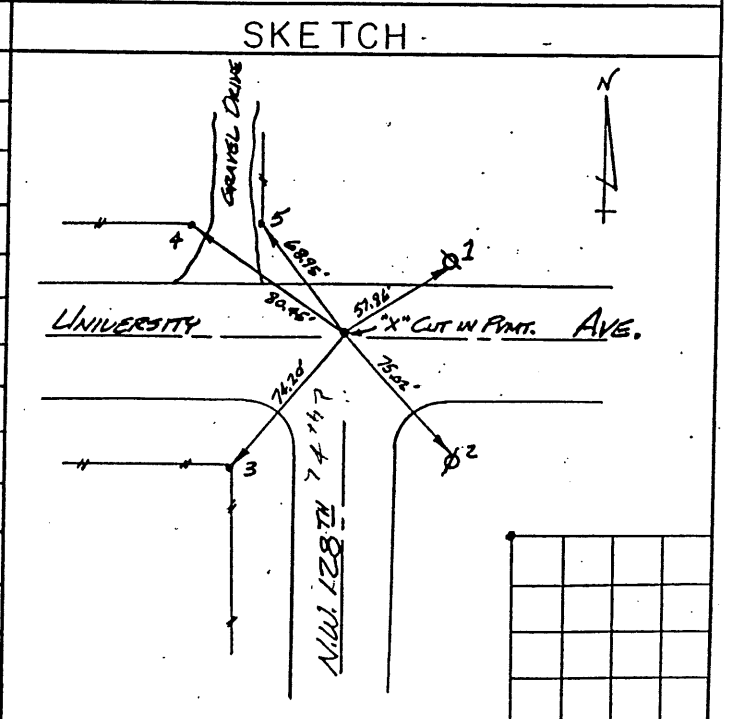
COMBINED ADJUSTMENT FACTOR _____

REF. PT.	AZIMUTH	DISTANCE	REFERENCES
No. 1	N.E.	57.86'	"X" NAILS IN S.E. FACE OF POWER POLE
No. 2	S.E.	75.02'	"X" NAILS IN N.E. FACE OF POWER POLE
No. 3	S.W.	74.20'	N.E. FACE OF STEEL FENCE POST
No. 4	N.W.	80.45'	"X" NAILS IN E. FACE OF GATE POST
No. 5	N.W.	68.95'	"X" NAILS IN W. FACE OF GATE POST

DESCRIPTION

MARK: "X" CUT IN PAVEMENT

LOCATION: IN INTERSECTION
 OF UNIVERSITY AVE. &
 N.W. 128TH ST.



LAND CORNERS AND HORIZONTAL CONTROL POINTS

DATE 3-6-90 M. J. HARDEN ASSOC., INC. A.P.I. JOB NO _____

Note: *Could be under Concrete* M.J.H. JOB NO. 6905-000

POINT NAME OR DESIGNATION GPS-8

POINT NO. _____, SEC. 7, T. 78, R. 25

ESTABLISHED BY: M.J. HARDEN Assoc. DATE: APRIL 1987

RECOVERED BY: _____ DATE: _____

COORDINATES: N 174379.952 (meters), E 475769.773 (meters)
572111.559, E 1560921.330
 (Iowa STATE PLANE COORDINATE SYSTEM, South ZONE)

COORDINATES: N _____, E _____
 (_____ STATE PLANE MODIFIED GRID COORDINATE SYSTEM _____ ZONE)

COORDINATES: N _____, E _____
 (INDEPENDENT GRID COORDINATE SYSTEM)

ELEVATION FACTOR _____ SCALE FACTOR _____

COMBINED ADJUSTMENT FACTOR _____

REF. PT.	AZIMUTH	DISTANCE	REFERENCES
No. 1	N.N.E.	86.67'	"X" NAILS IN NW FACE OF POWER POLE
No. 2	N.E.	37.73'	"X" NAILS IN TOP OF FENCE CORNER POST
No. 3	E.S.E.	91.73'	"X" NAILS IN S.W. FACE OF POWER POLE
No. 4	S.E.	71.10'	"X" NAILS IN N. FACE OF GATE POST
No. 5	S.S.E.	63.45'	"X" NAILS IN N. FACE OF GATE POST
No. 6	S.W.	59.40'	"X" NAILS IN S.E. FACE OF POWER POLE
No. 7	N.W.	112.27'	"X" NAILS IN N.E. FACE OF POWER POLE

