

SURVEYOR'S REPORT

Specific Purpose Survey of the Monitoring Wells

TOHO-2

Osceola County, Florida

South Florida Water Management District's

Purchase Order number PC P602020

Keith and Schnars project number 16434.07,

Task 22001

Report Date: August 15, 2006

Submittal: First

Prepared for:

South Florida Water Management District

Prepared by:



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Licensed Business (L.B.) 1337

SURVEYOR'S REPORT

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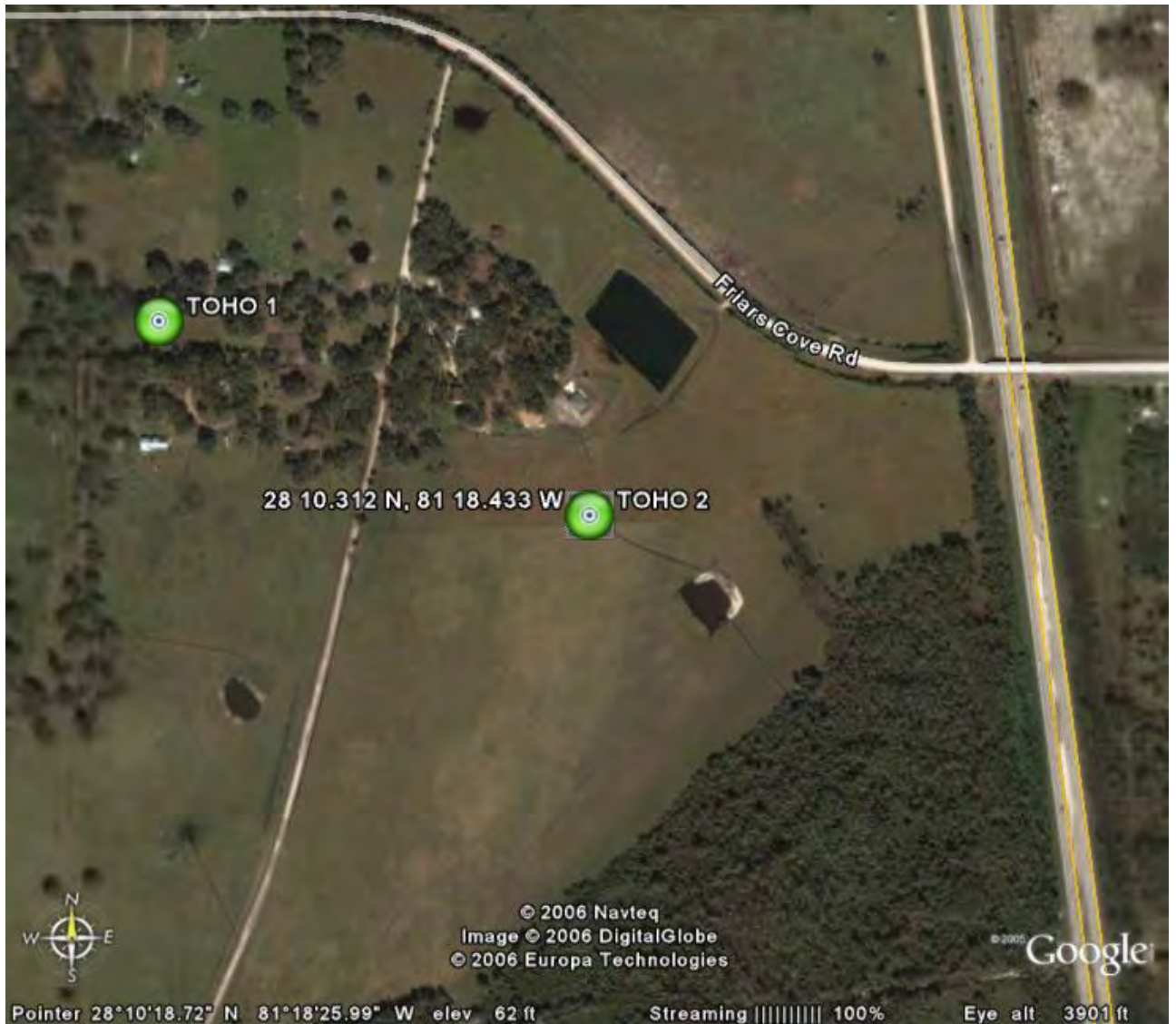
SURVEYOR'S REPORT

PURPOSE

To establish vertical data (NAVD 1988 and NGVD 1929) on the Monitoring Wells at the structure.

LOCATION OF PROJECT

The project is located in Osceola County.



SURVEYOR'S REPORT

ITEMS DELIVERED TO THE DISTRICT

1. Electronic copy of field notes.
2. Electronic copy of all computation sheets.
3. CORPSMET 95 file.
4. Site photographs.
5. Surveyor's Report.

DATUM FOR THE PROJECT


The vertical datum for the project is North American Datum of 1988 (NAVD '88). National Geodetic Survey vertical control monuments with published NAVD '88 elevations were used as the basis for this survey. The National Geodetic Vertical Datum of 1929 (NGVD '29) shown were computed using CORPSCON version 6.0 program.

LEVELING METHODS

Benchmark TOHO-02 was constructed at the site. The elevations were established from Benchmark C 514 using a Wild NA-2 conventional level and three-wire observation method.

