

**MINIMUM TECHNICAL STANDARDS, VOL. 1
FINAL REPORT OF LIDAR CONTROL AND
QA/QC CHECKPOINT SURVEY**



PROJECT AREA D

**STATE OF FLORIDA
DIVISION OF EMERGENCY MANAGEMENT**

**TASK ORDER NO. 20070525-492720
CONTRACT NO. 07-HS-34-14-00-22-469**

AUGUST 29, 2008

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AUGUST 29, 2008

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MINIMUM TECHNICAL STANDARDS REPORT OF LiDAR GROUND CONTROL SURVEY

Task Order No. 20070525-492720
Contract No. 07-HS-34-14-00-22-469

PROJECT AREA D

For:

State of Florida, Division of Emergency Management
“State Emergency Response Team”
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REPORT OF LiDAR GROUND CONTROL SURVEY PROJECT AREA D FOR THE FLORIDA DIVISION OF EMERGENCY MANGEMENT

Introduction

This report contains an outline of the QA/QC Survey that supported LiDAR Data Acquisition in the general area of:

- Project Area D - Sarasota County, portions of the Southern coastal areas of Manatee County and portions of NW Charlotte County.

Project Area

Project Area D encompassed approximately +/-515 square miles of the approximately +/-3,774 square miles of the FY2007 State of Florida Division of Emergency Management Ground Control QA/QC Survey Mapping Project.

Purpose

The purpose of this survey was to acquire a minimum of twenty (20) independently surveyed LiDAR Control Points and a minimum of one-hundred twenty (120) three-dimensional LiDAR QA/QC Checkpoints per 500 square miles of project area. To the extent allowed by the terrain, the LiDAR Control Points and Checkpoints were distributed so that points were spaced at intervals of at least 10% of the diagonal distance across the dataset and at least 20% of the points were located in each quadrant of the +/- 515 square-mile project area.

LiDAR Control Points were defined as observations made on unobstructed, relatively flat, light-colored, hard uniform surfaces. Three-dimensional coordinate values were calculated for these points and then incorporated in the initial processing of the LiDAR data to ensure the proper horizontal and vertical geographical location of the LiDAR data set.

LiDAR QA/QC Checkpoints were ground truth observations distributed within the land cover classes of urban, bare-earth/low grass, brush land/sparse trees and dense trees/forested. These QA/QC Checkpoints were used to verify the accuracy of the LiDAR missions for final DTM and contour deliverables.

Date of Survey

All LiDAR Control Point and LiDAR QA/QC Checkpoint field operations took place between Aug 2, 2007 and Oct. 31, 2007.

Map Reference

Maps illustrating project boundaries, LiDAR QA/QC Checkpoints, LiDAR Control Points and GPS control stations for this project area can be found in Appendix F of this report.

Name of Responsible Surveyor

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Name of Company

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Field and Office Personnel

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Matthew Brown
Dave Bruno
Greg Fox
Jason Kail
Ben Messer
Wes Miller
Yonnier Nordelo
Jim Speelman

Abbreviations

1-D – One-Dimensional
2-D – Two-Dimensional
3-D – Three-Dimensional
cm – Centimeter
CP – Certified Photogrammetrist
DOI – Digital Orthophoto Imagery
FAC – Florida Administrative Code
FDEM – Florida Division of Emergency Mapping
FGDC – Federal Geodetic Control Committee
FL – Florida
GPS – Global Positioning System
Inc. – Incorporated
LiDAR – Light Detecting and Ranging
MTS – Florida Minimum Technical Standards (FAC 61G17)
NAD 83/99-HARN – North American Datum 1983 High Accuracy Reference Network 1999 adjustment
NAVD 88 – North American Vertical Datum of 1988

NGS – National Geodetic Survey
NOAA – National Oceanic and Atmospheric Administration
NSSDA – National Standards for Spatial Data Accuracy
PID – Photo Identifiable Point (feature)
QC – Quality Control
RMSE – Root Mean Square Error
RTK – Real-Time Kinematics
STD – Standard Deviations
TGO – Trimble Geomatics Office
TTC – Trimble Total Control
U.S. – United States
Woolpert – Woolpert, Inc

Data Sources

Existing Control Point Coordinates: NGS Information Services
NOAA, N/NGS12
National Geodetic Survey
SSMC-3, #9202
1315 East-West Highway
Silver Spring, MD 20910-3282
Phone: (301) 713-3242
Fax: (301) 713-4172
[Email: info_center@ngs.noaa.gov](mailto:info_center@ngs.noaa.gov)
<http://www.ngs.noaa.gov/>

Monumentation

Woolpert field crews performed a field reconnaissance to verify the existence and suitability of pre-selected existing National Geodetic Survey (NGS) control stations. These existing control stations were utilized to insure that quality X, Y, and Z coordinate values were computed for each of the newly established QA/QC Checkpoints throughout the project area. During the field reconnaissance, field crews recovered and verified twenty-two (22) existing NGS control stations suitable for GPS observations: **F 532, G 416, FLGPS 60, LORAN, HAVOLINE 2, I75 83 A01, I75 83 A28, I75 83 A29, I75 83 A34, I75 83 A39, I75 83 A44, I75 83 A53, I75 84 A03, MANAT RM NO4, PARISH, PUNTA GORDA ASTRO RESET, VENIPOINT, VERNA, W 247, and W 533.** The NGS Data Sheets for these stations can be found in Appendix A of this report.

Woolpert installed one new semi-permanent control station in a pre-determined location for both GPS checkpoint observations and to ensure for a uniform GPS network triangulation consisting of a minimum of 3 GPS base stations. This newly established geodetic control station, **NEW BASE 1**, consisted of an 18-inch long, 5/8-inch diameter rebar with a plastic Woolpert survey cap (LB6777) and was set flush with the ground. The station recovery information sheet for this point can be found in Appendix B of this report.

Woolpert established a total of 19 LiDAR Control Points, 147 LiDAR QA/QC Checkpoints and 16 intermediate (traverse) control stations to be used for conventional surveying of the dense trees/forested LiDAR QA/QC Checkpoints. All of these stations consisted of one of the following: a PK Nail, 6” spike with a plastic washer, a paint mark, a railroad spike, a hub and tack or a scribe mark.

Methodology

All field reconnaissance, monumentation, observations, data adjustments, and final report development was performed under the direct supervision of David Bruno, PSM 5670, Professional Surveyor and Mapper in Charge. Two types of GPS survey techniques, Rapid Static and Real-Time Kinematics, along with conventional survey methods were utilized in collecting the LiDAR Control Points and the LiDAR QA/QC Checkpoints for this project. Woolpert's ISO 9001 2000 certified QA/QC process for ground control and GPS surveys was used as a guideline for this project.

Rapid Static GPS

Woolpert field crews utilized Rapid Static GPS surveying techniques for measuring 119 of the 147 LiDAR QA/QC Checkpoints, 19 LiDAR Control Points and 6 intermediate (traverse) control stations [to be used for conventional surveying of the dense trees/forested LiDAR QA/QC Checkpoints]. Rapid Static GPS surveying required a minimum of two receivers to occupy NGS control stations and LiDAR QA/QC Checkpoints or LiDAR Control Points for a minimum of 30 minutes, depending upon baseline length, number of satellites, and satellite geometry. This method is comparable in accuracy to static surveying; however, shorter observation time is made possible due to advancements in hardware and software. The final coordinates for the LiDAR Control Points, LiDAR QA/QC Checkpoints and intermediate (traverse) control stations can be found in Appendix D of this report.

For this survey, Woolpert field crews utilized three (3) Woolpert-owned, Trimble Navigation R8 model 2 GNSS dual-frequency geodetic GPS receivers as base stations and up to four (4) Woolpert-owned, Trimble Navigation R8 model 2 GNSS dual-frequency geodetic GPS receivers as rovers. Each observation session utilized a 5-second sync rate, lasting between 30-45 minutes each depending on distance from the furthest base station.

Using rapid-static GPS techniques, the field crews also observed thirteen (13) existing NGS control stations and one (1) newly established control station in the GPS network in an effort to establish survey quality control coordinates throughout the project. The Rapid Static GPS control network consisted of the following NGS and newly established stations: **FLGPS 60, LORAN, HAVOLINE 2, I75 83 A01, I75 83 A34, I75 83 A44, I75 83 A53, I75 84 A03, MANAT RM NO4, PARISH, PUNTA GORDA ASTRO RESET, VENIPOINT, VERNA, and NEW BASE 1.**

Real-Time Kinematics (RTK) GPS

The field crew utilized Real-Time Kinematics (RTK) GPS surveying for measuring 18 of the 147 QA/QC Checkpoints and 10 intermediate (traverse) control stations. This survey was conducted using a 1-second epoch rate, in a fixed solution RTK mode with each GPS session lasting 30 to 60 seconds. Each LiDAR QA/QC Checkpoint was occupied twice with RTK (from two different base stations on different days) or a combination of RTK and Rapid Static GPS. The RTK LiDAR QA/QC Checkpoint comparisons can be found in Appendix C of this report. The final coordinates for the LiDAR QA/QC Checkpoints and intermediate (traverse) control stations can be found in Appendix D of this report.

Woolpert utilized one Trimble Navigation R8 model 2 dual-frequency GNSS GPS receiver and one Air Link Communications Raven CDMA cellular modem with a service plan provided by Verizon as a base station and utilized a minimum of two Trimble Navigation R8 model 2 dual-frequency GNSS GPS receivers, two Air Link Communications Raven CDMA cellular modems and a TSC2 or TSCe data collector as rovers for this project area.

Woolpert field crews utilized existing NGS control stations as RTK base stations. The RTK GPS control network consisted of the following existing control stations: **HAVOLINE 2, I75 83 A29, I75 83 A34, I75 83 A44, W 247.**

Woolpert field crews also observed nine (9) existing control points throughout the project area as quality control checks. These quality control checks were performed during each day of QA/QC observations and therefore created a continuous GPS network throughout the project area. These stations were **G 416, W 533, I75 83 A01, F 532, I75 83 A28, I75 83 A39, VENIPOINT, LORAN, I75 83 A16.** The RTK LiDAR existing control check comparisons can be found in Appendix C of this report.

Conventional Surveying

Using the paired intermediate (traverse) control stations set with Rapid-Static GPS, Woolpert field crews used a Woolpert-owned Topcon GTS-701 Total Station or a Woolpert-owned Topcon GTS-711 Total Station to acquire thirty-five (35) LiDAR QA/QC Checkpoints in obscured areas (dense trees/forested) where GPS observations were limited. The final coordinates for the LiDAR QA/QC Checkpoints can be found in Appendix D of this report.

Datum Reference and Final Coordinates

All horizontal GPS control was based on the Florida State Plane Coordinate System (West Zone), referenced to North American Datum 1983, adjustment of 1999 (NAD83/99) HARN, expressed in U.S. Survey Feet. All vertical control was based on the North American Vertical Datum of 1988 (NAVD88), also expressed in U.S. Survey Feet.

GPS Data Analysis and Processing

The field crew chief processed all session baselines each day using *Trimble Navigation's* Trimble Geomatics Office (TGO) Version 1.63 baseline processor with the broadcast ephemeris. *Trimble Navigation's* Trimble Geomatics Office (TGO) Wave Software User's Guide (November 1999) was used as a reference. The ratio and root-mean-square error (RMSE) criteria on pages 3-4 to 3-6 of the guide were followed. Other criteria used a maximum of 10.5 percent rejections, along with float-versus-fixed deltas of 10 cm. All cases that failed to meet any of these criteria were rejected and not used. Fixed solutions were obtained for all vector baselines.

Daily processing allowed the field crews to discover any weak links in the network and immediately schedule re-observations of the affected baselines. Once the fieldwork was complete, the processed baselines were then run through a rigorous loop closure analysis. Any baselines that failed this analysis were either reprocessed or removed from the network.

Rapid Static Adjustment

Upon completion of all field data processing, Woolpert performed a minimally constrained and fully constrained least-squares adjustments using *Trimble Navigation's* Trimble Total Control (TTC) version 2.73. After an acceptable minimally constrained least-squares adjustment was obtained, a fully constrained least-squares adjustment was performed by fixing the GPS networks to existing NGS/County control stations. Geoid 03 was used to model the elevations. For this survey the following stations were held fixed:

DIMENSIONS	EXISTING NGS CONTROL STATIONS
3-D Control Stations	HAVOLINE 2 (AG1868), I75 83 A34 (AG8216), I75 83 A44 (AG8255), I75 83 A53 (AG8303), I75 84 A03 (AG8055), LORAN (AG7631), PARISH (AG6295), VENIPOINT (AG9367) AND VERA (AG1968)
2-D Control Stations	FLGPS 60 (AG9365) AND I75 83 A01 (AG8045)
1-D Control Station	MANAT RM NO 4 (AG8407)

Accuracy Statement

The positional accuracy of the LiDAR Control Points was 0.06-feet (avg. 0.04-feet) horizontally and 0.22-feet (avg. 0.11-feet) vertically at the 95% confidence level. The positional accuracy of the LiDAR QA/QC Checkpoints was 0.21-feet (avg. 0.07-feet) horizontally and 0.28-feet (avg. 0.14-feet) vertically at the 95% confidence level.

The ground control survey meets positional accuracies necessary to support a DTM to meet or exceed a 3.8-foot horizontal accuracy and 0.6-foot fundamental vertical accuracy at the 95% confidence level.

The positional accuracies information can be found in Appendix E of this report.

Notes

1. THIS REPORT OF SURVEY IS PART OF THE LiDAR MAPPING QA/QC GROUND CONTROL SURVEY. SIX (6) GROUND CONTROL LAYOUT MAPS SHALL ACCOMPANY THE SURVEY REPORT. NEITHER THE MAPS NOR THIS REPORT OF SURVEY IS FULL AND COMPLETE WITHOUT THE OTHER. THIS REPORT OF SURVEY IS NOT VALID WITHOUT THE SIGNATURE AND ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER IN RESPONSIBLE CHARGE.
2. THIS REPORT OF SURVEY CONSISTS OF ONE HUNDRED-SIXTEEN (116) PAGES AND EACH PAGE SHALL NOT BE CONSIDERED FULL OR COMPLETE UNLESS ATTACHED TO THE OTHER(S). ADDITIONS OR DELETIONS TO SURVEY MAPS AND REPORTS BY OTHER THAN THE SIGNING PARTY OR PARTIES IS PROHIBITED WITHOUT THE WRITTEN CONSENT OF THE SIGNING PARTY OR PARTIES.
3. THIS LiDAR MAPPING QA/QC GROUND CONTROL SURVEY DATA AND REPORT IS CERTIFIED TO THE FLORIDA DIVISION OF EMERGENCY MANAGEMENT AS MEETING OR EXCEEDING, IN QUALITY AND PRECISION, THE STANDARDS APPLICABLE FOR THIS WORK, AS SET FORTH IN CHAPTER 61G17, FLORIDA ADMINISTRATIVE CODE & FEMA GUIDELINES AND SPECIFICATIONS FOR FLOOD HAZARD MAPPING PARTNERS.

Surveyor and Mapper in Responsible Charge:

David Bruno PSM
Professional Surveyor and Mapper
License Number: LS 5670

Signed: _____

Seal:

APPENDIX A: EXISTING GROUND CONTROL INFORMATION

This appendix contains the published National Geodetic Survey (NGS) data sheets for the control utilized for Project Area D of the FY2007 State of Florida Division of Emergency Management Ground Control QA/QC Survey Mapping Project.

The NGS Data Sheet

See file [dsdata.txt](#) for more information about the datasheet.

DATABASE = ,PROGRAM = datasheet, VERSION = 7.59
1 National Geodetic Survey, Retrieval Date = MAY 12, 2008
AG1868 *****
AG1868 CBN - This is a Cooperative Base Network Control Station.
AG1868 DESIGNATION - HAVOLINE 2
AG1868 PID - AG1868
AG1868 STATE/COUNTY- FL/SARASOTA
AG1868 USGS QUAD - MYAKKA RIVER (1987)
AG1868
AG1868 *CURRENT SURVEY CONTROL
AG1868
AG1868* NAD 83(2007)- 27 02 48.34216(N) 082 15 52.23318(W) ADJUSTED
AG1868* NAVD 88 - 1.994 (meters) 6.54 (feet) ADJUSTED
AG1868
AG1868 EPOCH DATE - 2002.00
AG1868 X - 765,135.424 (meters) COMP
AG1868 Y - -5,632,783.600 (meters) COMP
AG1868 Z - 2,882,821.282 (meters) COMP
AG1868 LAPLACE CORR- -0.89 (seconds) DEFLEC99
AG1868 ELLIP HEIGHT- -21.942 (meters) (02/10/07) ADJUSTED
AG1868 GEOID HEIGHT- -23.90 (meters) GEOID03
AG1868 DYNAMIC HT - 1.991 (meters) 6.53 (feet) COMP
AG1868
AG1868 ----- Accuracy Estimates (at 95% Confidence Level in cm) -----
AG1868 Type PID Designation North East Ellip
AG1868 -----
AG1868 NETWORK AG1868 HAVOLINE 2 0.96 1.06 3.51
AG1868 -----
AG1868 MODELED GRAV- 979,129.9 (mgal) NAVD 88
AG1868
AG1868 VERT ORDER - SECOND CLASS II
AG1868
AG1868.The horizontal coordinates were established by GPS observations
AG1868.and adjusted by the National Geodetic Survey in February 2007.
AG1868
AG1868.The datum tag of NAD 83(2007) is equivalent to NAD 83(NSRS2007).
AG1868.See [National Readjustment](#) for more information.
AG1868.The horizontal coordinates are valid at the epoch date displayed above.
AG1868.The epoch date for horizontal control is a decimal equivalence
AG1868.of Year/Month/Day.
AG1868
AG1868.The orthometric height was determined by differential leveling
AG1868.and adjusted in June 1991.
AG1868
AG1868.The X, Y, and Z were computed from the position and the ellipsoidal ht.
AG1868
AG1868.The Laplace correction was computed from DEFLEC99 derived deflections.
AG1868
AG1868.The ellipsoidal height was determined by GPS observations
AG1868.and is referenced to NAD 83.
AG1868
AG1868.The geoid height was determined by GEOID03.
AG1868
AG1868.The dynamic height is computed by dividing the NAVD 88
AG1868.geopotential number by the normal gravity value computed on the
AG1868.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
AG1868.degrees latitude (g = 980.6199 gals.).

AG1868
AG1868'DESCRIBED BY NATIONAL GEODETIC SURVEY 1974 (CLN)
AG1868'STATION IS ABOUT 15-1/2 MILES NORTHWEST OF PUNTA GORDA, 12-1/2
AG1868'MILES EAST-SOUTHEAST OF VENICE, 9 MILES NORTHEAST OF
AG1868'ENGLEWOOD, 1 MILE WEST OF NORTH PORT CHARLOTTE AND ON THE SOUTH
AG1868'SIDE OF U.S. HIGHWAY 41 ON THE RIGHT-OF-WAY LINE.
AG1868'
AG1868'TO REACH THE STATION FROM THE JUNCTION OF U.S. HIGHWAY 41
AG1868'AND SOUTH BISCAYNE DRIVE IN NORTH PORT CHARLOTTE, GO WESTERLY
AG1868'ON U.S. HIGHWAY 41 FOR 1.05 MILES TO POWER LINE POLE 15N9 ON
AG1868'LEFT AND STATION.
AG1868'
AG1868'STATION MARKS ARE STANDARD DISKS STAMPED HAVOLINE 2 1974, THE
AG1868'SURFACE MARK IS A STANDARD DISK SET IN THE TOP OF A 12-INCH
AG1868'CYLINDRICAL CONCRETE MONUMENT THAT IS SET FLUSH WITH THE
AG1868'GROUND SURFACE. IT IS 273 FEET EAST-SOUTHEAST OF POWER LINE
AG1868'POLE 15N10, 127 WEST-SOUTHWEST OF POWER LINE POLE 15N9, 75 FEET
AG1868'SOUTH OF THE CENTER OF U.S. HIGHWAY 41 (EAST BOUND LANE), 2.4
AG1868'FEET EAST OF A METAL WITNESS POST, 2.4 FEET WEST OF A METAL
AG1868'WITNESS POST AND ABOUT 2.5 FEET LOWER IN ELEVATION THAN THE
AG1868'HIGHWAY. THE UNDERGROUND STATION MARK IS SET IN THE TOP OF AN
AG1868'IRREGULAR MASS OF CONCRETE 42-INCHES BELOW THE GROUND
AG1868'SURFACE.
AG1868'
AG1868'REFERENCE MARK 6, A STANDARD DISK STAMPED HAVOLINE 2 NO 6
AG1868'1974, IS SET IN THE TOP OF A 12-INCH CYLINDRICAL CONCRETE
AG1868'MONUMENT THAT IS SET FLUSH WITH THE GROUND SURFACE. IT IS 126.5
AG1868'FEET WEST OF POWER LINE POLE 15N9, 46.5 FEET SOUTH OF
AG1868'THE CENTER OF U.S. HIGHWAY 41, 2.1 FEET EAST OF A METAL WITNESS
AG1868'POST, 2 FEET WEST OF A METAL WITNESS POST, IN LINE WITH A ROW OF
AG1868'POWER LINE POLES AND ABOUT 1 FOOT HIGHER IN ELEVATION THAN THE
AG1868'STATION.
AG1868'
AG1868'REFERENCE MARK 7, A STANDARD DISK STAMPED HAVOLINE 2 NO 7
AG1868'1974, IS SET IN THE TOP OF A 12-INCH CYLINDRICAL CONCRETE
AG1868'MONUMENT THAT IS SET FLUSH WITH THE GROUND SURFACE. IT IS 75.5
AG1868'FEET SOUTH OF THE CENTER OF U.S. HIGHWAY 41, 80.5 FEET SOUTHWEST
AG1868'OF POWER LINE POLE 15N9, 2.9 FEET WEST OF A METAL WITNESS
AG1868'POST AND 6-INCHES HIGHER THAN THE STATION.
AG1868'
AG1868'AZIMUTH MARK, A STANDARD DISK STAMPED HAVOLINE 2 1974, IS
AG1868'SET IN THE TOP OF A 12-INCH CYLINDRICAL CONCRETE MONUMENT THAT IS
AG1868'SET FLUSH WITH THE GROUND SURFACE. IT IS 80 FEET WEST OF THE
AG1868'CENTER OF A PROJECTED LINE OF ORTEGA PLACE STREET, 46 FEET SOUTH OF
AG1868'THE CENTER OF U.S. HIGHWAY 41 (EAST BOUND LANE), 44 FEET
AG1868'WEST OF THE CENTER OF GRASS MEDIAN OF BLACKBURN BOULEVARD, 2
AG1868'FEET EAST OF POWER LINE POLE 102 AND 1.2 FEET SOUTHEAST OF
AG1868'A METAL WITNESS POST.
AG1868'
AG1868'TO REACH THE AZIMUTH MARK FROM THE STATION, GO WESTERLY ON
AG1868'U.S. HIGHWAY 41 FOR 0.3 MILE TO MARK ON LEFT AT BLACKBURN
AG1868'BOULEVARD.
AG1868'
AG1868'HEIGHT OF LIGHT ABOVE STATION MARK 1 METER.
AG1868
AG1868 STATION RECOVERY (1974)
AG1868
AG1868'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1974
AG1868'1 MI W FROM NORTH PORT CHARLOTTE.
AG1868'1.05 MILES WEST ALONG U.S. HIGHWAY 41 FROM ITS JUNCTION WITH
AG1868'S. BISCAYNE DRIVE IN NORTH PORT CHARLOTTE, 273 FEET EAST-SOUTHEAST
AG1868'OF POWER LINE POLE 15N10, 127 FEET WEST-SOUTHWEST OF POWER LINE
AG1868'POLE 15N9, 75 FEET SOUTH OF THE CENTER OF U.S. HIGHWAY 41 (EAST
AG1868'BOUND LANE), 2.4 FEET WEST OF A METAL WITNESS POST, 2.4 FEET

AG1868'EAST OF A METAL WITNESS POST, 2.5 FEET LOWER THAN THE SURFACE
AG1868'OF THE HIGHWAY, ON HIGHWAY RIGHT-OF-WAY AND A DISK SET IN THE
AG1868'TOP OF A 12-INCH ROUND CONCRETE MONUMENT THAT IS SET FLUSH
AG1868'WITH THE GROUND SURFACE.
AG1868
AG1868 STATION RECOVERY (1977)
AG1868
AG1868'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1977 (CLN)
AG1868'THE STATION MARK, REFERENCE MARK 6 AND AZIMUTH MARK WERE
AG1868'RECOVERED AND FOUND IN GOOD CONDITION. REFERENCE MARK 7
AG1868'WAS DESTROYED WHEN THE ENTRANCE ROAD WAS CONSTRUCTED FOR LA
AG1868'CASA ADULT MOBILE COMMUNITY. REFERENCE MARK 8 WAS ESTABLISHED
AG1868'AT THIS TIME. DUE TO CHANGES, A COMPLETE NEW DESCRIPTION
AG1868'FOLLOWS.
AG1868'
AG1868'STATION IS LOCATED ABOUT 1 MILE WEST OF NORTH PORT, ON THE SOUTH
AG1868'SIDE OF U.S. HIGHWAY 41 AND ON THE WEST SIDE OF THE ENTRANCE
AG1868'ROAD TO LA CASA MOBILE COMMUNITY.
AG1868'
AG1868'TO REACH THE STATION FROM THE JUNCTION OF U.S. HIGHWAY 41 AND
AG1868'BISCAYNE DRIVE AT THE STOP LIGHT IN NORTH PORT, GO WEST ON
AG1868'U.S. HIGHWAY 1 FOR 1.05 MILES TO LA CASA MOBILE COMMUNITY
AG1868'AND STATION ON LEFT.
AG1868'
AG1868'STATION MARKS ARE STANDARD DISKS STAMPED HAVOLINE 2 1974. THE
AG1868'SURFACE MARK IS SET IN A 12-INCH ROUND CONCRETE MONUMENT
AG1868'THAT IS 3-INCHES BELOW THE GROUND SURFACE. IT IS 129.5 FEET
AG1868'EAST OF POWER LINE POLE 15N9A, 99 FEET WEST OF POWER LINE
AG1868'POLE 15N9, 75 FEET SOUTH OF THE CENTER OF THE EAST BOUND LANE
AG1868'OF HIGHWAY 41, 61 FEET WEST OF THE CENTER OF THE ENTRANCE
AG1868'ROAD TO LA CASA, 25.5 FEET WEST-SOUTHWEST OF THE WEST END OF
AG1868'A CONCRETE CULVERT, 2.4 FEET WEST OF A METAL WITNESS POST,
AG1868'2.4 FEET EAST OF A METAL WITNESS POST AND ABOUT 3 FEET LOWER
AG1868'THAN THE HIGHWAY. THE UNDERGROUND MARK IS SET IN THE TOP OF
AG1868'AN IRREGULAR MASS OF CONCRETE.
AG1868'
AG1868'REFERENCE MARK 6 IS A STANDARD DISK STAMPED HAVOLINE 2 NO 6
AG1868'1974, IS SET IN THE TOP OF A 12-INCH ROUND CONCRETE MONUMENT
AG1868'THAT IS 6-INCHES BELOW THE GROUND SURFACE. IT IS 129 FEET
AG1868'EAST-NORTHEAST OF POWER LINE POLE 15N9A, 64 FEET WEST OF THE
AG1868'CENTER OF THE ENTRANCE ROAD TO LA CASA, 47 FEET SOUTH OF THE
AG1868'CENTER OF HIGHWAY 41 EAST BOUND LANE AND 36.5 FEET NORTHWEST
AG1868'OF THE WEST END OF A CONCRETE CULVERT.
AG1868'
AG1868'REFERENCE MARK 8 IS A STANDARD DISK STAMPED HAVOLINE 2 1974
AG1868'NO 8 1977, IS SET IN THE TOP OF A 12-INCH ROUND CONCRETE
AG1868'MONUMENT THAT IS SET FLUSH WITH THE GROUND. IT IS 159 FEET
AG1868'WEST OF THE CENTER OF THE ENTRANCE ROAD TO LA CASA, 73.5 FEET
AG1868'SOUTH OF THE CENTER OF HIGHWAY 41 EAST, 31 FEET EAST OF POWER LINE
AG1868'POLE 15N9A, 30.5 FEET EAST OF A METAL WITNESS POST AND ABOUT 2.5
AG1868'FEET LOWER THAN THE HIGHWAY.
AG1868'
AG1868'AZIMUTH MARK IS LOCATED 0.35 MILE WEST ALONG HIGHWAY 41 FROM
AG1868'STATION, AT ENTRANCE TO HARBOR COVE AT U.S. HIGHWAY 41 12000 SOUTH
AG1868'AND IS A STANDARD DISK STAMPED HAVOLINE 2 AZ 1974 THAT IS SET
AG1868'IN THE TOP OF A 12 INCH ROUND CONCRETE MONUMENT THAT IS 4-INCHES
AG1868'BELOW THE GROUND SURFACE. IT IS 45.5 FEET SOUTH OF CENTER OF
AG1868'HIGHWAY 41 EAST BOUND LANE. 44 FEET WEST OF THE CENTER OF
AG1868'MEDIAN OF BLACKBURN BOULEVARD 29 FEET NORTH-NORTHEAST OF A
AG1868'UNDERGROUND TELEVISION CABLE JUNCTION BOX, 10 FEET NORTH OF
AG1868'THE WEST END OF A CULVERT AND 1 FOOT EAST OF A METAL WITNESS
AG1868'POST.
AG1868'
AG1868'AIRLINE DISTANCE AND DIRECTION FROM NEAREST TOWN

AG1868'1 MILE WEST OF NORTH PORT.
AG1868
AG1868 STATION RECOVERY (1977)
AG1868
AG1868'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1977
AG1868'1.05 MILES WEST ALONG U.S. HIGHWAY 41 FROM ITS JUNCTION WITH BISCAYNE
AG1868'DRIVE AT THE STOP LIGHT IN NORTH PORT, 129.5 FEET EAST OF POWER LINE
AG1868'1.0 MILES WEST ALONG U.S. HIGHWAY 41 FROM ITS JUNCTION WITH BISCAYNE
AG1868'DRIVE AT THE STOP LIGHT IN NORTH PORT, 129.5 FEET EAST OF POWER LINE
AG1868'POLE 15 N 9 A, 99.0 FEET WEST OF POWER LINE POLE 15 N 9, 75.0 FEET
AG1868'SOUTH OF THE CENTER OF THE EAST BOUND LANE OF U.S. HIGHWAY 41, 61.0
AG1868'FEET WEST OF THE CENTER OF ENTRANCE ROAD TO LA CASA ADULT MOBILE
AG1868'COMMUNITY, 25.5 FEET WEST-SOUTHWEST OF THE WEST END OF A CONCRETE
AG1868'CULVERT, AND ON RIGHT-OF-WAY HIGHWAY LINE.
AG1868
AG1868 STATION RECOVERY (1983)
AG1868
AG1868'RECOVERY NOTE BY FLORIDA DEPARTMENT OF TRANSPORTATION 1983
AG1868'RECOVERED IN GOOD CONDITION.
AG1868
AG1868 STATION RECOVERY (1989)
AG1868
AG1868'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1989
AG1868'THE STATION IS LOCATED ABOUT 25.8 KM (16.05 MI) NORTHWEST OF PUNTA
AG1868'GORDA, 20.2 KM (12.55 MI) EAST-SOUTHEAST OF VENICE, 14.5 KM (9.00 MI)
AG1868'NORTHEAST OF ENGLEWOOD AND ABOUT 1.6 KM (1.00 MI) WEST OF NORTH PORT,
AG1868'ON THE SOUTH RIGHT-OF-WAY OF U.S. HIGHWAY 41 EASTBOUND, AND AT THE
AG1868'ENTRANCE TO THE LACASA MOBILE COMMUNITY. OWNERSHIP--STATE OF FLORIDA.
AG1868'TO REACH THE STATION FROM THE JUNCTION OF U.S. HIGHWAY 41 AND BISCAYNE
AG1868'BLVD. AT THE WEST EDGE OF NORTH PORT, GO WESTERLY ALONG U.S. HIGHWAY
AG1868'41 WESTBOUND FOR 1.6 KM (1.00 MI) TO THE ENTRANCE TO LA CASA MOBILE
AG1868'COMMUNITY AND THE STATION ON THE LEFT, ABOUT 0.24 KM (0.15 MI) WEST OF
AG1868'THE HOT MINERAL SPRINGS MOTEL.
AG1868'THE STATION IS RECESSED 8 CM BELOW GROUND. LOCATED 23.2 M (76.1 FT)
AG1868'SOUTH OF THE CENTERLINE OF THE EASTBOUND LANES OF HIGHWAY, 18.8 M
AG1868'(61.7 FT) WEST OF THE CENTER OF PAVED ENTRANCE ROAD TO LA CASA MOBILE
AG1868'COMMUNITY, 7.7 M (25.3 FT) WEST OF THE WEST END OF A 30-INCH CONCRETE
AG1868'PIPE CULVERT, 39.6 M (129.9 FT) EAST OF A CONCRETE POWERLINE POLE, 0.8
AG1868'M (2.6 FT) EAST OF A METAL WITNESS POST, 0.7 M (2.3 FT) WEST OF A
AG1868'METAL WITNESS POST AND ABOUT 0.61 M (2.0 FT) BELOW THE LEVEL OF THE
AG1868'HIGHWAY.
AG1868'DESCRIBED BY G.F. SMITH.
AG1868
AG1868 STATION RECOVERY (1992)
AG1868
AG1868'RECOVERY NOTE BY DENI ASSOCIATES INCORPORATED 1992
AG1868'RECOVERED IN GOOD CONDITION.
AG1868
AG1868 STATION RECOVERY (1992)
AG1868
AG1868'RECOVERY NOTE BY SARASOTA COUNTY FLORIDA 1992
AG1868'TO REACH THE STATION FROM THE INTERSECTION OF RIVER ROAD AND U.S.
AG1868'HIGHWAY 41 (TAMIAMI TRAIL) IN SARASOTA COUNTY, GO EASTERLY ON U.S.
AG1868'HIGHWAY 41 (TAMIAMI TRAIL), 2.2 MI (3.54 KM) TO THE STATION ON THE
AG1868'RIGHT.
AG1868'THE STATION IS A NATIONAL GEODETIC SURVEY (N.G.S.) HORIZONTAL CONTROL
AG1868'DISK STAMPED ---HAVOLINE 2 1974--- SET IN A ROUND CONCRETE MONUMENT
AG1868'5-INCHES BELOW THE GROUND. IT IS 47.7 FT (14.54 M) SOUTHERLY OF THE
AG1868'SOUTHERLY EDGE OF ASPHALT PAVEMENT ROAD BED FOR THE SOUTH BOUND LANES
AG1868'OF U.S. HIGHWAY 41 (TAMIAMI TRAIL), 40.9 FT (12.47 M) WESTERLY OF THE
AG1868'WESTERLY EDGE OF ASPHALT PAVEMENT ROAD BED FOR THE ENTRANCE TO LA
AG1868'CASA MOBILE HOME PARK.
AG1868'REFERENCES--
AG1868'REFERENCE MARK NUMBER 6 IS A NATIONAL GEODETIC SURVEY (N.G.S.)

AG1868'REFERENCE DISK STAMPED ---HAVOLINE 2 NO 6 1974--- SET IN A ROUND
AG1868'CONCRETE MONUMENT THAT IS 6-INCHES BELOW THE GROUND. IT IS 28.53 FT
AG1868'(8.70 M)NORTHERLY OF N.G.S. HORIZONTAL CONTROL STATION HAVOLINE 2.
AG1868'REFERENCE MARK NUMBER 8 IS A NATIONAL GEODETIC SURVEY (N.G.S.)
AG1868'REFERENCE DISK STAMPED ---HAVOLINE 2 NO 8 1974 1977--- SET IN A ROUND
AG1868'CONCRETE MONUMENT THAT IS FLUSH WITH THE GROUND. IT IS 98.48 FT
AG1868'(30.02 M)WESTERLY OF N.G.S. HORIZONTAL CONTROL STATION HAVOLINE 2.
AG1868
AG1868 STATION RECOVERY (2002)
AG1868
AG1868'RECOVERY NOTE BY US POWER SQUADRON 2002 (MDB)
AG1868'RECOVERED IN GOOD CONDITION.
AG1868
AG1868 STATION RECOVERY (2004)
AG1868
AG1868'RECOVERY NOTE BY DEWBERRY DAVIS 2004 (KEC)
AG1868'RECOVERED IN GOOD CONDITION.
AG1868
AG1868 STATION RECOVERY (2005)
AG1868
AG1868'RECOVERY NOTE BY FL DEPT OF ENV PRO 2005 (BPJ)
AG1868'RECOVERED IN GOOD CONDITION WITH A NEW TO REACH AS FOLLOWS,
AG1868'
AG1868'TO REACH THE MARK FROM THE JUNCTION OF U.S. HIGHWAY 41 AND STATE ROAD
AG1868'776 SOUTH IN PORT CHARLOTTE, GO WEST ON U.S. HIGHWAY 41 FOR 6.85 MI TO
AG1868'THE INTERSECTION OF SOUTH BISCAYNE DRIVE, CONTINUE WEST ON U.S.
AG1868'HIGHWAY 41 FOR 1.0 MI TO THE JUNCTION OF EL PRADO STREET ON THE LEFT
AG1868'AND THE MARK ON THE LEFT, SET IN THE TOP OF A CONCRETE MONUMENT
AG1868'RECESSED 6 INCHES BELOW THE LEVEL OF THE GROUND AND ABOUT 0.5 FT BELOW
AG1868'THE LEVEL OF U.S. HIGHWAY 41.