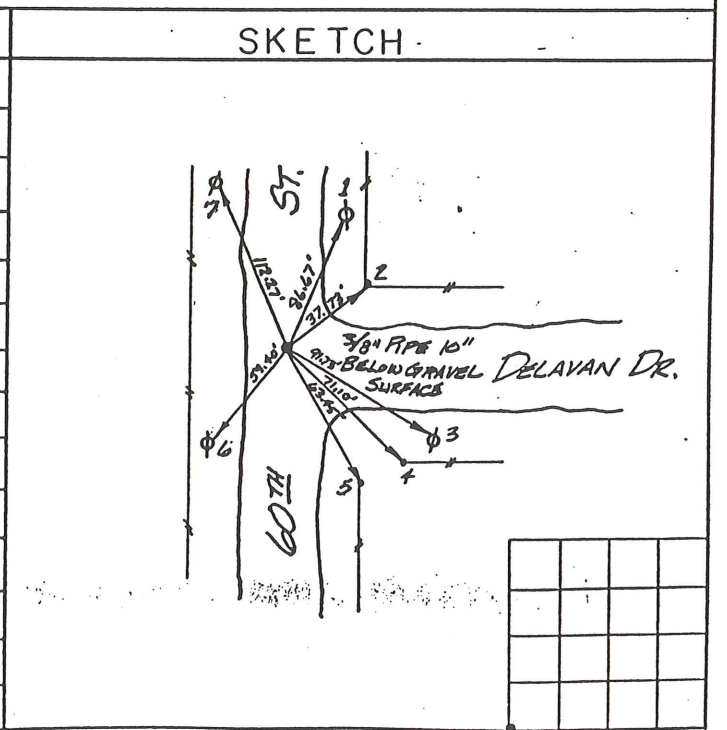
DESCRIPTION

MARK: 3/8" PIPE

LOCATION: 10" BELOW GRAVEL SURFACE IN INTERSECTION OF 60TH ST. & DELAVAN DR.

SW. COR. 7-78-25

Note: John Adams Found Destroyed



LAND CORNERS AND HORIZONTAL CONTROL POINTS

DATE 3-7-90 M. J. HARDEN ASSOC., INC. A.P.I. JOB NO _____

M.J.H. JOB NO. 6805-00

POINT NAME OR DESIGNATION GP5-9

POINT NO. _____, SEC. 31, T. 78, R. 25

ESTABLISHED BY: M.J. HARDEN ASSOC. DATE: APRIL 1987

RECOVERED BY: _____ DATE: _____

COORDINATES: N 553641.245, E 1564266.658 (NAD 1983,
(IOWA STATE PLANE COORDINATE SYSTEM, SOUTH ZONE)

COORDINATES: N _____, E _____
(STATE PLANE MODIFIED GRID COORDINATE SYSTEM _____ ZONE)

COORDINATES: N _____, E _____
(INDEPENDENT GRID COORDINATE SYSTEM)