SURVEYOR'S REPORT

VERTICAL CONTROL

BM C 514		Elevation:	NAVD 1988	87.65'	NGVD 1929	
Found in National Geodetic Survey Database	Latitude		28°10'23" (Scaled)			
State/County FL/Osceola	Longitude		81°18'07" (Scaled)			
USGS QUAD St. Cloud South (1980)						
Horiz. Order (Preliminary) Class (Preliminary)	<p>DESCRIBED BY FL DEPT OF ENV PRO 2001 (JLM) THE MARK IS ABOUT 26.9 MI NORTH OF KENSVILLE, 4.9 MI SOUTH OF ST. CLOUD, IN SECTION 34, TOWNSHIP 26 SOUTH, RANGE 30 EAST. TO REACH THE MARK FROM THE INTERSECTION OF U.S. HIGHWAY 192, 441 (13TH STREET) AND COUNTY ROAD 523 (VERMONT AVENUE, CANOE CREEK ROAD) IN ST. CLOUD, GO SOUTH ON COUNTY ROAD 523 (VERMONT AVENUE, CANOE CREEK ROAD) FOR 4.7 MI TO THE JUNCTION OF FRIARS COVE ROAD ON THE RIGHT, TURN RIGHT ON FRIARS COVE ROAD AND GO WEST FOR 1.4 MI THE EAST END OF BRIDGE NUMBER 920131 OVER THE FLORIDA TURNPIKE AND THE MARK IS ON THE LEFT, SET FLUSH IN THE TOP OF THE BRIDGE WALKWAY AND ABOUT 1.0 FT ABOVE THE LEVEL OF FRIARS COVE ROAD. LOCATED 15.6 FT SOUTHWEST OF THE APPROXIMATE CENTERLINE OF FRIARS COVE ROAD, 8.3 FT NORTHWEST OF THE SOUTHEAST END OF THE BRIDGE WALKWAY AND 0.9 FT NORTHEAST OF THE NORTH FACE OF THE BRIDGE RAIL.</p>					
						

SURVEYOR' S REPORT

PROJECT RESULTS

Monitoring Well

Monitoring Well TOHO-2:

Reference mark:

Set mark on S. side PVC pipe
With initials K&S.

New Reference

Mark El. **69.404'**

(NGVD '29)

(Wrote -1.027' to NAVD 1988).

Initials:

K&S

B.M., R.F., R.C.

Date:

7/27/06

written at the mark:

El. **69.271'**

Date: **3/11/99**

By: **D.S.Y., F.D.**

Reference Mark location:

Top of PVC Pipe

SURVEYOR'S REPORT

PROJECT PHOTO

TOHO-2



SURVEYOR' S REPORT

PROJECT PHOTO

TOHO-2



SURVEYOR'S REPORT

PROJECT PHOTO

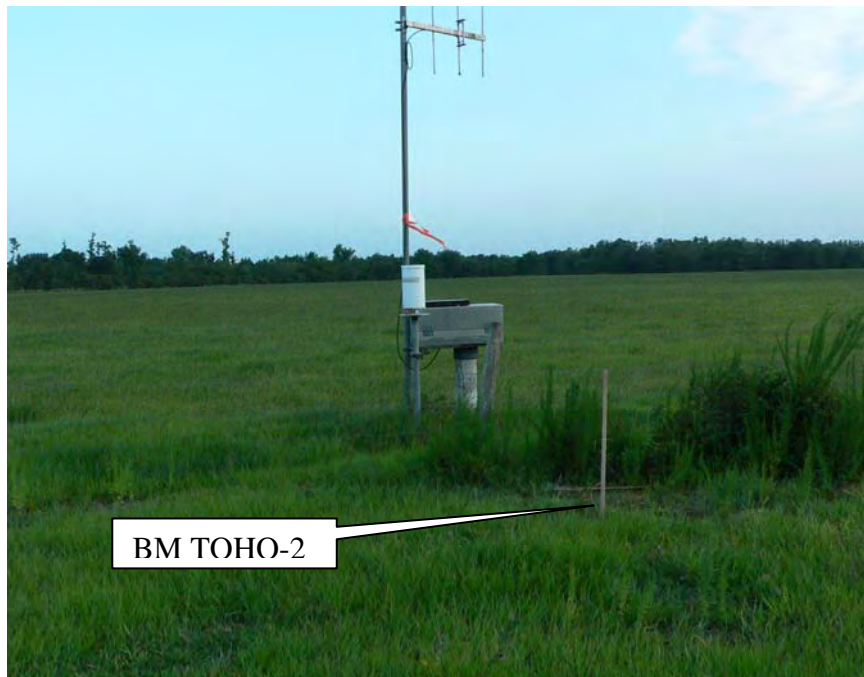
TOHO-2



SURVEYOR' S REPORT

PROJECT PHOTO

TOHO-2



SURVEYOR'S REPORT

Comments:

Party Chief: D. SULLIVAN Field Book: 1156 Page 31-38
Bench Mark: "C 514" El. 87.65', Vertical Datum: NAVD1988
Offset: 1.027' SFWMD VALUE (add this value to convert to NGVD 1929)
Offset: 1.027' NGS VALUE (add this value to convert to NGVD 1929)
NAVD 88 - North American Vertical Datum of 1988
NGVD29 -National Geodetic Vertical Datum of 1929
NAD 83-99 (Horizontal Datum) North American Datum
NGS- National Geodetic Survey
SFWMD- South Florida Water Management District
PVC- Polyvinyl Chloride

SURVEYOR'S CERTIFICATION

I hereby certify that this Specific Purpose Survey meets applicable portions of the Minimum Technical Standards set forth by the Florida Board of Professional Surveyors and Mappers in Chapter 61-G17, Florida Administrative Code. This report is prepared for the sole and specific use of the South Florida Water Management District and is not assignable.

