

MISSOURI GEOGRAPHIC REFERENCE SYSTEM

MISSOURI DEPARTMENT OF NATURAL RESOURCES
DIVISION OF GEOLOGY AND LAND SURVEY
LAND SURVEY PROGRAM

PO Box 250, Rolla, Missouri 65402, (573) 368-2300

STATION NAME: BU-05

PID: AD9778

COUNTY: Buchanan

STATE: Missouri

TOWNSHIP: 57 NORTH, RANGE: 35 WEST, SECTION: E 1/2 OF 8

USGS 7.5' QUAD: St. Joseph North

DATE MONUMENTED: 1993

MONUMENTED BY: MODNR

TECHNICAL DATA TABLE:

(All data in meters 1 meter = 3.28083333 feet)

HORIZONTAL: NAD 1983**VERTICAL:** NAVD 1988

DATE OF OBSERVATIONS: 1993

DATE OF OBSERVATIONS: 1993

DATE OF ADJUSTMENT: 2000

DATE OF ADJUSTMENT: 1993

ORDER: 1st

ORDER: 3rd

LATITUDE: 39°46'03.11385"

ELEVATION: 271.400

LONGITUDE: 94°50'46.79521"

ELLIPSOID HEIGHT: 239.50

MISSOURI COORDINATE SYSTEM 1983:

NORTH (Y): 399715.270

EAST (X): 820327.041

ZONE: West

CONVERGENCE: -00°13'18"

GRID FACTOR: .9999144

AZIMUTH INFORMATION:

STATION: BU-05

AZIMUTH MARK: BU-05A

GEODETTIC:

ASTRONOMIC: 267°16'02"

GRID: 267°29'20"

REMARKS

The HORIZONTAL POSITION was determined by GPS observations and adjusted by the National Geodetic Survey in February 2000.

The AZIMUTH was determined by observation of Polaris with an estimated accuracy of 1 second of arc.

The ELEVATION was determined by differential leveling using reset procedures from station St. Joseph by the Missouri Department of Natural Resources in 1993.

The ELLIPSOID HEIGHT was determined by GPS observations referenced to NAD83.

GEOID 99 was used in determining ELLIPSOID HEIGHT.

STATION: BU-05

DESCRIPTION: The station is a standard DNR aluminum GRS disk stamped "BU-05, 1993", set in a 12 inch diameter concrete post flush with the ground surface. The station has an underground mark 0.820 meters below the surface disk. The azimuth mark is a standard DNR aluminum GRS disk stamped "BU-05A, 1993", set in a 12 inch diameter concrete post that project about 3 inches above the ground surface.

STATION, AZIMUTH MARKS AND REFERENCE TIES: The station is located in the southeast lawn of St. Joseph City Hall about 3 feet east of the east building line of City hall; 11.0 feet north of back of curb of Francis Street; 1.5 feet north of edge of the sidewalk; 62.2 feet west of the southwest anchor bolt of a street light; 93.0 feet east of the southeast anchor bolt of a street light with a bus stop sign and 79.0 feet southeast of an 8 inch Norway Maple.

The azimuth mark is about 0.3 mile west of the station and in the southwest angle of the intersection of Francis Street and north 7th Street. It is 7.8 feet east of a cross in sidewalk; 7.8 feet southwest of a cross in sidewalk and 13.9 feet (face tie) northwest of the middle stone column.

STATION & AZIMUTH MARK TO REACH: To reach the station from I-29, exit 47 (Missouri Highway 6 and Frederick Boulevard) go west and southwest on Frederick for 2.9 miles to 12th Street. Turn left and go south on 12th St. for 0.15 mile to Francis Street. Turn right and go west on Francis for 0.05 mile to station on right north side as described.

To reach the azimuth mark from the station go west on Francis Street for 0.3 mile to intersection with north 7th Street and mark on left (south) in southwest angle of intersection as described.