*** retrieval complete.
Elapsed Time = 00:00:00

The NGS Data Sheet

See file [dsdata.txt](#) for more information about the datasheet.

```
DATABASE = ,PROGRAM = datasheet, VERSION = 7.59
1 National Geodetic Survey, Retrieval Date = MAY 12, 2008
AG8216 *****
AG8216 DESIGNATION - I75 83 A34
AG8216 PID - AG8216
AG8216 STATE/COUNTY- FL/SARASOTA
AG8216 USGS QUAD - LAUREL (1987)
AG8216
AG8216 *CURRENT SURVEY CONTROL
AG8216
AG8216* NAD 83(2007)- 27 09 13.80532(N) 082 25 22.05036(W) ADJUSTED
AG8216* NAVD 88 - 8.946 (meters) 29.35 (feet) ADJUSTED
AG8216
AG8216 EPOCH DATE - 2002.00
AG8216 X - 748,859.787 (meters) COMP
AG8216 Y - -5,629,524.284 (meters) COMP
AG8216 Z - 2,893,386.020 (meters) COMP
AG8216 LAPLACE CORR- -0.37 (seconds) DEFLEC99
AG8216 ELLIP HEIGHT- -15.147 (meters) (02/10/07) ADJUSTED
AG8216 GEOID HEIGHT- -24.02 (meters) GEOID03
AG8216 DYNAMIC HT - 8.932 (meters) 29.30 (feet) COMP
AG8216
AG8216 ----- Accuracy Estimates (at 95% Confidence Level in cm) -----
AG8216 Type PID Designation North East Ellip
AG8216 -----
AG8216 NETWORK AG8216 I75 83 A34 2.31 2.29 6.23
AG8216 -----
AG8216 MODELED GRAV- 979,128.3 (mgal) NAVD 88
AG8216
AG8216 VERT ORDER - SECOND CLASS II
AG8216
AG8216.The horizontal coordinates were established by GPS observations
AG8216.and adjusted by the National Geodetic Survey in February 2007.
AG8216
AG8216.The datum tag of NAD 83(2007) is equivalent to NAD 83(NSRS2007).
AG8216.See National Readjustment for more information.
AG8216.The horizontal coordinates are valid at the epoch date displayed above.
AG8216.The epoch date for horizontal control is a decimal equivalence
AG8216.of Year/Month/Day.
AG8216
AG8216.The orthometric height was determined by differential leveling
AG8216.and adjusted in June 1991.
AG8216
AG8216.The X, Y, and Z were computed from the position and the ellipsoidal ht.
AG8216
AG8216.The Laplace correction was computed from DEFLEC99 derived deflections.
AG8216
AG8216.The ellipsoidal height was determined by GPS observations
AG8216.and is referenced to NAD 83.
AG8216
AG8216.The geoid height was determined by GEOID03.
AG8216
AG8216.The dynamic height is computed by dividing the NAVD 88
AG8216.geopotential number by the normal gravity value computed on the
AG8216.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
AG8216.degrees latitude (g = 980.6199 gals.).
AG8216
AG8216.The modeled gravity was interpolated from observed gravity values.
AG8216
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AG8216'6.05 MILES TO INTERSTATE ROUTE 75 BRIDGE OVER COW PEN SLOUGH.
AG8216'
AG8216'STATION MARK IS A FLORIDA DEPARTMENT OF TRANSPORTATION BRASS DISK,
AG8216'STAMPED---I75 83 A34---, SET IN TOP OF ROUND CONCRETE MONUMENT THAT IS
AG8216'3 INCHES BELOW GROUND. IT IS 1.7 FEET NORTHEAST OF METAL WITNESS POST
AG8216'5.7 FEET NORTHEAST OF METAL GUARDRAIL AND 23.6 FEET NORTHEAST OF
AG8216'CENTER OF INTERSTATE ROUTE 75 SOUTHBOUND LANE.
AG8216'
AG8216'REFERENCE MARK NUMBER 1 IS A FLORIDA DEPARTMENT OF TRANSPORTATION
AG8216'BRASS DISK, STAMPED---I75 83 A34 RM NO 1---, SET IN TOP OF ROUND
AG8216'CONCRETE MONUMENT THAT IS 4 INCHES BELOW GROUND. IT IS 19.5 FEET
AG8216'NORTHEAST OF INTERSTATE ROUTE 75 SOUTHBOUND LANE AND 32.2 FEET
AG8216'SOUTH-SOUTHWEST OF METAL GUARDRAIL.
AG8216'
AG8216'REFERENCE MARK NUMBER 2 IS A FLORIDA DEPARTMENT OF TRANSPORTATION
AG8216'BRASS DISK, STAMPED---I75 83 A34 RM NO 2---, SET IN TOP OF ROUND
AG8216'CONCRETE MONUMENT THAT IS 2 INCHES BELOW GROUND. IT IS 1.0 FOOT
AG8216'NORTHEAST OF METAL WITNESS POST, 23.6 FEET NORTHEAST OF METAL
AG8216'GUARDRAIL AND 35.6 FEET NORTHEAST OF CENTER OF INTERSTATE ROUTE 75
AG8216'SOUTHBOUND LANE.
AG8216
AG8216 STATION RECOVERY (1983)
AG8216
AG8216'RECOVERY NOTE BY FLORIDA DEPARTMENT OF TRANSPORTATION 1983
AG8216'7.8 MI NE FROM VENICE.
AG8216'FROM THE INTERSECTION OF INTERSTATE ROUTE 75 AND VENICE EAST ROAD,
AG8216'ABOUT 4.0 MILES EAST OF VENICE, GO NORTHWESTERLY ALONG INTERSTATE
AG8216'ROUTE 75 FOR 3.75 MILES AND THE MARK, ON THE NORTHEAST SHOULDER OF THE
AG8216'SOUTHBOUND LANES. IT IS ABOUT 0.1 MILE SOUTHEAST OF THE SOUTHBOUND
AG8216'BRIDGE OVER COW PEN SLOUGH CANAL, 23.6 FEET NORTHEAST OF THE CENTER OF
AG8216'THE SOUTHBOUND LANES AND 5.7 FEET NORTHEAST OF A METAL GUARDRAIL.
AG8216'THE MARK IS 1.7 FT NE FROM A WITNESS POST.
AG8216
AG8216 STATION RECOVERY (1992)
AG8216
AG8216'RECOVERY NOTE BY SARASOTA COUNTY FLORIDA 1992
AG8216'TO REACH THE STATION FROM THE INTERSECTION OF JACARANDA BOULEVARD AND
AG8216'INTERSTATE 75 IN SARASOTA COUNTY, GO NORTH ON INTERSTATE 75, 3.8 MI
AG8216'(6.12 KM) TO THE STATION ON THE LEFT.
AG8216'THE STATION IS A FLDT SURVEY DISK STAMPED ---I75 83 A34--- SET IN A
AG8216'12-INCH ROUND CONCRETE MONUMENT THAT 6-INCHES BELOW GROUND. IT IS 7.8
AG8216'FT (2.38 M) NORTHEASTERLY OF THE NORTHERLY EDGE OF ASPHALT PAVEMENT
AG8216'ROAD BED FOR THE SOUTH BOUND LANES OF INTERSTATE 75 AND 450 FT
AG8216'(137.16 M) SOUTHEASTERLY OF THE COW PEN SLOUGH OVERPASS.
AG8216'REFERENCES--
AG8216'FLDT DISK STAMPED ---I75 83 A34 RM NO 1--- SET IN A 12-INCH ROUND
AG8216'CONCRETE MONUMENT THAT IS FLUSH WITH THE GROUND. IT IS 33.10 FT
AG8216'(10.09 M) SOUTHEASTERLY OF THE STATION.
AG8216'FLDT DISK STAMPED ---I75 83 A34 RM NO 2--- SET IN A 12-INCH ROUND
AG8216'CONCRETE MONUMENT THAT IS FLUSH WITH THE GROUND. IT IS 33.95 FT
AG8216'(10.35 M) NORTHWESTERLY OF THE STATION.

*** retrieval complete.
Elapsed Time = 00:00:01

The NGS Data Sheet

See file [dsdata.txt](#) for more information about the datasheet.

```
DATABASE = ,PROGRAM = datasheet, VERSION = 7.59
1 National Geodetic Survey, Retrieval Date = MAY 12, 2008
AG8255 *****
AG8255 DESIGNATION - I75 83 A44
AG8255 PID - AG8255
AG8255 STATE/COUNTY- FL/SARASOTA
AG8255 USGS QUAD - BEE RIDGE (1987)
AG8255
AG8255 *CURRENT SURVEY CONTROL
AG8255
AG8255* NAD 83(2007)- 27 16 08.53288(N) 082 26 56.31547(W) ADJUSTED
AG8255* NAVD 88 - 17.064 (meters) 55.98 (feet) ADJUSTED
AG8255
AG8255 EPOCH DATE - 2002.00
AG8255 X - 745,520.823 (meters) COMP
AG8255 Y - -5,624,086.328 (meters) COMP
AG8255 Z - 2,904,742.010 (meters) COMP
AG8255 LAPLACE CORR- -0.80 (seconds) DEFLEC99
AG8255 ELLIP HEIGHT- -7.242 (meters) (02/10/07) ADJUSTED
AG8255 GEOID HEIGHT- -24.24 (meters) GEOID03
AG8255 DYNAMIC HT - 17.038 (meters) 55.90 (feet) COMP
AG8255
AG8255 ----- Accuracy Estimates (at 95% Confidence Level in cm) -----
AG8255 Type PID Designation North East Ellip
AG8255 -----
AG8255 NETWORK AG8255 I75 83 A44 2.33 2.33 6.84
AG8255 -----
AG8255 MODELED GRAV- 979,126.8 (mgal) NAVD 88
AG8255
AG8255 VERT ORDER - SECOND CLASS II
AG8255
AG8255.The horizontal coordinates were established by GPS observations
AG8255.and adjusted by the National Geodetic Survey in February 2007.
AG8255
AG8255.The datum tag of NAD 83(2007) is equivalent to NAD 83(NSRS2007).
AG8255.See National Readjustment for more information.
AG8255.The horizontal coordinates are valid at the epoch date displayed above.
AG8255.The epoch date for horizontal control is a decimal equivalence
AG8255.of Year/Month/Day.
AG8255
AG8255.The orthometric height was determined by differential leveling
AG8255.and adjusted in June 1991.
AG8255
AG8255.Photographs are available for this station.
AG8255
AG8255.The X, Y, and Z were computed from the position and the ellipsoidal ht.
AG8255
AG8255.The Laplace correction was computed from DEFLEC99 derived deflections.
AG8255
AG8255.The ellipsoidal height was determined by GPS observations
AG8255.and is referenced to NAD 83.
AG8255
AG8255.The geoid height was determined by GEOID03.
AG8255
AG8255.The dynamic height is computed by dividing the NAVD 88
AG8255.geopotential number by the normal gravity value computed on the
AG8255.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
AG8255.degrees latitude (g = 980.6199 gals.).
AG8255
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AG8255.The modeled gravity was interpolated from observed gravity values.

AG8255

	North	East	Units	Scale Factor	Converg.
AG8255;SPC FL W	- 325,292.908	155,545.775	MT	0.99996556	-0 12 20.6
AG8255;SPC FL W	- 1,067,231.82	510,319.76	sFT	0.99996556	-0 12 20.6
AG8255;UTM 17	- 3,017,065.166	356,574.289	MT	0.99985394	-0 39 50.4

AG8255

	Elev Factor	x	Scale Factor	=	Combined Factor
AG8255!SPC FL W	- 1.00000114	x	0.99996556	=	0.99996670
AG8255!UTM 17	- 1.00000114	x	0.99985394	=	0.99985508

AG8255

PID	Reference Object	Distance	Geod. Az
			ddmmss.s
AG8256 I75 83 A44 RM 1		9.797 METERS	08110
AG8257 I75 83 A44 RM 2		9.826 METERS	27950

AG8255

SUPERSEDED SURVEY CONTROL

AG8255

NAD 83(1999)- 27 16 08.53262(N)	082 26 56.31665(W)	AD () 1
ELLIP H (06/19/01) -7.194 (m)		GP () 4 1
NAD 83(1990)- 27 16 08.53126(N)	082 26 56.31596(W)	AD () 1
ELLIP H (05/09/94) -7.118 (m)		GP () 4 2
NAD 83(1990)- 27 16 08.53362(N)	082 26 56.31561(W)	AD () 2
NAD 83(1986)- 27 16 08.53260(N)	082 26 56.32721(W)	AD () 2
NAVD 88 (05/09/94) 17.06 (m)	56.0 (f)	LEVELING 3
NGVD 29 (09/01/92) 17.395 (m)	57.07 (f)	ADJUSTED 2 2

AG8255

AG8255.Superseded values are not recommended for survey control.

AG8255.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.

AG8255.[See file dsdata.txt](#) to determine how the superseded data were derived.

AG8255

AG8255_U.S. NATIONAL GRID SPATIAL ADDRESS: 17RLL5657417065(NAD 83)

AG8255_MARKER: DD = SURVEY DISK

AG8255_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT

AG8255_SP_SET: CONCRETE POST

AG8255_STAMPING: I75 83 A44

AG8255_MARK LOGO: FLDT

AG8255_PROJECTION: RECESSED 8 CENTIMETERS

AG8255_MAGNETIC: N = NO MAGNETIC MATERIAL

AG8255_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO

AG8255+STABILITY: SURFACE MOTION

AG8255_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR

AG8255+SATELLITE: SATELLITE OBSERVATIONS - December 06, 2005

AG8255

HISTORY	- Date	Condition	Report By
HISTORY	- 1983	MONUMENTED	FLDT
HISTORY	- 1983	GOOD	FLDT
HISTORY	- 19920608	GOOD	FL-115
HISTORY	- 20020228	GOOD	USPSQD
HISTORY	- 20030310	GOOD	USPSQD
HISTORY	- 20050818	GOOD	FLDEP
HISTORY	- 20051206	GOOD	JCLS

AG8255

STATION DESCRIPTION

AG8255

AG8255'DESCRIBED BY FLORIDA DEPARTMENT OF TRANSPORTATION 1983 (CBM)

AG8255'STATION IS LOCATED ABOUT 5 MILES NORTHEAST OF OSPREY AND ABOUT 7 MILES

AG8255'SOUTHEAST OF SARASOTA

AG8255'

AG8255'THE STATION IS LOCATED IN THE INTERSTATE ROUTE 75 AND STATE ROUTE 72

AG8255'INTERCHANGE AT SOUTH SIDE OF INTERSTATE ROUTE 75 BRIDGE OVER STATE

AG8255'ROUTE 72 IN MEDIAN.

AG8255'
AG8255'STATION MARK IS A FLORIDA DEPARTMENT OF TRANSPORTATION BRASS DISK,
AG8255'STAMPED---I75 83 A44---, SET IN TOP OF ROUND CONCRETE MONUMENT THAT IS
AG8255'6 INCHES BELOW GROUND. IT IS 4.5 FEET SOUTH OF METAL WITNESS POST,
AG8255'5.0 FEET SOUTH OF SOUTH END OF ABUTMENT, 32.5 FEET WEST OF WEST EDGE
AG8255'OF CONCRETE PAVEMENT NORTHBOUND LANE AND 34.0 FEET EAST OF EAST EDGE
AG8255'CONCRETE PAVEMENT SOUTHBOUND LANE.
AG8255'
AG8255'REFERENCE MARK NUMBER 1 IS A FLORIDA DEPARTMENT OF TRANSPORTATION
AG8255'BRASS DISK, STAMPED---I75 83 A44 RM NO 1---, SET FLUSH IN TOP OF
AG8255'CONCRETE ABUTMENT. IT IS 0.4 FOOT NORTH OF SOUTH EDGE OF CONCRETE
AG8255'ABUTMENT, 0.6 FEET WEST OF EAST END OF CONCRETE ABUTMENT AND 1.7 FEET
AG8255'WEST OF METAL GUARDRAIL.
AG8255'
AG8255'REFERENCE MARK NUMBER 2 IS A FLORIDA DEPARTMENT OF TRANSPORTATION
AG8255'BRASS DISK, STAMPED---I75 83 A44 RM NO 2---, SET FLUSH IN TOP OF
AG8255'CONCRETE ABUTMENT. IT IS 0.4 FOOT NORTH OF SOUTH EDGE OF CONCRETE
AG8255'ABUTMENT, 0.6 FOOT EAST OF WEST END OF CONCRETE ABUTMENT AND 1.6 FEET
AG8255'EAST OF EAST EDGE CONCRETE PAVEMENT SOUTHBOUND LANE.
AG8255
AG8255 STATION RECOVERY (1983)
AG8255
AG8255'RECOVERY NOTE BY FLORIDA DEPARTMENT OF TRANSPORTATION 1983
AG8255'7.7 MI SE FROM SARASOTA.
AG8255'FROM THE INTERSECTION OF INTERSTATE ROUTE 75 AND STATE ROAD 780, ABOUT
AG8255'3.0 MILES EAST OF SARASOTA, GO SOUTH ALONG INTERSTATE ROUTE 75 FOR
AG8255'4.65 MILES TO THE INTERSECTION OF STATE ROAD 72 AND THE MARK. IT IS
AG8255'34.0 FEET EAST OF THE EAST EDGE OF THE CONCRETE DRIVING PAVEMENT OF
AG8255'THE SOUTHBOUND LANES, 32.5 FEET WEST OF THE WEST EDGE OF THE CONCRETE
AG8255'DRIVING PAVEMENT OF THE NORTHBOUND LANES AND 5.0 FEET SOUTH OF THE
AG8255'SOUTH CONCRETE GUARDRAIL BETWEEN THE NORTH AND SOUTHBOUND BRIDGES.
AG8255'THE MARK IS 4.5 FT S FROM A WITNESS POST.
AG8255
AG8255 STATION RECOVERY (1992)
AG8255
AG8255'RECOVERY NOTE BY SARASOTA COUNTY FLORIDA 1992
AG8255'TO REACH THE STATION FROM THE INTERSECTION OF STATE ROAD 681 AND
AG8255'INTERSTATE 75 IN SARASOTA COUNTY, GO NORTH ON INTERSTATE 75, 5.5 MI
AG8255'(8.85 KM) TO THE STATION ON THE LEFT.
AG8255'THE STATION IS A FLDT SURVEY DISK STAMPED ---I75 83 A44--- SET IN A
AG8255'12-INCH ROUND CONCRETE MONUMENT THAT IS 6-INCHES BELOW GROUND. IT IS
AG8255'4.8 FT (1.46 M) SOUTHERLY OF THE SOUTHERLY EDGE OF A CONCRETE
AG8255'RETAINING WALL FOR THE STATE ROAD 72 (CLARK ROAD) OVERPASS.
AG8255'REFERENCES--
AG8255'REFERENCE MARK NUMBER 1 IS A DRILL HOLE IN THE SOUTHEASTERLY CORNER OF
AG8255'THE CONCRETE RETAINING WALL FOR THE STATE ROAD 72 (CLARK ROAD)
AG8255'OVERPASS. IT IS 32.12 FT (9.79 M) NORTHEASTERLY OF THE STATION.
AG8255'FLDT DISK STAMPED ---I75 83 A44 RM NO 2--- SET IN THE SOUTHWESTERLY
AG8255'CORNER OF THE CONCRETE RETAINING WALL FOR THE STATE ROAD 72 (CLARK
AG8255'ROAD) OVERPASS. IT IS 32.24 FT (9.83 M) NORTHWESTERLY OF THE STATION.
AG8255
AG8255 STATION RECOVERY (2002)
AG8255
AG8255'RECOVERY NOTE BY US POWER SQUADRON 2002
AG8255'RECOVERED IN GOOD CONDITION.
AG8255
AG8255 STATION RECOVERY (2003)
AG8255
AG8255'RECOVERY NOTE BY US POWER SQUADRON 2003 (BAS)
AG8255'RECOVERED IN GOOD CONDITION.
AG8255
AG8255 STATION RECOVERY (2005)
AG8255
AG8255'RECOVERY NOTE BY FL DEPT OF ENV PRO 2005 (BPJ)

AG8255'RECOVERED AS DESCRIBED.
AG8255
AG8255 STATION RECOVERY (2005)
AG8255
AG8255'RECOVERY NOTE BY JOHN CHANCE LAND SURVEYS INC 2005
AG8255'RECOVERED IN GOOD CONDITION.

*** retrieval complete.
Elapsed Time = 00:00:01

The NGS Data Sheet

See file [dsdata.txt](#) for more information about the datasheet.

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DATABASE = ,PROGRAM = datasheet, VERSION = 7.59
1 National Geodetic Survey, Retrieval Date = MAY 12, 2008
AG8303 *****
AG8303 DESIGNATION - I75 83 A53
AG8303 PID - AG8303
AG8303 STATE/COUNTY- FL/SARASOTA
AG8303 USGS QUAD - BEE RIDGE (1987)
AG8303
AG8303 *CURRENT SURVEY CONTROL
AG8303
AG8303* NAD 83(2007)- 27 19 33.10292(N) 082 26 51.63255(W) ADJUSTED
AG8303* NAVD 88 - 13.721 (meters) 45.02 (feet) ADJUSTED
AG8303
AG8303 EPOCH DATE - 2002.00
AG8303 X - 745,268.571 (meters) COMP
AG8303 Y - -5,621,203.715 (meters) COMP
AG8303 Z - 2,910,335.895 (meters) COMP
AG8303 LAPLACE CORR- -0.81 (seconds) DEFLEC99
AG8303 ELLIP HEIGHT- -10.671 (meters) (02/10/07) ADJUSTED
AG8303 GEOID HEIGHT- -24.36 (meters) GEOID03
AG8303 DYNAMIC HT - 13.700 (meters) 44.95 (feet) COMP
AG8303
AG8303 ----- Accuracy Estimates (at 95% Confidence Level in cm) -----
AG8303 Type PID Designation North East Ellip
AG8303 -----
AG8303 NETWORK AG8303 I75 83 A53 2.14 2.18 6.94
AG8303 -----
AG8303 MODELED GRAV- 979,127.6 (mgal) NAVD 88
AG8303
AG8303 VERT ORDER - SECOND CLASS II
AG8303
AG8303.The horizontal coordinates were established by GPS observations
AG8303.and adjusted by the National Geodetic Survey in February 2007.
AG8303
AG8303.The datum tag of NAD 83(2007) is equivalent to NAD 83(NSRS2007).
AG8303.See National Readjustment for more information.
AG8303.The horizontal coordinates are valid at the epoch date displayed above.
AG8303.The epoch date for horizontal control is a decimal equivalence
AG8303.of Year/Month/Day.
AG8303
AG8303.The orthometric height was determined by differential leveling
AG8303.and adjusted in June 1991.
AG8303
AG8303.The X, Y, and Z were computed from the position and the ellipsoidal ht.
AG8303
AG8303.The Laplace correction was computed from DEFLEC99 derived deflections.
AG8303
AG8303.The ellipsoidal height was determined by GPS observations
AG8303.and is referenced to NAD 83.
AG8303
AG8303.The geoid height was determined by GEOID03.
AG8303
AG8303.The dynamic height is computed by dividing the NAVD 88
AG8303.geopotential number by the normal gravity value computed on the
AG8303.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
AG8303.degrees latitude (g = 980.6199 gals.).
AG8303
AG8303.The modeled gravity was interpolated from observed gravity values.
AG8303
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AG8303;
AG8303;SPC FL W      -      331,588.866      155,697.135      MT      0.99996540      -0 12 19.8
AG8303;SPC FL W      -      1,087,887.80      510,816.35      sFT      0.99996540      -0 12 19.8
AG8303;UTM 17        -      3,023,359.006      356,776.028      MT      0.99985322      -0 39 52.8
AG8303
AG8303!              -      Elev Factor x Scale Factor = Combined Factor
AG8303!SPC FL W      -      1.00000168 x 0.99996540 = 0.99996708
AG8303!UTM 17        -      1.00000168 x 0.99985322 = 0.99985490
AG8303
AG8303:              Primary Azimuth Mark                      Grid Az
AG8303:SPC FL W      -      I75 83 A54                        003 43 13.6
AG8303:UTM 17        -      I75 83 A54                        004 10 46.6
AG8303
AG8303|-----|
AG8303| PID      Reference Object                      Distance      Geod. Az |
AG8303|                                     dddmmss.s |
AG8303| AG8309 I75 83 A54                        APPROX. 1.4 KM 0033053.8 |
AG8303| AG8304 I75 83 A53 RM 1                      10.323 METERS 07940 |
AG8303| AG8302 I75 83 A53 RM 2                      10.504 METERS 29049 |
AG8303|-----|
AG8303
AG8303              SUPERSEDED SURVEY CONTROL
AG8303
AG8303 NAD 83(1999)- 27 19 33.10269(N)      082 26 51.63369(W) AD(      ) 1
AG8303 ELLIP H (06/19/01) -10.631 (m)      GP(      ) 4 1
AG8303 NAD 83(1990)- 27 19 33.10136(N)      082 26 51.63293(W) AD(      ) 1
AG8303 ELLIP H (05/09/94) -10.553 (m)      GP(      ) 4 2
AG8303 NAD 83(1990)- 27 19 33.10362(N)      082 26 51.63298(W) AD(      ) 2
AG8303 NAD 83(1986)- 27 19 33.10282(N)      082 26 51.64480(W) AD(      ) 2
AG8303 NAVD 88 (05/09/94) 13.72 (m)      45.0 (f) LEVELING 3
AG8303 NGVD 29 (09/01/92) 14.041 (m)      46.07 (f) ADJUSTED 2 2
AG8303
AG8303.Superseded values are not recommended for survey control.
AG8303.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
AG8303.See file dsdata.txt to determine how the superseded data were derived.
AG8303
AG8303_U.S. NATIONAL GRID SPATIAL ADDRESS: 17RLL5677623359(NAD 83)
AG8303_MARKER: DH = HORIZONTAL CONTROL DISK
AG8303_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT
AG8303_SP_SET: CONCRETE POST
AG8303_STAMPING: I75 83 A53
AG8303_MARK LOGO: FLDT
AG8303_PROJECTION: RECESSED 10 CENTIMETERS
AG8303_MAGNETIC: N = NO MAGNETIC MATERIAL
AG8303_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO
AG8303+STABILITY: SURFACE MOTION
AG8303_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
AG8303+SATELLITE: SATELLITE OBSERVATIONS - March 10, 2003
AG8303
AG8303 HISTORY      - Date      Condition      Report By
AG8303 HISTORY      - 1983      MONUMENTED      FLDT
AG8303 HISTORY      - 1983      GOOD            FLDT
AG8303 HISTORY      - 19920610 GOOD            FL-115
AG8303 HISTORY      - 19941110 GOOD            GEOBAS
AG8303 HISTORY      - 20020305 GOOD            USPSQD
AG8303 HISTORY      - 20030310 GOOD            USPSQD
AG8303
AG8303              STATION DESCRIPTION
AG8303
AG8303'DESCRIBED BY FLORIDA DEPARTMENT OF TRANSPORTATION 1983 (CBM)
AG8303'STATION IS LOCATED ABOUT 5-1/4 MILES SOUTHEAST OF SARASOTA AND ABOUT 4
AG8303'MILES SOUTH OF INTERSECTION OF INTERSTATE ROUTE 75 AND MANATEE-
AG8303'SARASOTA COUNTY IN MEDIAN ON SOUTH SIDE OF INTERSTATE ROUTE 75 BRIDGE
AG8303'OVER PALMER BOULEVARD.

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AG8303'RECOVERY NOTE BY US POWER SQUADRON 2002
AG8303'RECOVERED IN GOOD CONDITION.
AG8303
AG8303 STATION RECOVERY (2003)
AG8303
AG8303'RECOVERY NOTE BY US POWER SQUADRON 2003 (BAS)
AG8303'RECOVERED IN GOOD CONDITION.

*** retrieval complete.
Elapsed Time = 00:00:00

The NGS Data Sheet

See file [dsdata.txt](#) for more information about the datasheet.

```
DATABASE = ,PROGRAM = datasheet, VERSION = 7.59
1 National Geodetic Survey, Retrieval Date = MAY 12, 2008
AG8055 *****
AG8055 DESIGNATION - I75 83 A03
AG8055 PID - AG8055
AG8055 STATE/COUNTY- FL/SARASOTA
AG8055 USGS QUAD - MURDOCK SE (1987)
AG8055
AG8055 *CURRENT SURVEY CONTROL
AG8055
AG8055* NAD 83(2007)- 27 04 48.25032(N) 082 06 25.62909(W) ADJUSTED
AG8055* NAVD 88 - 8.294 (meters) 27.21 (feet) ADJUSTED
AG8055
AG8055 EPOCH DATE - 2002.00
AG8055 X - 780,375.790 (meters) COMP
AG8055 Y - -5,629,002.668 (meters) COMP
AG8055 Z - 2,886,110.587 (meters) COMP
AG8055 LAPLACE CORR- -1.19 (seconds) DEFLEC99
AG8055 ELLIP HEIGHT- -15.849 (meters) (02/10/07) ADJUSTED
AG8055 GEOID HEIGHT- -24.13 (meters) GEOID03
AG8055 DYNAMIC HT - 8.281 (meters) 27.17 (feet) COMP
AG8055
AG8055 ----- Accuracy Estimates (at 95% Confidence Level in cm) -----
AG8055 Type PID Designation North East Ellip
AG8055 -----
AG8055 NETWORK AG8055 I75 83 A03 2.16 2.21 5.47
AG8055 -----
AG8055 MODELED GRAV- 979,121.3 (mgal) NAVD 88
AG8055
AG8055 VERT ORDER - SECOND CLASS II
AG8055
AG8055.The horizontal coordinates were established by GPS observations
AG8055.and adjusted by the National Geodetic Survey in February 2007.
AG8055
AG8055.The datum tag of NAD 83(2007) is equivalent to NAD 83(NSRS2007).
AG8055.See National Readjustment for more information.
AG8055.The horizontal coordinates are valid at the epoch date displayed above.
AG8055.The epoch date for horizontal control is a decimal equivalence
AG8055.of Year/Month/Day.
AG8055
AG8055.The orthometric height was determined by differential leveling
AG8055.and adjusted in June 1991.
AG8055
AG8055.The X, Y, and Z were computed from the position and the ellipsoidal ht.
AG8055
AG8055.The Laplace correction was computed from DEFLEC99 derived deflections.
AG8055
AG8055.The ellipsoidal height was determined by GPS observations
AG8055.and is referenced to NAD 83.
AG8055
AG8055.The geoid height was determined by GEOID03.
AG8055
AG8055.The dynamic height is computed by dividing the NAVD 88
AG8055.geopotential number by the normal gravity value computed on the
AG8055.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
AG8055.degrees latitude (g = 980.6199 gals.).
AG8055
AG8055.The modeled gravity was interpolated from observed gravity values.
AG8055
```


AG8055'STATION MARK IS A STANDARD FLORIDA DEPARTMENT OF TRANSPORTATION BRASS
AG8055'DISK, STAMPED---I75 83 A03---, SET IN TOP OF ROUND CONCRETE MONUMENT
AG8055'THAT IS 2 INCHES BELOW GROUND. IT IS 6.2 FEET NORTHEAST OF METAL
AG8055'WITNESS POST, 10.7 FEET NORTHEAST OF METAL GUARDRAIL, 18.0 FEET
AG8055'SOUTHEAST OF SOUTHEAST END OF BRIDGE, AND 34.6 FEET NORTHEAST OF
AG8055'CENTERLINE INTERSTATE ROUTE 75 NORTHBOUND LANE.
AG8055'

AG8055'REFERENCE MARK NUMBER 1 IS A FLORIDA DEPARTMENT OF TRANSPORTATION
AG8055'BRASS DISK, STAMPED---I75 83 A03 RM NO 1---, SET IN TOP OF ROUND
AG8055'CONCRETE MONUMENT THAT IS 1 INCH BELOW GROUND. IT IS 1.7 FEET NORTH-
AG8055'NORTHWEST OF METAL WITNESS POST, 44.5 FEET NORTHEAST OF SOUTHEAST END
AG8055'OF BRIDGE AND 46 FEET SOUTH-SOUTHWEST OF PI IN RIGHT OF WAY FENCE LINE
AG8055'

AG8055'REFERENCE MARK NUMBER 2 IS A FLORIDA DEPARTMENT OF TRANSPORTATION
AG8055'BRASS DISK, STAMPED---I75 83 A03 RM NO 2---, SET FLUSH IN TOP OF
AG8055'CONCRETE GUARD RAIL. IT IS 0.7 FOOT SOUTHEAST OF EXPANSION JOINT IN
AG8055'BRIDGE GUARD RAIL, 5.3 FEET NORTHWEST OF SOUTHEAST END OF BRIDGE AND
AG8055'23.2 FEET NORTHEAST OF CENTERLINE OF INTERSTATE ROUTE 75 NORTHBOUND
AG8055'LANE.

AG8055

AG8055 STATION RECOVERY (1983)

AG8055

AG8055'RECOVERY NOTE BY FLORIDA DEPARTMENT OF TRANSPORTATION 1983

AG8055'21.9 MI SE FROM VENICE.

AG8055'FROM THE INTERSECTION OF INTERSTATE ROUTE 75 AND VENICE EAST ROAD,
AG8055'ABOUT 4.0 MILES EAST OF VENICE, GO EASTERLY ALONG INTERSTATE ROUTE 75
AG8055'FOR 16.0 MILES TO THE POINT WHERE THE INTERSTATE TURNS SOUTHEAST,
AG8055'CONTINUE SOUTHEAST ALONG THE INTERSTATE FOR 1.9 MILES TO THE BRIDGES
AG8055'OVER NEW CASTLE WATERWAY AND THE MARK. IT IS 34.6 FEET NORTHEAST OF
AG8055'THE CENTER OF THE NORTHBOUND LANES, 18.0 FEET SOUTHEAST OF THE
AG8055'SOUTHEAST END OF THE NORTHEAST CONCRETE GUARDRAIL OF THE NORTHBOUND
AG8055'BRIDGE AND 10.7 FEET NORTHEAST OF THE METAL GUARDRAIL.
AG8055'THE MARK IS 6.2 FT NE FROM A WITNESS POST.

AG8055

AG8055 STATION RECOVERY (1992)

AG8055

AG8055'RECOVERY NOTE BY SARASOTA COUNTY FLORIDA 1992

AG8055'TO REACH THE STATION FROM THE INTERSECTION OF KINGS HIGHWAY (STATE
AG8055'ROAD 769) AND THE NORTH BOUND LANE OF INTERSTATE 75 IN CHARLOTTE
AG8055'COUNTY, GO NORTHERLY ON INTERSTATE 75, 5.4 MI (8.69 KM) TO THE
AG8055'STATION ON THE RIGHT.

AG8055'THE STATION IS A FLDT SURVEY DISK STAMPED ---I75 83 A03--- SET IN A
AG8055'12-INCH ROUND CONCRETE MONUMENT THAT IS 6-INCHES BELOW GROUND. IT IS
AG8055'13 FT (3.96 M) NORTHEAST OF THE EASTERLY EDGE OF PAVEMENT OF THE
AG8055'NORTHBOUND LANE OF INTERSTATE 75 AND SOUTHEASTERLY OF NEW CASTLE
AG8055'WATERWAY.

AG8055'REFERENCES--

AG8055'FLDT DISK STAMPED --- I75 83 A03 RM NO 2--- SET IN THE TOP OF A
AG8055'CONCRETE WALL, 22.6 FT (6.89 M) WEST-NORTHWEST OF THE STATION.

AG8055'FDLT DISK STAMPED ---I75 83 A03 RM NO 1---SET IN THE TOP OF CONCRETE
AG8055'MONUMENT, 38.91 FT (11.86 M) NORTH-NORTHEAST OF THE STATION.

AG8055

AG8055 STATION RECOVERY (2001)

AG8055

AG8055'RECOVERY NOTE BY US POWER SQUADRON 2001 (MDB)

AG8055'NO WITNESS POST

AG8055'

AG8055

AG8055 STATION RECOVERY (2006)

AG8055

AG8055'RECOVERY NOTE BY FL DEPT OF ENV PRO 2006 (BPJ)

AG8055'RECOVERED IN GOOD CONDITION WITH A NEW TO REACH AS FOLLOWS, TO REACH
AG8055'THE MARK FROM THE INTERSECTION OF COUNTY ROAD 769 (KINGS HIGHWAY) AND
AG8055'THE INTERSTATE 75 OVERPASS ABOUT 3.5 MI NORTHEAST OF PORT CHARLOTTE,

AG8055'GO NORTHWEST ON INTERSTATE 75 FOR 1.1 MI TO THE SARASOTA-DESOTO
AG8055'COUNTY LINE, CONTINUE NORTHWEST ON INTERSTATE 75 FOR 4.45 MI TO THE
AG8055'MARK ON THE RIGHT.

*** retrieval complete.
Elapsed Time = 00:00:01

The NGS Data Sheet

See file [dsdata.txt](#) for more information about the datasheet.