KEITH and SCHNARS, PA.
L.B. number 1337

By:

Date of Survey
July 27, 2006

Kenneth T. Glass, PSM
Professional Surveyor and Mapper
State of Florida
Certificate No. 5713

JOB NO 16434.07
 DATE 06-28-06
 CREW SAME

BENCH WORK (CONST)

Bm	BS	MN	HI	FS	MN
TBM 27	5.93 5.66 5.59	5.600		6.59 5.92 5.25	5.920
554	6.65 5.70 4.75	5.700		6.22 5.95 5.67	5.947
TBM 28	7.69 6.53 5.36	6.527		4.54 3.59 2.64	3.590
TBM 29	7.59 6.39 5.19	6.390		5.46 4.28 3.11	4.283
TBM 30	7.58 6.34 5.10	6.340		5.22 3.99 2.76	3.990
TBM 31	7.31 6.12 4.92	6.117		4.94 3.20 1.96	3.200

2312
11010

ELEV ADJ ELEV REMARKS

~~TOED HUB SW OF FRIARS COVER RD~~
BEGIN BENCH RUN FOR TOHO-1 & TOHO-2
 57.22 57.31 DS14 NGS DATA SHEET
 NGS FLANGE ENCASED ROD
 FLANGE STAMPED DS14
 PUBLISHED ELEV = 57.31 NAVD 88

TOED HUB N/E FRIARS COVER RD

TOED HUB N/E FRIARS COVER RD

TOED HUB N/E FRIARS COVER RD

TOED HUB N/E FRIARS COVER RD

JOB NO 16434.07
 DATE 06-29-06
 CREW SAME

BENCH WORK (CONT)

BM	BS	MN	HC	FS	MN
TBM 32	6.81 5.65 4.48	233' 5.647		6.72 5.52 4.32	240' 5.520
TBM 33	6.17 4.98 3.78	239' 4.977		5.64 4.48 3.32	232' 4.480
TBM 34	6.10 4.91 3.71	239' 4.907		6.73 5.53 4.34	239' 5.533
TBM 35	6.94 5.80 4.66	238' 5.800		6.89 5.70 4.51	238' 5.700
TBM 36	6.87 5.68 4.39	248' 5.630		7.01 5.88 4.74	227' 5.877
TBM 37	7.65 7.01 6.138	227' 7.013		5.14 3.90 2.65	249' 3.897

ELEV	ADJ ELEV	REMARKS
67.861		TOED HUB N/E FRIARS COVERD
		TOED HUB N/E FRIARS COVERD
		TOED HUB N/E FRIARS COVERD
		TOED HUB N/E FRIARS COVERD
		TOED HUB N/E FRIARS COVERD
		TOED HUB N/E " " "
		TOED HUB N " " "

JOB NO 16434.07
 DATE 06-29-06
 CREW SAME

BENCH WORK (CONT)

BM	BS	MN	HI	FS	IN
TBM 38	7.83 1.39 6.94	1.15 89'	7.387	2.00 1.37 0.74	1.370
TBM 39	8.54 8.00 7.47	1.14 91'	8.003	1.74 1.29 0.85	1.293
TBM 40	7.06 6.55 6.04	1.20 97'	6.550	2.83 2.34 1.86	2.343
CS14				6.07 5.57 5.08	5.573

ELEV	ADJ ELEV	REMARKS
74.918		TOED HUB N FRIARS COVE RD
		TOED HUB N FRIARS COVE RD
		PK NAIL EXPANSION JOINT WEST END BRIDGE
87.649 -0.001	87.65	STAMPED DISC SE CORNER CS14 NGS DATA SHEET PUBLISHED ELEV = 87.65 NAVD 88

BENCH RUN CONTINUED IN
BOOK 1156 PAGE 53

JOB NO 16437.07
 DATE 07-05-06
 WEATHER SUNNY, 90°
 CREW D. SULLIVAN, D. JOHNSON, R. CRUMP, J. LAFLAUR

RERUN BENCH THRU TO HD 1 & 2 TO D514

BM	BS	IN	HI	FS	MIN
C514	5.75 5.03 4.30	145'	5.027		
TBM1	1.84 0.86 0.88	96'	0.860	8.42 7.69 6.96	7.690
TBM2	2.21 1.70 1.18	103'	1.0697	8.54 8.02 7.58	8.060
TBM3	2.75 1.97 1.19	156'	1.0970	7.74 7.23 6.72	7.230
TBM4	6.34 5.28 4.22	212'	5.280	7.04 6.26 5.49	6.263
TBM5	4.91 3.72 2.53	238'	3.720	8.00 6.94 5.88	6.940
	949		18.587	711	36.183

BENCHRUN CONTINUED FROM
BOOK 1156 PAGE 38

ELEV ADJ ELEV REMARKS

87.65

NGS DATA SHEET C514
 PUBLISHED ELEV = 87.65 NAVD 88
 NGS STAMPED METAL DISC N.E. CORNER
 BRIDGE 920131.

