1 National Geodetic Survey, Retrieval Date = August 2, 2007

JV4830 **********

JV4830 DESIGNATION - SCARFF **P9110**

JV4830 PID - JV4830

JV4830 STATE/COUNTY- MD/HARFORD

JV4830 USGS QUAD - JARRETTSVILLE (1974)

JV4830

JV4830 *CURRENT SURVEY CONTROL

JV4830 ---

JV4830* NAD 83(1991)- 39 31 58.67595(N) 076 26 31.69794(W) ADJUSTED

JV4830* NAVD 88 - 177.366 (meters) 581.91 (feet) ADJUSTED

JV4830 ---

JV4830 X - 1,154,785.827 (meters) COMP

JV4830 Y - -4,788,719.480 (meters) COMP

JV4830 Z - 4,038,219.158 (meters) COMP

JV4830 LAPLACE CORR- -2.54 (seconds) DEFLEC99

JV4830 ELLIP HEIGHT- 144.778 (meters) (09/18/02) GPS OBS

JV4830 GEOID HEIGHT- -32.62 (meters) GEOID03

JV4830 DYNAMIC HT - 177.274 (meters) 581.61 (feet) COMP

JV4830 MODELED GRAV- 980,107.7 (mgal) NAVD 88

JV4830

JV4830 HORZ ORDER - SECOND

JV4830 VERT ORDER - FIRST CLASS II

JV4830 ELLP ORDER - FOURTH CLASS II

JV4830

JV4830.The horizontal coordinates were established by classical geodetic methods

JV4830.and adjusted by the National Geodetic Survey in January 1992.

JV4830

JV4830.The orthometric height was determined by differential leveling

JV4830.and adjusted by the NATIONAL GEODETIC SURVEY in June 1991.

JV4830

JV4830.The X, Y, and Z were computed from the position and the ellipsoidal ht.

JV4830

JV4830.The Laplace correction was computed from DEFLEC99 derived deflections.

JV4830

JV4830.The ellipsoidal height was determined by GPS observations

JV4830.and is referenced to NAD 83.

JV4830

JV4830.The geoid height was determined by GEOID03.

JV4830

JV4830.The dynamic height is computed by dividing the NAVD 88

JV4830.geopotential number by the normal gravity value computed on the

JV4830.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45

JV4830.degrees latitude (g = 980.6199 gals.).

JV4830

JV4830.The modeled gravity was interpolated from observed gravity values.

JV4830

		North	East	Units	Scale Factor	Converg.
JV4830;SPC MD	-	207,321.512	447,961.364	MT	1.00001557	+0 21 00.5
JV4830;SPC MD	-	680,187.33	1,469,686.58	sFT	1.00001557	+0 21 00.5
JV4830;UTM 18	-	4,376,915.991	376,062.452	MT	0.99978912	-0 55 05.1

JV4830

		Elev Factor	x	Scale Factor	=	Combined Factor
JV4830!SPC MD	-	0.99997729	x	1.00001557	=	0.99999286
JV4830!UTM 18	-	0.99997729	x	0.99978912	=	0.99976641

