

1 National Geodetic Survey, Retrieval Date = July 25, 2007
 JV6333 *****

JV6333 DESIGNATION - KLEIN P0550

JV6333 PID - JV6333

JV6333 STATE/COUNTY- MD/HARFORD

JV6333 USGS QUAD - JARRETTSVILLE (1974)

JV6333

JV6333 *CURRENT SURVEY CONTROL

JV6333

JV6333* NAD 83(1991)- 39 34 32.94832(N) 076 23 08.78482(W) ADJUSTED

JV6333* NAVD 88 - 154.216 (meters) 505.96 (feet) ADJUSTED

JV6333

JV6333 X - 1,158,778.770 (meters) COMP

JV6333 Y - -4,784,618.973 (meters) COMP

JV6333 Z - 4,041,872.856 (meters) COMP

JV6333 LAPLACE CORR- -2.10 (seconds) DEFLEC99

JV6333 ELLIP HEIGHT- 121.572 (meters) (08/30/02) GPS OBS

JV6333 GEOID HEIGHT- -32.65 (meters) GEOID03

JV6333 DYNAMIC HT - 154.138 (meters) 505.70 (feet) COMP

JV6333 MODELED GRAV- 980,115.3 (mgal) NAVD 88

JV6333

JV6333 HORZ ORDER - FIRST

JV6333 VERT ORDER - FIRST CLASS II

JV6333 ELLP ORDER - FOURTH CLASS II

JV6333

JV6333.The horizontal coordinates were established by GPS observations

JV6333.and adjusted by the National Geodetic Survey in January 1992.

JV6333

JV6333.The orthometric height was determined by differential leveling

JV6333.and adjusted by the NATIONAL GEODETIC SURVEY in June 1991.

JV6333

JV6333.The X, Y, and Z were computed from the position and the ellipsoidal ht.

JV6333

JV6333.The Laplace correction was computed from DEFLEC99 derived deflections.

JV6333

JV6333.The ellipsoidal height was determined by GPS observations

JV6333.and is referenced to NAD 83.

JV6333

JV6333.The geoid height was determined by GEOID03.

JV6333

JV6333.The dynamic height is computed by dividing the NAVD 88

JV6333.geopotential number by the normal gravity value computed on the

JV6333.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45

JV6333.degrees latitude (g = 980.6199 gals.).

JV6333

JV6333.The modeled gravity was interpolated from observed gravity values.

JV6333

JV6333; North East Units Scale Factor Converg.