TOED HUB SO. SIDE FRIARS COVE RD.

" " " " " " "

" " " " " " "

" " " " " " "

TOED HUB PASTURE AT 3340 FRIARS COVE RD

JOB No 16434.07
 DATE 07-05-06
 CREW SAMS

BENCH RUN TO HUB 1 & 2 (CONT)

BM	BS	MIN	HI	FS	MIN
TBM 6	6.42 5.65 4.88	154'	5.650	6.53 5.34 4.15	238' 5.340
3 TO H 2 TO H 1	6.80 5.60 4.40	240'	5.600	6.47 5.69 4.91	156' 5.690
TBM 7	7.38 6.21 5.04	234'	6.210	6.76 5.55 4.34	242' 5.500
TBM 8	6.63 5.78 4.93	170'	5.780	5.11 3.94 2.78	233' 3.943
TBM 9	6.47 5.29 4.11	236'	5.290	5.35 4.50 3.65	170' 4.500
TBM 10	6.61 5.39 4.17	244'	5.390	6.43 5.26 4.04	234' 5.260
	1280		35.926	1272	30,230

ELEV	ADJ ELEV	REMARKS
64.861		TOED HUB PASTURE AT 3340 FRIARS COVE RD
64.641	64.634	1 DIA CAST MON W/BFWMD BRASS DISC TO H 1
		TOED HUB PASTURE AT 3340 FRIARS COVE RD
		" " " " " " " "
		NEAR GATE
		TOED HUB SO. SIDE FRIARS COVE RD.
		" " " " " " "

JOB NO 16434.07
 DATE 07-05-06
 CREW SAME

BENCH RUN TO 110 1/2 2 (CONT)

BM	BS	MN	HE	FS	MN
TBM 11	6.34 5.76 5.17	116	5.757	6.31 5.09 3.87	244 5.090
TBM 12	6.24 5.04 3.84	240	5.040	5.88 5.29 4.71	111 5.293
TBM 13	6.69 5.46 4.23	245	5.460	6.90 5.70 4.50	242 5.700
TBM 14	4.99 3.72 2.44	255	3.917	7.69 6.46 5.23	246 6.460
TBM 15	7.02 5.93 4.84	212	5.930	5.93 4.64 3.35	1852 4.640
TBM 16	5.33 4.81 4.29	104	4.810	8.28 7.19 6.11	217 7.193
	1179		30.717	1321	34.373

ELEV	ADS ELEV	REMARKS
68.618		TOED HUB SO/W SIDE FRIARS LOVE RD
		TOED HUB SO. SIDE PARTIN RANCH RD
		TOED HUB ^{NO} SO SIDE PARTIN RANCH RD.
		TOED HUB NO. SIDE PARTIN RANCH RD
		TOED HUB NEAR CORRAL PARTIN RANCH
		TOED HUB SIDE PASTURE PARTIN RANCH

BS NO	16454.07				
DATE	01-05-06				
CREW	JAME				
BRANCH RUN TO HOLEZ (LONG)					
BS	BS	MN	HI	FS	MN
S/B TO HOLEZ	7.75			7.40	
TO HOLEZ	6.76	6.760		6.89	6.890
	5.77			6.38	
	1.84			5.47	
TBM 17	6.73	6.730		4.48	4.480
	5.62			5.49	
	6.35			6.18	
TBM 18	5.35	5.350		5.08	5.080
	4.35			3.98	
	4.56			5.77	
TBM 19	3.40	3.400		4.74	4.740
	2.24			3.71	
	5.55			7.81	
TBM 20	4.34	4.337		6.64	6.640
	3.12			5.47	
	5.44			7.91	
TBM 21	4.32	4.320		6.70	6.700
	3.20			5.49	
	1318	30.900		1203	34.521

ELEV	ADJ ELEV	REMARKS
63.156	63.134	1' DIA CAST IRON W/SF WIND DISC FENCE
		TOED HUB PASTURE AT 3200 FRIARS COVE RD
		" " " " " " " "
		TOED HUB NO/E SIDE FRIARS COVE RD
		TURN LONG. FELL IN MIDDLE OF ROAD
		TOED HUB NO/E SIDE FRIARS COVE RD
		" " " " " " " "

SAME CREW
7/29/2000
TOHO & REDO

BM	BS	MEAN	HI	FS	MEAN
	5.23				
BM TOHO 2	5.13	5.130			
	<u>5.03</u>				
	15.39				
	1.73			1.43	
WELL PIPE 1	1.69	1.687		1.39	1.387
	<u>1.64</u>			<u>1.34</u>	
	5.06			4.16	
				5.53	
BM TOHO 2				5.43	5.430
				<u>5.33</u>	
				16.29	