JV4830
JV4830|---|
JV4830| PID   Reference Object   Distance   Geod. Az |
JV4830| dddmmss.s |
JV4830| CB1754 SCARFF RM 1   28.502 METERS 11550 |
JV4830| CB1755 SCARFF RM 2   33.339 METERS 22543 |
JV4830| CB1753 SCARFF AZ MK   2874025.5 |
JV4830|---|
JV4830
JV4830   SUPERSEDED SURVEY CONTROL
JV4830
JV4830 ELLIP H (01/27/92) 144.756 (m)   GP(   ) 4 1
JV4830 NAD 83(1986)- 39 31 58.66931(N)   076 26 31.70636(W) AD(   ) 2
JV4830 NAD 27   - 39 31 58.28300(N)   076 26 32.83900(W) AD(   ) 2
JV4830 NGVD 29 (06/18/91) 177.60   (m)   582.7   (f) LEVELING   3
JV4830
JV4830.Superseded values are not recommended for survey control.
JV4830.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
JV4830.See file dsdata.txt to determine how the superseded data were derived.
JV4830
JV4830_U.S. NATIONAL GRID SPATIAL ADDRESS: 18SUJ7606276916(NAD 83)
JV4830_MARKER: DS = TRIANGULATION STATION DISK
JV4830_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT
JV4830_SP_SET: CONCRETE POST
JV4830_STAMPING: SCARFF 1947
JV4830_MARK LOGO: CGS
JV4830_MAGNETIC: O = OTHER; SEE DESCRIPTION
JV4830_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO
JV4830+STABILITY: SURFACE MOTION
JV4830_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
JV4830+SATELLITE: SATELLITE OBSERVATIONS - December 09, 1993
JV4830
JV4830 HISTORY   - Date   Condition   Report By
JV4830 HISTORY   - 1947   MONUMENTED   CGS
JV4830 HISTORY   - 1947   GOOD   CGS
JV4830 HISTORY   - 19890904 GOOD   RDA
JV4830 HISTORY   - 19931209 GOOD   GEOMET
JV4830
JV4830   STATION DESCRIPTION
JV4830
JV4830'DESCRIBED BY COAST AND GEODETIC SURVEY 1947 (CRR)
JV4830'THE STATION IS LOCATED ALONG STATE HIGHWAY 152 ABOUT 5 MILES
JV4830'WEST OF BELAIR AND 0.3 MILE NORTHEAST OF SCARFF CORNERS. IT IS
JV4830'IN THE NORTHWEST CORNER OF AN OLD ORCHARD, 24 FEET SOUTHEAST OF A
JV4830'WHITE WITNESS POST WHICH IS IN THE FENCE CORNER. THE MARK IS
JV4830'6 INCHES BELOW THE SURFACE OF THE GROUND AND THE DISK IS STAMPED
JV4830'SCARFF 1947.
JV4830'
JV4830'REFERENCE MARK NO. 1 IS 93.51 FEET EAST OF THE STATION IN THE FENCE
JV4830'LINE OF AN EAST-WEST FENCE. THE MARK PROJECTS ABOUT 8 INCHES AND
JV4830'THE DISK IS STAMPED SCARFF NO 1 1947.
JV4830'
JV4830'REFERENCE MARK NO. 2 IS 109.38 FEET SOUTH OF THE STATION IN
JV4830'THE FENCE LINE OF A NORTH-SOUTH FENCE LINE. THE MARK PROJECTS
JV4830'ABOUT 8 INCHES AND THE DISK IS STAMPED SCARFF NO 2 1947.
JV4830'
JV4830'THE AZIMUTH MARK IS APPROXIMATELY 1.0 MILE WEST OF THE STATION,