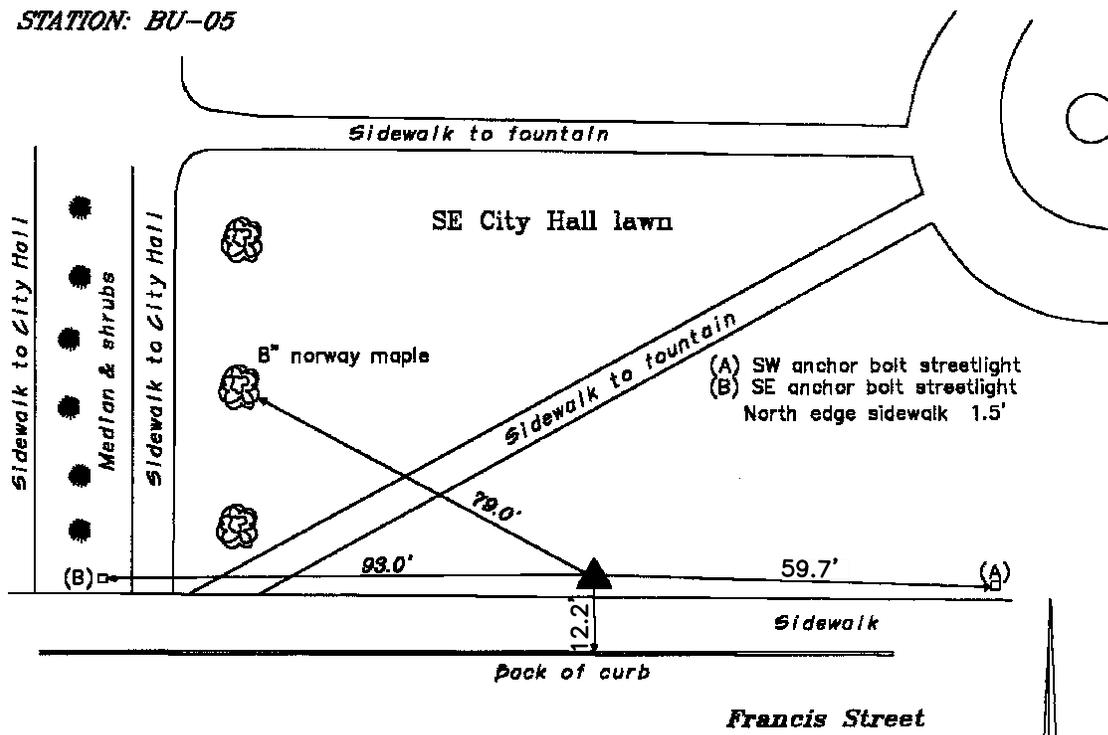
SPECIAL INFORMATION:

SUPERSEDED SURVEY CONTROL

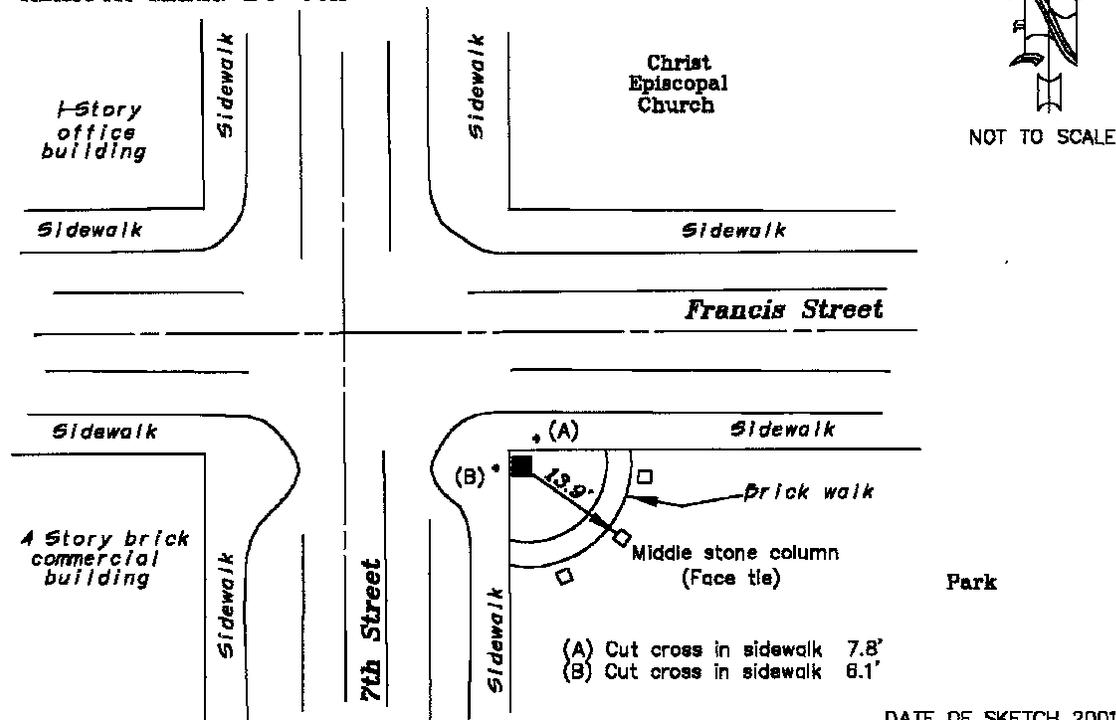
NGS NAD 83(1997)-	39°46'03.11384"(N)	94°50'46.79523"(W)
NGS NAD 83(1997)-	39°46'03.11384"(N)	94°50'46.79523"(W)
NGS NAD 83(1986)-	39°46'03.11656"(N)	94°50'46.79101"(W)
MODNR NAD 83(1986)-	39°46'03.11605"(N)	94°50'46.79102"(W)

DATE of REPORT, 2002

STATION: BU-05



AZIMUTH MARK: BU-05A



DATE OF SKETCH 2001



STATION: BU-05 (LOOKING NORTH)



STATION: BU-05 (LOOKING EAST)