

**GPS SURVEY MARK DESCRIPTION**

GIS MAPPING BY:  
 THE SIDWELL COMPANY  
 WEST CHICAGO, ILLINOIS

THE OFFICE OF THE  
 COUNTY ENGINEER  
 DICKINSON COUNTY, IOWA

DESIGNATION 1003731 3 GPS NO. 8015 COUNTY DICKINSON STATE IOWA  
 LOCATED IN SECTION 31 TWP 100 N RANGE 37 W USGS QUAD MAP LAKE PARK  
 THE STATION IS  
 AT THE SOUTHWEST CORNER OF THE INTERSECTION BETWEEN HIGHWAY 9 AND 160TH AVENUE.

MARK BERNTSEN MONUMENT WITH 2-1/2" ALUMINUM DISK ON ROD WITH 6" ACCESS COVER

MARK EXISTING  VALUES AS PUBLISHED BY  
 MARK SET  VALUES ESTABLISHED BY Patrick Engineering Inc. DATE August, 2002

HORIZONTAL VALUES ORIGINATED ON ORDER "B" IOWA HIGH ACCURACY REFERENCE NETWORK (HARN) CONTROL ESTABLISHED BY THE NATIONAL GEODETIC SURVEY AND BASED ON THE NORTH AMERICAN DATUM OF 1983, 1996 ADJUSTMENT.

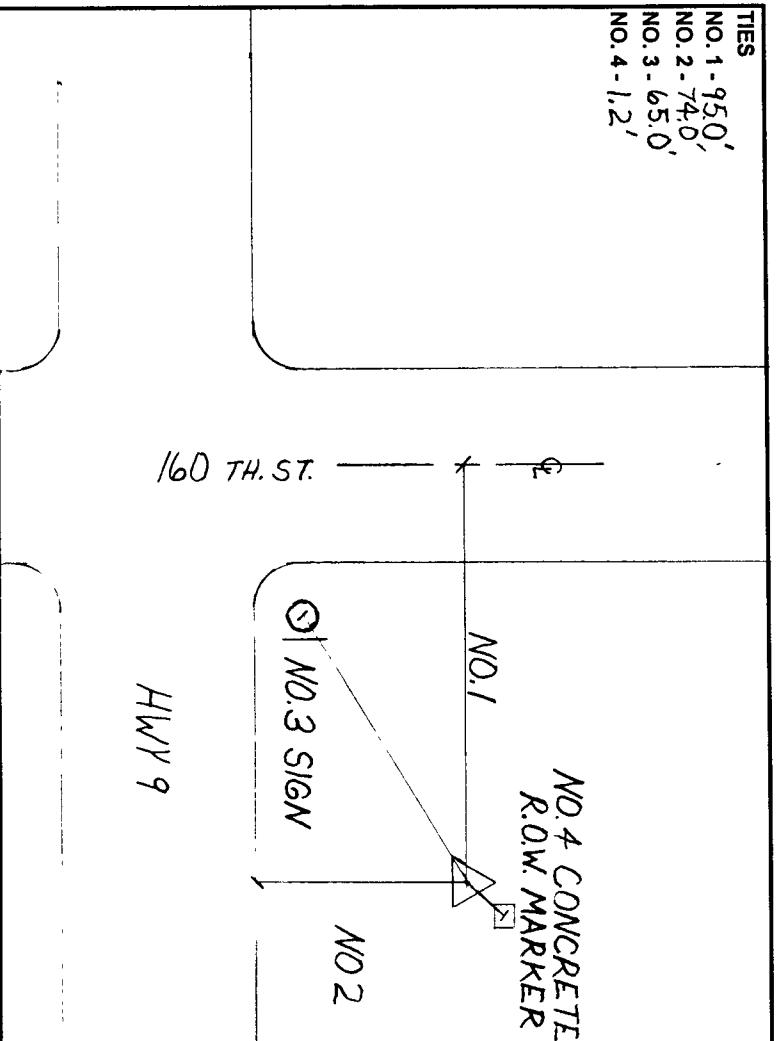
LATITUDE NORTH 43° 25' 50.471306"  
 LONGITUDE WEST 95° 16' 07.836515"  
 ELLIPSOID HEIGHT (meter) 417.507 \* (Based on GEOID99 Model)

IOWA COORDINATE SYSTEM, NORTH ZONE CONVERGENCE ANGLE -1° 11' 55.77"

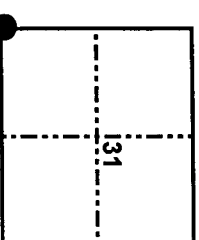
COORDINATES (US FEET) SCALE FACTOR 0.999969  
 NORTHING (Y) 3989372.59 COORDINATES (METERS) 1215963.197  
 EASTING (X) 4451381.63 EASTING (X) 1356783.834

VERTICAL VALUES ORIGINATED ON VERTICAL CONTROL ESTABLISHED BY THE NATIONAL GEODETIC SURVEY AND/OR THE U.S. GEOLOGICAL SURVEY AND BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988.

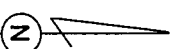
ELEVATION (US FEET) 1460.37 ELEVATION (METERS) 445.122



TIES  
 NO. 1 - 95.0'  
 NO. 2 - 74.0'  
 NO. 3 - 65.0'  
 NO. 4 - 1.2'



SECTION MAP



SKETCH BY CCS

PATRICK 09-2002