ELEVATION FACTOR _____ SCALE FACTOR _____

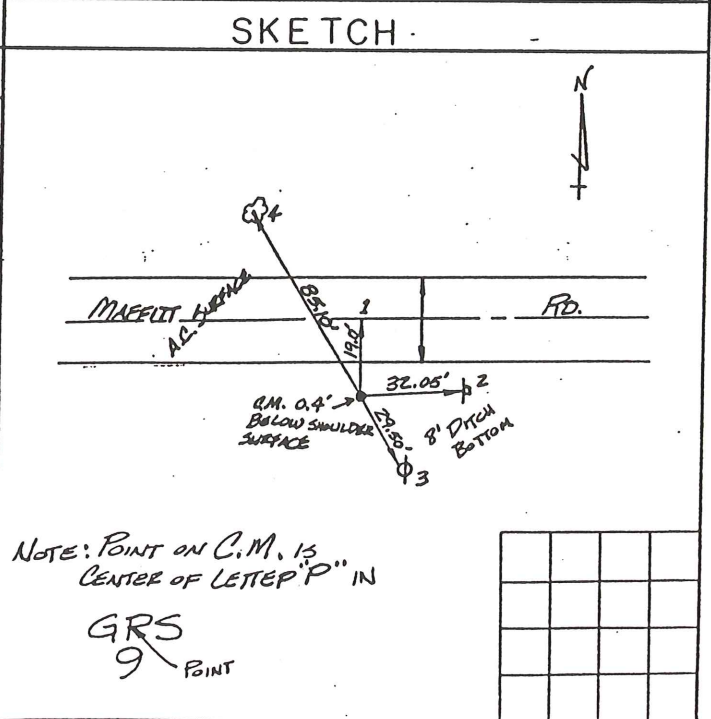
COMBINED ADJUSTMENT FACTOR _____

REF. PT.	AZIMUTH	DISTANCE	REFERENCES
No. 1	N.	19.0'	CENTERLINE OF A.C. SURFACE OF MAFFITT RD.
No. 2	E.	32.05'	W. FACE OF WOOD POST FOR 30 M.P.H. CURVE SIGN
No. 3	S.E.	29.50'	"X" NAILS IN W. FACE OF POWER POLE
No. 4	N.W.	85.10'	"X" NAILS IN S. FACE OF 12" ELM TREE

DESCRIPTION

MARK: CONC. MON.

LOCATION: 0.4' BELOW SHOULDER SURFACE ON S. SIDE OF MAFFITT RD.



LAND CORNERS AND HORIZONTAL CONTROL POINTS

DATE 3-7-90

M. J. HARDEN ASSOC., INC.

A.P.I. JOB NO _____

M.J.H. JOB NO. 6805-00

POINT NAME OR DESIGNATION GPS-11

POINT NO. _____, SEC. 32, T. 78, R. 24

ESTABLISHED BY: M.J. HARDEN ASSOC. DATE: APRIL 1987

RECOVERED BY: _____ DATE: _____

COORDINATES: N 167927.557, E 487906.436
 (TOWIA STATE PLANE COORDINATE SYSTEM, SOUTH ZONE)
 (NAD 1983)

COORDINATES: N _____, E _____
 (STATE PLANE MODIFIED GRID COORDINATE SYSTEM _____ ZONE)

COORDINATES: N _____, E _____
 (INDEPENDENT GRID COORDINATE SYSTEM)

ELEVATION FACTOR _____ SCALE FACTOR _____

COMBINED ADJUSTMENT FACTOR _____

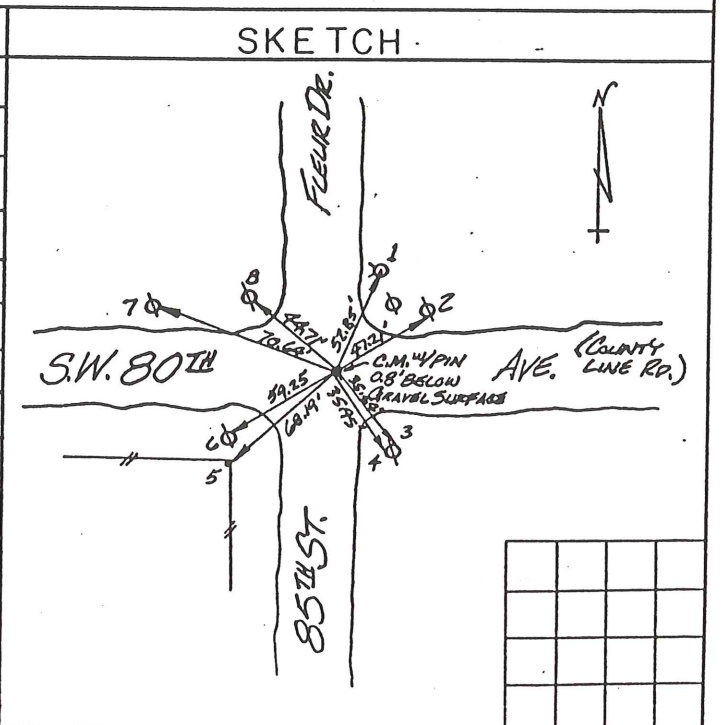
REF. PT.	AZIMUTH	DISTANCE	REFERENCES
No. 1	N.E.	52.85'	CENTER BOLT ON FIRE HYD.
No. 2	E.N.E.	47.21'	"X" NAILS IN S.W. FACE OF POWER POLE
No. 3	S.E.	35.54'	"X" NAILS IN N.W. FACE OF POWER POLE
No. 4	S.E.	35.95'	"X" NAILS IN S.W. FACE OF POWER POLE
No. 5	S.W.	68.19'	"X" NAILS IN N.E. FACE OF CORNER POST
No. 6	W.S.W.	59.25'	"X" NAILS IN N.W. FACE OF POWER POLE
No. 7	W.N.W.	70.64'	"X" NAILS IN S.E. FACE OF POWER POLE
No. 8	N.W.	44.71'	"X" NAILS IN S.E. FACE OF POWER POLE