ELEV.	ADJ. ELEV.	REMARKS
64.634		
63.134		POURED CONC. MON. W/ S.F.W.M.D. BRASS DISK
NAVD 88		
68.377		
66.877		2" PVC PIPE IN ALUM BOX ON 8" PVC PIPE
		ENCASEMENT
		NGVD 29 =
		67.904 69.404
		= 1.027 TO NAVD 88
64.634	64.634	
63.134	63.134	POURED CONC. MON. W/ S.F.W.M.D. BRASS DISK
<u>FLAT</u>	NAVD 88	

Identification Information:

Citation:

Citation Information:

Kenneth T. Glass
Keith & Schnars

Originator: Kenneth T. Glass, P. S. M. (ed.)
 Publication_Date: 20060727
 Publication_Time: Unknown
 Title: S. F. W. M. D. Monitoring Well
 Edition: TOHO-2
 Series_Information:
 Publication_Information:
 Publication_Place: Not Published
 Publisher: None
 Online_Linkage: kglass@keithandschnars.com
 Larger_Work_Citation:
 Citation_Information:
 Series_Information:
 Publication_Information:

Description:

Abstract:

South Florida Water Management District
 Structure TOHO-2.

Purpose

Purpose:

To establish reference elevations in NAVD 1988 and
 NGVD 1929 datum at the Monitoring Well(s).

Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Survey Date

Calendar_Date: 20060727

Range_of_Dates/Times:

Multiple_Dates/Times:

Currentness_Reference: Publication Date

Status:

Progress: Complete

Maintenance_and_Update_Frequency: Unknown

Spatial_Domain:

Bounding_Coordinates:

West_Bounding_Coordinate: 81° 18' 26.0"

East_Bounding_Coordinate: 81° 18' 26.0"

North_Bounding_Coordinate: 28° 10' 18.7"

South_Bounding_Coordinate: 28° 10' 18.7"

Keywords:

Theme:

Theme_Keyword_Thesaurus: Specific Purpose Survey
 Theme_Keyword: Monitoring Well(s)

Place:

Place_Keyword_Thesaurus: Osceola County

Place_Keyword: S. F. W. M. D. Monitoring Well TOHO-2

Place_Keyword: SEC. 03 - T27S - R30E

Stratum:

Temporal:

Access_Constraints: Key needed to gain access to Monitoring Wells.

Use_Constraints: Call South Florida Water Management District for key.

Point_of_Contact:

Contact_Information:

Contact_Person_Primary:

Contact_Person: Howard J. Ehmke

Contact_Organization: South Florida Water Management

Howard Ehmke
SFWMD

District

Contact_Organization_Primary:

Contact_Position: P. S. M.

Contact_Address:

Address_Type: mailing and physical address

Address:

Acceler 8

Suite 150

2301 Centerpark West Drive

City: West Palm Beach

State_or_Province: Florida

Postal_Code: 33409

Country: USA

TOHO 2. gen
Contact_Voice_Telephone: (561) 242-5520 ext 4064
Contact_Electronic_Mail_Address: hehmke@sfwmd.gov
Hours_of_Service: 8:00 am to 5:00 pm EST

Security_Information:

Cross_Reference:

 Citation_Information:

 Series_Information:

 Publication_Information:

Data_Quality_Information:

 Attribute_Accuracy:

 Attribute_Accuracy_Report:

Equipment Used

The horizontal location of the benchmark was taken from a hand held G.P.S. unit. The vertical data was collected using a Wild NA-2 Level. Coordinates are based on the Florida State Plane Coordinate System, East Zone, NAD 83/90. Elevations are based on NAVD 1988 with an offset supplied to convert to NGVD 1929.

Logical_Consistency_Report:

Vertical data on the monitoring wells were established using the site benchmark.

Completeness_Report:

Project Results

69.404' (NGVD 1929) TOHO-2 Well.
Offset written at wells (-) 1.027' to NAVD 1988.
TOHO-2 2006 was the site benchmark used for this survey.

NAVD 1988 elevation 64.634'

Positional_Accuracy:

 Horizontal_Positional_Accuracy:

Horizontal

 Horizontal_Positional_Accuracy_Report:

The horizontal position of the benchmark was established using a hand held GPS.

Quantitative_Horizontal_Positional_Accuracy_Assessment:

Horizontal_Positional_Accuracy_Value: Lat. 28°10'18.7"

Long. 81°18'26.0"

Horizontal_Positional_Accuracy_Explanation: Value derived

by hand-held GPS unit.

 Vertical_Positional_Accuracy:

 Vertical_Positional_Accuracy_Report:

The onsite benchmark was used to establish the elevations on the monitoring well(s) in this report.

Quantitative_Vertical_Positional_Accuracy_Assessment:

Vertical_Positional_Accuracy_Value: 0.033ft. NAVD88

Vertical_Positional_Accuracy_Explanation: Better than

0.03ft. x sq. root of miles of the level loop.

Lineage:

 Source_Information:

 Source_Citation:

 Citation_Information:

 Series_Information:

 Publication_Information:

 Larger_Work_Citation:

 Citation_Information:

 Series_Information:

 Publication_Information:

 Source_Time_Period_of_Content:

 Time_Period_Information:

 Single_Date/Time:

 Range_of_Dates/Times:

 Multiple_Dates/Times:

Process_Step:

 Process_Description:

Level Line

Differential leveling was performed using a Wild NA-2 conventional level. The onsite benchmark TOHO-2 2006 was used to determine the monitoring well elevation. Elevations were written at the wells in NGVD 1929 with an offset provided to convert the elevations to NAVD 1988.