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DATABASE = ,PROGRAM = datasheet, VERSION = 7.59
1 National Geodetic Survey, Retrieval Date = MAY 12, 2008
AG7631 *****
AG7631 CBN - This is a Cooperative Base Network Control Station.
AG7631 TIDAL BM - This is a Tidal Bench Mark.
AG7631 DESIGNATION - LORAN
AG7631 PID - AG7631
AG7631 STATE/COUNTY- FL/SARASOTA
AG7631 USGS QUAD - VENICE (1987)
AG7631
AG7631 *CURRENT SURVEY CONTROL
AG7631
AG7631* NAD 83(2007)- 27 04 38.92549(N) 082 27 01.59084(W) ADJUSTED
AG7631* NAVD 88 - 3.672 (meters) 12.05 (feet) ADJUSTED
AG7631
AG7631 EPOCH DATE - 2002.00
AG7631 X - 746,649.012 (meters) COMP
AG7631 Y - -5,633,703.261 (meters) COMP
AG7631 Z - 2,885,853.007 (meters) COMP
AG7631 LAPLACE CORR- 0.05 (seconds) DEFLEC99
AG7631 ELLIP HEIGHT- -20.314 (meters) (02/10/07) ADJUSTED
AG7631 GEOID HEIGHT- -23.89 (meters) GEOID03
AG7631 DYNAMIC HT - 3.666 (meters) 12.03 (feet) COMP
AG7631
AG7631 ----- Accuracy Estimates (at 95% Confidence Level in cm) -----
AG7631 Type PID Designation North East Ellip
AG7631 -----
AG7631 NETWORK AG7631 LORAN 2.16 2.20 6.17
AG7631 -----
AG7631 MODELED GRAV- 979,126.2 (mgal) NAVD 88
AG7631
AG7631 VERT ORDER - SECOND CLASS I
AG7631
AG7631.The horizontal coordinates were established by GPS observations
AG7631.and adjusted by the National Geodetic Survey in February 2007.
AG7631
AG7631.The datum tag of NAD 83(2007) is equivalent to NAD 83(NSRS2007).
AG7631.See National Readjustment for more information.
AG7631.The horizontal coordinates are valid at the epoch date displayed above.
AG7631.The epoch date for horizontal control is a decimal equivalence
AG7631.of Year/Month/Day.
AG7631
AG7631.The orthometric height was determined by differential leveling
AG7631.and adjusted in June 1991.
AG7631
AG7631.This Tidal Bench Mark is designated as VM 11358
AG7631.by the Center for Operational Oceanographic Products and Services.
AG7631
AG7631.The X, Y, and Z were computed from the position and the ellipsoidal ht.
AG7631
AG7631.The Laplace correction was computed from DEFLEC99 derived deflections.
AG7631
AG7631.The ellipsoidal height was determined by GPS observations
AG7631.and is referenced to NAD 83.
AG7631
AG7631.The geoid height was determined by GEOID03.
AG7631
AG7631.The dynamic height is computed by dividing the NAVD 88
AG7631.geopotential number by the normal gravity value computed on the
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AG7631'
AG7631'TO REACH THE STATION FROM THE POST OFFICE IN VENICE, GO SOUTH ONE
AG7631'BLOCK TO VENICE AVENUE, THEN TURN LEFT AND GO EAST ONE BLOCK, TURN
AG7631'RIGHT AND GO SOUTH FOR 1.5 MILES TO A T-INTERSECTION. TURN RIGHT AT
AG7631'THE INTERSECTION AND GO WEST FOR 0.4 MILE TO THE LORAN STATION AND THE
AG7631'STATION SITE AS DESCRIBED.
AG7631
AG7631 STATION RECOVERY (1978)
AG7631
AG7631'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1978 (RST)
AG7631'STATION WAS RECOVERED AS DESCRIBED.
AG7631
AG7631 STATION RECOVERY (1982)
AG7631
AG7631'RECOVERY NOTE BY FL DEPT OF NAT RES 1982
AG7631'IN VENICE.
AG7631'BEGIN AT THE VENICE AIRPORT, GO 0.8 MILE WESTERLY ON AVENUE E TO
AG7631'HARBOR DRIVE, THENCE 0.2 MILE SOUTH ALONG HARBOR DRIVE TO THE ENTRANCE
AG7631'OF THE OLD VENICE COAST GUARD STATION. THE MARK BEARS 98.7 FEET NORTH
AG7631'OF THE CENTERLINE OF THE ENTRANCE DRIVE TO THE OLD COAST GUARD
AG7631'STATION, 20.2 FEET NORTHEAST OF THE NORTHEAST CORNER OF A CONCRETE PAD
AG7631'FOR A FORMER HIGH VOLTAGE TRANSFORMER, 156 FEET NORTHEAST OF A
AG7631'FLAGPOLE, 77.5 FEET WEST-NORTHWEST OF BENCH MARK IWSA 1 1950, AND 0.3
AG7631'FOOT EAST OF A WITNESS POST.
AG7631
AG7631 STATION RECOVERY (1983)
AG7631
AG7631'RECOVERY NOTE BY FL DEPT OF NAT RES 1983
AG7631'RECOVERED IN GOOD CONDITION.
AG7631
AG7631 STATION RECOVERY (1984)
AG7631
AG7631'RECOVERY NOTE BY FL DEPT OF NAT RES 1984 (JGC)
AG7631'LORAN 1954 RECOVERED GOOD.
AG7631
AG7631 STATION RECOVERY (1989)
AG7631
AG7631'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1989
AG7631'THE STATION IS LOCATED ABOUT 0.96 KM (0.60 MI) WEST OF THE VENICE
AG7631'MUNICIPAL AIRPORT, AT AN OPEN GRASSY AREA, AT THE SITE OF THE OLD
AG7631'VENICE COAST GUARD STATION. ABOUT 0.08 KM (0.05 MI) WEST OF HARBOR
AG7631'DRIVE, AND ABOUT 0.16 KM (0.10 MI) SOUTH OF THE JUNCTION OF HARBOR
AG7631'DRIVE AND AIRPORT AVE. E (BEACH ROAD). OWNERSHIP--U.S. GOVERNMENT.
AG7631'TO REACH THE STATION FROM THE JUNCTION OF U.S. HIGHWAY 41 BUSINESS
AG7631'ROUTE AND AVE DEL CIRCO, LOCATED ABOUT 1.3 KM (0.80 MI) WEST OF THE
AG7631'JUNCTION OF U.S. HIGHWAY 41 AND U.S. HIGHWAY 41 BUSINESS ROUTE, AT THE
AG7631'SOUTH EDGE OF VENICE, GO SOUTH ALONG AVENUE DEL CIRCO FOR 0.48 KM
AG7631'(0.30 MI) TO THE JUNCTION OF AIRPORT ROAD, THEN GO RIGHT, WEST ALONG
AG7631'AIRPORT ROAD FOR 0.48 KM (0.30 MI) TO DANTES RESTAURANT ON THE LEFT
AG7631'AND THE AIRPORT MANAGERS OFFICE, THEN CONTINUE WEST ALONG AIRPORT
AG7631'AVE. E AND BEACH ROAD FOR 0.96 KM (0.60 MI) TO THE JUNCTION OF HARBOR
AG7631'DRIVE, THEN GO LEFT, SOUTH ALONG HARBOR DRIVE FOR 0.16 KM (0.10 MI) TO
AG7631'THE ENTRANCE TO THE OLD COAST GUARD STATION ON THE RIGHT, THEN GO
AG7631'RIGHT, WEST ALONG AN ASPHALT ROAD FOR 0.08 KM (0.05 MI) TO THE STATION
AG7631'ON THE RIGHT, IN AN OPEN GRASSY AREA.
AG7631'THE STATION IS RECESSED 13 CM BELOW GROUND. LOCATED 47.6 M
AG7631'(156.2 FT) NORTHEAST OF A FLAGPOLE, 6.2 M (20.3 FT) NORTHEAST OF THE
AG7631'NORTHEAST EDGE OF A 10 FT BY 20 FT CONCRETE PAD, 47 M (154.2 FT) EAST
AG7631'OF THE SOUTHEAST CORNER OF A WHITE BLOCK OFFICE BUILDING, 30 M
AG7631'(98.4 FT) NORTH OF THE APPROXIMATE CENTER OF AN ASPHALT ROAD, 0.09 M
AG7631'(0.3 FT) EAST OF A METAL WITNESS POST AND LEVEL WITH THE ASPHALT ROAD.
AG7631'DESCRIBED BY G.F. SMITH.
AG7631
AG7631 STATION RECOVERY (1990)

AG7631
AG7631'RECOVERY NOTE BY FL DEPT OF NAT RES 1990
AG7631'RECOVERED IN GOOD CONDITION.
AG7631
AG7631 STATION RECOVERY (1992)
AG7631
AG7631'RECOVERY NOTE BY SARASOTA COUNTY FLORIDA 1992
AG7631'TO REACH THE STATION FROM THE INTERSECTION OF BEACH ROAD AND HARBOR
AG7631'DRIVE IN THE CITY OF VENICE IN SARASOTA COUNTY, GO SOUTHERLY ON
AG7631'HARBOR DRIVE 650 FT (198.12 M) TO THE INTERSECTION OF HARBOR DRIVE
AG7631'AND THE ENTRANCE TO THE FORMER LORAN COAST GUARD STATION, TURN
AG7631'RIGHT AND GO SOUTHWEST ON THE ENTRANCE ROAD, 250 FT (76.20 M) TO THE
AG7631'STATION ON THE RIGHT. THE STATION IS A U.S. COAST AND GEODETIC SURVEY
AG7631'(C.G.S.) TRAVERSE STATION DISK STAMPED ---LORAN 1954--- SET IN A
AG7631'10-INCH SQUARE CONCRETE MONUMENT THAT IS 5-INCHES BELOW THE GROUND.
AG7631'IT IS 77.40 FT (23.59 M) SOUTHWESTERLY OF A NATIONAL OCEANIC SURVEY
AG7631'(N.O.S.) CONCRETE MONUMENT I WSA NO 1 1950, AND 20.25 FT (6.17 M)
AG7631'NORTHEASTERLY OF THE NORTHEASTERLY CORNER OF A CONCRETE SLAB.
AG7631'THE NATIONAL OCEANIC SURVEY (N.O.S.) CONCRETE MONUMENT STAMPED ---I
AG7631'WSA NO 1 1950--- IS 65.0 FT (19.81 M) NORTHWESTERLY OF THE CENTERLINE
AG7631'OF THE ENTRANCE OF THE FORMER LORAN COAST GUARD STATION, 180.36 FT
AG7631'(54.97 M) SOUTHWESTERLY OF A N.O.S. DISK 5858 C 1977, 190.20 FT
AG7631'(57.97 M) NORTHEASTERLY OF A N.O.S. DISK 5858 C 1977 SET IN A
AG7631'CONCRETE SLAB FOR A FLAG POLE, AND 87.18 FT (26.57 M) SOUTHEASTERLY
AG7631'OF THE SOUTHEASTERLY CORNER OF A CONCRETE SLAB.
AG7631
AG7631 STATION RECOVERY (2002)
AG7631
AG7631'RECOVERY NOTE BY US POWER SQUADRON 2002
AG7631'RECOVERED IN GOOD CONDITION.

*** retrieval complete.
Elapsed Time = 00:00:00

The NGS Data Sheet

See file [dsdata.txt](#) for more information about the datasheet.

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DATABASE = ,PROGRAM = datasheet, VERSION = 7.59
1 National Geodetic Survey, Retrieval Date = MAY 12, 2008
AG6295 *****
AG6295 DESIGNATION - PARISH
AG6295 PID - AG6295
AG6295 STATE/COUNTY- FL/MANATEE
AG6295 USGS QUAD - PARRISH (1987)
AG6295
AG6295 *CURRENT SURVEY CONTROL
AG6295
AG6295* NAD 83(2007)- 27 35 26.78543(N) 082 23 19.48536(W) NO CHECK
AG6295* NAVD 88 - 9.889 (meters) 32.44 (feet) ADJUSTED
AG6295
AG6295 EPOCH DATE - 2002.00
AG6295 X - 749,256.381 (meters) COMP
AG6295 Y - -5,607,014.111 (meters) COMP
AG6295 Z - 2,936,382.020 (meters) COMP
AG6295 LAPLACE CORR- -1.47 (seconds) DEFLEC99
AG6295 ELLIP HEIGHT- -14.855 (meters) (02/10/07) NO CHECK
AG6295 GEOID HEIGHT- -24.77 (meters) GEOID03
AG6295 DYNAMIC HT - 9.874 (meters) 32.39 (feet) COMP
AG6295
AG6295 ----- Accuracy Estimates (at 95% Confidence Level in cm) -----
AG6295 Type PID Designation North East Ellip
AG6295 -----
AG6295 NETWORK AG6295 PARISH 0.37 0.41 1.25
AG6295 -----
AG6295 MODELED GRAV- 979,142.4 (mgal) NAVD 88
AG6295
AG6295 VERT ORDER - SECOND CLASS I
AG6295
AG6295.The horizontal coordinates were established by GPS observations
AG6295.and adjusted by the National Geodetic Survey in February 2007.
AG6295
AG6295.The datum tag of NAD 83(2007) is equivalent to NAD 83(NSRS2007).
AG6295.See National Readjustment for more information.
AG6295.No horizontal observational check was made to the station.
AG6295.The horizontal coordinates are valid at the epoch date displayed above.
AG6295.The epoch date for horizontal control is a decimal equivalence
AG6295.of Year/Month/Day.
AG6295
AG6295.The orthometric height was determined by differential leveling
AG6295.and adjusted in June 1991.
AG6295
AG6295.Photographs are available for this station.
AG6295
AG6295.The X, Y, and Z were computed from the position and the ellipsoidal ht.
AG6295
AG6295.The Laplace correction was computed from DEFLEC99 derived deflections.
AG6295
AG6295.The ellipsoidal height was determined by GPS observations
AG6295.and is referenced to NAD 83.
AG6295
AG6295.The geoid height was determined by GEOID03.
AG6295
AG6295.The dynamic height is computed by dividing the NAVD 88
AG6295.geopotential number by the normal gravity value computed on the
AG6295.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
AG6295.degrees latitude (g = 980.6199 gals.).
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Woolpert, Inc. Aug. 29, 2008	Final Report of LiDAR Ground Control Survey and QC Survey Florida Division of Emergency Management – Project Area D
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AG6295 HISTORY - 1972 GOOD NGS
 AG6295 HISTORY - 1981 GOOD FL-057
 AG6295 HISTORY - 19870424 GOOD
 AG6295 HISTORY - 19890302 GOOD NGS
 AG6295 HISTORY - 19910806 GOOD GEOBAS
 AG6295 HISTORY - 19951228 GOOD NGS
 AG6295 HISTORY - 19990405 GOOD USGS
 AG6295 HISTORY - 20000228 GOOD FLDT
 AG6295 HISTORY - 20010426 GOOD FL-057
 AG6295 HISTORY - 20011113 GOOD JCLS
 AG6295 HISTORY - 20020531 GOOD FLDEP
 AG6295 HISTORY - 20040831 GOOD JCLS
 AG6295
 AG6295 STATION DESCRIPTION
 AG6295
 AG6295'DESCRIBED BY COAST AND GEODETIC SURVEY 1934 (GLA)
 AG6295'THIS STATION IS ABOUT 14.5 MILES NE FROM PALMETTO, 2.3 MILES
 AG6295'EASTWARD FROM PARISH RAILROAD STATION, 60 FEET N OF THE CENTER
 AG6295'LINE OF STATE HIGHWAY 32, 36 FEET NE OF A 20-INCH OAK TREE
 AG6295'(TRIANGULAR BLAZE), 33 PACES W OF THE CENTER LINE OF SAND ROAD
 AG6295'AND PROJECTS 3 INCHES.
 AG6295'
 AG6295'SURFACE, UNDERGROUD, REFERENCE, AND AZIMUTH MARKS ARE STANDARD
 AG6295'BRONZE DISKS SET IN CONCRETE.
 AG6295'
 AG6295'REFERENCE MARK NO. 1 IS NE OF THE STATION, 3.5 FEET W OF THE
 AG6295'FENCE LINE, 7 FEET E OF THE CENTER LINE OF THE SAND ROAD, 120
 AG6295'FEET N OF THE CENTER LINE OF STATE HIGHWAY 32, AND PROJECTS 12
 AG6295'INCHES.
 AG6295'
 AG6295'REFERENCE MARK NO. 2 IS SE OF THE STATION, 1 FOOT W OF THE
 AG6295'FENCE LINE, 53 FEET S OF THE CENTER LINE OF STATE HIGHWAY 32 AND
 AG6295'PROJECTS 10 INCHES.
 AG6295'
 AG6295'AZIMUTH MARK IS ENE OF THE STATION, 41 FEET S OF THE CENTER
 AG6295'LINE OF THE HIGHWAY, 2.5 FEET N OF FENCE LINE AND PROJECTS 12
 AG6295'INCHES.
 AG6295'
 AG6295'TO REACH GO E ON STATE HIGHWAY 32 FOR 2.3 MILES FROM THE PARISH
 AG6295'RAILROAD STATION TO THE STATION ON THE N SIDE OF THE ROAD.
 AG6295'
 AG6295'177.6 FEET BETWEEN THE REFERENCE MARKS.
 AG6295
 AG6295 STATION RECOVERY (1943)
 AG6295
 AG6295'RECOVERY NOTE BY COAST AND GEODETIC SURVEY 1943 (RLS)
 AG6295'RECOVERED AS DESCRIBED, EXCEPT FOR THE FOLLOWING DISCREPANCIES--
 AG6295'
 AG6295'1. THE STATION IS FLUSH WITH THE GROUND. IT DOES NOT PROJECT
 AG6295'3 INCHES.
 AG6295'
 AG6295'2. REFERENCE MARK 1 IS 9 FEET E OF THE CENTER LINE OF DIRT
 AG6295'ROAD, NOT 7 FEET.
 AG6295'
 AG6295'3. REFERENCE MARK 1 IS 109 FEET N OF CENTER LINE OF STATE
 AG6295'HIGHWAY 32, NOT 120 FEET N OF IT.
 AG6295
 AG6295 STATION RECOVERY (1954)
 AG6295
 AG6295'RECOVERY NOTE BY COAST AND GEODETIC SURVEY 1954 (IRR)
 AG6295'STATION AND REFERENCE MARKS 1 AND 2 RECOVERED IN GOOD
 AG6295'CONDITION. THE AZIMUTH MARK WAS FOUND LYING ON THE SHOULDER OF
 AG6295'THE ROAD, DESTROYED.
 AG6295'

AG6295'THE DESCRIPTION IS ADEQUATE WITH THE FOLLOWING CORRECTIONS--
AG6295'
AG6295'STATE HIGHWAY 32 HAS BEEN RENUMBERED 62.
AG6295'
AG6295'THE MARK IS FLUSH WITH THE GROUND AND COVERED WITH SAND AND
AG6295'TRASH. A 4- BY 4-IN. CONCRETE WITNESS POST WAS SET 11.3 FT.
AG6295'TO THE SE AND PROJECTS 18 IN.
AG6295
AG6295 STATION RECOVERY (1958)
AG6295
AG6295'RECOVERY NOTE BY COAST AND GEODETIC SURVEY 1958 (ALW)
AG6295'THIS STATION WAS RECOVERED IN JUNE 1958. THE STATION AND
AG6295'REFERENCE MARK 1 WERE FOUND TO BE IN GOOD CONDITION. REFERENCE
AG6295'MARK 2 WAS SEARCHED FOR BUT NOT RECOVERED. IT MAY HAVE BEEN
AG6295'DESTROYED BY HIGHWAY CONSTRUCTION. THE AZIMUTH MARK WAS FOUND
AG6295'DESTROYED. THE POST WAS FOUND BROKEN OFF. THE DISK WAS
AG6295'RECOVERED. REFERENCE MARK 3 WAS SET.
AG6295'
AG6295'THE STATION IS LOCATED 2.3 MI. E OF PARISH, 0.25 MI. W OF A
AG6295'CURVE IN THE HIGHWAY, 160 YD. W OF A SMALL FARM POND, 290 YD. W
AG6295'OF A JUNCTION WITH AN OILED ROAD LEADING N, 58 FT. N OF THE
AG6295'CENTERLINE OF STATE HIGHWAY 62, 10.3 FT. N OF A FENCE, 129 FT. W
AG6295'OF A T-FENCE CORNER, 118 FT. W OF THE W END OF A WIRE GATE, 129
AG6295'FT. W OF A FENCE LEADING N, 34 FT. NE OF AN 18-IN. DEAD OAK TREE
AG6295'AND 1.8 FT. E OF A CONCRETE WITNESS POST. A TRIANGULATION
AG6295'STATION DISK SET IN THE TOP OF A ROUND CONCRETE POST WHICH IS
AG6295'FLUSH WITH THE GROUND, STAMPED PARISH 1934.
AG6295'
AG6295'REFERENCE MARK 1 IS 161.97 FT. OR 49.369 M. NE OF THE STATION,
AG6295'3 FT. E OF A N AND S FENCE, 64 FT. N OF A T-FENCE CORNER, 111 FT.
AG6295'N OF THE CENTERLINE OF THE HIGHWAY AND 69 FT. N OF THE W END OF
AG6295'A WIRE GATE. A REFERENCE MARK DISK SET IN THE TOP OF A ROUND
AG6295'CONCRETE POST WHICH PROJECTS 1.0 FT. ABOVE THE GROUND, STAMPED
AG6295'PARISH NO 1 1934.
AG6295'
AG6295'REFERENCE MARK 3 IS 67.820 FT. OR 20.670 M. N OF THE STATION,
AG6295'79 FT. N-NE OF AN 18-IN. DEAD OAK TREE, 124 FT. N OF THE CENTERLINE
AG6295'OF THE HIGHWAY, 77 FT. N OF A FENCE, 157 FT. W OF A FENCE
AG6295'AND 159 FT. W-NW OF A FENCE. A REFERENCE MARK DISK SET IN THE
AG6295'TOP OF A SQUARE CONCRETE POST WHICH PROJECTS 0.1 FT. ABOVE THE
AG6295'GROUND, STAMPED PARISH NO 3 1934.
AG6295'
AG6295'TO REACH THE STATION FROM THE JUNCTION OF STATE HIGHWAY 62 AND
AG6295'U.S. HIGHWAY 301 AT PARISH, GO 2.3 MI. E ALONG STATE HIGHWAY 62
AG6295'TO A T-FENCE CORNER AND THE STATION ON THE LEFT.
AG6295
AG6295 STATION RECOVERY (1960)
AG6295
AG6295'RECOVERY NOTE BY COAST AND GEODETIC SURVEY 1960 (WRK)
AG6295'THE STATION, R.M. 1 AND R.M. 3 WERE RECOVERED AS DESCRIBED IN JUNE
AG6295'1958 AND WERE FOUND IN GOOD CONDITION. STEEL WITNESS POSTS WERE
AG6295'SET BY ALL MARKS.
AG6295
AG6295 STATION RECOVERY (1972)
AG6295
AG6295'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1972 (LFS)
AG6295'STATION MARK, REFERENCE MARK 1 AND 3 WERE RECOVERED AND FOUND IN
AG6295'GOOD CONDITION. THE AZIMUTH MARK WAS SEARCHED FOR BUT NOT FOUND
AG6295'AND APPARENTLY WAS DESTROYED WHEN STATE HIGHWAY 60 WAS WIDENED. THE
AG6295'DISTANCE TO REFERENCE MARK 1 CHECKED THE ORIGINAL DESCRIPTION.
AG6295'DUE TO LACK OF DATA, A COMPLETE NEW DESCRIPTION FOLLOWS.
AG6295'
AG6295'STATION IS ABOUT 23 MILES SOUTHEAST OF SAINT PETERSBURG, 25 MILES
AG6295'SOUTH-SOUTHEAST OF TAMPA, 20 MILES NORTHEAST OF SARASOTA, 2-1/4

AG6295'MILES EAST OF PARRISH AND ON PROPERTY OWNED BY THE MAYOR OF
 AG6295'PARRISH.
 AG6295'
 AG6295'TO REACH THE STATION FROM THE JUNCTION OF U.S. HIGHWAY 301 AND
 AG6295'STATE HIGHWAY 62 IN PARRISH, GO EAST ON STATE HIGHWAY 62 FOR 2.35
 AG6295'MILES TO A GATE ON LEFT AND STATION.
 AG6295'
 AG6295'STATION MARK, A STANDARD DISK STAMPED PARISH 1934, IS SET IN
 AG6295'THE TOP OF A 12-INCH CYLINDRICAL CONCRETE MONUMENT THAT IS
 AG6295'SET FLUSH WITH THE GROUND SURFACE. IT IS 148 FEET WEST-NORTHWEST
 AG6295'OF A 12-INCH PINE TREE, 131 FEET WEST-NORTHWEST OF THE FENCE
 AG6295'CORNER ON THE EAST SIDE OF THE GATE, 58 FEET NORTH OF THE CENTER
 AG6295'OF STATE HIGHWAY 62, 11 FEET NORTH OF A 4-INCH SQUARE CONCRETE
 AG6295'RIGHT-OF-WAY POST, 10 FEET NORTH OF A BARBED WIRE FENCE, 1.8
 AG6295'FEET EAST OF A 4-INCH SQUARE CONCRETE RIGHT-OF-WAY MARKER
 AG6295'POST, 1.5 FEET WEST OF A METAL WITNESS POST AND 1 FOOT NORTH
 AG6295'OF A METAL WITNESS POST.
 AG6295'
 AG6295'REFERENCE MARK 1, A STANDARD DISK STAMPED PARISH NO 1 1934, IS
 AG6295'SET IN THE TOP OF A 12-INCH CYLINDRICAL CONCRETE MONUMENT THAT
 AG6295'PROJECTS 9-INCHES ABOVE THE GROUND SURFACE. IT IS 108 FEET NORTH
 AG6295'OF THE CENTER OF STATE HIGHWAY 62, 64 FEET NORTHEAST OF THE FENCE
 AG6295'CORNER, 63 FEET NORTH-NORTHWEST OF THE 12-INCH PINE TREE, 2 FEET
 AG6295'SOUTHEAST OF A FENCE, 1.3 FEET NORTHEAST OF A METAL WITNESS POST
 AG6295'AND ABOUT THE SAME ELEVATION AS THE STATION MARK.
 AG6295'
 AG6295'REFERENCE MARK 3, A STANDARD DISK, STAMPED PARISH NO 3 1934, IS
 AG6295'SET IN THE TOP OF AN 8-INCH SQUARE PRECAST CONCRETE MONUMENT THAT
 AG6295'IS SET FLUSH WITH THE GROUND SURFACE. IT IS 161 FEET NORTHWEST
 AG6295'OF THE FENCE CORNER, 125 FEET NORTH OF THE CENTER OF STATE
 AG6295'HIGHWAY 62, 77 FEET NORTH OF THE RIGHT-OF-WAY FENCE, 1 FOOT EAST
 AG6295'OF A METAL WITNESS POST AND ABOUT THE SAME ELEVATION AS THE
 AG6295'STATION MARK.
 AG6295'
 AG6295'AIRLINE DISTANCE AND DIRECTION FROM NEAREST TOWN
 AG6295'2.35 MILES EAST OF PARRISH.
 AG6295
 AG6295 STATION RECOVERY (1972)
 AG6295
 AG6295'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1972
 AG6295'2.4 MI E FROM PARRISH.
 AG6295'2.35 MILES EAST ALONG STATE HIGHWAY 62 FROM ITS JUNCTION WITH
 AG6295'U.S. HIGHWAY 301 IN PARRISH, 148 FEET WEST-NORTHWEST OF A
 AG6295'12-INCH PINE TREE, 131 FEET WEST-NORTHWEST OF A FENCE CORNER,
 AG6295'58 FEET NORTH OF THE CENTER OF STATE HIGHWAY 62, 11 FEET NORTH
 AG6295'OF A 4-INCH SQUARE CONCRETE RIGHT-OF-WAY POST, 10 FEET NORTH OF A
 AG6295'BARBED-WIRE FENCE, 1.8 FEET EAST OF A 4-INCH SQUARE CONCRETE
 AG6295'RIGHT-OF-WAY POST, 1.5 FEET WEST OF A METAL WITNESS POST AND
 AG6295'1 FOOT NORTH OF A METAL WITNESS POST. A STANDARD DISK SET
 AG6295'IN THE TOP OF A 12-INCH CYLINDRICAL CONCRETE MONUMENT THAT IS
 AG6295'SET FLUSH WITH THE GROUND SURFACE.
 AG6295
 AG6295 STATION RECOVERY (1981)
 AG6295
 AG6295'RECOVERY NOTE BY HILLSBOROUGH COUNTY FLORIDA 1981 (SW)
 AG6295'PARISH 1934 RECOVERED GOOD.
 AG6295'
 AG6295'STA. PARISH VERTICALLY OBSTRUCTED BY POWER LINE.
 AG6295'
 AG6295'RM NO. 3 CLEAR.
 AG6295'
 AG6295'RM NO. 1 NEEDS WITNESS REPLACED.
 AG6295'
 AG6295'DISTANCE AND DIRECTION FROM NEAREST TOWN--2.3 MILES EAST OF PARISH.

AG6295
 AG6295 STATION RECOVERY (1987)
 AG6295
 AG6295'RECOVERED 1987
 AG6295'RECOVERED IN GOOD CONDITION.
 AG6295
 AG6295 STATION RECOVERY (1989)
 AG6295
 AG6295'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1989
 AG6295'THE STATION IS LOCATED ABOUT 37.0 KM (23.00 MI) SOUTHEAST OF ST.
 AG6295'PETERSBURG, 3.7 KM (2.30 MI) EAST OF PARRISH, IN SECTION 22, T 33 S, R
 AG6295'19 E. OWNERSHIP--UNKNOWN.
 AG6295'TO REACH THE STATION FROM THE JUNCTION OF U.S. HIGHWAY 301 AND STATE
 AG6295'HIGHWAY 62 IN PARRISH, GO EAST FOR 3.94 KM (2.45 MI) ON HIGHWAY 62 TO
 AG6295'THE STATION ON LEFT.
 AG6295'LOCATED 0.24 KM (0.15 MI) WEST FROM THE JUNCTION OF STATE HIGHWAY 62
 AG6295'AND KEEN ROAD, 17.68 M (58.0 FT) NORTH FROM THE APPROXIMATE CENTER OF
 AG6295'HIGHWAY 62, 2.96 M (9.7 FT) NORTH FROM A BARBED WIRE FENCE, 2.90 M
 AG6295'(9.5 FT) WEST FROM A UTILITY POLE, 0.55 M (1.8 FT) EAST FROM A
 AG6295'RIGHT-OF-WAY MARKER AND 0.30 M (1.0 FT) NORTH FROM A METAL WITNESS
 AG6295'POST.
 AG6295'DESCRIBED BY R.L. TAYLOR.
 AG6295
 AG6295 STATION RECOVERY (1991)
 AG6295
 AG6295'RECOVERY NOTE BY GEOBASE CONTROL INCORPORATED 1991
 AG6295'RECOVERED IN GOOD CONDITION.
 AG6295
 AG6295 STATION RECOVERY (1995)
 AG6295
 AG6295'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1995 (CFS)
 AG6295'THE STATION IS LOCATED ABOUT 23.00 MI (37.01 KM) SOUTHEAST OF ST.
 AG6295'PETERSBURG, 2.35 MI (3.78 KM) EAST OF PARRISH, IN SECTION 22, T 33 S,
 AG6295'R 19 E. OWNERSHIP -- UNKNOWN. TO REACH THE STATION FROM THE JUNCTION
 AG6295'OF U.S. HIGHWAY 301 AND STATE HIGHWAY 62 IN PARRISH, GO EAST ON STATE
 AG6295'HIGHWAY 62 FOR 2.35 MI (3.78 KM) TO THE STATION ON THE LEFT. LOCATED
 AG6295'0.15 MI (0.24 KM) WEST OF STATE HIGHWAY 62 AND KEEN ROAD JUNCTION,
 AG6295'58.0 FT (17.7 M) NORTH FROM THE APPROXIMATE CENTER OF STATE HIGHWAY
 AG6295'62, 9.7 FT (3.0 M) NORTH OF A BARBED WIRE FENCE, 9.5 FT (2.9 M) WEST
 AG6295'OF A UTILITY POLE, 1.8 FT (0.5 M) EAST OF A 4-INCH CONCRETE
 AG6295'RIGHT-OF-WAY MARKER, AND 1.0 FT (0.3 M) NORTH OF A METAL WITNESS POST.
 AG6295'RECOVERED IN GOOD CONDITION.
 AG6295
 AG6295 STATION RECOVERY (1999)
 AG6295
 AG6295'RECOVERY NOTE BY US GEOLOGICAL SURVEY 1999
 AG6295'RECOVERED AS DESCRIBED.
 AG6295
 AG6295 STATION RECOVERY (2000)
 AG6295
 AG6295'RECOVERY NOTE BY FLORIDA DEPARTMENT OF TRANSPORTATION 2000 (CDM)
 AG6295'RECOVERED AS DESCRIBED.
 AG6295
 AG6295 STATION RECOVERY (2001)
 AG6295
 AG6295'RECOVERY NOTE BY HILLSBOROUGH COUNTY FLORIDA 2001 (RJA)
 AG6295'THE STATION IS LOCATED IN MANATEE COUNTY, FLORIDA, ABOUT 23.0 MILES
 AG6295'SOUTHEAST OF ST.PETERSBURG AND 2.3 MILES EAST OF PARISH, IN SECTION
 AG6295'22, TOWNSHIP 33 SOUTH, RANGE 19 EAST. OWNERSHIP---UNKNOWN THE STATION
 AG6295'IS A 12 INCH ROUND CONCRETE MONUMENT. FLUSH WITH THE GROUND. TO
 AG6295'REACH THE STATION FROM THE INTERSECTION OF U.S. HWY. 301 AND S.R. 62
 AG6295'IN PARRISH, PROCEED EAST ON S.R.62 FOR 2.3 MILES TO THE STATION ON
 AG6295'THE LEFT (NORTH) SIDE OF THE ROAD. 15.00 MILES WEST OF C.R.39.
 AG6295'

AG6295'1.0 FT NORTH OF A METAL WITNESS POST AND NGS SIGN. 46.5 FT NORTH OF A
AG6295'NAIL AND HILLS COUNTY DISK IN THE NORTH EDGE OF PAVEMENT OF S.R.62.
AG6295'9.7 FT NORTH OF A BARBED WIRE FENCE. 9.7 FT WEST OF A WOOD UTILITY
AG6295'POLE (NO NUMBERS). 1.8 FT EAST OF A CONCRETE RIGHT-OF-WAY MONUMENT.
AG6295'11.0 FT NORTH-NORTHWEST OF A CONCRETE RIGHT-OF-WAY MONUMENT.

AG6295

STATION RECOVERY (2001)

AG6295

AG6295'RECOVERY NOTE BY JOHN CHANCE LAND SURVEYS INC 2001

AG6295'RECOVERED IN GOOD CONDITION.

AG6295

STATION RECOVERY (2002)

AG6295

AG6295'RECOVERY NOTE BY FL DEPT OF ENV PRO 2002 (BPJ)

AG6295'RECOVERED AS DESCRIBED.

AG6295'

AG6295

STATION RECOVERY (2004)

AG6295

AG6295'RECOVERY NOTE BY JOHN CHANCE LAND SURVEYS INC 2004

AG6295'RECOVERED IN GOOD CONDITION.