DESCRIPTION

MARK: CONC. MON. w/PIN

LOCATION: 0.8' BELOW GRAVEL SURFACE AT INTERSECTION OF S.W. 80TH AVE. (COUNTY LINE RD.) & 85TH ST. (FLEUR DR.)

S. 1/4 COR. 32-78-24



LAND CORNERS AND HORIZONTAL CONTROL POINTS

DATE 3-7-90 M. J. HARDEN ASSOC., INC. A.P.I. JOB NO _____
 M.J.H. JOB NO. 6805-00

POINT NAME OR DESIGNATION GPS-12

POINT NO. _____, SEC. 36, T. 78, R. 24

ESTABLISHED BY: M.J. HARDEN ASSOC. DATE: APRIL 1987

RECOVERED BY: _____ DATE: _____

COORDINATES: N 550772.274, E 1619193.632 (NAD 1983)
 (IOWA STATE PLANE COORDINATE SYSTEM, SOUTH ZONE)

COORDINATES: N _____, E _____
 (_____ STATE PLANE MODIFIED GRID COORDINATE SYSTEM _____ ZONE)

COORDINATES: N _____, E _____
 (INDEPENDENT GRID COORDINATE SYSTEM)

ELEVATION FACTOR _____ SCALE FACTOR _____

COMBINED ADJUSTMENT FACTOR _____

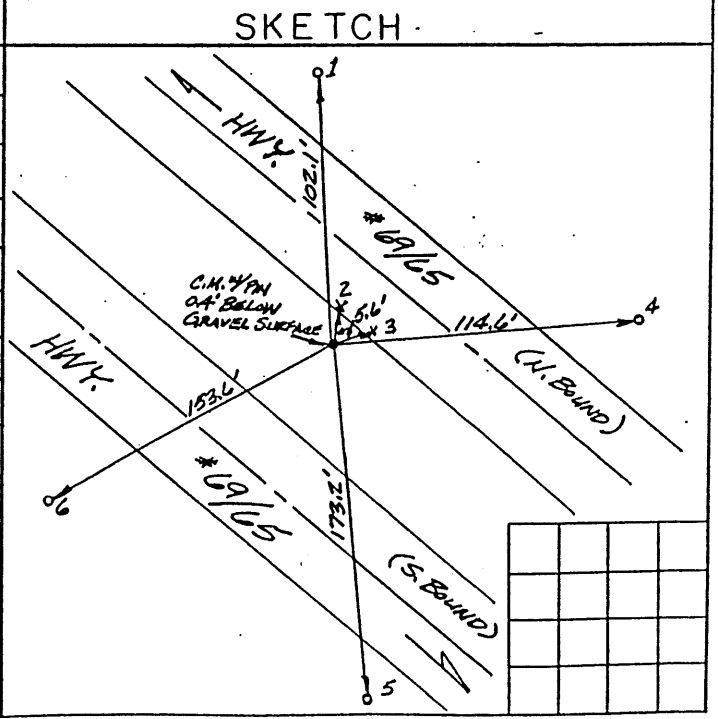
REF. PT.	AZIMUTH	DISTANCE	REFERENCES
No. 1	N.	102.1'	CONC. MON. W/ PIN IN CENTER
No. 2	N.N.E.	5.6'	"X" CUT IN FRNT. HWY. #69/65 N. BOUND
No. 3	E.N.E.	5.6'	"X" CUT IN FRNT. HWY. #69/65 N. BOUND
No. 4	E.N.E.	114.6'	CONC. MON. W/ PIN IN CENTER
No. 5	S.	173.2'	CONC. MON. W/ PIN IN CENTER
No. 6	S.W.	153.6'	CONC. MON. W/ PIN IN CENTER