Process_Date: 20060727

Process_Contact:

 Contact_Information:

TOHO 2. gen
Contact_Person_Primary:
Contact_Organization_Primary:
Contact_Address:

Spatial_Data_Organization_Information:
Spatial_Reference_Information:
Horizontal_Coordinate_System_Definition:
Geographic:
Latitude_Resolution: 28°10' 18.7"
Longitude_Resolution: 81°18' 26.0"
Geographic_Coordinate_Units: Degrees, minutes, and decimal

seconds
Geodetic_Model:
Vertical_Coordinate_System_Definition:
Altitude_System_Definition:
Depth_System_Definition:
Entity_and_Attribute_Information:
Detailed_Description:
Entity_Type:
Attribute:
Attribute_Domain_Values:
Attribute_Value_Accuracy_Information:

Overview_Description:
Distribution_Information:
Distributor:
Contact_Information:
Contact_Person_Primary:
Contact_Organization_Primary:
Contact_Organization: Keith and Schnars, P. A.
Contact_Person: Kenneth T. Glass, P. S. M.
Contact_Position: Director of Surveying and Mapping Lakeland
Contact_Address:
Address_Type: mailing and physical address
Address: 2525 Drane Field Rd., Suite 7
City: Lakeland
State_or_Province: Florida
Postal_Code: 33811
Country: Polk
Contact_Voice_Telephone: (863)-646-4771
Contact_Facsimile_Telephone: (863)-646-3378
Contact_Electronic_Mail_Address: kglass@keithandschnars.com
Hours_of_Service: 8:00-5:00 est.

Distribution_Liability: None
Standard_Order_Process:
Digital_Form:
Digital_Transfer_Information:
Digital_Transfer_Option:
Online_Option:
Computer_Contact_Information:
Network_Address:
Dialup_Instructions:
Offline_Option:
Recording_Capacity:

Available_Time_Period:
Time_Period_Information:
Single_Date/Time:
Range_of_Dates/Times:
Multiple_Dates/Times:

Metadata_Reference_Information:
Metadata_Date: 20060808
Metadata_Contact:
Contact_Information:
Contact_Person_Primary:
Contact_Person: Kenneth T. Glass, P. S. M.
Contact_Organization: Keith and Schnars, P. A.
Contact_Organization_Primary:
Contact_Position: Director of Surveying and Mapping Lakeland
Contact_Address:
Address_Type: mailing and physical address
Address: 2525 Drane Field Rd., Suite 7
City: Lakeland

TOHO 2. gen
State_or_Province: FL
Postal_Code: 33811
Country: USA
Contact_Voice_Telephone: (863) 646-4771
Contact_Facsimile_Telephone: (863) 646-3378
Contact_Electronic_Mail_Address: kglass@keithandschnars.com
Hours_of_Service: 8:00 am to 5:00 pm EST
Metadata_Standard_Name: FGDC Content Standards for Digital Geospatial Metadata
Metadata_Standard_Version: 19940608
Metadata_Security_Information:



SOUTH FLORIDA WATER MANAGEMENT DISTRICT

Rev. 4/01

COUNTY OSCEOLA	PROJECT	DESIGNATION Structure TOHO-2	
SECTION <u>03</u>	TOWNSHIP <u>27</u> SOUTH	RANGE <u>30</u> EAST	
GEOGRAPHIC INDEX OF QUAD			
Established by <u>KEITH AND SCHNARS</u>		NAME OF QUADRANGLE	
Recovered by		<u>ST. CLOUD SOUTH</u>	
SET CLASS "C" MONUMENT WITH SFWMD BRASS DISK.			
SURVEYOR <u>D. SULLIVAN (Keith and Schnars)</u>		FIELD BOOK, 1156, pgs. 31-38	
DATE <u>06/28/2006</u>			
HORIZONTAL DATUM: 1983 with 1999 correction, ZONE East			
VERTICAL DATUM: NGVD 1929 and NAVD 1988			
CONTROL ACCURACY: HORIZONTAL HAND-HELD GPS, 3 rd Order VERTICAL			
STATE PLANE COORDINATES	X = 557185	Y = 1395312	EL. (NGVD 1929) 65.661'
			EL. (NAVD 1988) 64.634'
LATITUDE <u>28° 10' 18.7"</u>		LONGITUDE <u>81° 18' 26.0"</u>	
DESCRIPTION			
South Florida Water Management District brass disk set in concrete monument stamped TOHO 2 / 2006			
The benchmark is located 5.5 miles southwest of Saint Cloud			
To reach the mark from the intersection of U.S. 192 and Vermont Ave. in Saint Cloud travel south along Vermont Ave. a distance of 4.8 miles (Vermont Ave. will turn into Canoe Creek Rd.) to Friars Cove Rd.			
Then travel 1.6 miles west along Friars Cove Rd. to a gate that has an address of 3340. Then travel 0.1 miles south from the Gate. The mark is 5' north of 4' barbed wire fence, and 10' north of the well structure.			
Notable Land marks:			