JV6333;SPC MD - 212,110.458 452,775.160 MT 1.00002443 +0 23 07.8

JV6333;SPC MD - 695,899.06 1,485,479.84 sFT 1.00002443 +0 23 07.8

JV6333;UTM 18 - 4,381,596.094 380,979.901 MT 0.99977441 -0 52 58.7

JV6333

JV6333! - Elev Factor x Scale Factor = Combined Factor

JV6333!SPC MD - 0.99998093 x 1.00002443 = 1.00000536

JV6333!UTM 18 - 0.99998093 x 0.99977441 = 0.99975534

JV6333

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JV6333 |-----|
JV6333 | PID      Reference Object                Distance      Geod. Az
JV6333 |                               388.436 METERS 08601
JV6333 |-----|
JV6333
JV6333                SUPERSEDED SURVEY CONTROL
JV6333
JV6333  ELLIP H (01/27/92) 121.552 (m)                GP(          ) 4 1
JV6333  NAD 83(1986)- 39 34 32.94155(N) 076 23 08.79178(W) AD(          ) 1
JV6333  NGVD 29 (06/18/91) 154.46 (m)                506.8 (f) LEVELING 3
JV6333
JV6333.Superseded values are not recommended for survey control.
JV6333.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
JV6333.See file dsdata.txt to determine how the superseded data were derived.
JV6333
JV6333_U.S. NATIONAL GRID SPATIAL ADDRESS: 18SUJ8098081596(NAD 83)
JV6333_MARKER: DD = SURVEY DISK
JV6333_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT
JV6333_SP_SET: CONCRETE POST
JV6333_STAMPING: 55 KLEIN 1989
JV6333_MARK LOGO: MD-025
JV6333_MAGNETIC: M = MARKER EQUIPPED WITH BAR MAGNET
JV6333_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO
JV6333+STABILITY: SURFACE MOTION
JV6333_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
JV6333+SATELLITE: SATELLITE OBSERVATIONS - March 11, 2007
JV6333
JV6333 HISTORY      - Date      Condition      Report By
JV6333 HISTORY      - 1989      MONUMENTED    RDA
JV6333 HISTORY      - 19931209 GOOD            GEOMET
JV6333 HISTORY      - 20000211 GOOD            GEOMET
JV6333 HISTORY      - 20040511 GOOD            DMW
JV6333 HISTORY      - 20070311 GOOD            NAGEL
JV6333
JV6333                STATION DESCRIPTION
JV6333
JV6333'DESCRIBED BY RINKER DETWILER AND ASSOCIATES 1989
JV6333'THE STATION IS LOCATED IN CENTRAL HARFORD COUNTY, MARYLAND ABOUT 3
JV6333'MILES NORTH OF BEL AIR. THE STATION IS LOCATED IN THE INTERSECTION
JV6333'OF STATE HIGHWAY 23 AND STATE HIGHWAY 24 IN THE SOUTHEAST CORNER OF
JV6333'THE INTERSECTION. THE STATION IS A STANDARD HARFORD COUNTY STATION
JV6333'DISC SET IN CONCRETE ABOUT 1 INCH BELOW GROUND STAMPED 55 KLEIN 1989.
JV6333'THE STATION IS 80.0 FEET SOUTH OF THE CENTERLINE OF HIGHWAY 23, 89.2
JV6333'FEET EAST OF G AND E POWER POLE NUMBER 28731, AND 31.8 FEET NORTHWEST
JV6333'OF A 4 INCH PEAR TREE.
JV6333
JV6333                STATION RECOVERY (1993)
JV6333
JV6333'RECOVERY NOTE BY GEOMETRICS GPS INCORPORATED 1993
JV6333'RECOVERED IN GOOD CONDITION.
JV6333
JV6333                STATION RECOVERY (2000)
JV6333
JV6333'RECOVERY NOTE BY GEOMETRICS GPS INCORPORATED 2000 (CCG)
JV6333'MARK UNDER WATER. FOUND AS DESCRIBED. VERY GOOD GPS STATION.
JV6333

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JV6333 STATION RECOVERY (2004)
JV6333
JV6333 'RECOVERY NOTE BY DAFT MCCUNE WALKER INCORPORATED 2004
JV6333 'RECOVERED AS DESCRIBED
JV6333
JV6333 STATION RECOVERY (2007)
JV6333
JV6333 'RECOVERY NOTE BY GEORGE E NAGEL AND ASSCOIATES INC 2007 (LWN)
JV6333 'RECOVERED IN GOOD CONDITION.

***RINKER-DETWILER INFORMATION FROM HARFORD COUNTY SURVEY CONTROL BOOK
NAD 83/86 COORDINATES - NGVD29 ELEVATIONS***

| | | | |
|-----------|-----------------|------------------|-------------|
| LATITUDE | 039 34 32.94162 | NORTH(sf) | 695898.378 |
| LONGITUDE | 076 23 08.79177 | EAST(sf) | 1485479.299 |
| GRID AZ. | 085 37 55.8 | ELEV. LEVEL OBS. | 506.76 ft |

1 National Geodetic Survey, Retrieval Date = July 25, 2007
 JV6334 *****

JV6334 DESIGNATION - KLEIN AZ MK P0551

JV6334 PID - JV6334

JV6334 STATE/COUNTY- MD/HARFORD

JV6334 USGS QUAD - JARRETTSVILLE (1974)

JV6334

JV6334 *CURRENT SURVEY CONTROL

JV6334

JV6334* NAD 83(1991)- 39 34 33.82274(N) 076 22 52.54879(W) ADJUSTED

JV6334* NAVD 88 - 152.352 (meters) 499.84 (feet) ADJUSTED

JV6334

JV6334 X - 1,159,151.003 (meters) COMP

JV6334 Y - -4,784,509.655 (meters) COMP

JV6334 Z - 4,041,892.458 (meters) COMP

JV6334 LAPLACE CORR- -2.07 (seconds) DEFLEC99

JV6334 ELLIP HEIGHT- 119.713 (meters) (09/18/02) GPS OBS

JV6334 GEOID HEIGHT- -32.65 (meters) GEOID03

JV6334 DYNAMIC HT - 152.274 (meters) 499.59 (feet) COMP

JV6334 MODELED GRAV- 980,116.1 (mgal) NAVD 88

JV6334

JV6334 HORZ ORDER - FIRST

JV6334 VERT ORDER - FIRST CLASS II

JV6334 ELLP ORDER - FOURTH CLASS II

JV6334

JV6334.The horizontal coordinates were established by GPS observations

JV6334.and adjusted by the National Geodetic Survey in January 1992.