DESCRIPTION

MARK: CONC. MON. W/ PIN IN CENTER

LOCATION: 0.4' BELOW GRAVEL SURFACE OF MEDIAN BETWEEN N. BND. & S. BND. HWY. #69/65

S.W. COR. 36-78-24



LAND CORNERS AND HORIZONTAL CONTROL POINTS

DATE 3-9-90 M. J. HARDEN ASSOC., INC. A.P.I. JOB NO _____

M.J.H. JOB NO. 6805-006

POINT NAME OR DESIGNATION GPS-21

POINT NO. _____, SEC. 20, T. 78, R. 24

ESTABLISHED BY: M.J. HARDEN ASSOC. DATE: APRIL 1987

RECOVERED BY: _____ DATE: _____

COORDINATES: N 561470.724, E 1600712.146 (NAD 1983)
 (IOWA STATE PLANE COORDINATE SYSTEM, SOUTH ZONE)

COORDINATES: N _____, E _____
 (_____ STATE PLANE MODIFIED GRID COORDINATE SYSTEM _____ ZONE)

COORDINATES: N _____, E _____
 (INDEPENDENT GRID COORDINATE SYSTEM)

ELEVATION FACTOR _____ SCALE FACTOR _____

COMBINED ADJUSTMENT FACTOR _____

REF. PT.	AZIMUTH	DISTANCE	REFERENCES
No. 1	N.	53.05'	"X" CUT IN S. END OF ISLAND ON FLEUR DR. N. OF MCKINLEY AVE.
No. 2	E.	56.28'	"X" CUT IN W. END OF ISLAND ON MCKINLEY AVE. E. OF FLEUR DR.
No. 3	S.	53.73'	"X" CUT IN N. END OF ISLAND ON FLEUR DR. S. OF MCKINLEY AVE.
No. 4	W.	54.35'	"X" CUT IN E. END OF ISLAND ON MCKINLEY AVE. W. OF FLEUR DR.

DESCRIPTION	SKETCH
MARK: <u>NAIL</u>	
LOCATION: <u>AT ASPH. CONC. SURFACE</u>	
<u>IN INTERSECTION OF MCKINLEY</u>	
<u>AVE. & FLEUR DR.</u>	
<u>S. 1/4 COR. 20-78-24</u>	

LAND CORNERS AND HORIZONTAL CONTROL POINTS

DATE 3-9-90 M. J. HARDEN ASSOC., INC. A.P.I. JOB NO _____

M.J.H. JOB NO. 6805-000

POINT NAME OR DESIGNATION GPS-23

POINT NO. _____, SEC. 34, T. 80, R. 24

ESTABLISHED BY: M.J. HARDEN DATE: JULY 1980

RECOVERED BY: _____ DATE: _____

COORDINATES: N 615165.955, E 1606459.123 (NAD 1983)
 (Iowa STATE PLANE COORDINATE SYSTEM, South ZONE)

COORDINATES: N _____, E _____
 (_____ STATE PLANE MODIFIED GRID COORDINATE SYSTEM _____ ZONE)

COORDINATES: N _____, E _____
 (INDEPENDENT GRID COORDINATE SYSTEM)

ELEVATION FACTOR _____ SCALE FACTOR _____

COMBINED ADJUSTMENT FACTOR _____

REF. PT.	AZIMUTH	DISTANCE	REFERENCES
No. 1	E.	22.63'	FENCE CORNER POST N. SIDE FIELD RD.
No. 2	E.S.E.	25.91'	FENCE POST
No. 3	S.E.	82.54'	POLE
No. 4	N.W.	75.65'	BELL SYSTEM SIGN