SKETCH



The NGS Data Sheet

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

```

DATABASE = Sybase ,PROGRAM = datasheet, VERSION = 7.35
1 National Geodetic Survey, Retrieval Date = APRIL 26, 2006
DF6738 *****
DF6738 DESIGNATION - D 514
DF6738 PID - DF6738
DF6738 STATE/COUNTY- FL/OSCEOLA
DF6738 USGS QUAD - ST CLOUD SOUTH (1980)
DF6738
DF6738 *CURRENT SURVEY CONTROL
DF6738
DF6738 * NAD 83(1986)- 28 10 36. (N) 081 19 03. (W) SCALED
DF6738 * NAVD 88 - 17.467 (meters) 57.31 (feet) ADJUSTED
DF6738
DF6738 GEOID HEIGHT- -27.80 (meters) GEOID03
DF6738 DYNAMIC HT - 17.441 (meters) 57.22 (feet) COMP
DF6738 MODELED GRAV- 979,154.7 (mgal) NAVD 88
DF6738
DF6738 VERT ORDER - SECOND CLASS I
DF6738
DF6738 The horizontal coordinates were scaled from a topographic map and have
DF6738 an estimated accuracy of +/- 6 seconds.
DF6738
DF6738 The orthometric height was determined by differential leveling
DF6738 and adjusted by the National Geodetic Survey in April 2004..
DF6738
DF6738 The geoid height was determined by GEOID03.
DF6738
DF6738 The dynamic height is computed by dividing the NAVD 88
DF6738 geopotential number by the normal gravity value computed on the
DF6738 Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
DF6738 degrees latitude (g = 980.6199 gals.).
DF6738
DF6738 The modeled gravity was interpolated from observed gravity values.
DF6738
DF6738 ;
DF6738 ; North East Units Estimated Accuracy
DF6738 ; SPC FL E - 425,830. 168,820. MT (+/- 180 meters Scaled)
DF6738
DF6738 SUPERSEDED SURVEY CONTROL
DF6738
DF6738 No superseded survey control is available for this station.
DF6738
DF6738 U.S. NATIONAL GRID SPATIAL ADDRESS: 17RMM688168(NAD 83)
DF6738 _MARKER: F = FLANGE-ENCASED ROD
DF6738 _SETTING: 49 = STAINLESS STEEL ROD W/O SLEEVE (10 FT.+)
DF6738 _STAMPING: D 514 2001
DF6738 _MARK LOGO: FLDEP
DF6738 _PROJECTION: FLUSH
DF6738 _MAGNETIC: M = MARKER EQUIPPED WITH BAR MAGNET
DF6738 _STABILITY: B = PROBABLY HOLD POSITION/ELEVATION WELL
DF6738 _SATELLITE: THE SITE LOCATION WAS REPORTED AS NOT SUITABLE FOR
DF6738 +SATELLITE: SATELLITE OBSERVATIONS - June 28, 2001
DF6738 _ROD/PIPE-DEPTH: 23.9 meters
DF6738
DF6738 HISTORY - Date Condition Report By
DF6738 HISTORY - 20010628 MONUMENTED FLDEP
DF6738
DF6738 STATION DESCRIPTION
DF6738
DF6738 DESCRIBED BY FL DEPT OF ENV PRO 2001 (JLM)
DF6738 THE MARK IS ABOUT 27.0 MI NORTH OF KENSVILLE, 5.0 MI SOUTH OF ST.
DF6738 CLOUD, IN SECTION 33,
DF6738 TOWNSHIP 26 SOUTH, RANGE 30 EAST.
DF6738
DF6738 TO REACH THE MARK FROM THE INTERSECTION OF U.S. HIGHWAY 192, 441 (13TH
DF6738 STREET) AND
DF6738 COUNTY ROAD 523 (VERMONT AVENUE, CANOE CREEK ROAD) IN ST. CLOUD, GO
DF6738 SOUTH ON COUNTY
DF6738 ROAD 523 (VERMONT AVENUE, CANOE CREEK ROAD) FOR 4.7 MI TO THE JUNCTION
DF6738 OF FRIARS COVE

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DATASHEETS

DF6738'ROAD ON THE RIGHT, TURN RIGHT ON FRIARS COVE ROAD AND GO WEST FOR 1.4
DF6738'MI TO THE EAST
DF6738'END OF THE BRIDGE OVER THE FLORIDA TURNPIKE, CONTINUE WEST ON FRIARS
DF6738'COVE ROAD FOR 1.0
DF6738'MI TO THE DEAD END AND THE MARK ON THE LEFT, A STAINLESS STEEL ROD
DF6738'DRIVEN TO REFUSAL AT
DF6738'A DEPTH OF 78.4 FT WITH A NGS LOGO CAP FLUSH WITH THE GROUND AND ABOUT
DF6738'1.0 FT BELOW THE
DF6738'LEVEL OF FRIARS COVE ROAD, THE DATUM POINT IS RECESSED 0.5 FT BELOW
DF6738'THE LEVEL OF THE NGS
DF6738'LOGO CAP.
DF6738'
DF6738'LOCATED 92.0 FT SOUTHWEST OF A METAL GATE, 20.0 FT SOUTH OF THE
DF6738'APPROXIMATE CENTERLINE
DF6738'OF FRIARS COVE ROAD, 17.0 FT WEST OF A 60-INCH OAK TREE, 1.2 FT NORTH
