



CITY OF THE COLONY GPS CONTROL SHEET

ESTABLISHED BY: BRITTAIN & CRAWFORD, LLC.
LAND SURVEYING & TOPOGRAPHIC MAPPING PH. 817-926-0211

MONUMENT NAME: MONUMENT No. 4	DATE ESTABLISHED: FEBRUARY, 2009	COUNTY: DENTON	STATE: TEXAS	MAPSCO PAGE NO. 453-T
NAD-83 (CORS 96) GEODETIC POSITION LATITUDE N 033° 07' 10.90795" LONGITUDE W 096° 54' 46.96410"		NAD-83 (CORS 96) STATE PLANE COORDINATES NORTH CENTRAL ZONE (METERS) NORTHING (Y) 2162244.716 EASTING (X) 748081.021		
ELLIPSOIDAL ELEVATION (METERS) 148.494 ELLIPSOIDAL HEIGHT (METERS) -26.469		NAD-83 (CORS 96) STATE PLANE COORDINATES NORTH CENTRAL ZONE (U.S. SURVEY FEET) NORTHING (Y) 7093964.53907 EASTING (X) 2454329.14973		
AZIMUTH MARK: MONUMENT #5 AT HIDDEN COVE PARK LYING N59°13'37"W 6852.07' FROM MONUMENT #4		NAVD-88 ELEV: 574.024' (U.S. SURVEY FEET)		

DESCRIPTION: 3 1/4" ALUMINUM DISK SET IN CONCRETE APPROXIMATELY 103' WEST OF THE WESTERLY CURB OF LEBANON ROAD AND ±500' WEST OF THE INTERSECTION OF BOYD ROAD ON TOP OF HIGHEST HILL AT LARGE ROCK TOWER.

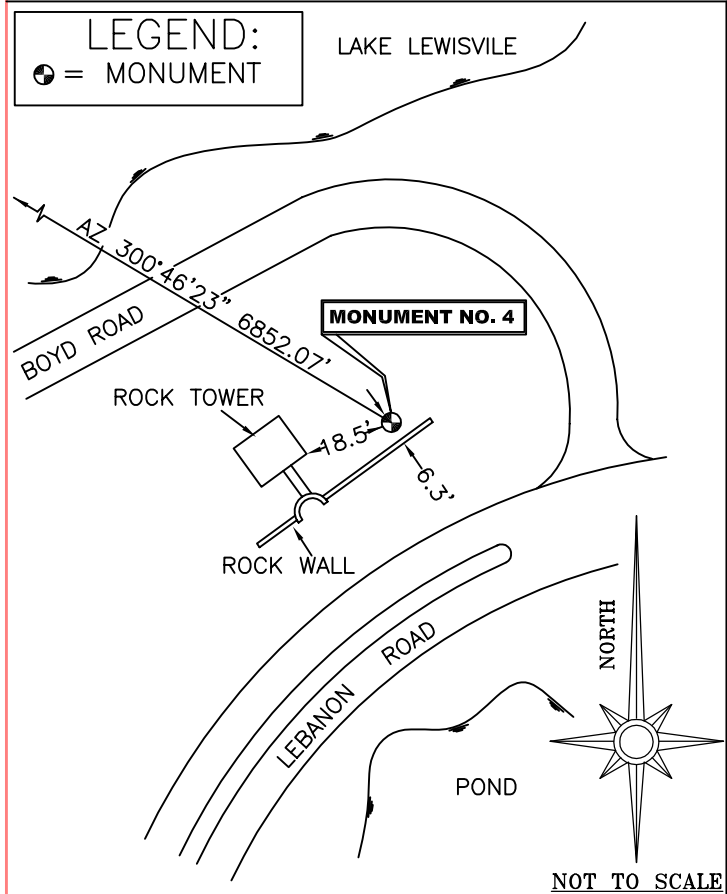


PHOTO TAKEN FROM THE NORTHEAST LOOKING SOUTHWEST TOWARDS THE ROCK TOWER ON THE NORTHEASTERLY SIDE OF LEBANON ROAD.



Monument 4.txt

FILE: COL10222.090 000507860

NGS OPUS SOLUTION REPORT

All computed coordinate accuracies are listed as peak-to-peak values.
For additional information: www.ngs.noaa.gov/OPUS/Using_OPUS.html#accuracy

RINEX FILE: col1022o.09o DATE: January 26, 2009
TIME: 23:34:32 UTC

SOFTWARE: page5 0810.20 master50.pl 081023 START: 2009/01/22 14:46:00
EPHEMERIS: igr15154.eph [rapid] STOP: 2009/01/22 18:47:00
NAV FILE: brdc0220.09n OBS USED: 8324 / 9190 :91%
ANT NAME: THA800961+REC NONE # FIXED AMB: 50 / 53 :94%
ARP HEIGHT: 1.52705 OVERALL RMS: 0.017(m)

REF FRAME: NAD_83(CORS96)(EPOCH:2002.0000) ITRF00 (EPOCH:2009.0595)

X: -643623.315(m) 0.011(m) -643624.020(m) 0.011(m)
Y: -5308481.948(m) 0.043(m) -5308480.526(m) 0.043(m)
Z: 3465165.585(m) 0.013(m) 3465165.416(m) 0.013(m)

LAT: 33 7 10.90795 0.017(m) 33 7 10.92689 0.017(m)
E LON: 263 5 13.03590 0.013(m) 263 5 13.00230 0.013(m)
W LON: 96 54 46.96410 0.013(m) 96 54 46.99770 0.013(m)
EL HGT: 148.494(m) 0.039(m) 147.291(m) 0.039(m)
ORTHO HGT: 174.963(m) 0.075(m) [NAVD88 (Computed using GEOID03)]

UTM COORDINATES STATE PLANE COORDINATES
UTM (Zone 14) SPC (4202 TXNC)
Northing (Y) [meters] 3666494.700 2162244.716
Easting (X) [meters] 694708.403 748081.021
Convergence [degrees] 1.14064971 0.86551607
Point Scale 1.00006745 0.99987333
Combined Factor 1.00004414 0.99985002

US NATIONAL GRID DESIGNATOR: 14SPB9470866495(NAD 83)

BASE STATIONS USED

PID DESIGNATION LATITUDE LONGITUDE DISTANCE(m)
DF8986 TXDE DENTON CORS ARP N331237.612 W0970945.970 25376.1
DF8984 TXDA DALLAS CORS ARP N324759.927 W0964022.453 41969.4
DF8982 TXCO COLLIN CORS ARP N330954.927 W0963740.571 27077.7

NEAREST NGS PUBLISHED CONTROL POINT

DN0341 POE RM 1 N330905. W0965344. 3886.5

This position and the above vector components were computed without any knowledge by the National Geodetic Survey regarding the equipment or field operating procedures used.