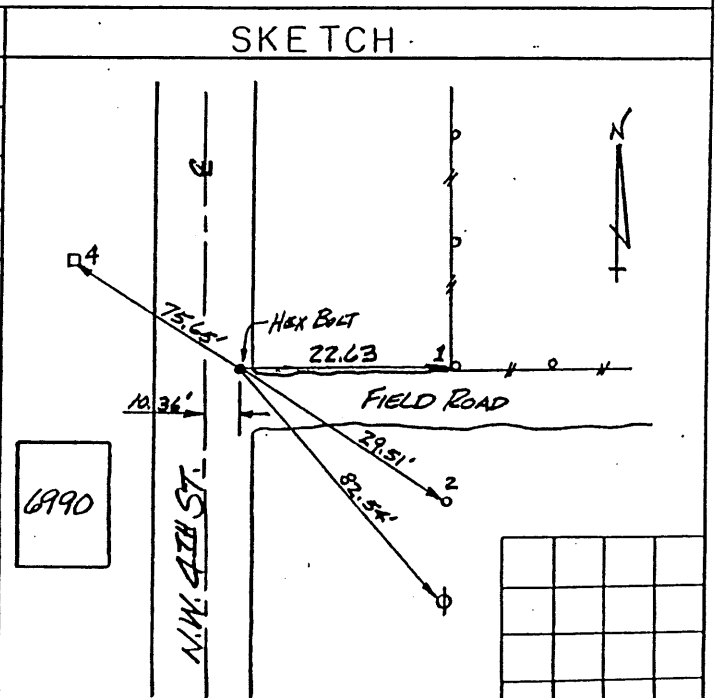
DESCRIPTION

MARK: HEX BOLT

LOCATION: FLUSH W/ P.M.T.
10.36' E. OF E. N.W. 4TH ST.

IN S.E. 1/4 34-80-24

PAINTED TARGET



6990

LAND CORNERS AND HORIZONTAL CONTROL POINTS

DATE 3-12-90 M. J. HARDEN ASSOC., INC. A.P.I. JOB NO _____

M.J.H. JOB NO. 6805-000

POINT NAME OR DESIGNATION GPS-25

POINT NO. _____, SEC. 6, T. 79, R. 22

ESTABLISHED BY: M.J. HARDEN ASSOC. DATE: APRIL 1988

RECOVERED BY: _____ DATE: _____

COORDINATES: N 614845.808, E 1650711.029 (NAD 1983)
 (IOWA STATE PLANE COORDINATE SYSTEM, SOUTH ZONE)

COORDINATES: N _____, E _____
 (_____ STATE PLANE MODIFIED GRID COORDINATE SYSTEM _____ ZONE)

COORDINATES: N _____, E _____
 (INDEPENDENT GRID COORDINATE SYSTEM)

ELEVATION FACTOR _____ SCALE FACTOR _____

COMBINED ADJUSTMENT FACTOR _____

REF. PT.	AZIMUTH	DISTANCE	REFERENCES
No. 1	N.E.	50.30'	W. FACE OF SIGN POST
No. 2	S.S.E.	24.30'	N. EDGE OF SLAB OF N. BOUND HWY. #65
No. 3	S.W.	30.20'	E. FACE OF SIGN POST

DESCRIPTION	SKETCH									
MARK: <u>5/8" FERROD & CAP</u>										
LOCATION: <u>IN MEDIAN OF HWY. #65 W. OF N.E. 72ND ST.</u>										
<u>CLOTH TARGET</u>	<table border="1" style="width: 100px; height: 100px; border-collapse: collapse;"> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </table>									

LAND CORNERS AND HORIZONTAL CONTROL POINTS

DATE 3-12-90 M. J. HARDEN ASSOC., INC. A.P.I. JOB NO _____

M.J.H. JOB NO. 6805-000

POINT NAME OR DESIGNATION GPS-33

POINT NO. _____, SEC. 34, T. 81, R. 25

ESTABLISHED BY: M.J. HARDEN ASSOC. DATE: 1988

RECOVERED BY: _____ DATE: _____

COORDINATES: N 648060.049, E 1575014.737 (NAD 1983)
 (IOWA STATE PLANE COORDINATE SYSTEM, SOUTH ZONE)

COORDINATES: N _____, E _____
 (_____ STATE PLANE MODIFIED GRID COORDINATE SYSTEM _____ ZONE)

COORDINATES: N _____, E _____
 (INDEPENDENT GRID COORDINATE SYSTEM)