JV4830'25 FEET NORTH OF THE APPROXIMATE CENTER LINE OF HIGHWAY 152, 7
JV4830'FEET NORTHWEST OF A TELEPHONE POLE AND 3 FEET NORTH OF A FENCE
JV4830'CORNER. THE MARK PROJECTS ABOUT 6 INCHES AND THE DISK IS STAMPED
JV4830'SCARFF 1947.
JV4830'
JV4830'TO REACH THE STATION FROM THE BUSINESS DISTRICT IN BELAIR, GO
JV4830'SOUTHWEST ON U.S. HIGHWAY 1 FOR 2.6 MILES, BEAR RIGHT ON STATE
JV4830'HIGHWAY 147 FOR 1.1 MILES, TURN RIGHT ON STATE HIGHWAY 152 FOR
JV4830'3.6 MILES TO A FARM DRIVE ON THE RIGHT. PASS THROUGH FARMYARD
JV4830'FOR 0.1 MILE TO A GATE TO THE RIGHT OF THE BARN, PASS THROUGH
JV4830'THE GATE INTO THE PASTURE AND GO 0.1 MILE NORTHWEST TO THE
JV4830'CORNER OF THE PASTURE OR ORCHARD AND THE STATION AS DESCRIBED.
JV4830'TO REACH THE AZIMUTH MARK FROM THE STATION, GO BACK TO THE
JV4830'HIGHWAY, TURN RIGHT AND GO 0.9 MILE TO A SMALL CLUMP OF TREES
JV4830'ON A HIGH BANK ON THE RIGHT AND THE AZIMUTH MARK AS DESCRIBED.
JV4830'
JV4830'HEIGHT OF LIGHT ABOVE STATION MARK 30 METERS.
JV4830
JV4830   STATION RECOVERY (1947)
JV4830
JV4830'RECOVERY NOTE BY COAST AND GEODETIC SURVEY 1947
JV4830'RECOVERED IN GOOD CONDITION.
JV4830
JV4830   STATION RECOVERY (1989)
JV4830
JV4830'RECOVERY NOTE BY RINKER DETWILER AND ASSOCIATES 1989
JV4830'THE STATION IS LOCATED IN WESTERN HARFORD COUNTY, MARYLAND ABOUT 6
JV4830'MILES WEST OF THE VILLAGE OF BEL AIR. TO REACH THE STATION FROM THE
JV4830'INTERSECTION OF FEDERAL HIGHWAY 1 AND STATE HIGHWAY 152 PROCEED
JV4830'NORTHWEST ALONG HIGHWAY 152 3.9 MILES TO DRIVEWAY OF JOSEPH HESS BOX
JV4830'2001 ON THE RIGHT. TURN RIGHT AND PROCEED TO THE LARGE WOODEN BARN.
JV4830'PROCEED NORTHEAST ON FOOT APPROXIMATELY 382 FEET TO THE STATION. THE
JV4830'STATION IS AN EXISTING USC AND GS SURVEY DISC SET IN CONCRETE ABOUT 4
JV4830'INCHES BELOW GROUND STAMPED SCARFF 1947. THE STATION IS 11.6 FEET
JV4830'SOUTH OF WITNESS POST, 109.6 FEET EAST OF REFERENCE MARK SCARFF 2
JV4830'1947, 382.4 FEET NORTHEAST OF THE NORTHEAST CORNER OF THE BARN.
JV4830
JV4830   STATION RECOVERY (1993)
JV4830
JV4830'RECOVERY NOTE BY GEOMETRICS GPS INCORPORATED 1993
JV4830'RECOVERED IN GOOD CONDITION.

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

LATITUDE	039 31 58.66931	NORTH(sf)	680186.652
LONGITUDE	076 26 31.70636	EAST(sf)	1469685.919
GRID AZ.	158 05 45.0	ELEV. LEVEL OBS.	582.68 ft.

1 National Geodetic Survey, Retrieval Date = August 2, 2007

JV6301 **********

JV6301 DESIGNATION - SCARFF AZ MK 2 **P9111**

JV6301 PID - JV6301

JV6301 STATE/COUNTY- MD/HARFORD

JV6301 USGS QUAD - JARRETTSVILLE (1974)

JV6301

JV6301 *CURRENT SURVEY CONTROL

JV6301 ---

JV6301* NAD 83(1991)- 39 31 45.65246(N) 076 26 25.05483(W) ADJUSTED

JV6301* NAVD 88 - 172.377 (meters) 565.54 (feet) ADJUSTED

JV6301 ---

JV6301 LAPLACE CORR- -2.55 (seconds) DEFLEC99

JV6301 GEOID HEIGHT- -32.63 (meters) GEOID03

JV6301 DYNAMIC HT - 172.288 (meters) 565.25 (feet) COMP

JV6301 MODELED GRAV- 980,107.9 (mgal) NAVD 88

JV6301

JV6301 HORZ ORDER - THIRD

JV6301 VERT ORDER - FIRST CLASS II

JV6301

JV6301.The horizontal coordinates were established by classical geodetic methods

JV6301.and adjusted by the National Geodetic Survey in January 1992.

JV6301.No horizontal observational check was made to the station.

JV6301

JV6301.The orthometric height was determined by differential leveling

JV6301.and adjusted by the NATIONAL GEODETIC SURVEY in June 1991.

JV6301

JV6301.The Laplace correction was computed from DEFLEC99 derived deflections.

JV6301

JV6301.The geoid height was determined by GEOID03.

JV6301

JV6301.The dynamic height is computed by dividing the NAVD 88

JV6301.geopotential number by the normal gravity value computed on the

JV6301.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45

JV6301.degrees latitude (g = 980.6199 gals.).

JV6301

JV6301.The modeled gravity was interpolated from observed gravity values.