*** retrieval complete.

Elapsed Time = 00:00:01

The NGS Data Sheet

See file [dsdata.txt](#) for more information about the datasheet.

```
DATABASE = ,PROGRAM = datasheet, VERSION = 7.59
1 National Geodetic Survey, Retrieval Date = MAY 12, 2008
AG9367 *****
AG9367 CBN - This is a Cooperative Base Network Control Station.
AG9367 SACS - This is a Secondary Airport Control Station.
AG9367 DESIGNATION - VENIPOINT
AG9367 PID - AG9367
AG9367 STATE/COUNTY- FL/SARASOTA
AG9367 USGS QUAD - VENICE (1987)
AG9367
AG9367 *CURRENT SURVEY CONTROL
AG9367
AG9367* NAD 83(2007)- 27 04 32.83142(N) 082 26 49.16897(W) ADJUSTED
AG9367* NAVD 88 - 4.243 (meters) 13.92 (feet) ADJUSTED
AG9367
AG9367 EPOCH DATE - 2002.00
AG9367 X - 746,999.585 (meters) COMP
AG9367 Y - -5,633,743.475 (meters) COMP
AG9367 Z - 2,885,686.280 (meters) COMP
AG9367 LAPLACE CORR- 0.08 (seconds) DEFLEC99
AG9367 ELLIP HEIGHT- -19.688 (meters) (02/10/07) ADJUSTED
AG9367 GEOID HEIGHT- -23.88 (meters) GEOID03
AG9367 DYNAMIC HT - 4.237 (meters) 13.90 (feet) COMP
AG9367
AG9367 ----- Accuracy Estimates (at 95% Confidence Level in cm) -----
AG9367 Type PID Designation North East Ellip
AG9367 -----
AG9367 NETWORK AG9367 VENIPOINT 0.61 0.61 2.33
AG9367 -----
AG9367 MODELED GRAV- 979,126.2 (mgal) NAVD 88
AG9367
AG9367 VERT ORDER - SECOND CLASS I
AG9367
AG9367.This mark is at Venice Airport (VNC)
AG9367
AG9367.The horizontal coordinates were established by GPS observations
AG9367.and adjusted by the National Geodetic Survey in February 2007.
AG9367
AG9367.The datum tag of NAD 83(2007) is equivalent to NAD 83(NSRS2007).
AG9367.See National Readjustment for more information.
AG9367.The horizontal coordinates are valid at the epoch date displayed above.
AG9367.The epoch date for horizontal control is a decimal equivalence
AG9367.of Year/Month/Day.
AG9367
AG9367.The orthometric height was determined by differential leveling
AG9367.and adjusted in May 2001.
AG9367
AG9367.The X, Y, and Z were computed from the position and the ellipsoidal ht.
AG9367
AG9367.The Laplace correction was computed from DEFLEC99 derived deflections.
AG9367
AG9367.The ellipsoidal height was determined by GPS observations
AG9367.and is referenced to NAD 83.
AG9367
AG9367.The geoid height was determined by GEOID03.
AG9367
AG9367.The dynamic height is computed by dividing the NAVD 88
AG9367.geopotential number by the normal gravity value computed on the
AG9367.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
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AG9367.degrees latitude (g = 980.6199 gals.).

AG9367

AG9367.The modeled gravity was interpolated from observed gravity values.

AG9367

AG9367;	North	East	Units	Scale Factor	Converg.
AG9367;SPC FL W	- 303,879.730	155,666.043	MT	0.99996543	-0 12 12.5
AG9367;SPC FL W	- 996,978.75	510,714.34	sFT	0.99996543	-0 12 12.5
AG9367;UTM 17	- 2,995,654.097	356,523.848	MT	0.99985412	-0 39 31.5

AG9367

AG9367!	Elev Factor	x	Scale Factor	=	Combined Factor
AG9367!SPC FL W	- 1.00000309	x	0.99996543	=	0.99996852
AG9367!UTM 17	- 1.00000309	x	0.99985412	=	0.99985721

AG9367

AG9367:	Primary Azimuth Mark	Grid Az
AG9367:SPC FL W	- VENIPOINT AZ MK	135 34 25.3
AG9367:UTM 17	- VENIPOINT AZ MK	136 01 44.3

AG9367

AG9367	PID	Reference Object	Distance	Geod. Az
AG9367				ddmmss.s
AG9367	AG9387	VENIPOINT AZ MK	APPROX. 0.9 KM	1352212.8

AG9367

AG9367

AG9367

SUPERSEDED SURVEY CONTROL

AG9367

AG9367	NAD 83(1999)-	27 04 32.83112(N)	082 26 49.16929(W)	AD(	) B
AG9367	ELLIP H (05/31/01)	-19.699 (m)		GP(	) 5 1
AG9367	NAD 83(1990)-	27 04 32.82969(N)	082 26 49.16876(W)	AD(	) B
AG9367	ELLIP H (09/13/90)	-19.668 (m)		GP(	) 4 1
AG9367	NAVD 88 (03/27/98)	4.24 (m)	13.9 (f)	LEVELING	3
AG9367	NGVD 29 (09/01/92)	4.589 (m)	15.06 (f)	ADJUSTED	2 1

AG9367

AG9367.Superseded values are not recommended for survey control.

AG9367.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.

AG9367.[See file dsdata.txt](#) to determine how the superseded data were derived.

AG9367

AG9367_U.S. NATIONAL GRID SPATIAL ADDRESS: 17RLK5652495654(NAD 83)

AG9367_MARKER: F = FLANGE-ENCASED ROD

AG9367_SETTING: 59 = STAINLESS STEEL ROD IN SLEEVE (10 FT.+)

AG9367_SP_SET: STAINLESS STEEL ROD IN SLEEVE

AG9367_STAMPING: VENIPOINT 1989

AG9367_MARK LOGO: NGS

AG9367_PROJECTION: FLUSH

AG9367_MAGNETIC: I = MARKER IS A STEEL ROD

AG9367_STABILITY: B = PROBABLY HOLD POSITION/ELEVATION WELL

AG9367_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR

AG9367+SATELLITE: SATELLITE OBSERVATIONS - September 21, 2005

AG9367_ROD/PIPE-DEPTH: 13.6 meters

AG9367

AG9367	HISTORY	- Date	Condition	Report By
AG9367	HISTORY	- 1989	MONUMENTED	NGS
AG9367	HISTORY	- 19901103	GOOD	FLDNR
AG9367	HISTORY	- 19960122	GOOD	NGS
AG9367	HISTORY	- 20020212	GOOD	USPSQD
AG9367	HISTORY	- 20050921	GOOD	FLDEP

AG9367

AG9367

STATION DESCRIPTION

AG9367

AG9367'DESCRIBED BY NATIONAL GEODETIC SURVEY 1989

AG9367'THE STATION IS LOCATED ABOUT 0.96 KM (0.60 MI) SOUTH OF VENICE, 0.96

AG9367'KM (0.60 MI) SOUTHWEST OF U.S. HIGHWAY 41, NEAR THE NORTHWEST END AND

AG9367'AT SOUTHWEST SIDE OF RUNWAY 13-31 AT THE VENICE MUNICIPAL AIRPORT.

AG9367'OWNERSHIP--CITY OF VENICE, 401 W. VENICE AVE, VENICE FL 34285. MANAGER

AG9367'IS MARY ANN LAKIN OR GENE BOSTICK, PHONE NUMBER IS 813-485-9293,

AG9367'485-7226. NOTE--PERMISSION MUST BE OBTAINED BEFORE ENTERING AIRPORT.
AG9367'TO REACH THE STATION FROM THE JUNCTION OF U.S. HIGHWAY 41 AND STATE
AG9367'ROUTE 775, LOCATED ABOUT 6.5 KM (4.05 MI) SOUTHEAST OF THE JUNCTION OF
AG9367'U.S. HIGHWAY 41 AND VENICE AVE WHICH IS LOCATED AT ABOUT THE CENTER OF
AG9367'VENICE, GO NORTHWEST ALONG U.S. HIGHWAY 41 FOR 3.2 KM (2.00 MI) TO THE
AG9367'JUNCTION OF U.S. HIGHWAY 41 BUSINESS ON THE LEFT, THEN GO LEFT ALONG
AG9367'U.S. HIGHWAY 41 BUSINESS FOR ABOUT 1.3 KM (0.80 MI) TO THE JUNCTION OF
AG9367'AVE DEL CIRCO ON THE LEFT, THEN GO LEFT, SOUTH, ALONG AVE DEL CIRCO
AG9367'FOR 0.48 KM (0.30 MI) TO THE JUNCTION OF AIRPORT ROAD, THEN GO RIGHT,
AG9367'WEST, ALONG AIRPORT ROAD (AVE E) FOR 0.48 KM (0.30 MI) TO DANTES
AG9367'RESTAURANT ON THE LEFT AND AIRPORT MANAGERS OFFICE JUST WEST OF THE
AG9367'RESTAURANT, THEN PASS THRU AN ELECTRIC GATE TO THE SOUTH OF THE
AG9367'OFFICE, AND GO WESTERLY ALONG TAXIWAY FOR ABOUT 0.72 KM (0.45 MI) TO
AG9367'THE STATION, LOCATED AT THE SOUTHWEST CORNER OF RUNWAY END 13 OF
AG9367'RUNWAY 13-31.

AG9367'THE STATION IS RECESSED 6 CM BELOW GROUND. LOCATED 13.7 M (44.9 FT)
AG9367'SOUTHWEST OF THE SOUTHWEST EDGE OF THE RUNWAY, 20.8 M (68.2 FT)
AG9367'SOUTHEAST OF THE APPROXIMATE CENTER OF A TRACK ROAD, 26 M (85.3 FT)
AG9367'SOUTH OF THE SOUTHWEST CORNER OF RUNWAY AND 50.6 M (166.0 FT)
AG9367'NORTH-NORTHEAST OF A FENCE AROUND A GOLF COURSE.
AG9367'DESCRIBED BY G.F. SMITH.

AG9367

AG9367 STATION RECOVERY (1990)

AG9367

AG9367'RECOVERY NOTE BY FL DEPT OF NAT RES 1990

AG9367'THE STATION IS IN VENICE AT THE VENICE MUNICIPAL AIRPORT, AT THE
AG9367'NORTHWEST END AND SOUTHWEST SIDE OF RUNWAYS 13-31 IN SECTION 19, T 39
AG9367'S, R 19 E. OWNERSHIP--CITY OF VENICE. MANAGER--MARYANN STEVENS OR
AG9367'GENE BOSTICK, PHONE NUMBER 812-485-9293 OR 812-485-7226.
AG9367'TO REACH THE STATION FROM THE JUNCTION OF U.S. HIGHWAY 41 AND BUSINESS
AG9367'U.S. HIGHWAY 41 IN VENICE, GO SOUTHEASTERLY ON U.S. HIGHWAY 41 FOR
AG9367'1.05 MI (1.69 KM) TO THE INTERSECTION OF VENICE AVENUE (STATE ROAD
AG9367'772) AND U.S. HIGHWAY 41, CONTINUE SOUTHEASTERLY ON U.S. HIGHWAY 41
AG9367'FOR 1.90 MI (3.06 KM) TO THE JUNCTION OF U.S. HIGHWAY 41 AND BUSINESS
AG9367'U.S. HIGHWAY 41 SOUTH OF VENICE, TURN RIGHT ON BUSINESS U.S. HIGHWAY
AG9367'41 AND GO NORTHWESTERLY FOR 0.45 MI (0.72 KM) TO THE GULF
AG9367'INTERCOASTAL WATERWAY BRIDGE, CONTINUE NORTHWESTERLY ON BUSINESS U.S.
AG9367'HIGHWAY 41 FOR 0.50 MI (0.80 KM) TO THE JUNCTION OF AVENUE DEL CIRCO
AG9367'ON THE LEFT, TURN LEFT ON AVENUE DEL CIRCO AND GO SOUTH FOR 0.35 MI
AG9367'(0.56 KM) TO THE INTERSECTION OF AIRPORT ROAD, TURN RIGHT ON AIRPORT
AG9367'ROAD AND GO WEST FOR 0.40 MI (0.64 KM) TO THE AIRPORT OFFICE DRIVEWAY
AG9367'(0.20 MI WEST OF THE DANTES RESTAURANT), TURN LEFT AND GO SOUTH ON
AG9367'THE DRIVEWAY FOR 0.05 MI (0.08 KM) TO AN ELECTRIC LOCKED GATE, PASS
AG9367'THROUGH THE GATE AND GO SOUTH FOR 0.05 MI (0.08 KM) TO THE TAXIWAY,
AG9367'TURN RIGHT ON THE TAXIWAY AND GO WEST FOR 0.15 MI (0.24 KM) TO THE
AG9367'TAXIWAY RAMP ON THE LEFT, TURN LEFT ON THE TAXIWAY RAMP AND GO
AG9367'SOUTHWESTERLY FOR 0.15 MI (0.24 KM) TO THE STATION ON THE LEFT.
AG9367'LOCATED 166.7 FT (50.8 M) NORTH-NORTHEAST OF A CHAINLINK FENCE AROUND
AG9367'THE AIRPORT, 87.0 FT (26.5 M) SOUTH FROM THE FIRST ONE OF FOUR RED
AG9367'AND BLUE RUNWAY END LIGHTS, 74.7 FT (22.8 M) SOUTHEAST OF THE
AG9367'APPROXIMATE CENTERLINE OF A DIRT TRACK ROAD AND 44.9 FT (13.7 M)
AG9367'SOUTHWEST OF THE SOUTHWEST EDGE OF THE RUNWAY.
AG9367'NOTE CONTACT THE MANAGER TO PASS THROUGH THE GATE. ACCESS TO DATUM
AG9367'POINT IS HAD THROUGH A 5-INCH LOGO CAP.

AG9367

AG9367 STATION RECOVERY (1996)

AG9367

AG9367'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1996 (AJL)

AG9367'NOTE--THIS IS A SAC STATION. THE STATION IS IN VENICE AT THE VENICE
AG9367'MUNICIPAL AIRPORT, ALONG THE NORTHWEST END AND SOUTHWEST SIDE OF
AG9367'RUNWAY 13-31 IN SECTION 19, T 39 S, R 19 E. OWNERSHIP--CITY OF
AG9367'VENICE, VENICE MUNICIPAL AIRPORT, 150 EAST AIRPORT AVE, VENICE, FL
AG9367'34285. ADMINISTRATIVE ASSISTANT IS BEVERLY C. TALCOTT. PHONE
AG9367'813-485-8679. GENE BOSTIC IS MAINTENANCE SUPERVISOR. PHONE

AG9367'813-485-7226. NOTE--PERMISSION MUST BE OBTAINED BEFORE ENTERING
AG9367'AIRPORT. TO REACH THE FROM THE JUNCTION OF U.S. HIGHWAY 41 AND
AG9367'BUSINESS HIGHWAY 41 ON THE NORTH SIDE OF VENICE, GO SOUTHERLY ON
AG9367'BUSINESS HIGHWAY 41 FOR 3.38 KM (2.10 MI) TO THE JUNCTION OF AVE DEL
AG9367'CIRCO ON THR RIGHT. TURN RIGHT, SOUTH-SOUTHWEST, ON AVE DEL CIRCO FOR
AG9367'0.48 KM (0.30 MI) TO THE T-JUNCTION OF AIRPORT ROAD. TURN LEFT, EAST,
AG9367'ON AIRPORT ROAD FOR 0.16 KM (0.10 MI) TO A ROAD RIGHT LEADING TO THE
AG9367'AIRPORT MAINTENANCE BUILDING. TURN RIGHT, SOUTH, FOR 0.08 KM (0.05
AG9367'MI) TO A LOCKED GATE. PASS THROUGH THE GATE, SOUTH, ACROSS PARKING
AG9367'AREA FOR 0.13 KM (0.10 MI) TO A TAXI AND RUNWAY END 22. TURN RIGHT,
AG9367'SOUTHWEST, ALONG THE NORTHWEST SIDE OF THE RUNWAY FOR 0.96 KM (0.60
AG9367'MI) TO THE JUNCTION OF RUNWAY 13-31. CONTINUE SOUTHWEST, CROSSING
AG9367'RUNWAY 13-31, THEN TURN RIGHT, NORTHWEST, ALONG THE RUNWAY FOR 0.75 KM
AG9367'(0.45 MI) TO THE STATION JUST BEFORE THE RUNWAY END. THE STATION IS A
AG9367'PUNCH HOLE TOP CENTER OF A STAINLESS STEEL ROD IN A 25 CM GREASE
AG9367'FILLED SLEEVE 90 CM LONG ENCASED IN A 12.7 CM PVC PIPE WITH A LOGO CAP
AG9367'SURROUNDED BY CONCRETE SET FLUSH WITH THE GROUND. IT IS 50.4 M (165.4
AG9367'FT) NORTHEAST OF THE CHAIN-LINK PERIMETER FENCE, 38.3 M (125.7 FT)
AG9367'EAST-SOUTHEAST OF THE REIL, 26.4 M (86.6 FT) SOUTH-SOUTHEAST OF THE
AG9367'SOUTHWEST MOST THRESHOLD LIGHT, AND 13.7 M (44.9 FT) SOUTHWEST OF THE
AG9367'SOUTHWEST EDGE OF THE RUNWAY. DESCRIBED BY D.G. AUG

AG9367

AG9367 STATION RECOVERY (2002)

AG9367

AG9367'RECOVERY NOTE BY US POWER SQUADRON 2002

AG9367'RECOVERED IN GOOD CONDITION.

AG9367

AG9367 STATION RECOVERY (2005)

AG9367

AG9367'RECOVERY NOTE BY FL DEPT OF ENV PRO 2005 (BPJ)

AG9367'RECOVERED IN GOOD CONDITION WITH A NEW TO REACH AS FOLLOWS, TO REACH
AG9367'THE MARK FROM THE JUNCTION OF U.S. HIGHWAY 41 AND STATE ROAD 776 IN
AG9367'SOUTH VENICE, GO NORTHWEST ON U.S. HIGHWAY 41 FOR 2.0 MI TO THE
AG9367'JUNCTION OF U.S. HIGHWAY 41 BYPASS, TURN LEFT AND CONTINUE NORTHWEST
AG9367'ON U.S. HIGHWAY 41 BUSINESS ROUTE (TAMIAMI TRAIL) FOR 0.95 MI TO THE
AG9367'JUNCTION OF AVINEDA DEL CIRCO ON THE LEFT, TURN LEFT AND GO SOUTH ON
AG9367'AVINEDA DEL CIRCO FOR 0.35 MI TO THE JUNCTION OF AIRPORT AVENUE, TURN
AG9367'LEFT AND GO EAST ON AIRPORT AVENUE FO 0.1 MI TO THE JUNCTION OF AN
AG9367'AIRPORT MAINTENANCE ROAD ON THE RIGHT, TURN RIGHT AND GO SOUTH FOR
AG9367'0.05 MI THROUGH A LOCKED GATE, THEN GO SOUTHEAST ACROSS A PARKING AREA
AG9367'FOR 0.05 MI TO THE NORTHEAST END OF RUNWAY END 22, TURN RIGHT AND GO
AG9367'SOUTHWEST ALONG RUNWAY4-22 FOR 0.6 MI TO THE JUNCTION OF RUNWAY 13-31,
AG9367'CONTINUE SOUTHWEST CROSSING RUNWAY 13-31, THEN TURN RIGHT AND GO
AG9367'NORTHWEST ALONG RUNWAY 13-31 FOR 0.45 STOPPING SHORT OF THE END OF THE
AG9367'RUNWAY AND THE MARK IN THE GRASS ON THE SOUTHWEST SIDE OF RUNWAY
AG9367'13-31.

AG9367'

AG9367'NOTE TO OBTAIN ENTRY PERMISSION CONTACT AIRPORT ASSISTANT

AG9367'ADMINISTRATOR BEVERLY C. JAMES AT 150 EAST AIRPORT AVENUE VENICE,

AG9367'FLORIDA. PHONE (941) 486-2711 OR (941) 486-2704.

*** retrieval complete.

Elapsed Time = 00:00:02

The NGS Data Sheet

See file [dsdata.txt](#) for more information about the datasheet.

```
DATABASE = ,PROGRAM = datasheet, VERSION = 7.59
1 National Geodetic Survey, Retrieval Date = MAY 12, 2008
AG1968 *****
AG1968 CBN - This is a Cooperative Base Network Control Station.
AG1968 DESIGNATION - VERNA
AG1968 PID - AG1968
AG1968 STATE/COUNTY- FL/SARASOTA
AG1968 USGS QUAD - OLD MYAKKA (1987)
AG1968
AG1968 *CURRENT SURVEY CONTROL
AG1968
AG1968* NAD 83(2007)- 27 21 55.10823(N) 082 16 05.66402(W) ADJUSTED
AG1968* NAVD 88 - 27.308 (meters) 89.59 (feet) ADJUSTED
AG1968
AG1968 EPOCH DATE - 2002.00
AG1968 X - 762,600.531 (meters) COMP
AG1968 Y - -5,616,864.351 (meters) COMP
AG1968 Z - 2,914,224.548 (meters) COMP
AG1968 LAPLACE CORR- -0.59 (seconds) DEFLEC99
AG1968 ELLIP HEIGHT- 2.694 (meters) (02/10/07) ADJUSTED
AG1968 GEOID HEIGHT- -24.56 (meters) GEOID03
AG1968 DYNAMIC HT - 27.266 (meters) 89.46 (feet) COMP
AG1968
AG1968 ----- Accuracy Estimates (at 95% Confidence Level in cm) -----
AG1968 Type PID Designation North East Ellip
AG1968 -----
AG1968 NETWORK AG1968 VERNA 2.78 2.86 7.66
AG1968 -----
AG1968 MODELED GRAV- 979,125.8 (mgal) NAVD 88
AG1968
AG1968 VERT ORDER - SECOND CLASS 0
AG1968
AG1968.The horizontal coordinates were established by GPS observations
AG1968.and adjusted by the National Geodetic Survey in February 2007.
AG1968
AG1968.The datum tag of NAD 83(2007) is equivalent to NAD 83(NSRS2007).
AG1968.See National Readjustment for more information.
AG1968.The horizontal coordinates are valid at the epoch date displayed above.
AG1968.The epoch date for horizontal control is a decimal equivalence
AG1968.of Year/Month/Day.
AG1968
AG1968.The orthometric height was determined by differential leveling
AG1968.and adjusted in June 1991.
AG1968
AG1968.The X, Y, and Z were computed from the position and the ellipsoidal ht.
AG1968
AG1968.The Laplace correction was computed from DEFLEC99 derived deflections.
AG1968
AG1968.The ellipsoidal height was determined by GPS observations
AG1968.and is referenced to NAD 83.
AG1968
AG1968.The geoid height was determined by GEOID03.
AG1968
AG1968.The dynamic height is computed by dividing the NAVD 88
AG1968.geopotential number by the normal gravity value computed on the
AG1968.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
AG1968.degrees latitude (g = 980.6199 gals.).
AG1968
AG1968.The modeled gravity was interpolated from observed gravity values.
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AG1968
AG1968;
AG1968;SPC FL W      -      335,908.671      173,463.944      MT      0.99994987      -0 07 23.9
AG1968;SPC FL W      -      1,102,060.36      569,106.29      sFT      0.99994987      -0 07 23.9
AG1968;UTM 17        -      3,027,535.644      374,574.521      MT      0.99979419      -0 34 58.9
AG1968
AG1968!              -      Elev Factor      x      Scale Factor =      Combined Factor
AG1968!SPC FL W      -      0.99999958      x      0.99994987 =      0.99994945
AG1968!UTM 17        -      0.99999958      x      0.99979419 =      0.99979377
AG1968
AG1968|-----|
AG1968| PID      Reference Object                      Distance      Geod. Az      |
AG1968|                                     dddmmss.s |
AG1968| AG1967 VERN A RM 1                          52.370 METERS 10742 |
AG1968| AG1966 VERN A RM 2                          53.730 METERS 35417 |
AG1968| AG1519 VERN A 1934 AZ MK 1944              APPROX. 0.7 KM 3582030.9 |
AG1968|-----|
AG1968
AG1968                      SUPERSEDED SURVEY CONTROL
AG1968
AG1968 NAD 83(1999)- 27 21 55.10750(N)      082 16 05.66506(W) AD(      ) B
AG1968 ELLIP H (05/31/01)      2.681 (m)      GP(      ) 5 1
AG1968 NAD 83(1990)- 27 21 55.10606(N)      082 16 05.66443(W) AD(      ) B
AG1968 ELLIP H (09/13/90)      2.790 (m)      GP(      ) 4 1
AG1968 NAD 83(1986)- 27 21 55.10549(N)      082 16 05.67220(W) AD(      ) 1
AG1968 NAD 27      - 27 21 53.94371(N)      082 16 06.34607(W) AD(      ) 1
AG1968 NAVD 88 (05/09/94)      27.31 (m)      89.6 (f) LEVELING      3
AG1968 NGVD 29 (??/??/92)      27.594 (m)      90.53 (f) ADJ UNCH      2 0
AG1968
AG1968.Superseded values are not recommended for survey control.
AG1968.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
AG1968.See file dsdata.txt to determine how the superseded data were derived.
AG1968
AG1968_U.S. NATIONAL GRID SPATIAL ADDRESS: 17RLL7457527536(NAD 83)
AG1968_MARKER: DS = TRIANGULATION STATION DISK
AG1968_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT
AG1968_SP_SET: CONCRETE POST
AG1968_STAMPING: VERN A 1934
AG1968_MARK LOGO: CGS
AG1968_PROJECTION: FLUSH
AG1968_MAGNETIC: M = MARKER EQUIPPED WITH BAR MAGNET
AG1968_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO
AG1968+STABILITY: SURFACE MOTION
AG1968_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
AG1968+SATELLITE: SATELLITE OBSERVATIONS - March 31, 2006
AG1968
AG1968 HISTORY      - Date      Condition      Report By
AG1968 HISTORY      - 1934      MONUMENTED      CGS
AG1968 HISTORY      - 1943      GOOD      CGS
AG1968 HISTORY      - 1948      GOOD      FLDT
AG1968 HISTORY      - 1952      GOOD      USGS
AG1968 HISTORY      - 1963      GOOD      NGS
AG1968 HISTORY      - 1977      GOOD      LOCSUR
AG1968 HISTORY      - 19870625 GOOD
AG1968 HISTORY      - 19890407 GOOD      NGS
AG1968 HISTORY      - 19920930 GOOD      FL-115
AG1968 HISTORY      - 20060331 SEE DESCRIPTION FLDEP
AG1968
AG1968                      STATION DESCRIPTION
AG1968
AG1968'DESCRIBED BY COAST AND GEODETIC SURVEY 1934 (JB)
AG1968'THE STATION IS LOCATED ON THE EAST SIDE OF A MACADAM ROAD IN
AG1968'A FIELD OF SMALL PALMETTOES APPROXIMATELY 0.3 MILE SOUTH OF A
AG1968'CATTLE GAP IN THE HIGHWAY, 16 PACES EAST OF THE CENTER LINE OF

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AG1968'THE HIGHWAY, 15 PACES NORTHEAST OF THE INTERSECTION OF A
AG1968'DRAINAGE DITCH WITH A HIGHWAY DITCH, AND 12 PACES NORTH-NORTHEAST
AG1968'OF A 12-INCH PINE TREE WITH A TRIANGULAR BLAZE. THE
AG1968'MARK PROJECTS 6 INCHES ABOVE GROUND AND IS STAMPED VERN A 1934.
AG1968'
AG1968'TO REACH THE STATION FROM MYAKKA CITY POST OFFICE FOLLOW
AG1968'STATE HIGHWAY 18A WEST FOR 7.1 MILES TO A GROUP OF UNPAINTED
AG1968'BUILDINGS AND A T-ROAD SOUTH (VERNA), TURN SOUTH ON A
AG1968'MACADAM ROAD FOR 1.1 MILES TO A CATTLE GAP IN THE HIGHWAY,
AG1968'AND CONTINUE AHEAD FOR ABOUT 0.3 MILE TO THE STATION.
AG1968'
AG1968'SURFACE, UNDERGROUND, REFERENCE AND AZIMUTH MARKS ARE
AG1968'STANDARD BRONZE DISKS SET IN CONCRETE.
AG1968'
AG1968'REFERENCE MARK NO.1 IS 52.37 METERS SOUTHEAST OF THE STATION,
AG1968'37 PACES SOUTH OF AN 18-INCH PINE TREE WITH A ROSIN BLAZE,
AG1968'AND 32 PACES WEST-NORTHWEST OF A LONE 6-INCH PINE TREE. THE
AG1968'MARK PROJECTS 6 INCHES AND IS STAMPED VERN A NO 1 1934.
AG1968'
AG1968'REFERENCE MARK NO.2 IS 53.73 METERS NORTH-NORTHWEST OF THE
AG1968'STATION, 10 PACES EAST OF THE CENTER LINE OF THE HIGHWAY, AND
AG1968'2 PACES SOUTH OF A LONE 12-INCH PINE TREE. THE MARK PROJECTS 6
AG1968'INCHES AND IS STAMPED VERN A NO 2 1934.
AG1968'
AG1968'AZIMUTH MARK IS APPROXIMATELY 0.3 MILE NORTH OF THE STATION,
AG1968'15 PACES SOUTHWEST OF A CATTLE GAP IN THE HIGHWAY, 9 PACES
AG1968'WEST OF THE CENTER LINE OF THE HIGHWAY, 2 PACES SOUTH OF A
AG1968'WOODEN GATE, AND IN A FENCE LINE. THE MARK PROJECTS 6 INCHES
AG1968'AND IS STAMPED VERN A AZ MK 1934.
AG1968'
AG1968'A 103-FOOT TOWER WILL CLEAR ALL LINES OBSERVED.
AG1968
AG1968 STATION RECOVERY (1943)
AG1968
AG1968'RECOVERY NOTE BY COAST AND GEODETIC SURVEY 1943 (RLS)
AG1968'RECOVERED AS DESCRIBED, EXCEPT FOR THE FOLLOWING DISCREPANCIES--
AG1968'
AG1968'1. THE STATION PROJECTS 3 INCHES ABOVE GROUND, NOT 6 INCHES
AG1968'ABOVE GROUND.
AG1968'
AG1968'2. REFERENCE MARK 1 PROJECTS 3 INCHES ABOVE GROUND, NOT 6
AG1968'INCHES ABOVE GROUND.
AG1968'
AG1968'3. REFERENCE MARK 2 PROJECTS 3 INCHES ABOVE GROUND, NOT 6
AG1968'INCHES ABOVE GROUND.
AG1968'
AG1968'4. AZIMUTH MARK PROJECTS 3 INCHES, NOT 6 INCHES.
AG1968'
AG1968'5. AZIMUTH MARK IS 0.4 MILE N OF STATION, NOT 0.3 MILE.
AG1968
AG1968 STATION RECOVERY (1948)
AG1968
AG1968'RECOVERY NOTE BY FLORIDA DEPARTMENT OF TRANSPORTATION 1948 (WMP)
AG1968'LETTER OF W.M. PARKER, DIV.ENGR., STATE ROAD DEPT. OF FLORIDA,
AG1968'TALLAHASSEE, DATED 11/5/48--
AG1968'
AG1968'THIS MONUMENT AND R.M.S 1 AND 2 WERE RECOVERED AND FOUND TO
AG1968'BE IN GOOD CONDITION.
AG1968'
AG1968'THE CATTLE GAP REFERRED TO IN THE 1934 DESCRIPTION HAS BEEN
AG1968'REMOVED. THE DISTANCE IN THE DESCRIPTION SHOULD READ
AG1968'APPROXIMATELY 0.4 MILE S OF BREAK IN ROAD SURFACE MARKING
AG1968'OLD CATTLE GAP. DISTANCE FROM T-ROAD (STATE HIGHWAY 70)
AG1968'AT VERN A IS APPROXIMATELY 1.51 MI. S. THE TREES REFERRED TO

AG1968'IN THE DESCRIPTION WERE NOT FOUND. NO ATTEMPT WAS MADE TO
AG1968'RECOVER THE AZIMUTH MARK.
AG1968
AG1968 STATION RECOVERY (1952)
AG1968
AG1968'RECOVERY NOTE BY US GEOLOGICAL SURVEY 1952
AG1968'STATION RECOVERED IN GOOD CONDITION.
AG1968
AG1968 STATION RECOVERY (1963)
AG1968
AG1968'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1963
AG1968'8.5 MI W FROM MYAKKA CITY.
AG1968'LOCATED ABOUT 7.0 MILES NORTHWEST ALONG STATE ROAD 70 FROM THE
AG1968'CENTER OF MYAKKA CITY, THENCE SOUTH 1.5 MILE ALONG Verna ROAD,
AG1968'49 FEET EAST OF THE CENTER OF THE ROAD, 150 FEET NORTH OF A
AG1968'POWER POLE, ABOUT 125 FEET NORTHEAST OF THREE PINE TREES WITH
AG1968'TRIANGULAR BLAZES ON THE WEST SIDE OF THE ROAD AND 2 FEET EAST
AG1968'OF A WITNESS SIGN. SET IN THE TOP OF A 12-INCH SQUARE CONCRETE
AG1968'MONUMENT PROJECTING 2 INCHES.
AG1968
AG1968 STATION RECOVERY (1977)
AG1968
AG1968'RECOVERY NOTE BY LOCAL SURVEYOR (INDIVIDUAL OR FIRM) 1977
AG1968'50 FT. EAST OF CENTERLINE OF Verna ROAD. NO CATTLE GAP.
AG1968
AG1968 STATION RECOVERY (1987)
AG1968
AG1968'RECOVERED 1987
AG1968'RECOVERED IN GOOD CONDITION.
AG1968
AG1968 STATION RECOVERY (1989)
AG1968
AG1968'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1989
AG1968'THE STATION WAS RECOVERED IN FAIR CONDITION. THE SOUTH SIDE OF
AG1968'CONCRETE POST IS CHIPPED. THE SOUTH EDGE OF DISK IS DAMAGED.
AG1968'THE STATION IS LOCATED ABOUT 32.67 KM (20.30 MI) NORTHEAST OF VENICE,
AG1968'20.12 KM (12.50 MI) EAST-NORTHEAST OF SARASOTA, 10.14 KM (6.30 MI)
AG1968'WEST OF MYAKKA CITY, IN THE WEST CENTRAL PART OF SECTION 12, T 36 S, R
AG1968'20 E, IN A SMALL CLUMP OF PALMETTO. OWNERSHIP--CITY OF SARASOTA WATER
AG1968'DEPARTMENT, 1750 12TH ST, SARASOTA FL 34236, GENE GAINNEY, PHONE
AG1968'813-322-2370.
AG1968'TO REACH THE STATION FROM THE INTERSECTION OF INTERSTATE HIGHWAY 75
AG1968'AND STATE ROAD 780, ABOUT 8.05 KM (5.00 MI) EAST OF SARASOTA, GO EAST
AG1968'FOR 17.62 KM (10.95 MI) ON STATE ROAD 780 TO A T-JUNCTION. TURN LEFT
AG1968'AND GO NORTH FOR 1.85 KM (1.15 MI) ON Verna ROAD TO A PAVED ROAD
AG1968'RIGHT, SINGLETRARY ROAD. CONTINUE STRAIGHT AHEAD AND GO NORTH FOR 1.58
AG1968'KM (1.00 MI) ON Verna ROAD TO A DIRT ROAD RIGHT. CONTINUE STRAIGHT
AG1968'AHEAD AND GO NORTH FOR ABOUT 100 M (328.1 FT) ON Verna ROAD TO THE
AG1968'STATION ON RIGHT.
AG1968'THE STATION PROJECTS 7 CM ABOVE GROUND. LOCATED 91.59 M (300.5 FT)
AG1968'NORTH FROM A BARBED WIRE FENCE LINE, 47.15 M (154.7 FT)
AG1968'NORTH-NORTHEAST FROM THE FIRST UTILITY POLE THAT IS NORTH FROM A
AG1968'JUNCTION UTILITY POLE, 15.48 M (50.8 FT) EAST FROM THE APPROXIMATE
AG1968'CENTER OF Verna ROAD, 3.93 M (12.9 FT) EAST FROM A CARSONITE WITNESS
AG1968'POST IN BARBED WIRE FENCE LINE AND 0.37 M (1.2 FT) WEST FROM A METAL
AG1968'WITNESS POST.
AG1968'DESCRIBED BY D.F. CALLAHAN.
AG1968
AG1968 STATION RECOVERY (1992)
AG1968
AG1968'RECOVERY NOTE BY SARASOTA COUNTY FLORIDA 1992
AG1968'TO REACH THE STATION FROM THE INTERSECTION OF STATE ROAD 780
AG1968'(FRUITVILLE ROAD) AND Verna ROAD IN SARASOTA COUNTY, GO NORTH ON
AG1968'Verna ROAD, 2.1 MI (3.38 KM) TO THE STATION ON THE RIGHT.

AG1968'THE STATION IS A U. S. COAST AND GEODETIC SURVEY (C.G.S.)
AG1968'TRIANGULATION STATION DISK STAMPED ---VERNA 1934--- SET IN A 12-INCH
AG1968'ROUND CONCRETE MONUMENT THAT IS 6-INCHES BELOW THE GROUND. IT IS 50.7
AG1968'FT (15.45 M) EASTERLY OF THE CENTERLINE OF VERNA ROAD, AND 1.3 FT
AG1968'(0.40 M) WESTERLY OF A SURVEY MARKER WITNESS POST.
AG1968'REFERENCES--
AG1968'REFERENCE MARK NUMBER 1 IS STANDARD SARASOTA COUNTY (SARCO) REFERENCE
AG1968'TAG AND P.K. NAIL SET IN THE EASTERLY EDGE OF ASPHALT PAVEMENT ROAD
AG1968'BED FOR VERNA ROAD. IT IS 45.87 FT (13.98 M) SOUTHWESTERLY OF C.G.S.
AG1968'VERNA, AND 48.32 FT (14.73 M) SOUTHERLY OF SARCO REFERENCE NO. 2.
AG1968'REFERENCE MARK NUMBER 2 IS A STANDARD SARASOTA COUNTY (SARCO)REFERENCE
AG1968'TAG AND P.K. NAIL SET IN THE EASTERLY EDGE OF ASPHALT PAVEMENT ROAD
AG1968'BED FOR VERNA ROAD. IT IS 46.16 FT (14.07 M) NORTHWESTERLY OF C.G.S.
AG1968'VERNA, AND 48.32 FT (14.73 M) NORTHERLY OF SARCO REFERENCE NO. 1.
AG1968
AG1968 STATION RECOVERY (2006)
AG1968
AG1968'RECOVERY NOTE BY FL DEPT OF ENV PRO 2006 (BPJ)
AG1968'RECOVERED IN POOR CONDITION WITH A NEW TO REACH AS FOLLOWS,
AG1968'
AG1968'TO REACH THE MARK FROM THE POST OFFICE IN MYAKKA CITY, GO WEST ON
AG1968'STATE ROAD 70 FOR 7.1 MI TO THE JUNCTION OF VERNA ROAD ON THE LEFT,
AG1968'TURN LEFT ON VERNA ROAD AND GO SOUTH FOR 1.5 MI TO THE MARK ON THE
AG1968'LEFT, SET IN THE TOP OF A CONCRETE MONUMENT FLUSH WITH THE GROUND AND
AG1968'ABOUT 1.0 FT BELOW THE LEVEL OF VERNA ROAD.
AG1968'
AG1968'NOTE THE DISC WAS FOUND CHIPPED ON THE EDGE BUT OK TO LEVEL TO.

*** retrieval complete.
Elapsed Time = 00:00:01

The NGS Data Sheet

See file [dsdata.txt](#) for more information about the datasheet.

```
DATABASE = ,PROGRAM = datasheet, VERSION = 7.59
1 National Geodetic Survey, Retrieval Date = MAY 12, 2008
AG9365 *****
AG9365 CBN - This is a Cooperative Base Network Control Station.
AG9365 DESIGNATION - FLGPS 60
AG9365 PID - AG9365
AG9365 STATE/COUNTY- FL/LEE
AG9365 USGS QUAD - BOKEELIA (1994)
AG9365
AG9365 *CURRENT SURVEY CONTROL
AG9365
AG9365* NAD 83(2007)- 26 42 08.29582(N) 082 09 18.95954(W) ADJUSTED
AG9365* NAVD 88 - 4.348 (meters) 14.27 (feet) ADJUSTED
AG9365
AG9365 EPOCH DATE - 2002.00
AG9365 X - 778,228.848 (meters) COMP
AG9365 Y - -5,648,407.948 (meters) COMP
AG9365 Z - 2,848,778.237 (meters) COMP
AG9365 LAPLACE CORR- -0.46 (seconds) DEFLEC99
AG9365 ELLIP HEIGHT- -19.352 (meters) (02/10/07) ADJUSTED
AG9365 GEOID HEIGHT- -23.74 (meters) GEOID03
AG9365 DYNAMIC HT - 4.341 (meters) 14.24 (feet) COMP
AG9365
AG9365 ----- Accuracy Estimates (at 95% Confidence Level in cm) -----
AG9365 Type PID Designation North East Ellip
AG9365 -----
AG9365 NETWORK AG9365 FLGPS 60 0.78 0.96 2.20
AG9365 -----
AG9365 MODELED GRAV- 979,099.8 (mgal) NAVD 88
AG9365
AG9365 VERT ORDER - SECOND CLASS II
AG9365
AG9365.The horizontal coordinates were established by GPS observations
AG9365.and adjusted by the National Geodetic Survey in February 2007.
AG9365
AG9365.The datum tag of NAD 83(2007) is equivalent to NAD 83(NSRS2007).
AG9365.See National Readjustment for more information.
AG9365.The horizontal coordinates are valid at the epoch date displayed above.
AG9365.The epoch date for horizontal control is a decimal equivalence
AG9365.of Year/Month/Day.
AG9365
AG9365.The orthometric height was determined by differential leveling
AG9365.and adjusted in May 2001.
AG9365
AG9365.The X, Y, and Z were computed from the position and the ellipsoidal ht.
AG9365
AG9365.The Laplace correction was computed from DEFLEC99 derived deflections.
AG9365
AG9365.The ellipsoidal height was determined by GPS observations
AG9365.and is referenced to NAD 83.
AG9365
AG9365.The geoid height was determined by GEOID03.
AG9365
AG9365.The dynamic height is computed by dividing the NAVD 88
AG9365.geopotential number by the normal gravity value computed on the
AG9365.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
AG9365.degrees latitude (g = 980.6199 gals.).
AG9365
AG9365.The modeled gravity was interpolated from observed gravity values.
```

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AG9365
AG9365;
AG9365;SPC FL W      -      North      East      Units Scale Factor Converg.
AG9365;SPC FL W      -      262,430.373  184,549.561  MT    0.99994412  -0 04 11.2
AG9365;SPC FL W      -      860,990.32   605,476.35   sFT    0.99994412  -0 04 11.2
AG9365;UTM 17        -      2,953,984.092  385,075.056  MT    0.99976306   -0 31 09.1
AG9365
AG9365!              -      Elev Factor x  Scale Factor =  Combined Factor
AG9365!SPC FL W      -      1.00000304 x  0.99994412 =  0.99994716
AG9365!UTM 17        -      1.00000304 x  0.99976306 =  0.99976610
AG9365
AG9365:              Primary Azimuth Mark                      Grid Az
AG9365:SPC FL W      -      FLGPS 60 AZ MK                      155 37 34.8
AG9365:UTM 17        -      FLGPS 60 AZ MK                      156 04 32.7
AG9365
AG9365|-----|
AG9365| PID      Reference Object                      Distance      Geod. Az |
AG9365|                                     dddmmss.s |
AG9365| AG9376 FLGPS 60 AZ MK                      APPROX. 1.4 KM 1553323.6 |
AG9365|-----|
AG9365
AG9365              SUPERSEDED SURVEY CONTROL
AG9365
AG9365 NAD 83(1999)- 26 42 08.29607(N)      082 09 18.96020(W) AD(      ) B
AG9365 ELLIP H (05/31/01) -19.338 (m)          GP(      ) 5 1
AG9365 NAD 83(1990)- 26 42 08.29444(N)      082 09 18.95948(W) AD(      ) B
AG9365 ELLIP H (09/13/90) -19.308 (m)          GP(      ) 4 1
AG9365 NAVD 88 (05/20/05) 4.35 (m)           14.3 (f) LEVELING 3
AG9365 NGVD 29 (09/01/92) 4.710 (m)           15.45 (f) ADJUSTED 2 2
AG9365
AG9365.Superseded values are not recommended for survey control.
AG9365.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
AG9365.See file dsdata.txt to determine how the superseded data were derived.
AG9365
AG9365_U.S. NATIONAL GRID SPATIAL ADDRESS: 17RLK8507553984(NAD 83)
AG9365_MARKER: DH = HORIZONTAL CONTROL DISK
AG9365_SETTING: 30 = SET IN A LIGHT STRUCTURE
AG9365_SP_SET: CONCRETE BRIDGE GUARDRAIL
AG9365_STAMPING: FLGPS 60 1989
AG9365_MARK LOGO: NGS
AG9365_MAGNETIC: N = NO MAGNETIC MATERIAL
AG9365_STABILITY: D = MARK OF QUESTIONABLE OR UNKNOWN STABILITY
AG9365_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
AG9365+SATELLITE: SATELLITE OBSERVATIONS - February 15, 2005
AG9365
AG9365 HISTORY      - Date      Condition      Report By
AG9365 HISTORY      - 1989      MONUMENTED      NGS
AG9365 HISTORY      - 19890714 GOOD              FLDNR
AG9365 HISTORY      - 19901218 GOOD
AG9365 HISTORY      - 19920901 GOOD              DENI
AG9365 HISTORY      - 20050215 GOOD              FLDEP
AG9365
AG9365              STATION DESCRIPTION
AG9365
AG9365'DESCRIBED BY NATIONAL GEODETIC SURVEY 1989
AG9365'THE STATION IS LOCATED IN THE NORTHEAST END OF BRIDGE OVER JUG CREEK
AG9365'OF COUNTY ROAD 767 (H. STRING FELLOW ROAD) IN BOKEELIA, 29 KM
AG9365'(18.00 MI) NORTHWEST OF FORT MYERS, ON THE NORTH END OF PINE ISLAND,
AG9365'IN SECTION 30, T 44 S, R 22 E. OWNERSHIP--LEE COUNTY.
AG9365'TO REACH THE STATION FROM THE COUNTY ROAD 767 BRIDGE OVER JUG CREEK IN
AG9365'BOKEELIA, GO TO THE NORTHEAST END OF BRIDGE AND THE STATION SET IN THE
AG9365'HEADWALL.
AG9365'LOCATED 6.6 M (21.7 FT) NORTHEAST OF THE CENTERLINE OF COUNTY ROAD
AG9365'767, 20.1 M (65.9 FT) SOUTH OF POWERLINE POLE NO. 251, 20.8 M
AG9365'(68.2 FT) SOUTH OF BOKEELIA ROAD SIGN AND 0.61 M (2.0 FT) SOUTH OF A

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AG9365'CARSONITE WITNESS POST.
AG9365'DESCRIBED BY R.L. MALLOY.
AG9365
AG9365 STATION RECOVERY (1989)
AG9365
AG9365'RECOVERY NOTE BY FL DEPT OF NAT RES 1989
AG9365'RECOVERED IN GOOD CONDITION.
AG9365
AG9365 STATION RECOVERY (1990)
AG9365
AG9365'RECOVERED 1990
AG9365'RECOVERED IN GOOD CONDITION.
AG9365
AG9365 STATION RECOVERY (1992)
AG9365
AG9365'RECOVERY NOTE BY DENI ASSOCIATES INCORPORATED 1992
AG9365'RECOVERED IN GOOD CONDITION.
AG9365
AG9365 STATION RECOVERY (2005)
AG9365
AG9365'RECOVERY NOTE BY FL DEPT OF ENV PRO 2005 (RWH)
AG9365'RECOVERED IN GOOD CONDITION, WITH THE FOLLOWING CHANGE, THE MARK IS
AG9365'SET ATOP THE NORTHEAST CONCRETE BRIDGE GUARDRAIL, NOT IN THE BRIDGE
AG9365'HEADWALL, THE MARK IS 3 FT ABOVE THE ROADWAY.