ELEVATION FACTOR _____ SCALE FACTOR _____

COMBINED ADJUSTMENT FACTOR _____

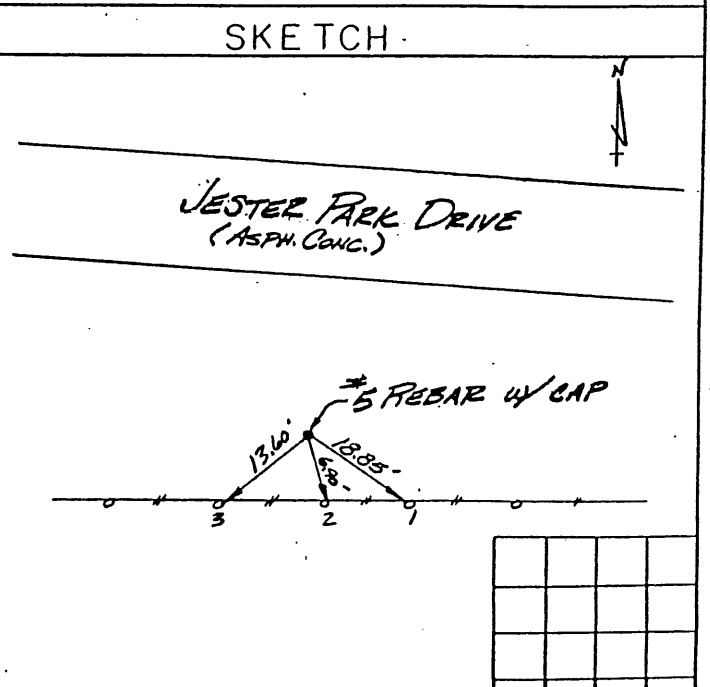
REF. PT.	AZIMUTH	DISTANCE	REFERENCES
No. 1	S.E.	18.85'	"X" NAILS IN FENCE POST
No. 2	S.S.E.	6.90'	"X" NAILS IN FENCE POST
No. 3	S.W.	13.60'	"X" NAILS IN FENCE POST

DESCRIPTION

MARK: #5 REBAR WITH CAP

LOCATION: SOUTH OF ASPH. CONC.
ON JESTER PARK DRIVE 0.6 MILE
WEST OF N.W. MADRID ROAD

CLOTH TARGET



LAND CORNERS AND HORIZONTAL CONTROL POINTS

DATE 4-16-90

M. J. HARDEN ASSOC., INC.

A.P.I. JOB NO _____

M.J.H. JOB NO. 7261-000

POINT NAME OR DESIGNATION GPS-37

POINT NO. _____, SEC. 24, T 79N, R 22W

ESTABLISHED BY: M.V. HARDEN Assoc. DATE: APRIL 1990

RECOVERED BY: _____ DATE: _____

COORDINATES: N _____, E _____
(_____ STATE PLANE COORDINATE SYSTEM, _____ ZONE)

COORDINATES: N _____, E _____
(_____ STATE PLANE MODIFIED GRID COORDINATE SYSTEM _____ ZONE)

COORDINATES: N _____, E _____
(INDEPENDENT GRID COORDINATE SYSTEM)

ELEVATION FACTOR _____ SCALE FACTOR _____

COMBINED ADJUSTMENT FACTOR _____

REF. PT.	AZIMUTH	DISTANCE	REFERENCES
No. 1	N.	8.45'	SHINER IN FACE OF FENCE CORNER POST
No. 2	N.E.	13.40'	SHINER IN FACE OF FENCE POST
No. 3	S.W.	77.20'	SHINER IN FACE OF POWER Poles