JV6301

JV6301;		North	East	Units	Scale Factor	Converg.
JV6301;SPC MD	-	206,920.835	448,122.472	MT	1.00001484	+0 21 04.6
JV6301;SPC MD	-	678,872.77	1,470,215.14	sFT	1.00001484	+0 21 04.6
JV6301;UTM 18	-	4,376,511.937	376,214.619	MT	0.99978865	-0 55 00.6

JV6301

JV6301!		Elev Factor	x	Scale Factor	=	Combined Factor
JV6301!SPC MD	-	0.99997808	x	1.00001484	=	0.99999292
JV6301!UTM 18	-	0.99997808	x	0.99978865	=	0.99976673

JV6301

JV6301 SUPERSEDED SURVEY CONTROL

JV6301

JV6301 NAD 83(1986)- 39 31 45.64582(N) 076 26 25.06346(W) AD( ) 4

JV6301 NGVD 29 (06/18/91) 172.61 (m) 566.3 (f) LEVELING 3

JV6301

JV6301.Superseded values are not recommended for survey control.

JV6301.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.

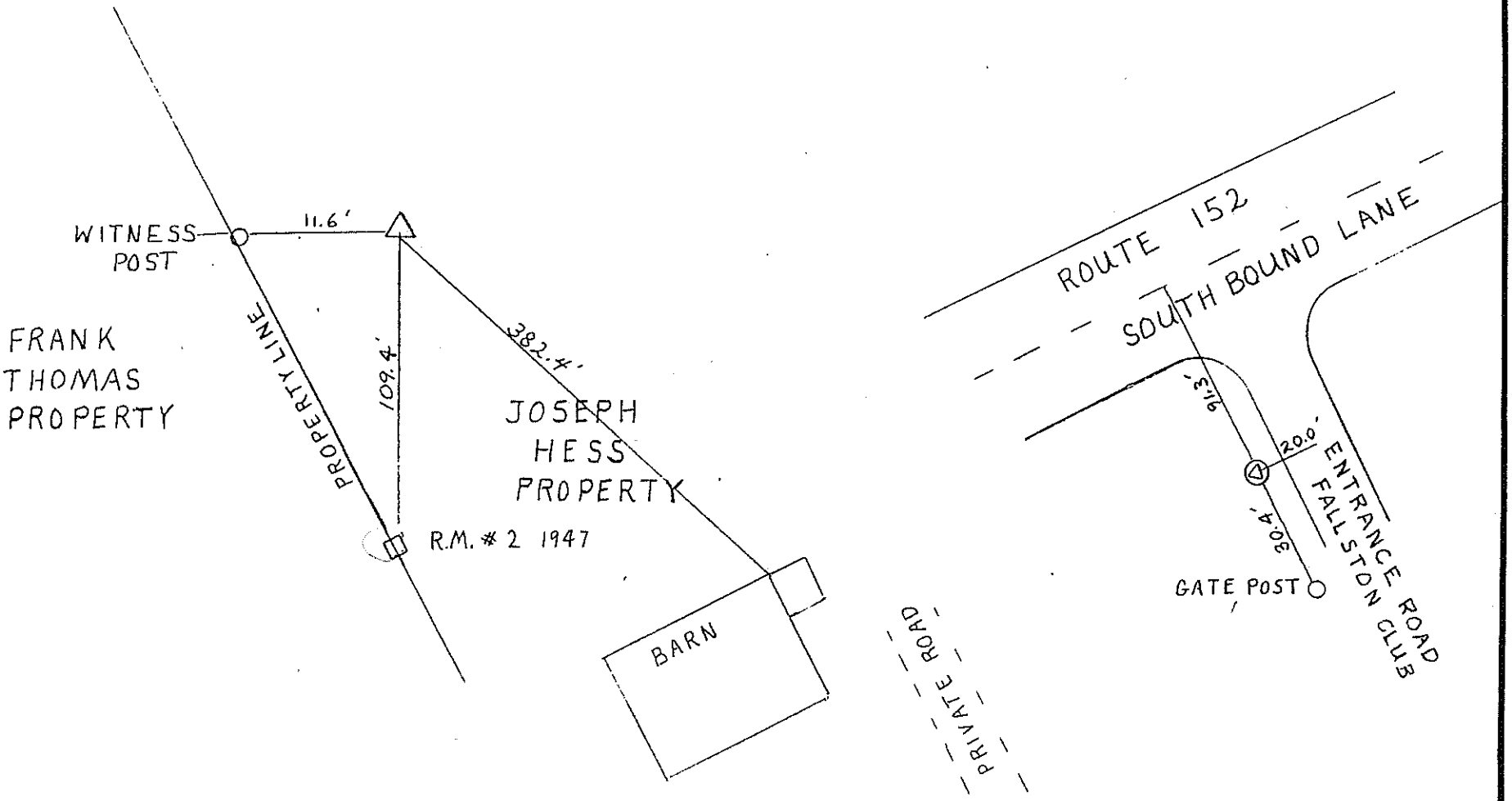
JV6301.See file dsdata.txt to determine how the superseded data were derived.