*** retrieval complete.
Elapsed Time = 00:00:02

The NGS Data Sheet

See file [dsdata.txt](#) for more information about the datasheet.

```
DATABASE = ,PROGRAM = datasheet, VERSION = 7.59
1 National Geodetic Survey, Retrieval Date = MAY 12, 2008
AG8045 *****
AG8045 DESIGNATION - I75 83 A01
AG8045 PID - AG8045
AG8045 STATE/COUNTY- FL/SARASOTA
AG8045 USGS QUAD - MURDOCK SE (1987)
AG8045
AG8045 *CURRENT SURVEY CONTROL
AG8045
AG8045* NAD 83(2007)- 27 03 34.76004(N) 082 05 04.93571(W) ADJUSTED
AG8045* NAVD 88 - 13.735 (meters) 45.06 (feet) ADJUSTED
AG8045
AG8045 EPOCH DATE - 2002.00
AG8045 X - 782,720.287 (meters) COMP
AG8045 Y - -5,629,721.308 (meters) COMP
AG8045 Z - 2,884,098.902 (meters) COMP
AG8045 LAPLACE CORR- -1.23 (seconds) DEFLEC99
AG8045 ELLIP HEIGHT- -10.399 (meters) (02/10/07) ADJUSTED
AG8045 GEOID HEIGHT- -24.12 (meters) GEOID03
AG8045 DYNAMIC HT - 13.714 (meters) 44.99 (feet) COMP
AG8045
AG8045 ----- Accuracy Estimates (at 95% Confidence Level in cm) -----
AG8045 Type PID Designation North East Ellip
AG8045 -----
AG8045 NETWORK AG8045 I75 83 A01 2.21 2.43 5.59
AG8045 -----
AG8045 MODELED GRAV- 979,119.7 (mgal) NAVD 88
AG8045
AG8045 VERT ORDER - SECOND CLASS II
AG8045
AG8045.The horizontal coordinates were established by GPS observations
AG8045.and adjusted by the National Geodetic Survey in February 2007.
AG8045
AG8045.The datum tag of NAD 83(2007) is equivalent to NAD 83(NSRS2007).
AG8045.See National Readjustment for more information.
AG8045.The horizontal coordinates are valid at the epoch date displayed above.
AG8045.The epoch date for horizontal control is a decimal equivalence
AG8045.of Year/Month/Day.
AG8045
AG8045.The orthometric height was determined by differential leveling
AG8045.and adjusted in June 1991.
AG8045
AG8045.The X, Y, and Z were computed from the position and the ellipsoidal ht.
AG8045
AG8045.The Laplace correction was computed from DEFLEC99 derived deflections.
AG8045
AG8045.The ellipsoidal height was determined by GPS observations
AG8045.and is referenced to NAD 83.
AG8045
AG8045.The geoid height was determined by GEOID03.
AG8045
AG8045.The dynamic height is computed by dividing the NAVD 88
AG8045.geopotential number by the normal gravity value computed on the
AG8045.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
AG8045.degrees latitude (g = 980.6199 gals.).
AG8045
AG8045.The modeled gravity was interpolated from observed gravity values.
AG8045
```


AG8045'-- , SET IN TOP OF A ROUND CONCRETE MONUMENT THAT IS 5 INCHES BELOW
AG8045'GROUND. IT IS 4.0 FEET SOUTHEAST OF METAL WITNESS POST, 6.0 FEET
AG8045'SOUTHEAST OF CONCRETE ABUTMENT, 37.0 FEET SOUTHWEST OF METAL GUARD
AG8045'RAIL, 36.5 FEET SOUTHWEST OF SOUTHEAST END OF BRIDGE RAIL AND 56.0
AG8045'FEET SOUTHWEST OF CENTERLINE OF INTERSTATE ROUTE 75 NORTHBOUND LANE.
AG8045'
AG8045'REFERENCE MARK NUMBER 1 IS A FLORIDA DEPARTMENT OF TRANSPORTATION
AG8045'BRASS DISK, STAMPED---I75 83 A01 RM NO 1---, SET IN DRILL HOLE IN
AG8045'CONCRETE BRIDGE GUARD RAIL. IT IS 3.3 FEET NORTHWEST OF SOUTHEAST OF
AG8045'NORTHBOUND LANE WEST BRIDGE RAIL, 9.8 FEET SOUTHEAST OF EXPANSION
AG8045'JOINT IN BRIDGE RAIL AND 19.5 FEET SOUTHWEST OF CENTERLINE OF NORTH
AG8045'BOUND LANE.
AG8045'
AG8045'REFERENCE MARK NUMBER 2 IS A FLORIDA DEPARTMENT OF TRANSPORTATION
AG8045'BRASS DISK, STAMPED---I75 83 A02 RM NO 2---, SET FLUSH IN DRILL HOLE
AG8045'IN TOP OF CONCRETE BRIDGE RAIL. IT IS 4.0 FEET NORTHWEST OF SOUTHEAST
AG8045'END OF SOUTHBOUND LANE EAST BRIDGE RAIL, 9.0 FEET SOUTHEAST OF AN
AG8045'EXPANSION JOINT IN BRIDGE RAIL AND 19.5 FEET NORTHEAST OF CENTERLINE
AG8045'I75 SOUTHBOUND LANE.
AG8045
AG8045 STATION RECOVERY (1983)
AG8045
AG8045'RECOVERY NOTE BY FLORIDA DEPARTMENT OF TRANSPORTATION 1983
AG8045'23.8 MI SE FROM VENICE.
AG8045'FROM THE INTERSECTION OF INTERSTATE ROUTE 75 AND VENICE EAST ROAD,
AG8045'ABOUT 4.0 MILES EAST OF VENICE, GO EASTERLY ALONG INTERSTATE ROUTE 75
AG8045'FOR 16.0 MILES TO THE POINT WHERE THE INTERSTATE TURNS SOUTHEAST,
AG8045'CONTINUE SOUTHEAST ALONG THE INTERSTATE FOR 3.8 MILES TO THE YORKSHIRE
AG8045'STREET UNDERPASS AND THE MARK. IT IS 56.0 FEET SOUTHWEST OF THE
AG8045'CENTER OF INTERSTATE ROUTE 75 NORTHBOUND LANES, 37.0 FEET SOUTHWEST OF
AG8045'THE METAL GUARDRAIL, 36.5 FEET SOUTHWEST OF THE SOUTHEAST END OF THE
AG8045'SOUTHWEST CONCRETE GUARDRAIL OF THE NORTHBOUND BRIDGE, 6.0 FEET
AG8045'SOUTHEAST OF THE SOUTHEAST CONCRETE GUARDWALL BETWEEN THE BRIDGES.
AG8045'THE MARK IS 4.0 FT SE FROM A WITNESS POST.
AG8045
AG8045 STATION RECOVERY (1992)
AG8045
AG8045'RECOVERY NOTE BY SARASOTA COUNTY FLORIDA 1992
AG8045'TO REACH THE STATION FROM THE INTERSECTION OF STATE ROAD 769 (KINGS
AG8045'HIGHWAY) AND THE NORTHBOUND LANE OF INTERSTATE 75 IN CHARLOTTE COUNTY
AG8045', GO NORTHWESTERLY ON INTERSTATE 75, 3.5 MI (5.63 KM) TO THE STATION
AG8045'ON THE LEFT.
AG8045'THE STATION IS A FLDT SURVEY DISK STAMPED ---I75 83 A01--- SET IN A
AG8045'12-INCH ROUND CONCRETE MONUMENT THAT IS 6-INCHES BELOW THE GROUND. IT
AG8045'IS 40.6 FT (12.37 M) NORTHEAST OF THE NORTHEAST EDGE OF PAVEMENT OF
AG8045'THE SOUTHBOUND LANE OF INTERSTATE 75 AND 5.9 FT (1.80 M) SOUTHEAST OF
AG8045'THE SOUTHERLY CONCRETE RETAINING WALL OF NORTH YORKSHIRE BOULEVARD
AG8045'AND INTERSTATE 75 OVERPASS.
AG8045'REFERENCES--
AG8045'FLDT DISK STAMPED ---I75 83 A01 RM NO 1--- SET IN THE TOP OF A
AG8045'CONCRETE RETAINING WALL, 37.77 FT (11.51 M) NORTHWEST OF THE STATION.
AG8045'FLDT DISK STAMPED ---I75 83 A01 RM NO 2--- SET IN THE TOP OF A
AG8045'CONCRETE RETAINING WALL, 38.20 FT (11.64 M) SOUTHWEST OF THE STATION.
AG8045
AG8045 STATION RECOVERY (2001)
AG8045
AG8045'RECOVERY NOTE BY US POWER SQUADRON 2001 (MDB)
AG8045'RECOVERED IN GOOD CONDITION.

*** retrieval complete.
Elapsed Time = 00:00:01

The NGS Data Sheet

See file [dsdata.txt](#) for more information about the datasheet.

```
DATABASE = ,PROGRAM = datasheet, VERSION = 7.59
1 National Geodetic Survey, Retrieval Date = MAY 12, 2008
AG8407 *****
AG8407 DESIGNATION - MANAT RM 4
AG8407 PID - AG8407
AG8407 STATE/COUNTY- FL/MANATEE
AG8407 USGS QUAD - BRADENTON (1987)
AG8407
AG8407 *CURRENT SURVEY CONTROL
AG8407
AG8407* NAD 83(1990)- 27 27 55.48205(N) 082 31 49.02450(W) ADJUSTED
AG8407* NAVD 88 - 9.396 (meters) 30.83 (feet) ADJUSTED
AG8407
AG8407 LAPLACE CORR- -1.43 (seconds) DEFLEC99
AG8407 GEOID HEIGHT- -24.47 (meters) GEOID03
AG8407 DYNAMIC HT - 9.382 (meters) 30.78 (feet) COMP
AG8407 MODELED GRAV- 979,137.7 (mgal) NAVD 88
AG8407
AG8407 HORZ ORDER - SECOND
AG8407 VERT ORDER - SECOND CLASS II
AG8407
AG8407.The horizontal coordinates were established by classical geodetic methods
AG8407.and adjusted by the National Geodetic Survey in May 1991.
AG8407
AG8407.The orthometric height was determined by differential leveling
AG8407.and adjusted in June 1991.
AG8407
AG8407.The Laplace correction was computed from DEFLEC99 derived deflections.
AG8407
AG8407.The geoid height was determined by GEOID03.
AG8407
AG8407.The dynamic height is computed by dividing the NAVD 88
AG8407.geopotential number by the normal gravity value computed on the
AG8407.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
AG8407.degrees latitude (g = 980.6199 gals.).
AG8407
AG8407.The modeled gravity was interpolated from observed gravity values.
AG8407
AG8407; North East Units Scale Factor Converg.
AG8407;SPC FL W - 347,083.847 147,587.727 MT 0.99997507 -0 14 40.5
AG8407;SPC FL W - 1,138,724.25 484,210.73 sFT 0.99997507 -0 14 40.5
AG8407;UTM 17 - 3,038,917.034 348,792.168 MT 0.99988223 -0 42 21.3
AG8407
AG8407! - Elev Factor x Scale Factor = Combined Factor
AG8407!SPC FL W - 1.00000237 x 0.99997507 = 0.99997744
AG8407!UTM 17 - 1.00000237 x 0.99988223 = 0.99988460
AG8407
AG8407 SUPERSEDED SURVEY CONTROL
AG8407
AG8407 NAD 83(1986)- 27 27 55.48635(N) 082 31 49.03940(W) AD( ) 2
AG8407 NGVD 29 (09/25/89) 9.89 (m) 32.4 (f) LEVELING 3
AG8407
AG8407.Superseded values are not recommended for survey control.
AG8407.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
AG8407.See file dsdata.txt to determine how the superseded data were derived.
AG8407
AG8407_U.S. NATIONAL GRID SPATIAL ADDRESS: 17RLL4879238917(NAD 83)
AG8407_MARKER: DR = REFERENCE MARK DISK
AG8407_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT
```

AG8407_SP_SET: CONCRETE POST
AG8407_STAMPING: MANAT NO 4 1934 1985
AG8407_MARK LOGO: NGS
AG8407_PROJECTION: PROJECTING 3 CENTIMETERS
AG8407_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO
AG8407+STABILITY: SURFACE MOTION

AG8407

AG8407	HISTORY	- Date	Condition	Report By
AG8407	HISTORY	- 1985	MONUMENTED	NGS
AG8407	HISTORY	- 1985	GOOD	FLDT

AG8407

AG8407 STATION DESCRIPTION

AG8407

AG8407'DESCRIBED BY FLORIDA DEPARTMENT OF TRANSPORTATION 1985

AG8407'2.35 MI SE FROM BRADENTON.

AG8407'FROM THE INTERSECTION OF INTERSTATE ROUTE 75 AND STATE ROAD 70, ABOUT
AG8407'8.0 MILES SOUTHEAST OF BRADENTON, GO WEST ON STATE ROAD 70 FOR ABOUT
AG8407'3.75 MILES TO THE INTERSECTION OF 33RD STREET EAST, GO NORTH ON 33RD
AG8407'STREET EAST FOR 0.2 MILE TO THE INTERSECTION OF 51ST AVENUE EAST, GO
AG8407'WEST ON 51ST AVENUE EAST FOR 0.3 MILE TO THE INTERSECTION OF 30TH
AG8407'STREET EAST, GO NORTH ON 30TH STREET EAST FOR 1.0 MILE TO THE
AG8407'INTERSECTION OF 38TH AVENUE EAST, GO WEST ON 38TH AVENUE EAST FOR
AG8407'0.25 MILE TO THE INTERSECTION OF 27TH STREET EAST AND THE MARK. IT
AG8407'IS 120.5 FEET SOUTHWEST OF A UTILITY POLE, 25.0 FEET WEST OF THE
AG8407'PROJECTED CENTER OF 27TH STREET EAST, 82.0 FEET SOUTH OF THE CENTER
AG8407'OF 38TH AVENUE EAST AND 3.0 FEET EAST OF THE NORTHWEST CORNER OF A
AG8407'CHAIN LINK FENCE.

AG8407'THE MARK IS 0.5 FT N FROM A WITNESS POST.

*** retrieval complete.

Elapsed Time = 00:00:00

The NGS Data Sheet

See file [dsdata.txt](#) for more information about the datasheet.

```
DATABASE = ,PROGRAM = datasheet, VERSION = 7.59
1 National Geodetic Survey, Retrieval Date = MAY 12, 2008
AG1623 *****
AG1623 DESIGNATION - PUNTA GORDA ASTRO RESET
AG1623 PID - AG1623
AG1623 STATE/COUNTY- FL/CHARLOTTE
AG1623 USGS QUAD - PUNTA GORDA (1987)
AG1623
AG1623 *CURRENT SURVEY CONTROL
AG1623
AG1623* NAD 83(2007)- 26 56 10.42796(N) 082 03 08.50821(W) ADJUSTED
AG1623* NAVD 88 - 1.574 (meters) 5.16 (feet) ADJUSTED
AG1623
AG1623 EPOCH DATE - 2002.00
AG1623 X - 786,754.823 (meters) COMP
AG1623 Y - -5,635,416.660 (meters) COMP
AG1623 Z - 2,871,907.858 (meters) COMP
AG1623 LAPLACE CORR- -1.29 (seconds) DEFLEC99
AG1623 ELLIP HEIGHT- -22.434 (meters) (02/10/07) ADJUSTED
AG1623 GEOID HEIGHT- -24.02 (meters) GEOID03
AG1623 DYNAMIC HT - 1.571 (meters) 5.15 (feet) COMP
AG1623
AG1623 ----- Accuracy Estimates (at 95% Confidence Level in cm) -----
AG1623 Type PID Designation North East Ellip
AG1623 -----
AG1623 NETWORK AG1623 PUNTA GORDA ASTRO RESET 1.14 1.14 2.23
AG1623 -----
AG1623 MODELED GRAV- 979,114.0 (mgal) NAVD 88
AG1623
AG1623 VERT ORDER - FIRST CLASS I
AG1623
AG1623.The horizontal coordinates were established by GPS observations
AG1623.and adjusted by the National Geodetic Survey in February 2007.
AG1623
AG1623.The datum tag of NAD 83(2007) is equivalent to NAD 83(NSRS2007).
AG1623.See National Readjustment for more information.
AG1623.The horizontal coordinates are valid at the epoch date displayed above.
AG1623.The epoch date for horizontal control is a decimal equivalence
AG1623.of Year/Month/Day.
AG1623
AG1623.The orthometric height was determined by differential leveling
AG1623.and adjusted in June 1991.
AG1623.WARNING-Repeat measurements at this control monument indicate possible
AG1623.vertical movement.
AG1623
AG1623.The X, Y, and Z were computed from the position and the ellipsoidal ht.
AG1623
AG1623.The Laplace correction was computed from DEFLEC99 derived deflections.
AG1623
AG1623.The ellipsoidal height was determined by GPS observations
AG1623.and is referenced to NAD 83.
AG1623
AG1623.The geoid height was determined by GEOID03.
AG1623
AG1623.The dynamic height is computed by dividing the NAVD 88
AG1623.geopotential number by the normal gravity value computed on the
AG1623.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
AG1623.degrees latitude (g = 980.6199 gals.).
AG1623
```

AG1623.The modeled gravity was interpolated from observed gravity values.

AG1623

	North	East	Units	Scale Factor	Converg.
AG1623;SPC FL W	- 288,339.634	194,800.054	MT	0.99994151	-0 01 25.4
AG1623;SPC FL W	- 945,994.28	639,106.51	sFT	0.99994151	-0 01 25.4
AG1623;UTM 17	- 2,979,806.814	395,527.248	MT	0.99973474	-0 28 36.3

AG1623

	Elev Factor	x	Scale Factor	=	Combined Factor
AG1623!SPC FL W	- 1.00000352	x	0.99994151	=	0.99994503
AG1623!UTM 17	- 1.00000352	x	0.99973474	=	0.99973826

AG1623

	Primary Azimuth Mark	Grid Az
AG1623:SPC FL W	- PUNTA GORDA FLA PWR AND LT	118 45 24.0
AG1623:UTM 17	- PUNTA GORDA FLA PWR AND LT	119 12 34.9

AG1623

PID	Reference Object	Distance	Geod. Az
AG1623	AG0747 PUNTA GORDA FLA PWR AND LT	APPROX. 0.6 KM	1184358.6
AG1623	AG1071 CIVIC	255.903 METERS	29858

AG1623

SUPERSEDED SURVEY CONTROL

	NAD 83(1999)-	26 56 10.42796(N)	082 03 08.50832(W)	AD()	1
AG1623	ELLIP H (07/06/01)	-22.445 (m)		GP()	4 2
AG1623	NAD 83(1990)-	26 56 10.42650(N)	082 03 08.50779(W)	AD()	1
AG1623	ELLIP H (11/12/93)	-22.417 (m)		GP()	4 1
AG1623	NAD 83(1990)-	26 56 10.42684(N)	082 03 08.50586(W)	AD()	3
AG1623	NAD 83(1986)-	26 56 10.42689(N)	082 03 08.52042(W)	AD()	3
AG1623	NAD 27	- 26 56 09.20637(N)	082 03 09.19971(W)	AD()	3
AG1623	NAVD 88 (11/12/93)	1.57 (m)	5.2 (f)	LEVELING	3
AG1623	NGVD 29 (??/??/92)	1.92 (m)	6.3 (f)	COMPUTED	1 1

AG1623

AG1623.Superseded values are not recommended for survey control.

AG1623.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.

AG1623.[See file dsdata.txt](#) to determine how the superseded data were derived.

AG1623

AG1623_U.S. NATIONAL GRID SPATIAL ADDRESS: 17RLK9552779807(NAD 83)

AG1623_MARKER: DS = TRIANGULATION STATION DISK

AG1623_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT

AG1623_SP_SET: CONCRETE POST

AG1623_STAMPING: PUNTA GORDA ASTRONOMIC 1909 1943 1974

AG1623_MARK LOGO: CGS

AG1623_PROJECTION: PROJECTING 33 CENTIMETERS

AG1623_MAGNETIC: N = NO MAGNETIC MATERIAL

AG1623_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO

AG1623+STABILITY: SURFACE MOTION

AG1623_SATELLITE: THE SITE LOCATION WAS REPORTED AS NOT SUITABLE FOR

AG1623+SATELLITE: SATELLITE OBSERVATIONS - February 18, 2006

AG1623

	HISTORY	- Date	Condition	Report By
AG1623	HISTORY	- 1974	MONUMENTED	NGS
AG1623	HISTORY	- 1981	GOOD	NOS
AG1623	HISTORY	- 1989	GOOD	USPSQD
AG1623	HISTORY	- 19920804	MARK NOT FOUND	USPSQD
AG1623	HISTORY	- 19920805	GOOD	DENI
AG1623	HISTORY	- 20051011	GOOD	FLDEP
AG1623	HISTORY	- 20060218	GOOD	FLDEP

AG1623

STATION DESCRIPTION

AG1623

AG1623'DESCRIBED BY NATIONAL GEODETIC SURVEY 1974

AG1623'AT PUNTA GORDA.

AG1623'AT PUNTA GORDA, IN THE NORTHWEST ANGLE OF INTERSECTION OF TAYLOR
AG1623'STREET AND WEST RETTA ESPLANADE STREET, ON CITY PROPERTY SOUTHEAST
AG1623'OF THE CHARLOTTE COUNTY MEMORIAL AUDITORIUM, 103 FEET
AG1623'EAST-SOUTHEAST OF THE SOUTHEAST CORNER OF THE AUDITORIUM, 103
AG1623'FEET EAST-SOUTHEAST OF THE SOUTHEAST CORNER OF THE AUDITORIUM,
AG1623'65.5 FEET WEST OF THE JUNCTION OF TAYLOR STREET AND WEST RETTA
AG1623'ESPLANADE STREET, 49.5 FEET SOUTHWEST OF THE CENTER OF TAYLOR
AG1623'STREET, 42.5 FEET NORTHWEST OF THE CENTER OF WEST RETTA ESPLANADE
AG1623'STREET, 18 FEET SOUTH OF A 36-INCH CEDAR TREE AND 1 FOOT WEST
AG1623'OF A METAL WITNESS POST. A DISK SET IN THE TOP OF A CONCRETE
AG1623'MONUMENT 1.5 FEET BY 2 FEET AND PROJECTS 2 FEET ABOVE THE
AG1623'GROUND SURFACE.

AG1623

AG1623

STATION RECOVERY (1981)

AG1623

AG1623'RECOVERY NOTE BY NATIONAL OCEAN SERVICE 1981 (RHH)

AG1623'THE STATION IS LOCATED IN PUNTA GORDA NEAR THE JUNCTION OF TAYLOR
AG1623'STREET AND WEST RETTA ESPLANADE STREET. THERE IS NO ORIGINAL
AG1623'DESCRIPTION, THEREFORE A COMPLETE NEW DESCRIPTION FOLLOWS. THE
AG1623'SECOND-ORDER NO CHECK POSITION APPEARS TO BE IN ERROR AND A
AG1623'THIRD-ORDER POSITION WAS SET ON THE STATION AT THIS TIME. THE
AG1623'STATION AND RM 1 ARE ALSO BENCH MARKS.

AG1623'

AG1623'TO REACH THE STATION FROM THE CHARLOTTE COUNTY COURTHOUSE IN PUNTA
AG1623'GORDA ON TAYLOR STREET, GO 0.3 KM (0.2 MILES) NORTHWEST ON TAYLOR
AG1623'STREET TO ITS JUNCTION WITH WEST RETTA ESPLANADE STREET AND THE
AG1623'STATION IN THE NORTHWEST CORNER OF THE INTERSECTION.

AG1623'

AG1623'THE STATION IS A STANDARD NGS DISK

AG1623'STAMPED---PUNTA GORDA ASTRONOMIC 1909 1943 1974---,

AG1623'SET INTO THE TOP OF A SQUARE CONCRETE MONUMENT 60 CM ON A SIDE

AG1623'PROJECTING 120 CM ABOVE THE GROUND. IT IS LOCATED

AG1623'15.8 METERS (52 FT) SOUTHWEST FROM THE CENTERLINE OF TAYLOR STREET,

AG1623'13.56 METERS (44.5 FT) NORTHWEST FROM THE CENTERLINE OF WEST

AG1623'RETTA ESPLANADE STREET, AND

AG1623'5.5 METERS (18 FT) SOUTH FROM A 120 CM AUSTRALIAN PINE TREE.

AG1623'

AG1623'REFERENCE MARK NO 1 IS A STANDARD NGS DISK

AG1623'STAMPED---PUNTA GORDA ASTRONOMIC RM NO 1 1909 1943---,

AG1623'SET INTO THE TOP OF AND FLUSH WITH THE SIDEWALK.

AG1623'IT IS LOCATED 21.73 METERS (71.3 FT) SOUTHEAST FROM THE STATION,

AG1623'12.8 METERS (42.0 FT) SOUTHWEST FROM THE CENTERLINE OF TAYLOR STREET,

AG1623'7.99 METERS (26.2 FT) SOUTHEAST FROM THE CENTERLINE OF WEST

AG1623'RETTA ESPLANADE STREET, AND 0.3 METERS (1.0 FT) SOUTH FROM

AG1623'THE EDGE OF THE SIDEWALK.

AG1623'

AG1623'HEIGHT OF LIGHT SHOWN ABOVE THE MARK WAS 1.17 METERS.

AG1623

AG1623

STATION RECOVERY (1989)

AG1623

AG1623'RECOVERY NOTE BY US POWER SQUADRON 1989 (AEI)

AG1623'RECOVERED IN GOOD CONDITION.

AG1623

AG1623

STATION RECOVERY (1992)

AG1623

AG1623'RECOVERY NOTE BY US POWER SQUADRON 1992 (CIH)

AG1623'MARK NOT FOUND.

AG1623

AG1623

STATION RECOVERY (1992)

AG1623

AG1623'RECOVERY NOTE BY DENI ASSOCIATES INCORPORATED 1992

AG1623'RECOVERED IN GOOD CONDITION.

AG1623

AG1623

STATION RECOVERY (2005)

AG1623

AG1623'RECOVERY NOTE BY FL DEPT OF ENV PRO 2005 (BPJ)

AG1623'THE MARK IS IN PUNTA GORDA, IN SECTION 6, TOWNSHIP 41 SOUTH, RANGE 23
AG1623'EAST.

AG1623'

AG1623'TO REACH THE MARK FROM THE INTERSECTION OF U.S. HIGHWAY 17 NORTHBOUND
AG1623'(OLYMPIA AVENUE) AND U.S. HIGHWAY 41 NORTHBOUND IN PUNTA GORDA, GO
AG1623'SOUTHWEST ON WEST OLYMPIA AVENUE FOR 0.1 MI TO THE INTERSECTION OF
AG1623'TAYLOR STREET, TURN RIGHT ON TAYLOR STREET AND GO NORTHWEST FOR 0.2
AG1623'MI TO THE JUNCTION OF WEST RETTA ESPLANADE ON THE LEFT AND THE MARK
AG1623'ON THE LEFT, SET IN THE TOP OF A RECTANGULAR CONCRETE MONUMENT
AG1623'PROJECTING 1.3 FT ABOVE THE LEVEL OF THE GROUND AND ABOUT 2.5 FT
AG1623'ABOVE THE LEVEL OF WEST RETTA ESPLANADE.

AG1623'

AG1623'LOCATED 53.2 FT SOUTHWEST OF THE APPROXIMATE CENTERLINE OF TAYLOR
AG1623'STREET, 43.6 FT NORTHWEST OF THE APPROXIMATE CENTERLINE OF WEST RETTA
AG1623'ESPLANADE, 30.8 FT SOUTHWEST OF AN UNSTAMPED NGS REFERENCE MARK DISK
AG1623'AND 1.3 FT WEST OF A METAL WITNESS POST. NOTE REFERENCE MARK NO 1 WAS
AG1623'NOT FOUND BECAUSE THERE WAS A NEW SIDEWALK AND PAVING BRICKS
AG1623'INSTALLED, BUT AN UNSTAMPED NGS REFERENCE MARK WAS FOUND IN THE WEST
AG1623'CURB OF TAYLOR STREET IN THE NORTHWEST CORNER OF THE INTERSECTION.

AG1623

AG1623 STATION RECOVERY (2006)

AG1623

AG1623'RECOVERY NOTE BY FL DEPT OF ENV PRO 2006 (BPJ)

AG1623'RECOVERED AS DESCRIBED.

*** retrieval complete.

Elapsed Time = 00:00:02

The NGS Data Sheet

See file [dsdata.txt](#) for more information about the datasheet.

```
DATABASE = ,PROGRAM = datasheet, VERSION = 7.59
1 National Geodetic Survey, Retrieval Date = MAY 12, 2008
AG8184 *****
AG8184 DESIGNATION - I75 83 A28
AG8184 PID - AG8184
AG8184 STATE/COUNTY- FL/SARASOTA
AG8184 USGS QUAD - VENICE (1987)
AG8184
AG8184 *CURRENT SURVEY CONTROL
AG8184
AG8184* NAD 83(2007)- 27 06 32.79503(N) 082 22 34.58099(W) ADJUSTED
AG8184* NAVD 88 - 5.233 (meters) 17.17 (feet) ADJUSTED
AG8184
AG8184 EPOCH DATE - 2002.00
AG8184 X - 753,729.633 (meters) COMP
AG8184 Y - -5,631,151.262 (meters) COMP
AG8184 Z - 2,888,973.921 (meters) COMP
AG8184 LAPLACE CORR- -0.19 (seconds) DEFLEC99
AG8184 ELLIP HEIGHT- -18.754 (meters) (02/10/07) ADJUSTED
AG8184 GEOID HEIGHT- -23.95 (meters) GEOID03
AG8184 DYNAMIC HT - 5.225 (meters) 17.14 (feet) COMP
AG8184
AG8184 ----- Accuracy Estimates (at 95% Confidence Level in cm) -----
AG8184 Type PID Designation North East Ellip
AG8184 -----
AG8184 NETWORK AG8184 I75 83 A28 2.16 2.18 5.94
AG8184 -----
AG8184 MODELED GRAV- 979,130.9 (mgal) NAVD 88
AG8184
AG8184 VERT ORDER - SECOND CLASS II
AG8184
AG8184.The horizontal coordinates were established by GPS observations
AG8184.and adjusted by the National Geodetic Survey in February 2007.
AG8184
AG8184.The datum tag of NAD 83(2007) is equivalent to NAD 83(NSRS2007).
AG8184.See National Readjustment for more information.
AG8184.The horizontal coordinates are valid at the epoch date displayed above.
AG8184.The epoch date for horizontal control is a decimal equivalence
AG8184.of Year/Month/Day.
AG8184
AG8184.The orthometric height was determined by differential leveling
AG8184.and adjusted in June 1991.
AG8184
AG8184.The X, Y, and Z were computed from the position and the ellipsoidal ht.
AG8184
AG8184.The Laplace correction was computed from DEFLEC99 derived deflections.
AG8184
AG8184.The ellipsoidal height was determined by GPS observations
AG8184.and is referenced to NAD 83.
AG8184
AG8184.The geoid height was determined by GEOID03.
AG8184
AG8184.The dynamic height is computed by dividing the NAVD 88
AG8184.geopotential number by the normal gravity value computed on the
AG8184.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
AG8184.degrees latitude (g = 980.6199 gals.).
AG8184
AG8184.The modeled gravity was interpolated from observed gravity values.
AG8184
```

AG8184'ROUTE 75 SOUTHBOUND LANE, 60.5 FEET NORTH OF NORTHEAST CORNER POST OF
AG8184'RIGHT OF WAY FENCE, 62.5 FEET NORTH-NORTHEAST OF NORTHWEST CORNER POST
AG8184'OF RIGHT OF WAY FENCE AND 59.0 FEET NORTH OF METAL WITNESS POST.

AG8184'

AG8184'REFERENCE MARK NUMBER 1 IS A FLORIDA DEPARTMENT OF TRANSPORTATION
AG8184'BRASS DISK, STAMPED---I75 83 A28 RM NO 1---, SET IN TOP OF ROUND
AG8184'CONCRETE MONUMENT THAT IS 1 INCH BELOW GROUND. IT IS 5.5 FEET NORTH
AG8184'OF RIGHT OF WAY FENCE 5.0 FEET NORTH OF RIGHT OF WAY METAL REFERENCE
AG8184'POST, 32.5 FEET EAST-SOUTHEAST OF NORTHEAST OF CORNER POST OF RIGHT OF
AG8184'FENCE AND 101.0 FEET SOUTH OF CENTER OF INTERSTATE ROUTE 75 SOUTHBOUND
AG8184'LANE.

AG8184'

AG8184'REFERENCE MARK NUMBER 2 IS A FLORIDA DEPARTMENT OF TRANSPORTATION
AG8184'BRASS DISK, STAMPET---I75 83 A28 RM NO 2---, SET IN TOP OF ROUND
AG8184'CONCRETE MONUMENT THAT IS 2 INCHES BELOW GROUND. IT IS 35.0 FEET
AG8184'NORTH OF METAL WITNESS POST, 27.2 FEET WEST-SOUTHWEST OF CORNER POST
AG8184'OF RIGHT OF WAY FENCE AND 99.0 FEET SOUTH OF CENTER OF INTERSTATE
AG8184'ROUTE 75 SOUTHBOUND LANE.

AG8184

AG8184 STATION RECOVERY (1983)

AG8184

AG8184'RECOVERY NOTE BY FLORIDA DEPARTMENT OF TRANSPORTATION 1983

AG8184'4.6 MI EAST FROM VENICE.

AG8184'FROM THE INTERSECTION OF INTERSTATE ROUTE 75 AND VENICE EAST ROAD,
AG8184'ABOUT 4.0 MILES EAST OF VENICE, GO EASTERLY ALONG INTERSTATE ROUTE 75
AG8184'FOR 0.6 MILE AND THE MARK, AT AN OFFSET IN THE SOUTH RIGHT OF WAY
AG8184'FENCE FOR A DITCH. IT IS 62.5 FEET NORTH NORTHEAST OF THE NORTHWEST
AG8184'CORNER POST OF THE OFFSET IN THE RIGHT OF WAY FENCE, 60.5 FEET NORTH
AG8184'OF THE NORTHEAST CORNER POST AND 28.8 FEET SOUTH OF THE CENTER OF THE
AG8184'SOUTHBOUND LANES.

AG8184'THE MARK IS 59.0 FT N FROM A WITNESS POST.

AG8184

AG8184 STATION RECOVERY (1992)

AG8184

AG8184'RECOVERY NOTE BY SARASOTA COUNTY FLORIDA 1992

AG8184'TO REACH THE STATION FROM THE INTERSECTION OF RIVER ROAD AND
AG8184'INTERSTATE 75 IN SARASOTA COUNTY, GO NORTH ON INTERSTATE 75, 1.7 MI
AG8184'(2.74 KM) TO THE STATION ON THE LEFT.
AG8184'THE STATION IS A FLDT SURVEY DISK STAMPED ---I75 83 A28--- SET IN A
AG8184'12-INCH ROUND CONCRETE MONUMENT THAT IS 6-INCHES BELOW GROUND. IT IS
AG8184'6.4 FT (1.95 M) SOUTHERLY OF THE SOUTHERLY EDGE OF ASPHALT PAVEMENT
AG8184'ROAD BED OF THE SOUTH BOUND INTERSTATE 75, AND 331.5 FT (101.04 M)
AG8184'WESTERLY OF AN EMERGENCY CALL BOX NO. 192.

AG8184'REFERENCES--

AG8184'FLDT DISK STAMPED ---I75 83 A28 RM NO 1--- SET IN A 12-INCH ROUND
AG8184'CONCRETE MONUMENT THAT IS FLUSH WITH THE GROUND. IT IS 78.64 FT
AG8184'(23.97 M) SOUTHEASTERLY OF THE STATION.

AG8184'FLDT DISK STAMPED ---I75 83 A28 RM NO 2--- SET IN A 12-INCH ROUND
AG8184'CONCRETE MONUMENT THAT IS FLUSH WITH THE GROUND. IT IS 83.00 FT
AG8184'SOUTHWESTERLY OF THE STATION.

*** retrieval complete.

Elapsed Time = 00:00:01

The NGS Data Sheet

See file [dsdata.txt](#) for more information about the datasheet.

```
DATABASE = ,PROGRAM = datasheet, VERSION = 7.59
1 National Geodetic Survey, Retrieval Date = MAY 12, 2008
AG8192 *****
AG8192 DESIGNATION - I75 83 A29
AG8192 PID - AG8192
AG8192 STATE/COUNTY- FL/SARASOTA
AG8192 USGS QUAD - VENICE (1987)
AG8192
AG8192 *CURRENT SURVEY CONTROL
AG8192
AG8192* NAD 83(2007)- 27 06 41.12797(N) 082 23 04.89918(W) ADJUSTED
AG8192* NAVD 88 - 12.125 (meters) 39.78 (feet) ADJUSTED
AG8192
AG8192 EPOCH DATE - 2002.00
AG8192 X - 752,887.242 (meters) COMP
AG8192 Y - -5,631,152.203 (meters) COMP
AG8192 Z - 2,889,205.353 (meters) COMP
AG8192 LAPLACE CORR- -0.14 (seconds) DEFLEC99
AG8192 ELLIP HEIGHT- -11.883 (meters) (02/10/07) ADJUSTED
AG8192 GEOID HEIGHT- -23.95 (meters) GEOID03
AG8192 DYNAMIC HT - 12.106 (meters) 39.72 (feet) COMP
AG8192
AG8192 ----- Accuracy Estimates (at 95% Confidence Level in cm) -----
AG8192 Type PID Designation North East Ellip
AG8192 -----
AG8192 NETWORK AG8192 I75 83 A29 2.18 2.20 6.00
AG8192 -----
AG8192 MODELED GRAV- 979,130.4 (mgal) NAVD 88
AG8192
AG8192 VERT ORDER - SECOND CLASS II
AG8192
AG8192.The horizontal coordinates were established by GPS observations
AG8192.and adjusted by the National Geodetic Survey in February 2007.
AG8192
AG8192.The datum tag of NAD 83(2007) is equivalent to NAD 83(NSRS2007).
AG8192.See National Readjustment for more information.
AG8192.The horizontal coordinates are valid at the epoch date displayed above.
AG8192.The epoch date for horizontal control is a decimal equivalence
AG8192.of Year/Month/Day.
AG8192
AG8192.The orthometric height was determined by differential leveling
AG8192.and adjusted in June 1991.
AG8192
AG8192.The X, Y, and Z were computed from the position and the ellipsoidal ht.
AG8192
AG8192.The Laplace correction was computed from DEFLEC99 derived deflections.
AG8192
AG8192.The ellipsoidal height was determined by GPS observations
AG8192.and is referenced to NAD 83.
AG8192
AG8192.The geoid height was determined by GEOID03.
AG8192
AG8192.The dynamic height is computed by dividing the NAVD 88
AG8192.geopotential number by the normal gravity value computed on the
AG8192.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
AG8192.degrees latitude (g = 980.6199 gals.).
AG8192
AG8192.The modeled gravity was interpolated from observed gravity values.
AG8192
```

AG8192'8 INCHES BELOW GROUND. IT IS 6.5 FEET WEST OF METAL WITNESS POST, 8.5
AG8192'WEST OF CONCRETE ABUTMENT AND 35.2 FEET SOUTHWEST OF CENTER OF
AG8192'INTERSTATE ROUTE 75 NORTHBOUND LANE.