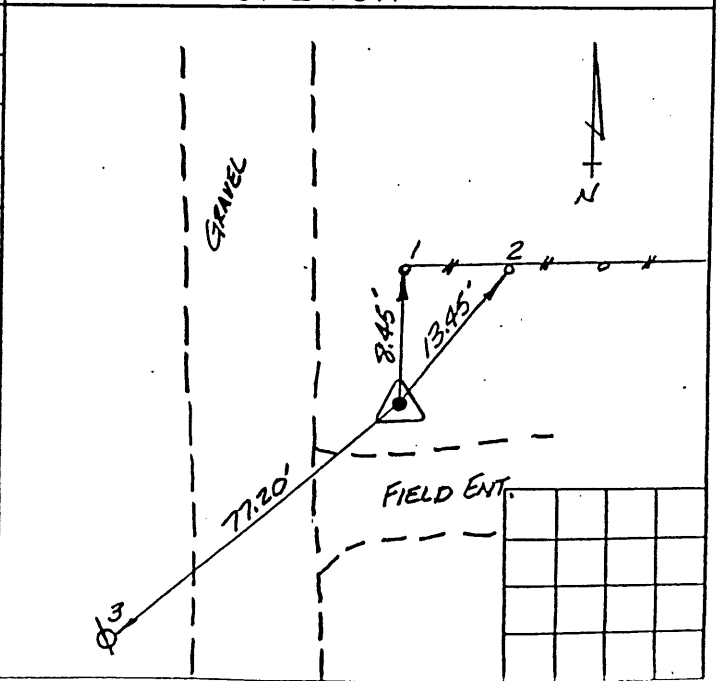
DESCRIPTION

MARK: _____

LOCATION: _____

Cloth Target

SKETCH



LAND CORNERS AND HORIZONTAL CONTROL POINTS

DATE 4-16-90

M. J. HARDEN ASSOC., INC.

A.P.I. JOB NO _____

M.J.H. JOB NO. 7261-000

POINT NAME OR DESIGNATION GPS-39

POINT NO. _____, SEC. 1, T. 79N, R. 22W

ESTABLISHED BY: M.J. HARDEN ASSOC. DATE: APRIL 1990

RECOVERED BY: _____ DATE: _____

COORDINATES: N _____, E _____
(_____ STATE PLANE COORDINATE SYSTEM, _____ ZONE)

COORDINATES: N _____, E _____
(_____ STATE PLANE MODIFIED GRID COORDINATE SYSTEM _____ ZONE)

COORDINATES: N _____, E _____
(INDEPENDENT GRID COORDINATE SYSTEM)

ELEVATION FACTOR _____ SCALE FACTOR _____

COMBINED ADJUSTMENT FACTOR _____

REF. PT.	AZIMUTH	DISTANCE	REFERENCES
No. 1	E.	55.65'	SHINER IN POWER POLE
No. 2	S.	40.6'	SHINER IN POWER POLE
No. 3	N.	50.6'	SHINER IN STOP SIGN POLE

DESCRIPTION	SKETCH
MARK: <u>5/8" REBAR WITH CAP</u>	
LOCATION: <u>IN BOTTOM OF DITCH</u>	
<u>S.E. OF INTERSECTION OF</u>	
<u>N.E. 70TH AVE. AND N.E. 120TH ST.</u>	
<u>APPROX. N.E. CORNER OF</u>	
<u>SECTION 1-79-22.</u>	
<u>CLST: TARGET</u>	

LAND CORNERS AND HORIZONTAL CONTROL POINTS

DATE 4-17-90

M. J. HARDEN ASSOC., INC.

A.P.I. JOB NO _____

M.J.H. JOB NO. 7261-006

POINT NAME OR DESIGNATION GPS-41

POINT NO. _____, SEC. 30, T. 80N, R. 25W

ESTABLISHED BY: M.J. HARDEN ASSOC. DATE: APRIL 1990

RECOVERED BY: _____ DATE: _____

COORDINATES: N _____, E _____
(STATE PLANE COORDINATE SYSTEM, _____ ZONE)

COORDINATES: N _____, E _____
(STATE PLANE MODIFIED GRID COORDINATE SYSTEM _____ ZONE)

COORDINATES: N _____, E _____
(INDEPENDENT GRID COORDINATE SYSTEM)

ELEVATION FACTOR _____ SCALE FACTOR _____

COMBINED ADJUSTMENT FACTOR _____

REF. PT.	AZIMUTH	DISTANCE	REFERENCES
No. 1	S.W.	30.0'	SHINER IN POWER POLE
No. 2	S.S.W.	32.4'	TOP OF WARNING SIGN
No. 3	S.E.	55.7'	SHINER IN CORNER FENCE POST

DESCRIPTION

MARK: 5/8" REBAR w/ CAP

LOCATION: ON TOP OF BANK
NORTH OF WHERE N.W. 142ND ST.
TURNS WEST INTO DALLAS CO.

APPROX. N.W. CORNER OF
SECTION 30-80-25

CLOTH TARGET