JV6301
JV6301_U.S. NATIONAL GRID SPATIAL ADDRESS: 18SUJ7621576512(NAD 83)
JV6301_MARKER: DZ = AZIMUTH MARK DISK
JV6301_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT
JV6301_SP_SET: CONCRETE POST
JV6301_STAMPING: SCARFF 2 1989
JV6301_MARK LOGO: MD-025
JV6301_MAGNETIC: M = MARKER EQUIPPED WITH BAR MAGNET
JV6301_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO
JV6301+STABILITY: SURFACE MOTION
JV6301_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
JV6301+SATELLITE: SATELLITE OBSERVATIONS - 1989
JV6301
JV6301 HISTORY   - Date   Condition   Report By
JV6301 HISTORY   - 1989   MONUMENTED   RDA
JV6301
JV6301   STATION DESCRIPTION
JV6301
JV6301'DESCRIBED BY RINKER DETWILER AND ASSOCIATES 1989
JV6301'THE STATION IS LOCATED IN WESTERN HARFORD COUNTY, MARYLAND ABOUT 6
JV6301'WEST OF THE VILLAGE OF BEL AIR. TO REACH THE STATION FROM THE
JV6301'INTERSECTION OF FEDERAL HIGHWAY 1 AND STATE HIGHWAY 152 PROCEED
JV6301'NORTHWEST ALONG HIGHWAY 152 3.9 MILES TO DRIVEWAY OF JOSEPH HESS BOX
JV6301'2001 ON THE RIGHT. TURN RIGHT AND PROCEED TO THE LARGE WOODEN BARN.
JV6301'PROCEED NORTHEAST ON FOOT APPROXIMATELY 382 FEET TO THE STATION. TO
JV6301'REACH THE AZIMUTH MARK FROM THE STATION PROCEED SOUTHWEST ALONG THE
JV6301'DRIVEWAY TO ITS INTERSECTION WITH HIGHWAY 152. TURN LEFT AND PROCEED
JV6301'SOUTHEAST ALONG HIGHWAY 152 0.2 MILES TO ITS INTERSECTION WITH THE
JV6301'ENTRANCE OF THE FALLSTON CLUB AND THE MARK ON THE RIGHT. THE MARK IS
JV6301'A STANDARD HARFORD COUNTY AZIMUTH DISC SET IN CONCRETE ABOUT 1 INCH
JV6301'BELOW GROUND STAMPED SCARFF 2 1989. THE MARK IS 20.0 FEET NORTHWEST
JV6301'OF THE CENTERLINE OF THE ENTRANCE ROAD TO THE FALLSTON CLUB, 91.3
JV6301'FEET SOUTHWEST OF THE CENTERLINE OF HIGHWAY 152, 30.4 FEET NORTHEAST
JV6301'OF GATE POST.

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

LATITUDE	039 31 45.64555	NORTH(sf)	678872.068
LONGITUDE	076 26 25.06325	EAST(sf)	1470214.489
GRID AZ.	338 05 45.0	ELEV. LEVEL OBS.	566.31 ft.

911 SCARFF 1947



RINKER-DETWILER & ASSOCIATES, P.C.
Engineering • Surveying • Land Planning
Global Positioning System • Mapping