AG8192'

AG8192'REFERENCE MARK NUMBER 1 IS A FLORIDA DEPARTMENT OF TRANSPORTATION
AG8192'BRASS DISK, STAMPED---I75 83 A29 RM NO 1---, SET FLUSH IN TOP OF
AG8192'CONCRETE GUARDRAIL. IT IS 3.8 FEET EAST OF WEST END OF CONCRETE
AG8192'GUARDRAIL, 9.7 FEET WEST OF WEST END OF CONCRETE BRIDGE AND 19.5 FEET
AG8192'SOUTHWEST OF CENTER OF INTERSTATE ROUTE 75 NORTHBOUND LANE.

AG8192'

AG8192'REFERENCE MARK NUMBER 2 IS A FLORIDA DEPARTMENT OF TRANSPORTATION
AG8192'BRASS DISK, STAMPED---I75 83 A29 RM NO 2---, SET FLUSH IN TOP OF
AG8192'CONCRETE GUARDRAIL. IT IS 3.5 FEET EAST OF WEST END CONCRETE
AG8192'GUARDRAIL SOUTHBOUND LANE, 12.2 FEET WEST OF WEST END OF CONCRETE
AG8192'BRIDGE SOUTHBOUND LANE AND 19.0 FEET NORTHEAST OF CENTER OF INTERSTATE
AG8192'ROUTE 75 SOUTHBOUND LANE.

AG8192

AG8192 STATION RECOVERY (1983)

AG8192

AG8192'RECOVERY NOTE BY FLORIDA DEPARTMENT OF TRANSPORTATION 1983

AG8192'4.0 MI EAST FROM VENICE.

AG8192'THE MARK IS ABOVE LEVEL WITH ROAD.

AG8192'THE MARK IS LOCATED AT THE INTERSECTION OF INTERSTATE ROUTE 75 AND

AG8192'VENICE EAST ROAD (JACARANDA BOULEVARD) EXIT NUMBER 35. IT IS 35.2

AG8192'FEET SOUTHWEST OF THE CENTER OF THE NORTHBOUND LANES OF THE INTERSTATE

AG8192'AND 8.5 FEET NORTHWEST OF THE NORTHWEST CONCRETE GUARDWALL BETWEEN THE

AG8192'NORTH AND SOUTHBOUND INTERSTATE BRIDGES.

AG8192'THE MARK IS 6.5 FT NW FROM A WITNESS POST.

AG8192

AG8192 STATION RECOVERY (1992)

AG8192

AG8192'RECOVERY NOTE BY SARASOTA COUNTY FLORIDA 1992

AG8192'TO REACH THE STATION FROM THE INTERSECTION OF RIVER ROAD AND

AG8192'INTERSTATE 75 IN SARASOTA COUNTY, GO NORTH ON INTERSTATE 75, 2.2 MI

AG8192'(3.54 KM) TO THE STATION ON THE LEFT.

AG8192'THE STATION IS A FLDT SURVEY DISK STAMPED ---I75 83 A29--- SET IN A

AG8192'12-INCH ROUND CONCRETE MONUMENT THAT IS 6-INCHES BELOW GROUND. IT IS

AG8192'8.5 FT (2.59 M) WESTERLY OF THE WESTERLY EDGE OF THE CONCRETE

AG8192'RETAINING WALL FOR JACARANDA BOULEVARD OVERPASS.

AG8192'REFERENCES--

AG8192'FLDT DISK STAMPED ---I75 83 A29 RM NO 1--- SET IN THE NORTHWEST CORNER

AG8192'OF THE CONCRETE RETAINING WALL FOR BOULEVARD OVERPASS. IT IS 16.37 FT

AG8192'(4.99 M)NORTHEASTERLY OF THE STATION.

AG8192'FLDT DISK STAMPED ---I75 83 A29 RM NO 2--- SET IN THE SOUTHWEST CORNER

AG8192'OF THE CONCRETE RETAINING WALL FOR BOULEVARD OVERPASS. IT IS 73.37 FT

AG8192'(22.36 M) SOUTHEASTERLY OF THE STATION.

AG8192

AG8192 STATION RECOVERY (2002)

AG8192

AG8192'RECOVERY NOTE BY US POWER SQUADRON 2002 (MDB)

AG8192'RECOVERED IN GOOD CONDITION.

*** retrieval complete.

Elapsed Time = 00:00:00

The NGS Data Sheet

See file [dsdata.txt](#) for more information about the datasheet.

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DATABASE = ,PROGRAM = datasheet, VERSION = 7.59
1 National Geodetic Survey, Retrieval Date = MAY 12, 2008
AG8236 *****
AG8236 DESIGNATION - I75 83 A39
AG8236 PID - AG8236
AG8236 STATE/COUNTY- FL/SARASOTA
AG8236 USGS QUAD - LAUREL (1987)
AG8236
AG8236 *CURRENT SURVEY CONTROL
AG8236
AG8236* NAD 83(2007)- 27 12 16.10020(N) 082 26 26.94136(W) ADJUSTED
AG8236* NAVD 88 - 6.175 (meters) 20.26 (feet) ADJUSTED
AG8236
AG8236 EPOCH DATE - 2002.00
AG8236 X - 746,751.213 (meters) COMP
AG8236 Y - -5,627,216.435 (meters) COMP
AG8236 Z - 2,898,376.116 (meters) COMP
AG8236 LAPLACE CORR- -0.62 (seconds) DEFLEC99
AG8236 ELLIP HEIGHT- -17.986 (meters) (02/10/07) ADJUSTED
AG8236 GEOID HEIGHT- -24.12 (meters) GEOID03
AG8236 DYNAMIC HT - 6.165 (meters) 20.23 (feet) COMP
AG8236
AG8236 ----- Accuracy Estimates (at 95% Confidence Level in cm) -----
AG8236 Type PID Designation North East Ellip
AG8236 -----
AG8236 NETWORK AG8236 I75 83 A39 2.35 2.37 6.68
AG8236 -----
AG8236 MODELED GRAV- 979,127.2 (mgal) NAVD 88
AG8236
AG8236 VERT ORDER - SECOND CLASS II
AG8236
AG8236.The horizontal coordinates were established by GPS observations
AG8236.and adjusted by the National Geodetic Survey in February 2007.
AG8236
AG8236.The datum tag of NAD 83(2007) is equivalent to NAD 83(NSRS2007).
AG8236.See National Readjustment for more information.
AG8236.The horizontal coordinates are valid at the epoch date displayed above.
AG8236.The epoch date for horizontal control is a decimal equivalence
AG8236.of Year/Month/Day.
AG8236
AG8236.The orthometric height was determined by differential leveling
AG8236.and adjusted in June 1991.
AG8236
AG8236.The X, Y, and Z were computed from the position and the ellipsoidal ht.
AG8236
AG8236.The Laplace correction was computed from DEFLEC99 derived deflections.
AG8236
AG8236.The ellipsoidal height was determined by GPS observations
AG8236.and is referenced to NAD 83.
AG8236
AG8236.The geoid height was determined by GEOID03.
AG8236
AG8236.The dynamic height is computed by dividing the NAVD 88
AG8236.geopotential number by the normal gravity value computed on the
AG8236.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
AG8236.degrees latitude (g = 980.6199 gals.).
AG8236
AG8236.The modeled gravity was interpolated from observed gravity values.
AG8236
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The NGS Data Sheet

See file [dsdata.txt](#) for more information about the datasheet.

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DATABASE = ,PROGRAM = datasheet, VERSION = 7.59
1 National Geodetic Survey, Retrieval Date = MAY 12, 2008
AG8117 *****
AG8117 DESIGNATION - I75 83 A16
AG8117 PID - AG8117
AG8117 STATE/COUNTY- FL/SARASOTA
AG8117 USGS QUAD - MURDOCK (1987)
AG8117
AG8117 *CURRENT SURVEY CONTROL
AG8117
AG8117* NAD 83(2007)- 27 06 00.25462(N) 082 14 53.66730(W) ADJUSTED
AG8117* NAVD 88 - 7.761 (meters) 25.46 (feet) ADJUSTED
AG8117
AG8117 EPOCH DATE - 2002.00
AG8117 X - 766,372.802 (meters) COMP
AG8117 Y - -5,629,907.263 (meters) COMP
AG8117 Z - 2,888,083.468 (meters) COMP
AG8117 LAPLACE CORR- -0.91 (seconds) DEFLEC99
AG8117 ELLIP HEIGHT- -16.302 (meters) (02/10/07) ADJUSTED
AG8117 GEOID HEIGHT- -24.01 (meters) GEOID03
AG8117 DYNAMIC HT - 7.750 (meters) 25.43 (feet) COMP
AG8117
AG8117 ----- Accuracy Estimates (at 95% Confidence Level in cm) -----
AG8117 Type PID Designation North East Ellip
AG8117 -----
AG8117 NETWORK AG8117 I75 83 A16 1.61 1.92 5.21
AG8117 -----
AG8117 MODELED GRAV- 979,131.9 (mgal) NAVD 88
AG8117
AG8117 VERT ORDER - SECOND CLASS II
AG8117
AG8117.The horizontal coordinates were established by GPS observations
AG8117.and adjusted by the National Geodetic Survey in February 2007.
AG8117
AG8117.The datum tag of NAD 83(2007) is equivalent to NAD 83(NSRS2007).
AG8117.See National Readjustment for more information.
AG8117.The horizontal coordinates are valid at the epoch date displayed above.
AG8117.The epoch date for horizontal control is a decimal equivalence
AG8117.of Year/Month/Day.
AG8117
AG8117.The orthometric height was determined by differential leveling
AG8117.and adjusted in June 1991.
AG8117
AG8117.The X, Y, and Z were computed from the position and the ellipsoidal ht.
AG8117
AG8117.The Laplace correction was computed from DEFLEC99 derived deflections.
AG8117
AG8117.The ellipsoidal height was determined by GPS observations
AG8117.and is referenced to NAD 83.
AG8117
AG8117.The geoid height was determined by GEOID03.
AG8117
AG8117.The dynamic height is computed by dividing the NAVD 88
AG8117.geopotential number by the normal gravity value computed on the
AG8117.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
AG8117.degrees latitude (g = 980.6199 gals.).
AG8117
AG8117.The modeled gravity was interpolated from observed gravity values.
AG8117
```


AG8117'STAMPED---I75 83 A16---, SET IN TOP OF ROUND CONCRETE MONUMENT THAT IS
AG8117'6 INCHES BELOW GROUND. IT IS 27.5 FEET NORTH OF CENTER OF INTERSTATE
AG8117'ROUTE 75 NORTHBOUND LANE, 43.5 FEET SOUTH OF 24 INCH PINE TREE, 37.2
AG8117'FEET SOUTH OF METAL WITNESS POST, 331 FEET WEST OF MILE POST NUMBER
AG8117'185 AND 78.0 FEET SOUTH OF RIGHT OF WAY FENCE.

AG8117'

AG8117'REFERENCE MARK NUMBER 1 IS A FLORIDA DEPARTMENT OF TRANSPORTATION
AG8117'BRASS DISK, STAMPED---I75 83 A16 RM NO 1---, SET IN TOP OF ROUND
AG8117'CONCRETE MONUMENT THAT IS 1 INCH BELOW GROUND. IT IS 5.5 FEET SOUTH
AG8117'OF METAL WITNESS POST, 46.5 FEET SOUTH OF RIGHT OF WAY FENCE, 63.7
AG8117'FEET NORTH OF CENTER OF INTERSTATE ROUTE 75 NORTHBOUND LANE AND 30.0
AG8117'FEET EAST-SOUTHEAST OF 24 INCH PINE TREE.

AG8117'

AG8117'REFERENCE MARK NUMBER 2 IS A FLORIDA DEPARTMENT OF TRANSPORTATION
AG8117'BRASS DISK, STAMPED---I75 83 A16 RM NO 2---, SET IN TOP OF ROUND
AG8117'CONCRETE MONUMENT THAT IS 1 INCH BELOW GROUND. IT IS 4.5 FEET SOUTH
AG8117'OF METAL WITNESS POST, 42.5 FEET SOUTH OF RIGHT OF WAY FENCE, 63.7
AG8117'FEET NORTH OF CENTER OF INTERSTATE ROUTE 75 NORTHBOUND LANE AND 28.0
AG8117'FEET WEST-SOUTHWEST OF 24 INCH PINE TREE.

AG8117

AG8117 STATION RECOVERY (1983)

AG8117

AG8117'RECOVERY NOTE BY FLORIDA DEPARTMENT OF TRANSPORTATION 1983

AG8117'12.6 MI EAST FROM VENICE.

AG8117'FROM THE INTERSECTION OF INTERSTATE ROUTE 75 AND VENICE EAST ROAD,
AG8117'ABOUT 4.0 MILES EAST OF VENICE, GO EASTERLY ALONG INTERSTATE ROUTE 75
AG8117'FOR 8.65 MILES AND THE MARK, JUST WEST OF MILE POST 185. IT IS 331.0
AG8117'FEET WEST OF THE MILE POST, 78.0 FEET SOUTH OF THE NORTH RIGHT OF WAY
AG8117'FENCE, 43.5 FEET SOUTH OF A 24 INCH PINE TREE AND 27.5 FEET NORTH OF
AG8117'THE CENTER OF THE NORTHBOUND LANES.

AG8117'THE MARK IS 37.2 FT S FROM A WITNESS POST.

AG8117

AG8117 STATION RECOVERY (1992)

AG8117

AG8117'RECOVERY NOTE BY SARASOTA COUNTY FLORIDA 1992

AG8117'TO REACH THE STATION FROM THE INTERSECTION OF PONCE DE LEON BOULEVARD
AG8117'AND THE NORTH BOUND LANE OF INTERSTATE 75 IN SARASOTA COUNTY, GO
AG8117'WESTERLY ON INTERSTATE 75, 1.0 MI (1.61 KM) TO THE STATION ON THE
AG8117'RIGHT.

AG8117'THE STATION IS A FLDT SURVEY DISK STAMPED ---I75 83 A16--- SET IN A
AG8117'12-INCH ROUND CONCRETE MONUMENT THAT IS 6-INCHES BELOW GROUND. IT IS
AG8117'5.4 FT (1.65 M) NORTHERLY OF THE NORTHERLY EDGE OF PAVEMENT OF THE
AG8117'NORTH BOUND LANE OF INTERSTATE 75 AND 331 FT (100.89 M) WESTERLY OF
AG8117'MILE MARKER SIGN NO. 185.

AG8117'REFERENCES--

AG8117'FLDT DISK STAMPED ---I75 83 A16 RM NO 1--- SET IN THE TOP OF A
AG8117'CONCRETE MONUMENT, 43.22 FT (13.17 M) NORTHEAST OF THE STATION.

AG8117'FLDT DISK STAMPED ---I75 83 A16 RM NO 2--- SET IN THE TOP OF A
AG8117'CONCRETE MONUMENT, 47.36 FT (14.44 M) NORTHWEST OF THE STATION.

AG8117

AG8117 STATION RECOVERY (2004)

AG8117

AG8117'RECOVERY NOTE BY DEWBERRY DAVIS 2004 (KEC)

AG8117'RECOVERED IN GOOD CONDITION.

AG8117

AG8117 STATION RECOVERY (2006)

AG8117

AG8117'RECOVERY NOTE BY FL DEPT OF ENV PRO 2006 (BPJ)

AG8117'THE AREA WAS SEARCHED AND THE MARK WAS NOT FOUND.

*** retrieval complete.

Elapsed Time = 00:00:00

The NGS Data Sheet

See file [dsdata.txt](#) for more information about the datasheet.

```
DATABASE = ,PROGRAM = datasheet, VERSION = 7.59
1 National Geodetic Survey, Retrieval Date = MAY 12, 2008
AJ7556 *****
AJ7556 DESIGNATION - F 532
AJ7556 PID - AJ7556
AJ7556 STATE/COUNTY- FL/LEE
AJ7556 USGS QUAD - FORT MYERS (1987)
AJ7556
AJ7556 *CURRENT SURVEY CONTROL
AJ7556
AJ7556* NAD 83(2007)- 26 38 54.76275(N) 081 50 08.85620(W) ADJUSTED
AJ7556* NAVD 88 - 4.715 (meters) 15.47 (feet) ADJUSTED
AJ7556
AJ7556 EPOCH DATE - 2002.00
AJ7556 X - 810,091.031 (meters) COMP
AJ7556 Y - -5,646,627.666 (meters) COMP
AJ7556 Z - 2,843,455.721 (meters) COMP
AJ7556 LAPLACE CORR- -1.88 (seconds) DEFLEC99
AJ7556 ELLIP HEIGHT- -19.524 (meters) (02/10/07) ADJUSTED
AJ7556 GEOID HEIGHT- -24.23 (meters) GEOID03
AJ7556 DYNAMIC HT - 4.708 (meters) 15.45 (feet) COMP
AJ7556
AJ7556 ----- Accuracy Estimates (at 95% Confidence Level in cm) -----
AJ7556 Type PID Designation North East Ellip
AJ7556 -----
AJ7556 NETWORK AJ7556 F 532 2.02 1.96 3.68
AJ7556 -----
AJ7556 MODELED GRAV- 979,072.1 (mgal) NAVD 88
AJ7556
AJ7556 VERT ORDER - FIRST CLASS II
AJ7556
AJ7556.The horizontal coordinates were established by GPS observations
AJ7556.and adjusted by the National Geodetic Survey in February 2007.
AJ7556
AJ7556.The datum tag of NAD 83(2007) is equivalent to NAD 83(NSRS2007).
AJ7556.See National Readjustment for more information.
AJ7556.The horizontal coordinates are valid at the epoch date displayed above.
AJ7556.The epoch date for horizontal control is a decimal equivalence
AJ7556.of Year/Month/Day.
AJ7556
AJ7556.The orthometric height was determined by differential leveling
AJ7556.and adjusted in February 2002.
AJ7556
AJ7556.The X, Y, and Z were computed from the position and the ellipsoidal ht.
AJ7556
AJ7556.The Laplace correction was computed from DEFLEC99 derived deflections.
AJ7556
AJ7556.The ellipsoidal height was determined by GPS observations
AJ7556.and is referenced to NAD 83.
AJ7556
AJ7556.The geoid height was determined by GEOID03.
AJ7556
AJ7556.The dynamic height is computed by dividing the NAVD 88
AJ7556.geopotential number by the normal gravity value computed on the
AJ7556.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
AJ7556.degrees latitude (g = 980.6199 gals.).
AJ7556
AJ7556.The modeled gravity was interpolated from observed gravity values.
AJ7556
```

AJ7556;
 AJ7556;SPC FL W - 256,475.390 216,347.723 MT 0.99994447 +0 04 25.1
 AJ7556;SPC FL W - 841,453.01 709,800.82 sFT 0.99994447 +0 04 25.1
 AJ7556;UTM 17 - 2,947,781.486 416,818.592 MT 0.99968542 -0 22 29.6
 AJ7556
 AJ7556! - Elev Factor x Scale Factor = Combined Factor
 AJ7556!SPC FL W - 1.00000307 x 0.99994447 = 0.99994754
 AJ7556!UTM 17 - 1.00000307 x 0.99968542 = 0.99968849
 AJ7556
 AJ7556 SUPERSEDED SURVEY CONTROL
 AJ7556
 AJ7556 NAD 83(1999)- 26 38 54.76294(N) 081 50 08.85652(W) AD() 1
 AJ7556 ELLIP H (12/12/02) -19.523 (m) GP() 4 1
 AJ7556 NAVD 88 (12/12/02) 4.71 (m) 15.5 (f) LEVELING 3
 AJ7556
 AJ7556.Superseded values are not recommended for survey control.
 AJ7556.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
 AJ7556.[See file dsdata.txt](#) to determine how the superseded data were derived.
 AJ7556
 AJ7556_U.S. NATIONAL GRID SPATIAL ADDRESS: 17RMK1681947781(NAD 83)
 AJ7556_MARKER: F = FLANGE-ENCASED ROD
 AJ7556_SETTING: 49 = STAINLESS STEEL ROD W/O SLEEVE (10 FT.+)
 AJ7556_STAMPING: F 532 2001 CERP
 AJ7556_MARK LOGO: NONE
 AJ7556_PROJECTION: RECESSED 15 CENTIMETERS
 AJ7556_MAGNETIC: M = MARKER EQUIPPED WITH BAR MAGNET
 AJ7556_STABILITY: B = PROBABLY HOLD POSITION/ELEVATION WELL
 AJ7556_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
 AJ7556+SATELLITE: SATELLITE OBSERVATIONS - May 08, 2002
 AJ7556_ROD/PIPE-DEPTH: 24.3 meters
 AJ7556_SLEEVE-DEPTH : 0.46 meters
 AJ7556
 AJ7556 HISTORY - Date Condition Report By
 AJ7556 HISTORY - 20011019 MONUMENTED LDBLS
 AJ7556 HISTORY - 20020508 GOOD MAPTEC
 AJ7556
 AJ7556 STATION DESCRIPTION
 AJ7556
 AJ7556'DESCRIBED BY LD BRADLEY LAND SURVEYORS 2001 (JCH)
 AJ7556'THE MARK IS ABOUT 3.2 KM (2.0 MI) EAST OF FORT MYERS ON MICHIGAN
 AJ7556'AVENUE, IN
 AJ7556'SECTION 17, TOWNSHIP 44 SOUTH, RANGE 25 EAST, LEE COUNTY FLORIDA.
 AJ7556'OWNERSHIP -
 AJ7556'CITY OF FORT MYERS
 AJ7556'
 AJ7556'TO REACH THE MARK FROM THE INTERSECTION OF INTERSTATE HIGHWAY 75 AND
 AJ7556'STATE ROAD
 AJ7556'82 (I-75 EXIT 23, ABOUT 6.4 KM (4.0 MI) EAST OF FORT MYERS) GO
 AJ7556'NORTHWEST ON
 AJ7556'STATE ROAD 82 2.3 KM (1.43 MI) TO ITS JUNCTION WITH MICHIGAN AVENUE
 AJ7556'LINK, ON
 AJ7556'MICHIGAN AVENUE LINK GO NORTHWEST, ALONG A CURVE LEFT AND WEST 1.56 KM
 AJ7556'(0.97
 AJ7556'MI) TO THE INGLESIA EVANGELICA AREA DE SALVACION (ADDRESS 3645
 AJ7556'MICHIGAN AVE),
 AJ7556'AND THE MARK ON THE RIGHT.
 AJ7556'
 AJ7556'THE MARK IS 57.00 M (187.0 FT) WEST OF THE CENTERLINE OF MARK AND
 AJ7556'AVENUE, 23.32
 AJ7556'M (76.5 FT) SOUTHEAST OF THE MOST SOUTHEASTERN CORNER OF A CHURCH
 AJ7556'BUILDING,
 AJ7556'8.17 M (26.8 FT) NORTH OF THE CENTERLINE OF MICHIGAN AVENUE, 2.44 M
 AJ7556'(8.0 FT)
 AJ7556'NORTHWEST OF THE CENTER OF A WOOD UTILITY POLE NUMBER 322-210, AND

AJ7556'2.26 M (7.4
 AJ7556'FT) NORTHWEST OF A CARSONITE WITNESS POST. THE DATUM POINT IS SET 15
 AJ7556'CM (0.5
 AJ7556'FT) BELOW THE LEVEL OF THE GROUND AND ABOUT 1.60 M (1.0 FT) BELOW THE
 AJ7556'LEVEL OF
 AJ7556'THE AVENUE BEING A STAINLESS STEEL ROD DRIVEN TO A DEPTH OF 24.34 M
 AJ7556'(79.85 FT),
 AJ7556'TO SUBSTANTIAL RESISTANCE AND ENCASED BY A 5-INCH ROUND PVC PIPE WITH
 AJ7556'AN ACCESS
 AJ7556'COVER.
 AJ7556'
 AJ7556'NOTE - A MAGNET WAS PLACED INSIDE THE SLEEVE, BELOW THE ACCESS COVER.
 AJ7556'
 AJ7556'
 AJ7556'
 AJ7556'
 STATION RECOVERY (2002)
 AJ7556'
 AJ7556'RECOVERY NOTE BY MAPTECH INCORPORATED 2002 (CDP)
 AJ7556'THE MARK IS ABOUT 3.2 KM (2.0 MI) EAST OF FORT MYERS ON MICHIGAN
 AJ7556'AVENUE, IN
 AJ7556'SECTION 17, TOWNSHIP 44 SOUTH, RANGE 25 EAST, LEE COUNTY FLORIDA.
 AJ7556'OWNERSHIP -
 AJ7556'CITY OF FORT MYERS
 AJ7556'
 AJ7556'TO REACH THE MARK FROM THE INTERSECTION OF INTERSTATE HIGHWAY 75 AND
 AJ7556'STATE ROAD
 AJ7556'82 (I-75 EXIT 23, ABOUT 6.4 KM (4.0 MI) EAST OF FORT MYERS) GO
 AJ7556'NORTHWEST ON
 AJ7556'STATE ROAD 82 2.3 KM (1.43 MI) TO ITS JUNCTION WITH MICHIGAN AVENUE
 AJ7556'LINK, ON
 AJ7556'MICHIGAN AVENUE LINK GO NORTHWEST, ALONG A CURVE LEFT AND WEST 1.56 KM
 AJ7556'(0.97
 AJ7556'MI) TO THE INGLESIA EVANGELICA AREA DE SALVACION (ADDRESS 3645
 AJ7556'MICHIGAN AVE),
 AJ7556'AND THE MARK ON THE RIGHT.
 AJ7556'
 AJ7556'THE MARK IS 57.00 M (187.0 FT) WEST OF THE CENTERLINE OF MARK AND
 AJ7556'AVENUE, 23.32
 AJ7556'M (76.5 FT) SOUTHEAST OF THE MOST SOUTHEASTERN CORNER OF A CHURCH
 AJ7556'BUILDING,
 AJ7556'8.17 M (26.8 FT) NORTH OF THE CENTERLINE OF MICHIGAN AVENUE, 2.44 M
 AJ7556'(8.0 FT)
 AJ7556'NORTHWEST OF THE CENTER OF A WOOD UTILITY POLE NUMBER 322-210, AND
 AJ7556'2.26 M (7.4
 AJ7556'FT) NORTHWEST OF A CARSONITE WITNESS POST. THE DATUM POINT IS SET 15
 AJ7556'CM (0.5
 AJ7556'FT) BELOW THE LEVEL OF THE GROUND AND ABOUT 1.60 M (1.0 FT) BELOW THE
 AJ7556'LEVEL OF
 AJ7556'THE AVENUE BEING A STAINLESS STEEL ROD DRIVEN TO A DEPTH OF 24.34 M
 AJ7556'(79.85 FT),
 AJ7556'TO SUBSTANTIAL RESISTANCE AND ENCASED BY A 5-INCH ROUND PVC PIPE WITH
 AJ7556'AN ACCESS
 AJ7556'COVER.
 AJ7556'
 AJ7556'NOTE - A MAGNET WAS PLACED INSIDE THE SLEEVE, BELOW THE ACCESS COVER.
 AJ7556'
 AJ7556'

*** retrieval complete.
 Elapsed Time = 00:00:01

The NGS Data Sheet

See file [dsdata.txt](#) for more information about the datasheet.

```
DATABASE = ,PROGRAM = datasheet, VERSION = 7.59
1 National Geodetic Survey, Retrieval Date = MAY 12, 2008
AD8320 *****
AD8320 DESIGNATION - G 416
AD8320 PID - AD8320
AD8320 STATE/COUNTY- FL/LEE
AD8320 USGS QUAD - FORT MYERS SE (1987)
AD8320
AD8320 *CURRENT SURVEY CONTROL
AD8320
AD8320* NAD 83(2007)- 26 30 27.61107(N) 081 51 36.89661(W) ADJUSTED
AD8320* NAVD 88 - 1.434 (meters) 4.70 (feet) ADJUSTED
AD8320
AD8320 EPOCH DATE - 2002.00
AD8320 X - 808,669.187 (meters) COMP
AD8320 Y - -5,653,883.346 (meters) COMP
AD8320 Z - 2,829,495.248 (meters) COMP
AD8320 LAPLACE CORR- -2.09 (seconds) DEFLEC99
AD8320 ELLIP HEIGHT- -22.624 (meters) (02/10/07) ADJUSTED
AD8320 GEOID HEIGHT- -24.06 (meters) GEOID03
AD8320 DYNAMIC HT - 1.432 (meters) 4.70 (feet) COMP
AD8320
AD8320 ----- Accuracy Estimates (at 95% Confidence Level in cm) -----
AD8320 Type PID Designation North East Ellip
AD8320 -----
AD8320 NETWORK AD8320 G 416 0.69 0.82 1.59
AD8320 -----
AD8320 MODELED GRAV- 979,062.2 (mgal) NAVD 88
AD8320
AD8320 VERT ORDER - FIRST CLASS II
AD8320
AD8320.The horizontal coordinates were established by GPS observations
AD8320.and adjusted by the National Geodetic Survey in February 2007.
AD8320
AD8320.The datum tag of NAD 83(2007) is equivalent to NAD 83(NSRS2007).
AD8320.See National Readjustment for more information.
AD8320.The horizontal coordinates are valid at the epoch date displayed above.
AD8320.The epoch date for horizontal control is a decimal equivalence
AD8320.of Year/Month/Day.
AD8320
AD8320.The orthometric height was determined by differential leveling
AD8320.and adjusted in September 1992.
AD8320
AD8320.Photographs are available for this station.
AD8320
AD8320.The X, Y, and Z were computed from the position and the ellipsoidal ht.
AD8320
AD8320.The Laplace correction was computed from DEFLEC99 derived deflections.
AD8320
AD8320.The ellipsoidal height was determined by GPS observations
AD8320.and is referenced to NAD 83.
AD8320
AD8320.The geoid height was determined by GEOID03.
AD8320
AD8320.The dynamic height is computed by dividing the NAVD 88
AD8320.geopotential number by the normal gravity value computed on the
AD8320.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
AD8320.degrees latitude (g = 980.6199 gals.).
AD8320
```

AD8320.The modeled gravity was interpolated from observed gravity values.

AD8320

AD8320;	North	East	Units	Scale	Factor	Converg.
AD8320;SPC FL W	- 240,864.816	213,930.048	MT	0.99994357	+0 03 44.5	
AD8320;SPC FL W	- 790,237.32	701,868.83	sFT	0.99994357	+0 03 44.5	
AD8320;UTM 17	- 2,932,194.259	414,279.735	MT	0.99969072	-0 23 02.3	

AD8320

AD8320!	Elev Factor	x	Scale Factor	=	Combined Factor
AD8320!SPC FL W	- 1.00000355	x	0.99994357	=	0.99994712
AD8320!UTM 17	- 1.00000355	x	0.99969072	=	0.99969427

AD8320

AD8320 SUPERSEDED SURVEY CONTROL

AD8320

AD8320	NAD 83(1999)	- 26 30 27.61133(N)	081 51 36.89691(W)	AD()	1
AD8320 ELLIP H (12/12/02)	-22.648 (m)			GP()	4 1
AD8320 NAVD 88 (12/12/02)	1.43 (m)		4.7 (f)	LEVELING	3
AD8320 NGVD 29 (09/01/92)	1.794 (m)		5.89 (f)	ADJUSTED	1 2

AD8320

AD8320.Superseded values are not recommended for survey control.

AD8320.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.

AD8320.[See file dsdata.txt](#) to determine how the superseded data were derived.

AD8320

AD8320_U.S. NATIONAL GRID SPATIAL ADDRESS: 17RMK1428032194(NAD 83)

AD8320_MARKER: F = FLANGE-ENCASED ROD

AD8320_SETTING: 59 = STAINLESS STEEL ROD IN SLEEVE (10 FT.+)

AD8320_SP_SET: STAINLESS STEEL ROD IN SLEEVE

AD8320_STAMPING: G 416 1992

AD8320_MARK LOGO: NGS

AD8320_PROJECTION: FLUSH

AD8320_MAGNETIC: O = OTHER; SEE DESCRIPTION

AD8320_STABILITY: B = PROBABLY HOLD POSITION/ELEVATION WELL

AD8320_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR

AD8320+SATELLITE: SATELLITE OBSERVATIONS - February 15, 2005

AD8320_ROD/PIPE-DEPTH: 4.0 meters

AD8320_SLEEVE-DEPTH : 0.9 meters

AD8320

AD8320	HISTORY	- Date	Condition	Report By
AD8320	HISTORY	- 1992	MONUMENTED	NGS
AD8320	HISTORY	- 19990111	GOOD	USPSQD
AD8320	HISTORY	- 20020519	GOOD	MAPTEC
AD8320	HISTORY	- 20050215	GOOD	FLDEP

AD8320

AD8320 STATION DESCRIPTION

AD8320

AD8320'DESCRIBED BY NATIONAL GEODETIC SURVEY 1992

AD8320'10.2 KM (6.35 MI) SOUTHERLY ALONG U.S. HIGHWAY 41 FROM THE JUNCTION

AD8320'OF STATE HIGHWAY 884 IN FORT MYERS, 71.1 M (233.3 FT) NORTH OF THE

AD8320'NORTHEAST CORNER OF THE ETHAN ALLEN GALLERY CARRIAGE HOUSE, 19.0 M

AD8320'(62.3 FT) SOUTHWEST OF THE CENTER OF THE SOUTHBOUND LANES OF THE

AD8320'HIGHWAY, 19.0 M (62.3 FT) SOUTHEAST OF THE MOST EASTERLY SUPPORT LEG

AD8320'OF A BILLBOARD, 1.4 M (4.6 FT) NORTHWEST OF A UTILITY POLE, 1.1 M

AD8320'(3.6 FT) BELOW THE LEVEL OF THE HIGHWAY, AND 0.5 M (1.6 FT) SOUTHEAST

AD8320'OF A WITNESS POST. NOTE--ACCESS TO THE DATUM POINT IS THROUGH A

AD8320'5-INCH LOGO CAP.

AD8320

AD8320 STATION RECOVERY (1999)

AD8320

AD8320'RECOVERY NOTE BY US POWER SQUADRON 1999

AD8320'RECOVERED IN GOOD CONDITION.

AD8320

AD8320 STATION RECOVERY (2002)

AD8320

AD8320'RECOVERY NOTE BY MAPTECH INCORPORATED 2002 (CDP)

AD8320'RECOVERED AS DESCRIBED.

AD8320'
AD8320'
AD8320
AD8320 STATION RECOVERY (2005)
AD8320
AD8320'RECOVERY NOTE BY FL DEPT OF ENV PRO 2005 (RWH)
AD8320'RECOVERED IN GOOD CONDITION.

*** retrieval complete.
Elapsed Time = 00:00:01

The NGS Data Sheet

See file [dsdata.txt](#) for more information about the datasheet.

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DATABASE = ,PROGRAM = datasheet, VERSION = 7.59
1 National Geodetic Survey, Retrieval Date = MAY 12, 2008
AD1509 *****
AD1509 SACS - This is a Secondary Airport Control Station.
AD1509 DESIGNATION - W 247
AD1509 PID - AD1509
AD1509 STATE/COUNTY- FL/LEE
AD1509 USGS QUAD - FORT MYERS SE (1987)
AD1509
AD1509 *CURRENT SURVEY CONTROL
AD1509
AD1509* NAD 83(2007)- 26 35 09.63330(N) 081 51 22.32828(W) ADJUSTED
AD1509* NAVD 88 - 4.846 (meters) 15.90 (feet) ADJUSTED
AD1509
AD1509 EPOCH DATE - 2002.00
AD1509 X - 808,519.411 (meters) COMP
AD1509 Y - -5,649,989.043 (meters) COMP
AD1509 Z - 2,837,261.325 (meters) COMP
AD1509 LAPLACE CORR- -2.07 (seconds) DEFLEC99
AD1509 ELLIP HEIGHT- -19.322 (meters) (02/10/07) ADJUSTED
AD1509 GEOID HEIGHT- -24.15 (meters) GEOID03
AD1509 DYNAMIC HT - 4.838 (meters) 15.87 (feet) COMP
AD1509
AD1509 ----- Accuracy Estimates (at 95% Confidence Level in cm) -----
AD1509 Type PID Designation North East Ellip
AD1509 -----
AD1509 NETWORK AD1509 W 247 0.92 0.88 3.25
AD1509 -----
AD1509 MODELED GRAV- 979,067.5 (mgal) NAVD 88
AD1509
AD1509 VERT ORDER - FIRST CLASS I
AD1509
AD1509.This mark is at Page Field Airport (FMY)
AD1509
AD1509.The horizontal coordinates were established by GPS observations
AD1509.and adjusted by the National Geodetic Survey in February 2007.
AD1509
AD1509.The datum tag of NAD 83(2007) is equivalent to NAD 83(NSRS2007).
AD1509.See National Readjustment for more information.
AD1509.The horizontal coordinates are valid at the epoch date displayed above.
AD1509.The epoch date for horizontal control is a decimal equivalence
AD1509.of Year/Month/Day.
AD1509
AD1509.The orthometric height was determined by differential leveling
AD1509.and adjusted in September 1992.
AD1509
AD1509.The X, Y, and Z were computed from the position and the ellipsoidal ht.
AD1509
AD1509.The Laplace correction was computed from DEFLEC99 derived deflections.
AD1509
AD1509.The ellipsoidal height was determined by GPS observations
AD1509.and is referenced to NAD 83.
AD1509
AD1509.The geoid height was determined by GEOID03.
AD1509
AD1509.The dynamic height is computed by dividing the NAVD 88
AD1509.geopotential number by the normal gravity value computed on the
AD1509.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
AD1509.degrees latitude (g = 980.6199 gals.).
```