JV6334

JV6334.The orthometric height was determined by differential leveling

JV6334.and adjusted by the NATIONAL GEODETIC SURVEY in June 1991.

JV6334

JV6334.The X, Y, and Z were computed from the position and the ellipsoidal ht.

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JV6334.The Laplace correction was computed from DEFLEC99 derived deflections.

JV6334

JV6334.The ellipsoidal height was determined by GPS observations

JV6334.and is referenced to NAD 83.

JV6334

JV6334.The geoid height was determined by GEOID03.

JV6334

JV6334.The dynamic height is computed by dividing the NAVD 88

JV6334.geopotential number by the normal gravity value computed on the

JV6334.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45

JV6334.degrees latitude (g = 980.6199 gals.).

JV6334

JV6334.The modeled gravity was interpolated from observed gravity values.

JV6334

JV6334; North East Units Scale Factor Converg.

JV6334;SPC MD - 212,140.042 453,162.478 MT 1.00002448 +0 23 18.0

JV6334;SPC MD - 695,996.12 1,486,750.56 sFT 1.00002448 +0 23 18.0

JV6334;UTM 18 - 4,381,617.092 381,367.681 MT 0.99977327 -0 52 48.4

JV6334

JV6334! - Elev Factor x Scale Factor = Combined Factor

JV6334!SPC MD - 0.99998122 x 1.00002448 = 1.00000570

JV6334!UTM 18 - 0.99998122 x 0.99977327 = 0.99975449

JV6334

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JV6334 |-----|
JV6334 | PID      Reference Object                Distance      Geod. Az
JV6334 |                               388.436 METERS 26601
JV6334 |-----|
JV6334
JV6334                SUPERSEDED SURVEY CONTROL
JV6334
JV6334  ELLIP H (01/27/92) 119.688 (m)                GP(          ) 4 1
JV6334  NAD 83(1986)- 39 34 33.81597(N) 076 22 52.55574(W) AD(          ) 1
JV6334  NGVD 29 (06/18/91) 152.59 (m)                500.6 (f) LEVELING 3
JV6334
JV6334.Superseded values are not recommended for survey control.
JV6334.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
JV6334.See file dsdata.txt to determine how the superseded data were derived.
JV6334
JV6334_U.S. NATIONAL GRID SPATIAL ADDRESS: 18SUJ8136881617(NAD 83)
JV6334_MARKER: DZ = AZIMUTH MARK DISK
JV6334_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT
JV6334_SP_SET: CONCRETE POST
JV6334_STAMPING: 55 KLEIN 1989
JV6334_MARK LOGO: MD-025
JV6334_MAGNETIC: M = MARKER EQUIPPED WITH BAR MAGNET
JV6334_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO
JV6334+STABILITY: SURFACE MOTION
JV6334_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
JV6334+SATELLITE: SATELLITE OBSERVATIONS - March 11, 2007
JV6334
JV6334 HISTORY      - Date      Condition      Report By
JV6334 HISTORY      - 1989      MONUMENTED    RDA
JV6334 HISTORY      - 20070311 GOOD              NAGEL
JV6334
JV6334                STATION DESCRIPTION
JV6334
JV6334'DESCRIBED BY RINKER DETWILER AND ASSOCIATES 1989
JV6334'THE STATION IS LOCATED IN CENTRAL HARFORD COUNTY, MARYLAND ABOUT 3
JV6334'MILES NORTH OF BEL AIR. THE STATION IS LOCATED IN THE INTERSECTION
JV6334'OF STATE HIGHWAY 23 AND STATE HIGHWAY 24 IN THE SOUTHEAST CORNER OF
JV6334'THE INTERSECTION. TO REACH THE AZIMUTH MARK FROM THE STATION PROCEED
JV6334'EAST ALONG HIGHWAY 23 0.24 MILE TO THE MARK ON THE LEFT. THE MARK IS
JV6334'A STANDARD HARFORD COUNTY AZIMUTH DISC SET IN CONCRETE ABOUT 1 INCH
JV6334'BELOW GROUND STAMPED 55 KLEIN 1989. THE MARK IS 27.0 FEET NORTH OF
JV6334'THE CENTERLINE OF HIGHWAY 23, 11.6 FEET WEST OF STOP LIGHT CAUTION
JV6334'SIGN, 79.5 FEET SOUTHEAST OF A 5 INCH CEDAR TREE, AND 1274.37 FEET
JV6334'FROM THE STATION.
JV6334
JV6334                STATION RECOVERY (2007)
JV6334
JV6334'RECOVERY NOTE BY GEORGE E NAGEL AND ASSCOIATES INC 2007 (LWN)
JV6334'RECOVERED IN GOOD CONDITION.