AD1509 STATION RECOVERY (1976)
AD1509
AD1509'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1976
AD1509'RECOVERED IN GOOD CONDITION.
AD1509
AD1509 STATION RECOVERY (1981)
AD1509
AD1509'RECOVERY NOTE BY US GEOLOGICAL SURVEY 1981
AD1509'RECOVERED IN GOOD CONDITION.
AD1509
AD1509 STATION RECOVERY (1992)
AD1509
AD1509'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1992
AD1509'IN FORT MYERS, AT THE INTERSECTION OF IDLEWILD ROAD AND SIXTH STREET,
AD1509'IN TOP OF AND 0.2 M (0.7 FT) EAST OF THE WEST EDGE OF THE MOST
AD1509'NORTHWESTERLY OF 4 CONCRETE FOOTINGS FOR AN AIRPORT BEACON (BEACON
AD1509'REMOVED), IN THE SOUTHWEST CORNER OF THE LAWN OF THE LEE COUNTY
AD1509'DEPARTMENT OF TRANSPORTATION, 34.5 M (113.2 FT) WEST OF THE EXTENDED
AD1509'CENTERLINE OF THE STREET, 19.1 M (62.7 FT) EAST OF THE CENTER OF A
AD1509'PAVED ROAD, 12.9 M (42.3 FT) NORTH OF THE CENTERLINE OF THE ROAD, 6.3
AD1509'M (20.7 FT) SOUTH OF THE SOUTH CURB OF A PARKING LOT, 0.3 M (1.0 FT)
AD1509'ABOVE THE LEVEL OF THE ROAD, 0.3 M (1.0 FT) SOUTH OF A WITNESS POST,
AD1509'0.2 M (0.7 FT) SOUTH OF THE NORTH EDGE OF THE CONCRETE BASE, AND THE
AD1509'FOOTING IS 0.06 M (0.20 FT) BELOW THE GROUND SURFACE.
AD1509
AD1509 STATION RECOVERY (1996)
AD1509
AD1509'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1996 (CFS)
AD1509'THE STATION IS LOCATED OUTSIDE THE EASTERN BOUNDARY OF PAGE FIELD ON
AD1509'THE SOUTH SIDE OF FORT MYERS. IT IS SET ON THE NORTH SIDE OF IDLEWILD
AD1509'ROAD IN FRONT OF THE LEETRAN (LEE COUNTY TRANSIT) FACILITY BETWEEN 6TH
AD1509'STREET AND EAST AIRPORT ROAD. OWNERSHIP -- LEETRAN, 10715 EAST
AD1509'AIRPORT ROAD, FORT MYERS, FL 33907. TRANSIT MANAGER MR. LARRY
AD1509'RALSTON, TELEPHONE (941) 275-8726 TO REACH THE STATION FROM THE
AD1509'JUNCTION OF INTERSTATE HIGHWAY 75 AND STATE HIGHWAY 884 AT INTERSTATE
AD1509'HIGHWAY 75 EXIT 22 EAST OF FORT MYERS, GO WEST ON STATE HIGHWAY 884
AD1509'(COLONIAL BLVD) FOR 3.25 MI (5.23 KM) TO STATE HIGHWAY 739 (METO
AD1509'PARKWAY) ON THE LEFT, TURN LEFT AND GO SOUTHERLY ON THE METOR PARKWAY
AD1509'FOR 0.85 MI (1.37 KM) TO IDLEWILD ROAD ON THE RIGHT. TURN RIGHT ON
AD1509'IDLEWILD ROAD AND GO WEST FOR 0.1 MI (0.2 KM) CROSSING A RAILROAD
AD1509'TRACK AND TEN MILE CANAL TO A FOUR WAY STOP WITH 6TH STREET ON THE
AD1509'LEFT. CONTINUE STRAIGHT AHEAD FOR 0.05 MI (0.08 KM) TO THE STATION ON
AD1509'THE RIGHT NEAR THE CORNER OF IDLEWILD ROAD AND EAST AIRPORT ROAD. THE
AD1509'STATION IS A STANDARD U.S.C. AND G.S. BENCH MARK DISK SET IN THE
AD1509'NORTHWEST CORNER OF AN OLD 3-FT SQUARE CONCRETE FOOTING FOR A BEACON
AD1509'TOWER WHICH IS 4-INCHED BELOW THE SURFACE. THERE IS A SCRATCH THRU
AD1509'THE 24 IN 247. THE STATION IS WITHIN 0.2 MI (0.3 KM) OF PAGE FIELD
AD1509'GATES 4, 5, AND 6B. IT IS 20.0 M (65.6 FT) EAST OF THE PROJECTED
AD1509'CENTERLINE OF EAST AIRPORT ROAD, 13.55 M (44.46 FT) EAST OF THE CENTER
AD1509'OF DRAIN GRATE IN EAST AIRPORT ROAD, 12.8 M (42.0 FT) NORTH OF THE
AD1509'CENTERLINE OF IDLEWILD ROAD, 9.59 M (31.46 FT) SOUTHEAST OF THE
AD1509'SOUTHWEST CORNER OF PARKING LOT, 8.88 M (29.13 FT) EAST-SOUTHEAST OF
AD1509'IDLEWILD ROAD AND EAST AIRPORT ROAD STREET SIGN, 6.41 M (21.03 FT)
AD1509'SOUTH OF SOUTH CURB OF PARKING LOT, 2.87 M (9.42 FT) NORTH OF THE
AD1509'NORTHWEST CORNER OF OLD 3-FT SQUARE CONCRETE FOOTING, AND 0.27 M (0.89
AD1509'FT) SOUTH OF A WITNESS POST. THIS IS A SECONDARY AIRPORT CONTROL
AD1509'STATION. WJR
AD1509
AD1509 STATION RECOVERY (2003)
AD1509
AD1509'RECOVERY NOTE BY US POWER SQUADRON 2003
AD1509'RECOVERED IN GOOD CONDITION.
AD1509
AD1509 STATION RECOVERY (2003)

AD1509
AD1509'RECOVERY NOTE BY US POWER SQUADRON 2003
AD1509'RECOVERED IN GOOD CONDITION.
AD1509
AD1509 STATION RECOVERY (2005)
AD1509
AD1509'RECOVERY NOTE BY MCKIM AND CREED 2005 (BRH)
AD1509'RECOVERED IN GOOD CONDITION.

*** retrieval complete.
Elapsed Time = 00:00:01

The NGS Data Sheet

See file [dsdata.txt](#) for more information about the datasheet.

```
DATABASE = ,PROGRAM = datasheet, VERSION = 7.59
1 National Geodetic Survey, Retrieval Date = MAY 12, 2008
AJ7548 *****
AJ7548 DESIGNATION - W 533
AJ7548 PID - AJ7548
AJ7548 STATE/COUNTY- FL/LEE
AJ7548 USGS QUAD - ALVA SW (1987)
AJ7548
AJ7548 *CURRENT SURVEY CONTROL
AJ7548
AJ7548* NAD 83(2007)- 26 34 25.39504(N) 081 41 44.21093(W) ADJUSTED
AJ7548* NAVD 88 - 8.569 (meters) 28.11 (feet) ADJUSTED
AJ7548
AJ7548 EPOCH DATE - 2002.00
AJ7548 X - 824,440.400 (meters) COMP
AJ7548 Y - -5,648,306.661 (meters) COMP
AJ7548 Z - 2,836,045.277 (meters) COMP
AJ7548 LAPLACE CORR- -1.08 (seconds) DEFLEC99
AJ7548 ELLIP HEIGHT- -15.814 (meters) (02/10/07) ADJUSTED
AJ7548 GEOID HEIGHT- -24.37 (meters) GEOID03
AJ7548 DYNAMIC HT - 8.556 (meters) 28.07 (feet) COMP
AJ7548
AJ7548 ----- Accuracy Estimates (at 95% Confidence Level in cm) -----
AJ7548 Type PID Designation North East Ellip
AJ7548 -----
AJ7548 NETWORK AJ7548 W 533 1.84 1.96 3.51
AJ7548 -----
AJ7548 MODELED GRAV- 979,057.8 (mgal) NAVD 88
AJ7548
AJ7548 VERT ORDER - FIRST CLASS II
AJ7548
AJ7548.The horizontal coordinates were established by GPS observations
AJ7548.and adjusted by the National Geodetic Survey in February 2007.
AJ7548
AJ7548.The datum tag of NAD 83(2007) is equivalent to NAD 83(NSRS2007).
AJ7548.See National Readjustment for more information.
AJ7548.The horizontal coordinates are valid at the epoch date displayed above.
AJ7548.The epoch date for horizontal control is a decimal equivalence
AJ7548.of Year/Month/Day.
AJ7548
AJ7548.The orthometric height was determined by differential leveling
AJ7548.and adjusted in February 2002.
AJ7548
AJ7548.The X, Y, and Z were computed from the position and the ellipsoidal ht.
AJ7548
AJ7548.The Laplace correction was computed from DEFLEC99 derived deflections.
AJ7548
AJ7548.The ellipsoidal height was determined by GPS observations
AJ7548.and is referenced to NAD 83.
AJ7548
AJ7548.The geoid height was determined by GEOID03.
AJ7548
AJ7548.The dynamic height is computed by dividing the NAVD 88
AJ7548.geopotential number by the normal gravity value computed on the
AJ7548.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
AJ7548.degrees latitude (g = 980.6199 gals.).
AJ7548
AJ7548.The modeled gravity was interpolated from observed gravity values.
AJ7548
```


AJ7548' (25.1 FT) NORTHEAST OF A CARSONITE WITNESS POST. THE DATUM POINT IS
 AJ7548' SET 14 CM
 AJ7548' (0.46 FT) BELOW THE LEVEL OF THE GROUND, ABOUT 0.61 M (2.0 FT) BELOW
 AJ7548' THE LEVEL
 AJ7548' OF THE HIGHWAY, BEING THE TOP OF A STAINLESS STEEL ROD DRIVEN 13.28 M
 AJ7548' (43.58
 AJ7548' FT) TO REFUSAL AND ENCASED IN A 5-INCH PVC PIPE WITH AN ACCESS COVER.
 AJ7548'
 AJ7548' NOTE - A MAGNET WAS PLACED INSIDE THE SLEEVE, BELOW THE ACCESS COVER.
 AJ7548'
 AJ7548'
 AJ7548'
 AJ7548' STATION RECOVERY (2002)
 AJ7548'
 AJ7548' RECOVERY NOTE BY MAPTECH INCORPORATED 2002 (CDP)
 AJ7548' THE MARK IS ABOUT 19.3 KM (11.97 MI) SOUTHEAST OF FORT MYERS, ABOUT
 AJ7548' 34.6 KM
 AJ7548' (21.49 MI) NORTHWEST OF IMMOKALEE, IN SECTION 10, TOWNSHIP 45 SOUTH,
 AJ7548' RANGE 26
 AJ7548' EAST, LEE COUNTY FLORIDA. OWNERSHIP - FLORIDA DEPARTMENT OF
 AJ7548' TRANSPORTATION.
 AJ7548'
 AJ7548' TO REACH THE MARK FROM THE INTERSECTION OF INTERSTATE HIGHWAY 75 AND
 AJ7548' STATE
 AJ7548' ROAD NO 82 (I-75 EXIT 23, ABOUT 6.4 KM (4.0 MI) EAST OF FORT MYERS) GO
 AJ7548' SOUTHEAST ON STATE ROAD 82 10.8 KM (6.74 MI) TO THE JUNCTION WITH
 AJ7548' DANIELS
 AJ7548' PARKWAY-GUNNERY ROAD, CONTINUE SOUTHEAST ON STATE ROAD 82 2.0 KM (1.25
 AJ7548' MI) TO
 AJ7548' THE JUNCTION WITH ROD GUN CLUB ROAD AND THE MARK ON THE RIGHT, ALSO
 AJ7548' FROM THE
 AJ7548' JUNCTION OF STATE ROAD 82 AND ALABAMA ROAD SOUTH GO NORTHWEST ON STATE
 AJ7548' ROAD 82
 AJ7548' 3.7 KM (2.33 MI) TO THE MARK ON THE LEFT.
 AJ7548'
 AJ7548' THE MARK IS 18.29 M (60.0 FT) NORTHWEST OF THE CENTER OF ROD GUN CLUB
 AJ7548' ROAD,
 AJ7548' 16.25 M (53.3 FT) SOUTHWEST OF THE CENTERLINE OF STATE ROAD 82 AND
 AJ7548' 7.65 M
 AJ7548' (25.1 FT) NORTHEAST OF A CARSONITE WITNESS POST. THE DATUM POINT IS
 AJ7548' SET 14 CM
 AJ7548' (0.46 FT) BELOW THE LEVEL OF THE GROUND, ABOUT 0.61 M (2.0 FT) BELOW
 AJ7548' THE LEVEL
 AJ7548' OF THE HIGHWAY, BEING THE TOP OF A STAINLESS STEEL ROD DRIVEN 13.28 M
 AJ7548' (43.58
 AJ7548' FT) TO REFUSAL AND ENCASED IN A 5-INCH PVC PIPE WITH AN ACCESS COVER.
 AJ7548'
 AJ7548' NOTE - A MAGNET WAS PLACED INSIDE THE SLEEVE, BELOW THE ACCESS COVER.
 AJ7548'
 AJ7548' RECOVERED AS DESCRIBED 2002 MAPTECH INC (CDP)
 AJ7548'
 AJ7548'
 AJ7548'
 AJ7548'
 AJ7548' STATION RECOVERY (2007)
 AJ7548'
 AJ7548' RECOVERY NOTE BY HOLE MONTES AND ASSOCIATES INC 2007 (BRH)
 AJ7548' RECOVERED IN GOOD CONDITION.

 *** retrieval complete.
 Elapsed Time = 00:00:01

APPENDIX B: NEW GROUND CONTROL STATION INFORMATION

This appendix contains the station recovery information sheet for the newly established GPS control station set for Area D of the FY2007 State of Florida Division of Emergency Management Ground Control QA/QC Survey Mapping Project.

GPS Station Recovery - GPS Log Sheet																
Project Name: <u>Florida Coastal Mapping Project</u>	Operator Name: <u>M. BROWN</u> Job No. <u>66517</u>															
Station Name: <u>NEW BASE 1</u>	Date of Survey: <u>Nov 9, 07</u> Julian Day <u>313</u>															
WGS 84 Coordinates Latitude <u>27 23 28.285</u> Longitude <u>82 33 30.980</u> Ellip. Height <u>-85.251</u>	File Name: <u>B6743130</u> Session # <u>ALL</u>															
Type of Reciever: <u>R8-Z</u>	Type of Antenna: <u>"</u>															
Type of Mark: <u>5/8" IRC / CONTROL STA.</u>	Antenna Height: <u>2</u> ☐ USFT ☒ ARP ☐ Meters ☐ Phase Center 															
Stamping on Mark: <u>WOOLPERT LLP</u>	Start Time (local): <u>9:30 AM EST.</u> Weather Condition: <u>CLEAR</u>															
To Reach Description: <u>NORTH 780' +/- ON US41 FROM SEAGATE DR., TURN RIGHT ON UN-NAMED ROAD, GO 790', TURN SOUTH, GO 570' +/-</u>	Witness Lies: <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Reference Object</th> <th>Distance</th> <th>Azimuth</th> </tr> </thead> <tbody> <tr> <td>1) FENCE COR.</td> <td>9.7</td> <td>180°</td> </tr> <tr> <td>2) FIRE HYDRANT</td> <td>100'</td> <td>45°</td> </tr> <tr> <td>3) 10" PINE</td> <td>50'</td> <td>350°</td> </tr> <tr> <td>4)</td> <td></td> <td></td> </tr> </tbody> </table>	Reference Object	Distance	Azimuth	1) FENCE COR.	9.7	180°	2) FIRE HYDRANT	100'	45°	3) 10" PINE	50'	350°	4)		
Reference Object	Distance	Azimuth														
1) FENCE COR.	9.7	180°														
2) FIRE HYDRANT	100'	45°														
3) 10" PINE	50'	350°														
4)																
Sketch: 																

APPENDIX C: RTK LiDAR QA/QC COMPARISON CHECKS and EXISTING CONTROL CHECKS

This appendix contains RTK LiDAR QA/QC and existing control check comparisons for Area D of the FY2007 State of Florida Division of Emergency Management Ground Control QA/QC Survey Mapping Project.

HORIZONTAL DATUM: NAD83 (1999)
VERTICAL DATUM: NAVD88
UNITS: US SURVEY FEET
STATE PLANE ZONE: FLORIDA WEST (0902)
GEOID MODEL: GEOID03
COORDINATE SYSTEM: GRID

RTK LiDAR QA/QC COMPARISONS

METHOD	RTK STATION	NORTHING (US FT)	EASTING (US FT)	ELEVATION (US FT)	RTK BASE STATION
RTK OBSERVATION	4001	1016293.115	508440.499	8.255	I75 83 A44
RTK OBSERVATION	4001D	1016293.21	508440.54	8.39	I75 83 A34
DIFFERENCE		-0.098	-0.046	-0.135	
RTK OBSERVATION	4002	1016262.292	508445.312	9.436	I75 83 A44
RTK OBSERVATION	4002D	1016262.28	508445.35	9.35	I75 83 A34
DIFFERENCE		0.013	-0.036	0.085	
RTK OBSERVATION	4004	1014026.646	534660.788	12.051	I75 83 A44
RTK OBSERVATION	4004D	1014026.54	534660.77	12.13	HAVOLINE 2
DIFFERENCE		0.102	0.020	-0.082	
RTK OBSERVATION	4005	1014005.163	534666.247	13.983	I75 83 A44
RTK OBSERVATION	4005D	1014005.28	534666.17	13.92	HAVOLINE 2
DIFFERENCE		-0.118	0.075	0.059	
RTK OBSERVATION	4013	1038350.883	499398.522	14.610	I75 83 A44
RTK OBSERVATION	4013D	1038350.96	499398.44	14.77	I75 83 A34
DIFFERENCE		-0.075	0.079	-0.164	
RTK OBSERVATION	4014	1038266.818	499428.174	15.239	I75 83 A44
RTK OBSERVATION	4014D	1038266.79	499428.14	15.18	I75 83 A34
DIFFERENCE		0.023	0.036	0.062	
RTK OBSERVATION	4015	1038416.043	499446.206	15.144	I75 83 A44
RTK OBSERVATION	4015D	1038416.00	499446.20	15.27	I75 83 A34
DIFFERENCE		0.039	0.007	-0.128	
RTK OBSERVATION	4019	1074631.135	483623.491	27.703	I75 83 A44
RTK OBSERVATION	4019D	1074631.08	483623.47	27.78	I75 83 A34
DIFFERENCE		0.052	0.023	-0.079	

METHOD	RTK STATION	NORTHING (US FT)	EASTING (US FT)	ELEVATION (US FT)	RTK BASE STATION
RTK OBSERVATION	4020	1074591.755	483648.655	26.824	I75 83 A44
RTK OBSERVATION	4020D	1074591.72	483648.70	26.73	I75 83 A34
DIFFERENCE		0.033	-0.049	0.098	
RTK OBSERVATION	4076	998116.780	517273.867	15.807	I75 83 A29
RTK OBSERVATION	4076D	998116.74	517273.81	15.97	HAVOLINE 2
DIFFERENCE		0.039	0.059	-0.161	
RTK OBSERVATION	4077	998085.323	517374.726	13.737	I75 83 A29
RTK OBSERVATION	4077D	998085.27	517374.65	13.83	HAVOLINE 2
DIFFERENCE		0.056	0.072	-0.095	
RTK OBSERVATION	4079	982160.618	521970.984	12.178	I75 83 A29
RTK OBSERVATION	4079D	982160.65	521970.95	12.34	HAVOLINE 2
DIFFERENCE		-0.036	0.030	-0.161	
RTK OBSERVATION	4081	964189.863	534350.988	12.926	I75 83 A29
RTK OBSERVATION	4081D	964189.80	534351.03	13.03	HAVOLINE 2
DIFFERENCE		0.066	-0.043	-0.105	
RTK OBSERVATION	4082	964224.489	534366.179	13.330	I75 83 A29
RTK OBSERVATION	4082D	964224.42	534366.16	13.38	HAVOLINE 2
DIFFERENCE		0.069	0.020	-0.049	
RTK OBSERVATION	4083	964207.865	534086.921	12.346	I75 83 A29
RTK OBSERVATION	4083D	964207.84	534086.85	12.42	HAVOLINE 2
DIFFERENCE		0.030	0.075	-0.072	
RTK OBSERVATION	4092	1005353.950	544423.025	8.366	I75 83 A29
RTK OBSERVATION	4092D	1005353.89	544423.05	8.39	HAVOLINE 2
DIFFERENCE		0.056	-0.030	-0.020	
RTK OBSERVATION	4098	953697.951	578534.305	5.364	I75 83 A29
RTK OBSERVATION	4098D	953697.92	578534.23	5.52	HAVOLINE 2
DIFFERENCE		0.030	0.079	-0.161	
RTK OBSERVATION	4101	962805.295	605318.051	6.706	I75 83 A29
RTK OBSERVATION	4101D	962805.32	605318.08	6.77	HAVOLINE 2
DIFFERENCE		-0.030	-0.030	-0.059	
RTK OBSERVATION	4104	981535.028	616741.972	16.637	I75 83 A29
RTK OBSERVATION	4104D	981535.17	616741.85	16.60	HAVOLINE 2
DIFFERENCE		-0.141	0.125	0.033	
RTK OBSERVATION	4113D	1055673.453	493163.387	15.623	I75 83 A44
RTK OBSERVATION	4113D	1055673.49	493163.38	15.69	I75 83 A34
DIFFERENCE		-0.033	0.003	-0.066	

METHOD	RTK STATION	NORTHING (US FT)	EASTING (US FT)	ELEVATION (US FT)	RTK BASE STATION
RTK OBSERVATION	4114D	1055819.535	493016.629	15.597	I75 83 A44
RTK OBSERVATION	4114D	1055819.55	493016.62	15.62	I75 83 A34
DIFFERENCE		-0.016	0.010	-0.023	
RTK OBSERVATION	4118D	1074478.648	485937.899	19.669	I75 83 A44
RTK OBSERVATION	4118D	1074478.68	485937.85	19.71	I75 83 A34
DIFFERENCE		-0.030	0.052	-0.039	
RTK OBSERVATION	4119D	1074492.953	486157.003	17.697	I75 83 A44
RTK OBSERVATION	4119D	1074493.00	486156.90	17.58	I75 83 A34
DIFFERENCE		-0.043	0.108	0.115	
RTK OBSERVATION	4156D	1035430.042	499181.374	16.273	I75 83 A44
RTK OBSERVATION	4156D	1035430.13	499181.33	16.21	I75 83 A34
DIFFERENCE		-0.089	0.046	0.062	
RTK OBSERVATION	4157D	1035195.676	499280.330	16.457	I75 83 A44
RTK OBSERVATION	4157D	1035195.72	499280.28	16.41	I75 83 A34
DIFFERENCE		-0.046	0.046	0.046	
RTK OBSERVATION	4165D	997930.343	546850.625	11.234	I75 83 A29
RTK OBSERVATION	4165D	997930.28	546850.69	11.33	HAVOLINE 2
DIFFERENCE		0.059	-0.062	-0.095	
RTK OBSERVATION	4166D	997986.111	546615.790	10.568	I75 83 A29
RTK OBSERVATION	4166D	997986.15	546615.85	10.67	HAVOLINE 2
DIFFERENCE		-0.043	-0.062	-0.105	
RTK OBSERVATION	4170D	995090.900	573786.792	13.159	I75 83 A29
RTK OBSERVATION	4170D	995090.96	573786.80	13.18	HAVOLINE 2
DIFFERENCE		-0.062	-0.010	-0.016	
RTK OBSERVATION	4171D	995105.926	573493.226	12.920	I75 83 A29
RTK OBSERVATION	4171D	995105.89	573493.31	13.01	HAVOLINE 2
DIFFERENCE		0.033	-0.089	-0.092	
RTK OBSERVATION	4174D	979669.927	585984.205	9.403	I75 83 A29
RTK OBSERVATION	4174D	979669.90	585984.24	9.45	HAVOLINE 2
DIFFERENCE		0.023	-0.036	-0.049	
RTK OBSERVATION	4180D	980873.983	616045.989	17.457	I75 83 A29
RTK OBSERVATION	4180D	980874.02	616046.07	17.50	HAVOLINE 2
DIFFERENCE		-0.039	-0.085	-0.043	
RTK OBSERVATION	4186D	964293.780	605358.087	7.690	I75 83 A29
RTK OBSERVATION	4186D	964293.78	605358.15	7.61	HAVOLINE 2
DIFFERENCE		-0.003	-0.059	0.079	

METHOD	RTK STATION	NORTHING (US FT)	EASTING (US FT)	ELEVATION (US FT)	RTK BASE STATION
RTK OBSERVATION	4190D	953266.463	577666.558	8.402	I75 83 A29
RTK OBSERVATION	4190D	953266.51	577666.60	8.51	HAVOLINE 2
DIFFERENCE		-0.046	-0.043	-0.105	

RTK LiDAR QA/QC COMPARISONS

METHOD	RTK STATION	NORTHING (US FT)	EASTING (USFT)	ELEVATION (USFT)	RTK BASE STATION
PUBLISHED	G 416	790237.34	701868.81	4.70	W 247
OBSERVED	G 416 GPS	790237.24	701868.84	4.67	
DIFFERENCE		0.10	-0.03	0.03	
PUBLISHED	W 533	814339.12	755651.90	28.11	W 247
OBSERVED	W 533 GPS	814338.90	755651.90	28.25	
DIFFERENCE		0.22	0.00	-0.14	
PUBLISHED	W 533	814339.12	755651.90	28.11	W 247
OBSERVED	W 533 GPS	814338.87	755651.90	28.16	
DIFFERENCE		0.25	0.00	-0.05	
PUBLISHED	I75 81 A34	828653.41	720418.18	46.25	W 247
OBSERVED	I75 81 A34 GPS	828653.34	720418.18	46.20	
DIFFERENCE		0.07	0.00	0.05	
PUBLISHED	F 532	841453.03	709800.79	15.47	W 247
OBSERVED	F 532 GPS	841452.98	709800.80	15.47	
DIFFERENCE		0.05	-0.01	0.00	
PUBLISHED	F 532	841453.03	709800.79	15.47	W 247
OBSERVED	F 532 GPS	841452.89	709800.83	15.50	
DIFFERENCE		0.15	-0.04	-0.03	
PUBLISHED	I 75 83 A29	1009866.72	531025.72	39.78	I75 83 A44
OBSERVED	I 75 83 A29 CHK	1009866.67	531025.75	39.74	
DIFFERENCE		0.05	-0.03	0.04	
PUBLISHED	I 75 83 A29	1009866.72	531025.72	39.78	I75 83 A44
OBSERVED	I 75 83 A29 CHK	1009866.65	531025.83	39.84	
DIFFERENCE		0.07	-0.11	-0.06	
PUBLISHED	I 75 83 A29	1009866.72	531025.72	39.78	I75 83 A44
OBSERVED	I 75 83 A29 CHK	1009866.64	531025.79	39.85	
DIFFERENCE		0.08	-0.07	-0.07	
PUBLISHED	I75 83 A29	1097328.92	511342.48	31.24	I75 83 A44
OBSERVED	I75 83 A29 GPS	1097328.91	511342.44	31.19	
DIFFERENCE		0.01	0.04	0.05	
PUBLISHED	I75 83 A44	1067231.79	510319.66	55.98	I75 83 A29
OBSERVED		1067231.88	510319.61	55.70	
DIFFERENCE		-0.09	0.05	0.28	

METHOD	RTK STATION	NORTHING (US FT)	EASTING (USFT)	ELEVATION (USFT)	RTK BASE STATION
PUBLISHED	I75 83 A28	1009017.00	533762.81	17.17	I75 83 A29
OBSERVED		1009016.95	533762.78	17.14	
DIFFERENCE		0.05	0.03	0.03	
PUBLISHED	HAVOLINE 2	986260.06	570072.70	6.54	I75 83 A29
OBSERVED	HAVOLINE 2	986259.99	570072.60	6.59	
DIFFERENCE		0.07	0.10	-0.05	
PUBLISHED	I 75 83 A39	1043751.52	512887.70	20.26	I 75 83 A34
OBSERVED		1043751.48	512887.57	20.28	
DIFFERENCE		0.04	0.13	-0.02	
PUBLISHED	I 75 83 A39	1043751.52	512887.70	20.26	I 75 83 A34
OBSERVED		1043751.54	512887.53	20.25	
DIFFERENCE		-0.02	0.17	0.01	
PUBLISHED	I 75 83 A16	1005627.78	575406.08	25.46	I 75 83 A34
OBSERVED		1005627.83	575405.98	25.53	
DIFFERENCE		-0.04	0.10	-0.06	
PUBLISHED	I 75 83 A16	1005627.78	575406.08	25.46	I 75 83 A34
OBSERVED		1005627.76	575406.00	25.50	
DIFFERENCE		0.02	0.08	-0.04	
PUBLISHED	I 75 83 A16	1005627.78	575406.08	25.46	HAVOLINE 2
OBSERVED		1005627.72	575406.01	25.38	
DIFFERENCE		0.06	0.07	0.08	
PUBLISHED	I 75 83 A01	990866.01	628599.83	45.06	HAVOLINE 2
OBSERVED		990866.04	628599.89	45.10	
DIFFERENCE		-0.03	-0.06	-0.04	
PUBLISHED	I 75 83 A01	990866.01	628599.83	45.06	HAVOLINE 2
OBSERVED		990865.95	628599.82	45.25	
DIFFERENCE		0.06	0.01	-0.19	
PUBLISHED	I 75 83 A01	990866.01	628599.83	45.06	HAVOLINE 2
OBSERVED		990865.90	628599.84	45.19	
DIFFERENCE		0.11	-0.01	-0.13	
PUBLISHED	I 75 83 A01	990866.01	628599.83	45.06	HAVOLINE 2
OBSERVED		990865.97	628599.86	45.17	
DIFFERENCE		0.05	-0.03	-0.11	

METHOD	RTK STATION	NORTHING (US FT)	EASTING (USFT)	ELEVATION (USFT)	RTK BASE STATION
PUBLISHED	I 75 83 A01	990866.01	628599.83	45.06	HAVOLINE 2
OBSERVED		990865.96	628599.82	45.16	
DIFFERENCE		0.05	0.01	-0.10	
PUBLISHED	I 75 83 A01	990866.01	628599.83	45.06	HAVOLINE 2
OBSERVED		990865.92	628599.74	45.22	
DIFFERENCE		0.09	0.09	-0.16	
PUBLISHED	VENIPOINT	996978.75	510714.34	13.92	HAVOLINE 2
OBSERVED		996978.78	510714.38	13.74	
DIFFERENCE		-0.03	-0.04	0.18	
PUBLISHED	LORAN	997598.11	509593.72	12.05	HAVOLINE 2
OBSERVED		997598.10	509593.57	11.84	
DIFFERENCE		0.01	0.15	0.21	
PUBLISHED	LORAN	997598.11	509593.72	12.05	HAVOLINE 2
OBSERVED		997598.11	509593.63	12.01	
DIFFERENCE		0.00	0.09	0.04	

APPENDIX D: FINAL LiDAR CONTROL POINTS, LiDAR QA/QC CHECKPOINTS AND GEODETIC CONTROL COORDINATE LISTING

This appendix contains the final coordinate listings for the LiDAR QA/QC Checkpoints, LiDAR Control Points and the geodetic control stations utilized for Project Area D of the FY2007 State of Florida Division of Emergency Management Ground Control QA/QC Survey Mapping Project.

PROJECT AREA D

HORIZONTAL DATUM: NAD83 (1999)

VERTICAL DATUM: NAVD 88

UNITS: US SURVEY FEET

STATE PLANE ZONE: FLORIDA WEST (0902)

GEOID MODEL: GEOID 03

COORDINATE SYSTEM: GRID

DATE: 11-12-07

STATIONS IN RED USED RTK METHODS (28)

STATIONS IN BLUE USED CONVENTIONAL SURVEYING METHODS (35)

STATIONS IN BLACK USED RAPID STATIC METHODS (119)

LiDAR CONTROL POINTS AND QA/QC CHECKPOINTS:

STATION NAME	GRID NORTHING (US FT)	GRID EASTING (US FT)	STATION ELEVATION (US FT)	CLASSIFICATION
4001D	1016293.16	508440.52	8.32	BRUSH
4003D	1015957.29	507929.09	6.68	LOW GRASS OR BARE EARTH
4004D	1014026.60	534660.78	12.09	BRUSH
4005D	1014005.22	534666.21	13.95	URBAN
4006D	1013834.85	534913.28	12.76	URBAN
4007D	1016075.29	545814.05	15.51	URBAN
4008D-LC	1016349.37	547570.26	13.09	LOW GRASS OR BARE EARTH
4009D	1016298.88	547482.03	11.79	FORESTED
4010D	1029300.80	525563.62	17.11	URBAN
4011D	1039251.04	527182.26	17.66	LOW GRASS OR BARE EARTH
4012D	1039756.79	524488.21	19.31	BRUSH
4013D	1038350.92	499398.48	14.69	BRUSH
4014D	1038266.81	499428.16	15.21	LOW GRASS OR BARE EARTH
4015D	1038416.02	499446.20	15.21	URBAN
4016D	1055257.52	493334.95	15.89	BRUSH
4017D	1055326.58	493351.72	15.70	LOW GRASS OR BARE EARTH
4019D	1074631.11	483623.48	27.74	BRUSH
4020D	1074591.74	483648.68	26.77	URBAN
4021D	1074630.01	483752.50	25.64	LOW GRASS OR BARE EARTH
4023D	1094736.35	485402.38	28.93	BRUSH
4024D	1094755.65	485296.54	28.21	URBAN
4025D	1105290.29	476506.31	21.47	LOW GRASS OR BARE EARTH
4026D	1105349.47	476470.15	21.43	URBAN
4027D	1120066.57	472209.57	11.27	LOW GRASS OR BARE EARTH
4028D	1120075.87	472138.42	11.71	URBAN
4029D	1118601.02	471089.44	21.95	BRUSH
4030D	1133010.15	459371.47	20.50	LOW GRASS OR BARE EARTH
4032D	1137784.17	448303.60	12.51	BRUSH

STATION NAME	GRID NORTHING (US FT)	GRID EASTING (US FT)	STATION ELEVATION (US FT)	CLASSIFICATION
4033D	1133837.48	431983.75	3.70	BRUSH
4034D	1133809.27	431942.94	4.49	LOW GRASS OR BARE EARTH
4035D	1132240.07	461871.04	23.98	URBAN
4036D	1083259.21	468691.87	4.16	URBAN
4037D	1115627.16	472263.31	24.59	BRUSH
4038D	1078312.04	471883.37	1.74	LOW GRASS OR BARE EARTH
4039D	1083394.59	468466.46	4.86	BRUSH
4040D	1104340.09	452525.54	4.52	LOW GRASS OR BARE EARTH
4041D	1127932.19	433654.26	3.57	URBAN
4042D	1088877.04	466495.99	5.80	URBAN
4043D	1132217.49	461774.17	25.60	BRUSH
4044D	1086318.03	468321.06	1.76	LOW GRASS OR BARE EARTH
4045D	1105742.91	484519.62	23.53	BRUSH
4046D	1121556.39	493099.79	14.22	LOW GRASS OR BARE EARTH
4047D	1122077.30	495093.42	17.16	URBAN
4048D	1124824.45	492290.69	18.35	BRUSH
4049D	1131155.05	492064.84	14.01	LOW GRASS OR BARE EARTH
4050D	1131152.28	491988.55	14.30	BRUSH
4051D	1130951.04	492431.56	15.87	URBAN
4052D	1112434.85	514216.61	23.29	BRUSH
4053D	1120638.63	517769.82	23.11	URBAN
4054D	1118733.16	516400.53	24.06	LOW GRASS OR BARE EARTH
4055D	1108230.83	492763.22	32.76	LOW GRASS OR BARE EARTH
4056D	1110517.84	499761.47	27.72	BRUSH
4057D	1107892.94	492158.93	34.59	URBAN
4058D	1101153.21	507684.26	28.70	URBAN
4059D	1101552.21	507152.60	27.94	LOW GRASS OR BARE EARTH
4060D	1094290.53	502022.23	23.92	URBAN
4061D	1094040.59	504472.42	26.38	LOW GRASS OR BARE EARTH
4062D	1094927.80	502036.19	21.10	BRUSH
4063D	1094266.78	504446.95	26.10	LOW GRASS OR BARE EARTH
4064D	1077201.65	505240.65	24.95	LOW GRASS OR BARE EARTH
4067D	1057713.79	515203.22	21.83	URBAN
4069D	1057525.29	515253.70	20.29	BRUSH
4070D	1019523.64	522291.60	37.01	URBAN
4071D	1025062.71	518962.28	12.46	BRUSH
4072D	1034111.23	514596.95	18.59	URBAN
4075D	998197.80	517160.60	15.15	BRUSH
4076D	998116.76	517273.84	15.89	URBAN
4077D	998085.30	517374.69	13.78	LOW GRASS OR BARE EARTH
4078D	982181.64	520682.33	4.66	BRUSH
4079D	982160.64	521970.97	12.26	URBAN
4080D	984994.72	525621.50	14.59	LOW GRASS OR BARE EARTH
4081D	964189.83	534351.01	12.98	BRUSH
4082D	964224.45	534366.17	13.35	URBAN

STATION NAME	GRID NORTHING (US FT)	GRID EASTING (US FT)	STATION ELEVATION (US FT)	CLASSIFICATION
4083D	964207.85	534086.88	12.38	LOW GRASS OR BARE EARTH
4084D	947578.22	542678.90	5.60	BRUSH
4085D	946982.62	543102.40	5.94	URBAN
4086D	947005.60	543029.39	5.41	LOW GRASS OR BARE EARTH
4091D	1005506.53	544343.63	8.66	URBAN
4092D	1005353.92	544423.04	8.38	LOW GRASS OR BARE EARTH
4093D	966691.03	558083.86	11.85	LOW GRASS OR BARE EARTH
4094D	968873.35	559888.56	10.28	BRUSH
4095D	966173.87	557511.71	12.69	URBAN
4096D	953727.85	578539.93	7.46	URBAN
4097D	953751.62	578532.48	6.31	LOW GRASS OR BARE EARTH
4098D	953697.94	578534.27	5.44	BRUSH
4099D	962728.70	605334.52	7.64	URBAN
4100D	962770.96	605334.99	6.01	TRAVERSE POINT
4101D	962805.31	605318.07	6.74	BRUSH
4102D	981491.82	616615.35	17.61	URBAN
4103D	981446.52	616657.48	20.85	LOW GRASS OR BARE EARTH
4104D	981535.10	616741.91	16.62	BRUSH
4105D	979064.26	587032.44	9.80	URBAN
4106D	979101.89	587063.65	10.12	BRUSH
4107D	981275.93	584813.59	9.05	LOW GRASS OR BARE EARTH
4108D	995946.41	574214.22	17.38	LOW GRASS OR BARE EARTH
4109D	998911.39	576251.84	17.74	LOW GRASS OR BARE EARTH
4110D	998020.11	575851.70	17.95	LOW GRASS OR BARE EARTH
4111D	998973.10	576368.46	19.11	BRUSH
4112D	997390.46	575643.40	17.02	URBAN
4113D	1055673.47	493163.39	15.66	TRAVERSE POINT
4114D	1055819.55	493016.63	15.61	TRAVERSE POINT
4115D	1055780.77	493124.93	15.42	FORESTED
4116D	1055589.25	492997.12	15.11	FORESTED
4120D	1074481.24	486281.00	14.13	FORESTED
4121D	1076673.88	504947.63	30.08	TRAVERSE POINT
4122D	1076682.99	504874.06	29.48	TRAVERSE POINT
4123D	1076753.45	504960.19	27.02	FORESTED
4125D	1094256.48	504366.63	25.77	TRAVERSE POINT
4126D	1093890.86	504204.66	26.13	FORESTED
4130D	1106329.81	489576.82	37.50	FORESTED
4131D	1106466.87	489393.55	37.29	FORESTED
4132D	1106338.73	489083.94	38.19	FORESTED
4133D	1106175.41	489314.14	37.83	FORESTED
4136D	1119198.31	491217.01	18.69	FORESTED
4137D	1118872.41	490961.80	17.39	FORESTED
4142D	1104931.52	477364.69	17.11	FORESTED
4143D	1104680.91	477462.45	15.76	FORESTED
4150D	1013933.32	531078.08	12.53	FORESTED