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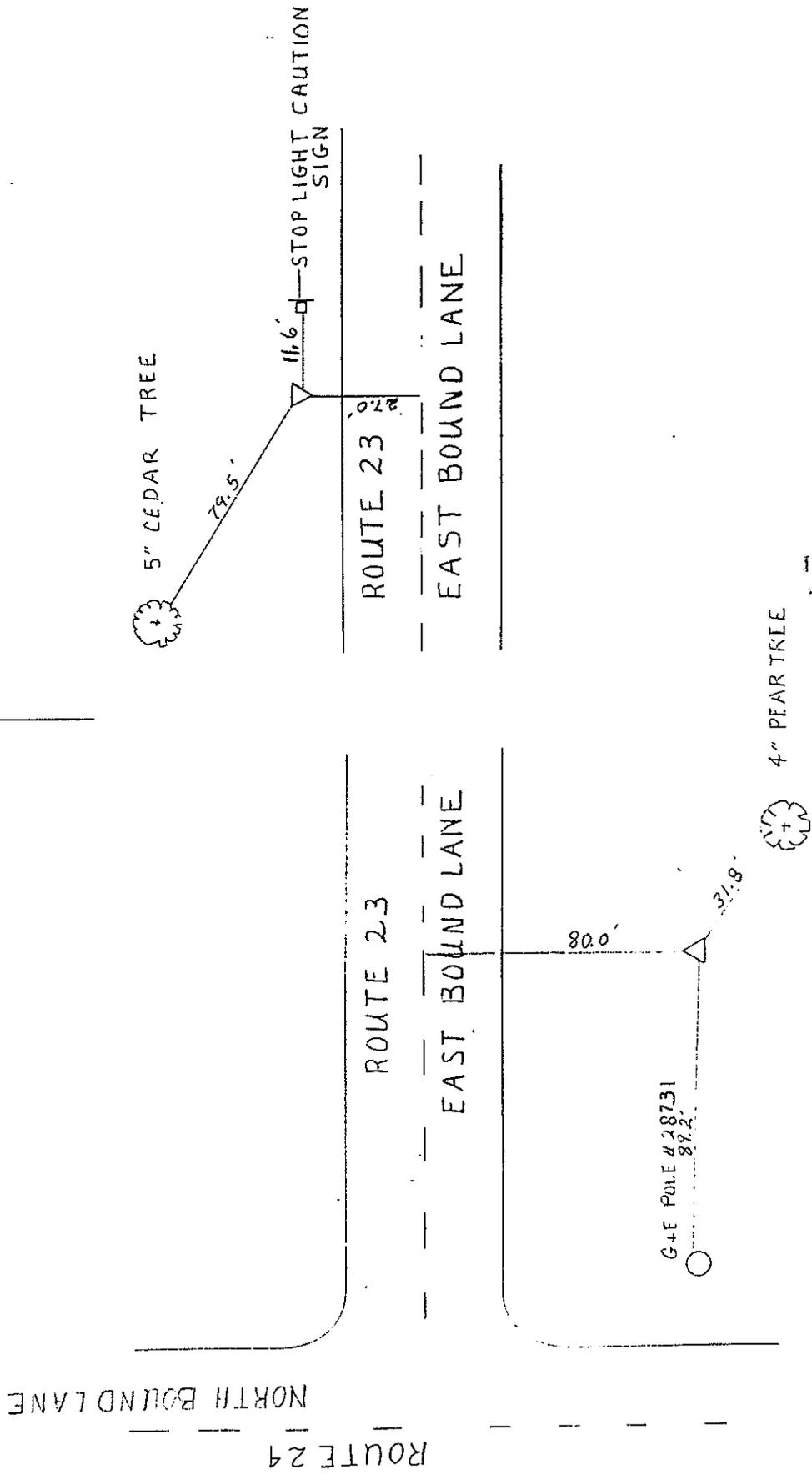
**RINKER-DETWILER INFORMATION FROM HARFORD COUNTY SURVEY CONTROL BOOK
NAD 83/86 COORDINATES - NGVD29 ELEVATIONS**

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LATITUDE 039 34 33.81601          NORTH(sf) 695995.438
LONGITUDE 076 22 52.55564          EAST(sf) 1486750.031
GRID AZ. 265 37 55.8              ELEV. LEVEL OBS. 500.63 ft

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55 KLEIN 1989



RINKER-DETWILER & ASSOCIATES, P.C.

Engineering • Surveying • Land Planning
Global Positioning System • Mapping