STATION NAME	GRID NORTHING (US FT)	GRID EASTING (US FT)	STATION ELEVATION (US FT)	CLASSIFICATION
4151D	1014103.24	530991.44	11.85	FORESTED
4152D	1016437.23	508711.69	11.50	TRAVERSE POINT
4153D	1016659.08	508718.39	14.78	TRAVERSE POINT
4154D	1016686.48	508460.35	10.98	FORESTED
4155D	1016311.96	508867.81	10.36	FORESTED
4157D	1035159.70	499280.31	16.43	TRAVERSE POINT
4158D	1035275.21	499352.91	15.65	FORESTED
4159D	1035029.25	499559.71	12.95	FORESTED
4162D	1005521.82	547029.46	4.73	FORESTED
4163D	1005428.56	546910.84	3.88	FORESTED
4164D	998044.80	544762.97	10.44	URBAN
4165D	997930.31	546850.66	11.28	TRAVERSE POINT
4166D	997986.13	546615.82	10.62	TRAVERSE POINT
4167D	998022.82	546582.13	6.87	FORESTED
4168D	998032.94	546951.56	6.46	FORESTED
4170D	995090.93	573786.80	13.17	TRAVERSE POINT
4171D	995105.91	573493.27	12.97	TRAVERSE POINT
4172D	995145.09	573565.17	13.23	FORESTED
4173D	995196.57	573793.93	13.90	FORESTED
4176D	979496.54	586017.31	9.01	FORESTED
4177D	979640.14	585861.74	8.87	FORESTED
4178D	979811.70	586020.88	8.47	FORESTED
4180D	980874.00	616046.03	17.48	TRAVERSE POINT
4182D	981036.62	615955.65	16.07	FORESTED
4183D	980807.22	616009.45	16.72	FORESTED
4186D	964293.78	605358.12	7.65	TRAVERSE POINT
4187D	964296.44	605428.40	8.81	FORESTED
4188D	964470.60	605305.32	7.75	FORESTED
4190D	953266.49	577666.58	8.46	TRAVERSE POINT
4191D	953138.66	577477.71	8.39	FORESTED
4192D	952907.03	577483.88	10.65	FORESTED
4197D	1094765.66	485386.32	29.17	URBAN
4198D	952939.58	577520.04	8.85	URBAN
4500D-LC	960584.58	540306.37	14.66	URBAN
4501D-LC	965889.29	557323.29	12.39	URBAN
4502D-LC	979065.00	586892.42	9.93	LIDAR CONTROL POINT
4503D-LC	997764.56	575504.77	18.61	LIDAR CONTROL POINT
4507D-LC	1103170.12	477161.28	20.55	URBAN
4509D	1104671.77	477246.63	17.18	URBAN
4510D	1106296.82	489855.16	37.64	URBAN
4511D-LC	1111617.28	492552.27	32.77	LIDAR CONTROL POINT
4512D-LC	1096599.03	483356.50	29.27	LIDAR CONTROL POINT
4513D-LC	1091084.93	489092.36	29.67	LIDAR CONTROL POINT
4514D-LC	1072866.26	493347.43	26.61	LIDAR CONTROL POINT
4515D-LC	1063688.32	485941.83	14.68	LIDAR CONTROL POINT

STATION NAME	GRID NORTHING (US FT)	GRID EASTING (US FT)	STATION ELEVATION (US FT)	CLASSIFICATION
4701D	1022421.07	525634.53	15.03	URBAN
4702D	1111800.41	474814.27	20.68	URBAN
4703D	1082778.70	494724.08	19.27	LOW GRASS OR BARE EARTH
4704D	1067870.67	501595.63	28.23	URBAN
4705D	1065914.82	514882.74	35.90	LOW GRASS OR BARE EARTH
4706D	1072902.62	511278.93	26.33	URBAN
4707D	1089490.34	511601.96	22.79	URBAN
4900D	962734.53	605280.17	7.54	LIDAR CONTROL POINT
4901D	945125.53	557836.72	9.18	LIDAR CONTROL POINT
4902D	947121.57	545901.54	9.07	LIDAR CONTROL POINT
4903D	972571.55	606137.58	13.38	LIDAR CONTROL POINT
4904D	1077365.03	484101.92	25.28	LIDAR CONTROL POINT
4905D	1039045.55	497752.90	14.75	LIDAR CONTROL POINT
4906D	1076671.60	505298.87	26.42	LIDAR CONTROL POINT
4907D	1115993.82	445291.79	5.42	LIDAR CONTROL POINT
4908D	1132219.37	462111.61	24.26	LIDAR CONTROL POINT
4909D	1137427.89	442120.50	7.44	LIDAR CONTROL POINT
4910D	1129970.58	469294.92	18.99	LIDAR CONTROL POINT
4911D	1110576.96	474523.21	22.28	LIDAR CONTROL POINT

NEW CONTROL STATION:

STATION NAME	GRID NORTHING (US FT)	GRID EASTING (US FT)	STATION ELEVATION (US FT)	CLASSIFICATION
NEWBASE1	1111785.32	474919.45	21.03	NEW CONTROL STATION

EXISTING CONTROL STATIONS:

STATION NAME	GRID NORTHING (US FT)	GRID EASTING (US FT)	STATION ELEVATION (US FT)	CLASSIFICATION
FLGPS 60	860990.34	605476.29	14.57	NGS CONTROL STATION
HAVOLINE 2	986260.07	570072.70	6.54	NGS CONTROL STATION
I75 83 A01	990866.02	628599.81	45.34	NGS CONTROL STATION
I75 83 A34	1025323.51	518684.35	29.35	NGS CONTROL STATION
I75 83 A44	1067231.79	510319.66	55.98	NGS CONTROL STATION
I75 83 A53	1087887.78	510816.25	45.02	NGS CONTROL STATION
I75 84 A03	1106287.97	511578.61	30.24	NGS CONTROL STATION
LORAN	997598.09	509593.58	12.05	NGS CONTROL STATION
MANAT RM NO4	1138724.43	484210.57	30.83	NGS CONTROL STATION
PARISH	1184128.48	530251.00	32.44	NGS CONTROL STATION
PUNTA GORDA ASTRO RESET	945994.28	639106.50	5.16	NGS CONTROL STATION
VENIPOINT	996978.72	510714.31	13.92	NGS CONTROL STATION
VERNA	1102060.29	569106.20	89.59	NGS CONTROL STATION

APPENDIX E: POSITIONAL ACCURACIES

This appendix contains the final positional accuracies for the LiDAR QA/QC Checkpoints (except the forest points) and the LiDAR Control Points for Project Area D of the FY2007 State of Florida Division of Emergency Management Ground Control QA/QC Survey Mapping Project.

PROJECT AREA D
LiDAR QA/QC POINTS
(NO FOREST POINTS)

CALCULATED ACCURACIES:

0.01	Meters RMSE_x
0.02	Meters RMSE_y
0.02	Meters RMSE_{xy}
0.04	Meters at 95% C.I.
0.04	RMSE_z
0.09	Meters at 95% C.I.

CALCULATED ACCURACIES:

0.05	Feet RMSE_x
0.06	Feet RMSE_y
0.07	Feet RMSE_{xy}
0.12	Feet at 95% C.I.
0.14	RMSE_z
0.28	Feet at 95% C.I.

METERS

<u>STATION</u>	<u>V_x</u>	<u>V_y</u>	<u>V_{xy}</u>	<u>V_z</u>
4001D	0.027	0.019	0.03	0.061
4003D	0.007	0.008	0.01	0.031
4004D	0.028	0.029	0.04	0.071
4005D	0.024	0.029	0.04	0.064
4006D	0.01	0.008	0.01	0.036
4007D	0.007	0.008	0.01	0.031
4008D-LC	0.009	0.011	0.01	0.033
4010D	0.009	0.009	0.01	0.038
4011D	0.012	0.013	0.02	0.041
4012D	0.009	0.01	0.01	0.036
4013D	0.02	0.023	0.03	0.069
4014D	0.02	0.024	0.03	0.073
4015D	0.021	0.025	0.03	0.075
4016D	0.009	0.012	0.02	0.033
4017D	0.008	0.011	0.01	0.031
4019D	0.027	0.029	0.04	0.104
4020D	0.027	0.029	0.04	0.108
4021D	0.008	0.007	0.01	0.031
4023D	0.009	0.008	0.01	0.033
4024D	0.016	0.021	0.03	0.038
4025D	0.012	0.012	0.02	0.037
4026D	0.013	0.012	0.02	0.045
4027D	0.008	0.007	0.01	0.032
4028D	0.008	0.007	0.01	0.033
4029D	0.007	0.008	0.01	0.032
4030D	0.007	0.008	0.01	0.032
4032D	0.006	0.008	0.01	0.034
4033D	0.009	0.01	0.01	0.039
4034D	0.011	0.01	0.01	0.048

US FEET

<u>STATION</u>	<u>V_x</u>	<u>V_y</u>	<u>V_{xy}</u>	<u>V_z</u>
4001D	0.09	0.06	0.11	0.20
4003D	0.02	0.03	0.03	0.10
4004D	0.09	0.10	0.13	0.23
4005D	0.08	0.10	0.12	0.21
4006D	0.03	0.03	0.04	0.12
4007D	0.02	0.03	0.03	0.10
4008D-LC	0.03	0.04	0.05	0.11
4010D	0.03	0.03	0.04	0.12
4011D	0.04	0.04	0.06	0.13
4012D	0.03	0.03	0.04	0.12
4013D	0.07	0.08	0.10	0.23
4014D	0.07	0.08	0.10	0.24
4015D	0.07	0.08	0.11	0.25
4016D	0.03	0.04	0.05	0.11
4017D	0.03	0.04	0.04	0.10
4019D	0.09	0.10	0.13	0.34
4020D	0.09	0.10	0.13	0.35
4021D	0.03	0.02	0.03	0.10
4023D	0.03	0.03	0.04	0.11
4024D	0.05	0.07	0.09	0.12
4025D	0.04	0.04	0.06	0.12
4026D	0.04	0.04	0.06	0.15
4027D	0.03	0.02	0.03	0.10
4028D	0.03	0.02	0.03	0.11
4029D	0.02	0.03	0.03	0.10
4030D	0.02	0.03	0.03	0.10
4032D	0.02	0.03	0.03	0.11
4033D	0.03	0.03	0.04	0.13
4034D	0.04	0.03	0.05	0.16

STATION	V_x	V_y	V_{xy}	V_z
4035D	0.007	0.01	0.01	0.039
4036D	0.009	0.01	0.01	0.035
4037D	0.008	0.01	0.01	0.037
4038D	0.007	0.007	0.01	0.031
4039D	0.006	0.007	0.01	0.031
4040D	0.01	0.01	0.01	0.042
4041D	0.008	0.008	0.01	0.037
4042D	0.008	0.008	0.01	0.036
4043D	0.007	0.008	0.01	0.038
4044D	0.011	0.008	0.01	0.035
4045D	0.006	0.007	0.01	0.029
4046D	0.008	0.009	0.01	0.033
4047D	0.008	0.008	0.01	0.048
4048D	0.008	0.007	0.01	0.03
4049D	0.008	0.007	0.01	0.032
4050D	0.015	0.009	0.02	0.045
4051D	0.009	0.008	0.01	0.035
4052D	0.008	0.009	0.01	0.03
4053D	0.009	0.009	0.01	0.034
4054D	0.006	0.007	0.01	0.028
4055D	0.007	0.008	0.01	0.035
4056D	0.009	0.008	0.01	0.032
4057D	0.008	0.008	0.01	0.03
4058D	0.008	0.008	0.01	0.03
4059D	0.007	0.007	0.01	0.029
4060D	0.01	0.011	0.01	0.032
4061D	0.008	0.01	0.01	0.033
4062D	0.01	0.014	0.02	0.038
4063D	0.008	0.008	0.01	0.032
4064D	0.008	0.009	0.01	0.029
4067D	0.014	0.011	0.02	0.036
4069D	0.01	0.01	0.01	0.034
4070D	0.007	0.01	0.01	0.031
4071D	0.009	0.009	0.01	0.031
4072D	0.007	0.009	0.01	0.03
4075D	0.01	0.012	0.02	0.042
4076D	0.023	0.02	0.03	0.048
4077D	0.021	0.019	0.03	0.049
4078D	0.011	0.01	0.01	0.033
4079D	0.019	0.022	0.03	0.05
4080D	0.01	0.009	0.01	0.034
4081D	0.026	0.031	0.04	0.072
4082D	0.03	0.03	0.04	0.068
4083D	0.028	0.031	0.04	0.067
4084D	0.011	0.011	0.02	0.036
4085D	0.007	0.008	0.01	0.031
4086D	0.007	0.008	0.01	0.031
4091D	0.009	0.009	0.01	0.034

STATION	V_x	V_y	V_{xy}	V_z
4035D	0.02	0.03	0.04	0.13
4036D	0.03	0.03	0.04	0.11
4037D	0.03	0.03	0.04	0.12
4038D	0.02	0.02	0.03	0.10
4039D	0.02	0.02	0.03	0.10
4040D	0.03	0.03	0.05	0.14
4041D	0.03	0.03	0.04	0.12
4042D	0.03	0.03	0.04	0.12
4043D	0.02	0.03	0.03	0.12
4044D	0.04	0.03	0.04	0.11
4045D	0.02	0.02	0.03	0.10
4046D	0.03	0.03	0.04	0.11
4047D	0.03	0.03	0.04	0.16
4048D	0.03	0.02	0.03	0.10
4049D	0.03	0.02	0.03	0.10
4050D	0.05	0.03	0.06	0.15
4051D	0.03	0.03	0.04	0.11
4052D	0.03	0.03	0.04	0.10
4053D	0.03	0.03	0.04	0.11
4054D	0.02	0.02	0.03	0.09
4055D	0.02	0.03	0.03	0.11
4056D	0.03	0.03	0.04	0.10
4057D	0.03	0.03	0.04	0.10
4058D	0.03	0.03	0.04	0.10
4059D	0.02	0.02	0.03	0.10
4060D	0.03	0.04	0.05	0.10
4061D	0.03	0.03	0.04	0.11
4062D	0.03	0.05	0.06	0.12
4063D	0.03	0.03	0.04	0.10
4064D	0.03	0.03	0.04	0.10
4067D	0.05	0.04	0.06	0.12
4069D	0.03	0.03	0.05	0.11
4070D	0.02	0.03	0.04	0.10
4071D	0.03	0.03	0.04	0.10
4072D	0.02	0.03	0.04	0.10
4075D	0.03	0.04	0.05	0.14
4076D	0.08	0.07	0.10	0.16
4077D	0.07	0.06	0.09	0.16
4078D	0.04	0.03	0.05	0.11
4079D	0.06	0.07	0.10	0.16
4080D	0.03	0.03	0.04	0.11
4081D	0.09	0.10	0.13	0.24
4082D	0.10	0.10	0.14	0.22
4083D	0.09	0.10	0.14	0.22
4084D	0.04	0.04	0.05	0.12
4085D	0.02	0.03	0.03	0.10
4086D	0.02	0.03	0.03	0.10
4091D	0.03	0.03	0.04	0.11

STATION	V_x	V_y	V_{xy}	V_z
4092D	0.023	0.025	0.03	0.076
4093D	0.008	0.007	0.01	0.033
4094D	0.011	0.009	0.01	0.041
4095D	0.006	0.009	0.01	0.032
4096D	0.007	0.009	0.01	0.037
4097D	0.012	0.012	0.02	0.054
4098D	0.023	0.031	0.04	0.082
4099D	0.007	0.008	0.01	0.034
4101D	0.022	0.028	0.04	0.057
4102D	0.007	0.009	0.01	0.036
4103D	0.007	0.008	0.01	0.034
4104D	0.025	0.024	0.03	0.051
4105D	0.007	0.008	0.01	0.036
4106D	0.008	0.007	0.01	0.032
4107D	0.006	0.008	0.01	0.031
4108D	0.006	0.008	0.01	0.03
4109D	0.057	0.102	0.12	0.051
4110D	0.012	0.025	0.03	0.041
4111D	0.007	0.008	0.01	0.031
4112D	0.01	0.008	0.01	0.033
4164D	0.007	0.009	0.01	0.03
4197D	0.009	0.008	0.01	0.036
4198D	0.023	0.019	0.03	0.09
4500D-LC	0.009	0.008	0.01	0.035
4501D-LC	0.008	0.008	0.01	0.03
4507D-LC	0.008	0.008	0.01	0.047
4509D	0.007	0.008	0.01	0.031
4510D	0.009	0.009	0.01	0.033
4701D	0.01	0.013	0.02	0.038
4702D	0.007	0.006	0.01	0.031
4703D	0.009	0.007	0.01	0.031
4704D	0.006	0.007	0.01	0.029
4705D	0.007	0.008	0.01	0.029
4706D	0.007	0.007	0.01	0.028
4707D	0.007	0.008	0.01	0.031
SUMSQ	0.02	0.03	0.05	0.21
COUNT	112.00	112.00	112.00	112.00
Avg Error	0.01	0.01	0.02	0.04
Max Error	0.06	0.10	0.12	0.11
Min Error	0.01	0.01	0.01	0.03
RMSE	0.01	0.02	0.02	0.04

STATION	V_x	V_y	V_{xy}	V_z
4092D	0.08	0.08	0.11	0.25
4093D	0.03	0.02	0.03	0.11
4094D	0.04	0.03	0.05	0.13
4095D	0.02	0.03	0.04	0.10
4096D	0.02	0.03	0.04	0.12
4097D	0.04	0.04	0.06	0.18
4098D	0.08	0.10	0.13	0.27
4099D	0.02	0.03	0.03	0.11
4101D	0.07	0.09	0.12	0.19
4102D	0.02	0.03	0.04	0.12
4103D	0.02	0.03	0.03	0.11
4104D	0.08	0.08	0.11	0.17
4105D	0.02	0.03	0.03	0.12
4106D	0.03	0.02	0.03	0.10
4107D	0.02	0.03	0.03	0.10
4108D	0.02	0.03	0.03	0.10
4109D	0.19	0.33	0.38	0.17
4110D	0.04	0.08	0.09	0.13
4111D	0.02	0.03	0.03	0.10
4112D	0.03	0.03	0.04	0.11
4164D	0.02	0.03	0.04	0.10
4197D	0.03	0.03	0.04	0.12
4198D	0.08	0.06	0.10	0.30
4500D-LC	0.03	0.03	0.04	0.11
4501D-LC	0.03	0.03	0.04	0.10
4507D-LC	0.03	0.03	0.04	0.15
4509D	0.02	0.03	0.03	0.10
4510D	0.03	0.03	0.04	0.11
4701D	0.03	0.04	0.05	0.12
4702D	0.02	0.02	0.03	0.10
4703D	0.03	0.02	0.04	0.10
4704D	0.02	0.02	0.03	0.10
4705D	0.02	0.03	0.03	0.10
4706D	0.02	0.02	0.03	0.09
4707D	0.02	0.03	0.03	0.10
SUMSQ	0.23	0.34	0.57	2.29
COUNT	112.00	112.00	112.00	112.00
Avg Error	0.04	0.04	0.06	0.13
Max Error	0.19	0.33	0.38	0.35
Min Error	0.02	0.02	0.03	0.09
RMSE	0.05	0.06	0.07	0.14

PROJECT AREA D
LiDAR CONTROL POINTS ONLY
(NO QA/QC POINTS)

CALCULATED ACCURACY:

0.01	Meters RMSE_x
0.01	Meters RMSE_y
0.01	Meters RMSE_{xy}
0.02	Meters at 95% C.I.
0.03	RMSE_z
0.07	Meters at 95% C.I.

CALCULATED ACCURACY:

0.03	Feet RMSE_x
0.03	Feet RMSE_y
0.04	Feet RMSE_{xy}
0.06	Feet at 95% C.I.
0.11	RMSE_z
0.22	Feet at 95% C.I.

METERS

STATION	V_x	V_y	V_{xy}	V_z
4502D-LC	0.006	0.007	0.01	0.031
4503D-LC	0.009	0.01	0.01	0.036
4511D-LC	0.011	0.008	0.01	0.033
4512D-LC	0.006	0.008	0.01	0.03
4513D-LC	0.007	0.007	0.01	0.029
4514D-LC	0.007	0.008	0.01	0.033
4515D-LC	0.009	0.01	0.01	0.036
4900D	0.009	0.01	0.01	0.036
4901D	0.01	0.007	0.01	0.033
4902D	0.006	0.009	0.01	0.031
4903D	0.009	0.01	0.01	0.039
4904D	0.007	0.008	0.01	0.03
4905D	0.01	0.011	0.01	0.039
4906D	0.01	0.01	0.01	0.033
4907D	0.014	0.015	0.02	0.044
4908D	0.007	0.007	0.01	0.032
4909D	0.006	0.007	0.01	0.034
4910D	0.007	0.008	0.01	0.031
4911D	0.006	0.006	0.01	0.031
SUMSQ	0.00	0.00	0.00	0.02
COUNT	19.00	19.00	19.00	19.00
AVG ERROR	0.01	0.01	0.01	0.03
MAX ERROR	0.01	0.02	0.02	0.04
MIN ERROR	0.01	0.01	0.01	0.03
RMSE	0.01	0.01	0.01	0.03

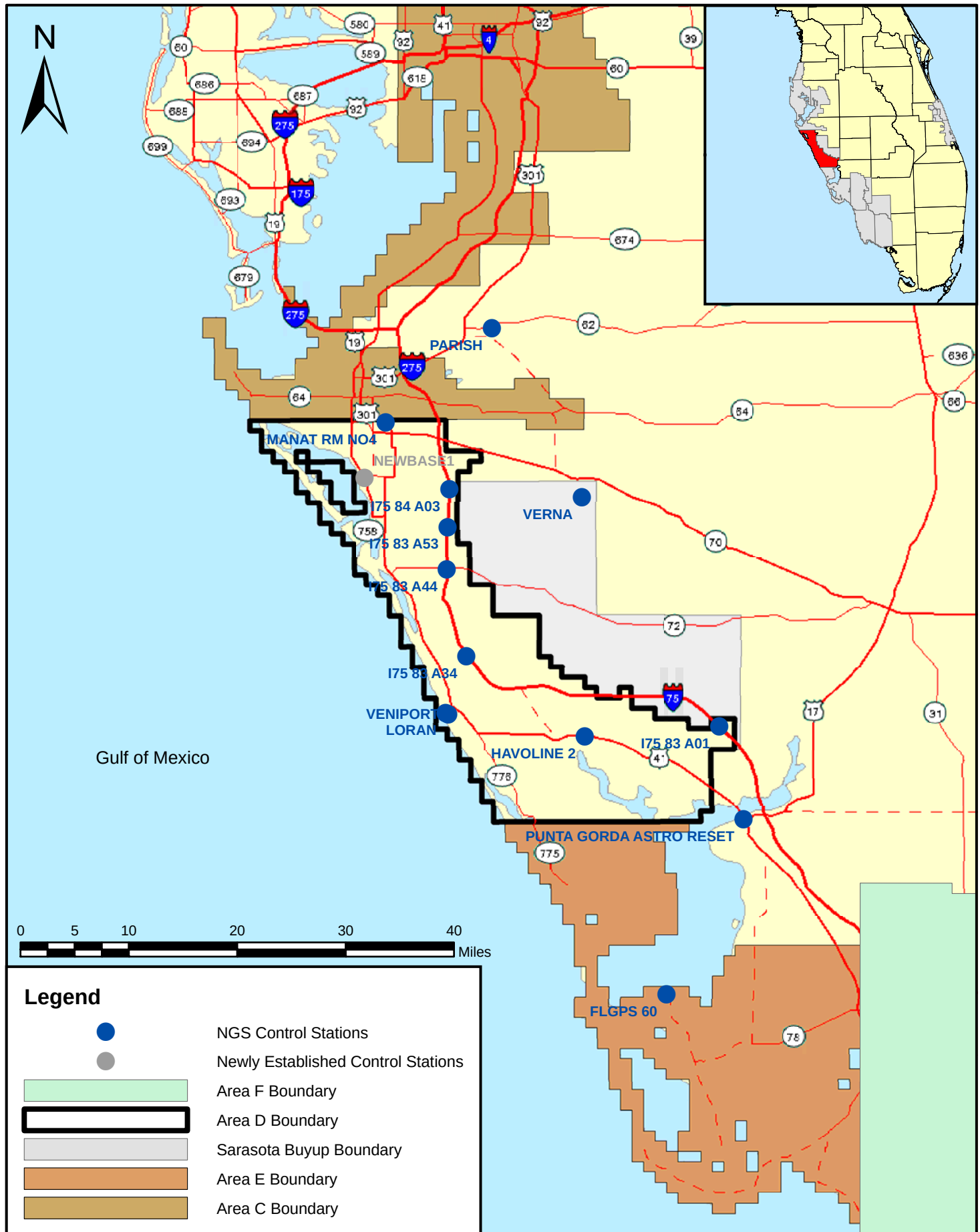
US FEET

STATION	V_x	V_y	V_{xy}	V_z
4502D-LC	0.02	0.02	0.03	0.10
4503D-LC	0.03	0.03	0.03	0.12
4511D-LC	0.04	0.03	0.03	0.11
4512D-LC	0.02	0.03	0.03	0.10
4513D-LC	0.02	0.02	0.03	0.10
4514D-LC	0.02	0.03	0.03	0.11
4515D-LC	0.03	0.03	0.03	0.12
4900D	0.03	0.03	0.03	0.12
4901D	0.03	0.02	0.03	0.11
4902D	0.02	0.03	0.03	0.10
4903D	0.03	0.03	0.03	0.13
4904D	0.02	0.03	0.03	0.10
4905D	0.03	0.04	0.03	0.13
4906D	0.03	0.03	0.03	0.11
4907D	0.05	0.05	0.07	0.14
4908D	0.02	0.02	0.03	0.10
4909D	0.02	0.02	0.03	0.11
4910D	0.02	0.03	0.03	0.10
4911D	0.02	0.02	0.03	0.10
SUMSQ	0.01	0.02	0.02	0.24
COUNT	19.00	19.00	19.00	19.00
AVG ERROR	0.03	0.03	0.03	0.11
MAX ERROR	0.05	0.05	0.07	0.14
MIN ERROR	0.02	0.02	0.03	0.10
RMSE	0.03	0.03	0.04	0.11

APPENDIX F: LAYOUT MAPS

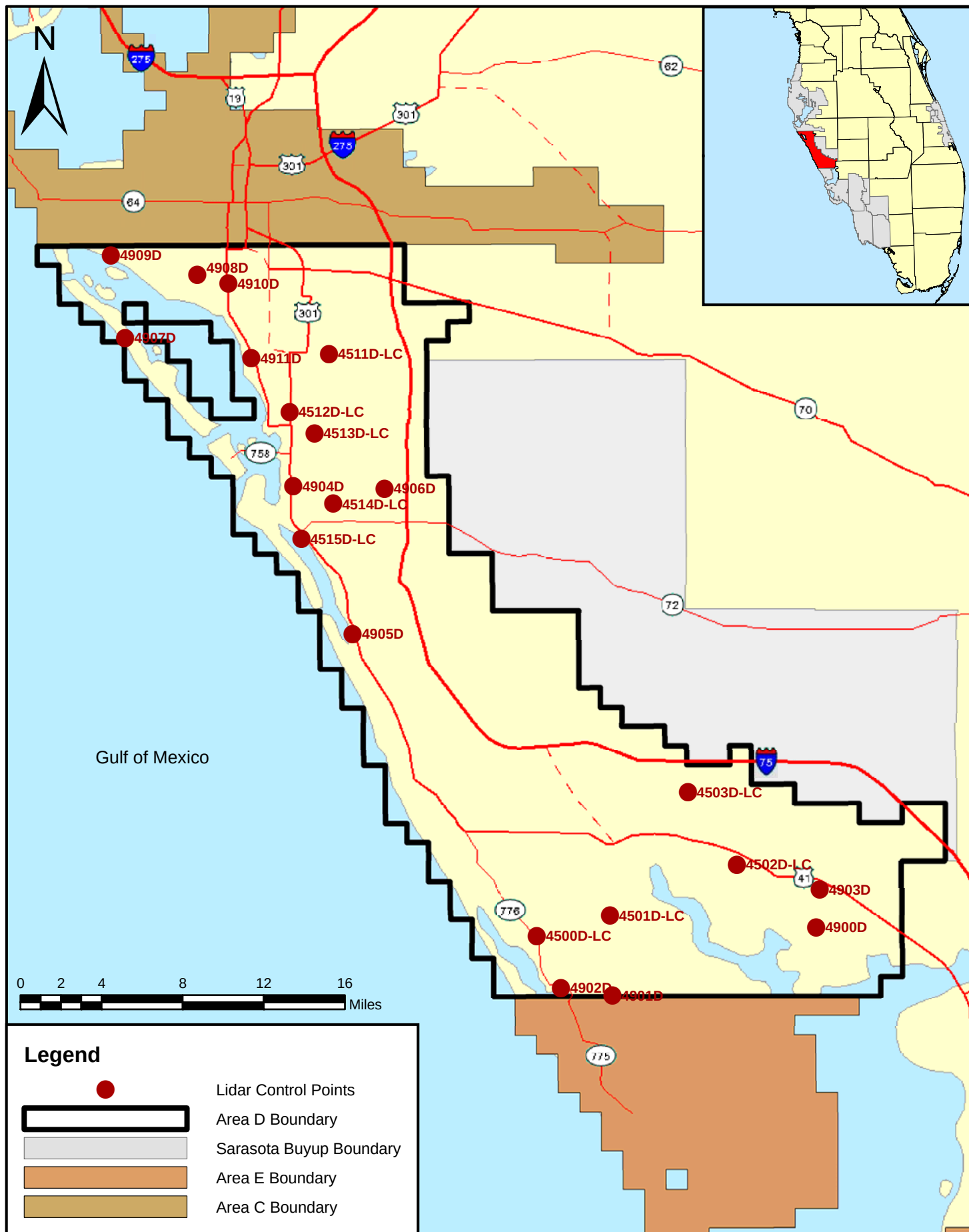
This appendix contains layout maps of the GPS Ground Control Stations, LiDAR Control Points and LiDAR QA/QC Checkpoints for Project Area D of the FY2007 State of Florida Division of Emergency Management Ground Control QA/QC Survey Mapping Project.

- GPS Control Stations
- LiDAR Control Points
- Brush Checkpoints
- Forested Checkpoints
- Low Grass or Bare Earth Checkpoints
- Urban Checkpoints



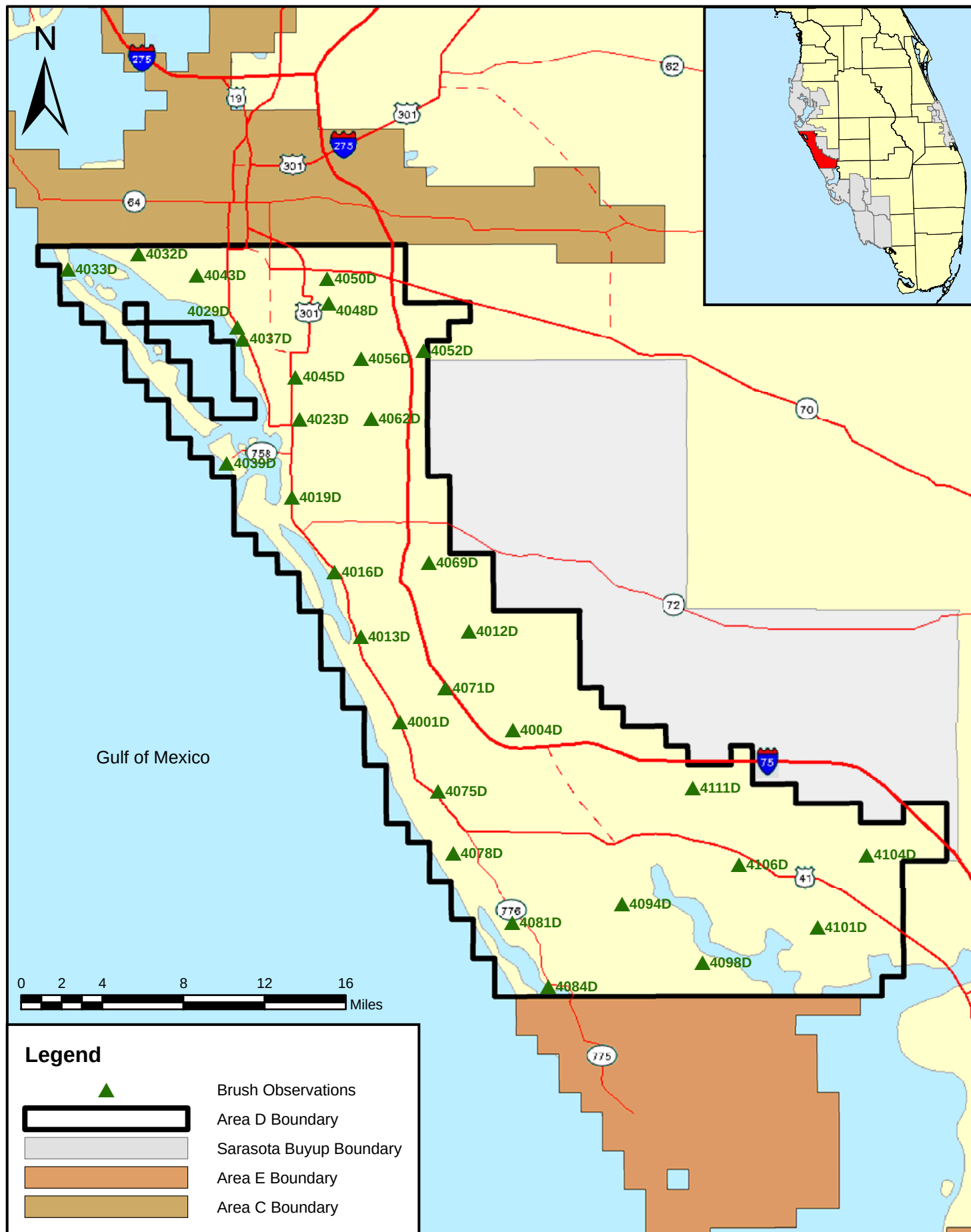


TASK ORDER C: AREA D - LiDAR CONTROL POINTS



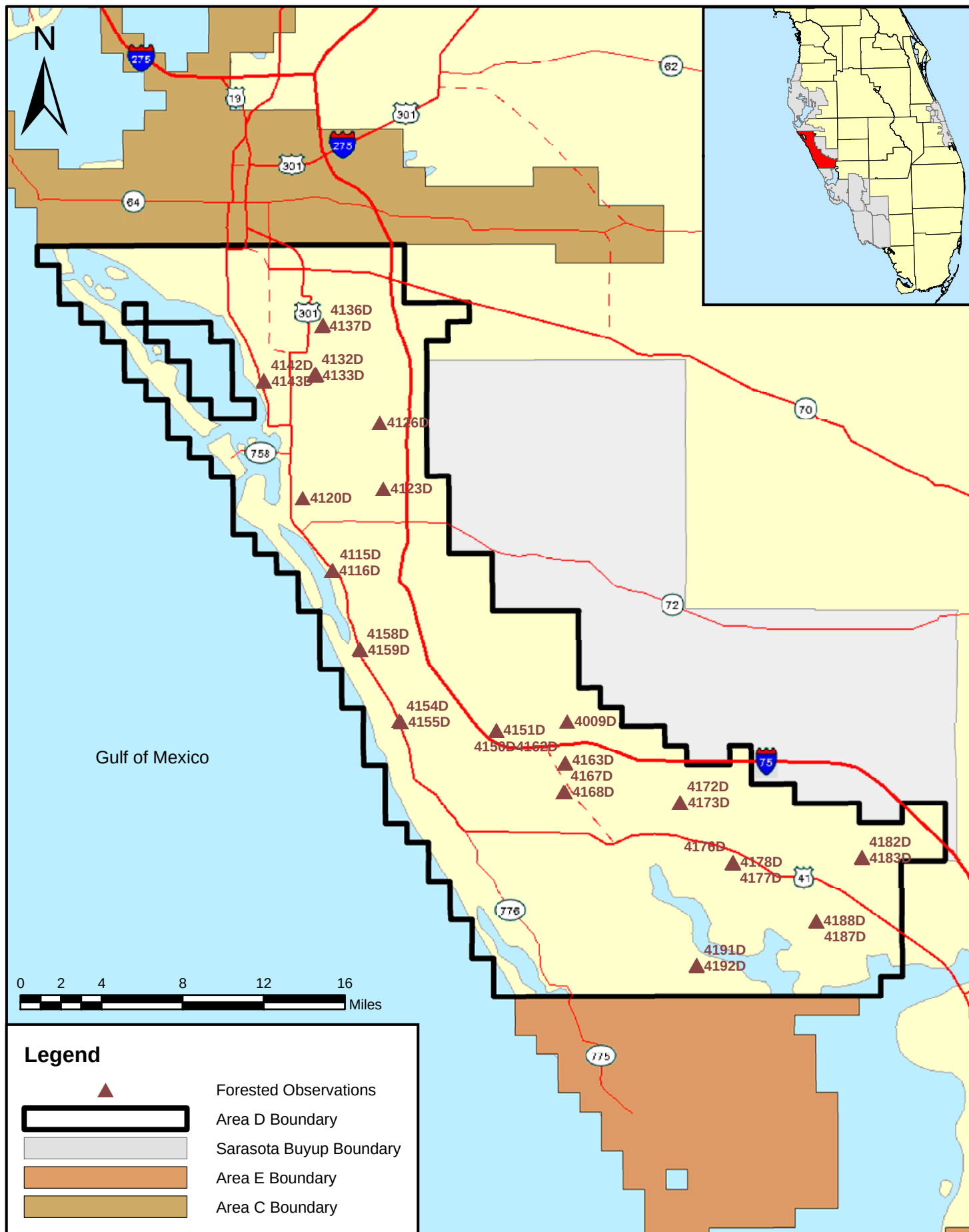


TASK ORDER C: AREA D - BRUSH





TASK ORDER C: AREA D - FORESTED





TASK ORDER C: AREA D - LOW GRASS OR BARE EARTH