DF6738'OF A BARBWIRE FENCE
DF6738'AND 1.0 FT NORTH OF A CARSONITE WITNESS POST.
DF6738'
DF6738'NOTE ACCESS TO DATUM POINT IS HAD THROUGH A 5-INCH NGS LOGO CAP.
DF6738'
DF6738'NOTE A MAGNET WAS IMBEDDED IN THE GROUND ON THE SOUTH SIDE OF THE
DF6738'MONUMENT.
DF6738'
DF6738'
DF6738'

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

The NGS Data Sheet

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

DATABASE = Sybase ,PROGRAM = datasheet, VERSION = 7.35

1 National Geodetic Survey, Retrieval Date = APRIL

DF6737 *****

DF6737 DESIGNATION - C 514

DF6737 PID - DF6737

DF6737 STATE/COUNTY- FL/OSCEOLA

DF6737 USGS QUAD - ST CLOUD SOUTH (1980)

DF6737

DF6737 *CURRENT SURVEY CONTROL

DF6737

DF6737*	NAD 83(1986)-	28 10 23.	(N)	081 18 07.	(W)	SCALED
DF6737*	NAVD 88	-	26.717	(meters)	87.65	(feet) ADJUSTED

DF6737

DF6737 GEOID HEIGHT- -27.82 (meters) GEOID03

DF6737 DYNAMIC HT - 26.678 (meters) 87.53 (feet) COMP

DF6737 MODELED GRAV- 979,154.6 (mgal) NAVD 88

DF6737

DF6737 VERT ORDER - SECOND CLASS I

DF6737

DF6737.The horizontal coordinates were scaled from a topographic map and have an estimated accuracy of +/- 6 seconds.

DF6737

DF6737.The orthometric height was determined by differential leveling

DF6737.and adjusted by the National Geodetic Survey in April 2004..

DF6737

DF6737.The geoid height was determined by GEOID03.

DF6737

DF6737.The dynamic height is computed by dividing the NAVD 88

DF6737.geopotential number by the normal gravity value computed on the

DF6737.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45

DF6737.degrees latitude (g = 980.6199 gals.).

DF6737

DF6737.The modeled gravity was interpolated from observed gravity values.

DF6737

DF6737;	North	East	Units	Estimated Accuracy
DF6737;SPC FL E -	425,420.	170,350.	MT	(+/- 180 meters Scaled)

DF6737

DF6737

DF6737 SUPERSEDED SURVEY CONTROL

DF6737

DF6737.No superseded survey control is available for this station.

DF6737

DF6737 U.S. NATIONAL GRID SPATIAL ADDRESS: 17RMM703164(NAD 83)

DF6737_MARKER: DD = SURVEY DISK

DF6737_SETTING: 31 = SET IN A PAVEMENT SUCH AS STREET, SIDEWALK, CURB, ETC.

DF6737_SP_SET: BRIDGE WALKWAY

DF6737_STAMPING: C 514 2001

DF6737_MARK LOGO: FLDEP

DF6737_MAGNETIC: N = NO MAGNETIC MATERIAL

DF6737_STABILITY: D = MARK OF QUESTIONABLE OR UNKNOWN STABILITY

DF6737_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR

DF6737+SATELLITE: SATELLITE OBSERVATIONS - June 28, 2001

DF6737

DF6737	HISTORY	- Date	Condition	Report By
DF6737	HISTORY	- 20010628	MONUMENTED	FLDEP

DF6737

DF6737

DF6737 STATION DESCRIPTION

DF6737

DF6737'DESCRIBED BY FL DEPT OF ENV PRO 2001 (JLM)

DF6737'THE MARK IS ABOUT 26.9 MI NORTH OF KENSVILLE, 4.9 MI SOUTH OF ST.

DF6737'CLOUD, IN SECTION 34,

DF6737'TOWNSHIP 26 SOUTH, RANGE 30 EAST.

DF6737'

DF6737'TO REACH THE MARK FROM THE INTERSECTION OF U.S. HIGHWAY 192, 441 (13TH

DF6737'STREET) AND

DF6737'COUNTY ROAD 523 (VERMONT AVENUE, CANOE CREEK ROAD) IN ST. CLOUD, GO

DF6737'SOUTH ON COUNTY

DF6737'ROAD 523 (VERMONT AVENUE, CANOE CREEK ROAD) FOR 4.7 MI TO THE JUNCTION

DF6737'OF FRIARS COVE

DF6737'ROAD ON THE RIGHT, TURN RIGHT ON FRIARS COVE ROAD AND GO WEST FOR 1.4



DATASHEETS

DF6737' MI THE EAST END
DF6737' OF BRIDGE NUMBER 920131 OVER THE FLORIDA TURNPIKE AND THE MARK ON THE
DF6737' LEFT, SET FLUSH
DF6737' IN THE TOP OF THE BRIDGE WALKWAY AND ABOUT 1.0 FT ABOVE THE LEVEL OF
DF6737' FRIARS COVE ROAD.
DF6737'
DF6737' LOCATED 15.6 FT SOUTHWEST OF THE APPROXIMATE CENTERLINE OF FRIARS COVE
DF6737' ROAD, 8.3 FT
DF6737' NORTHWEST OF THE SOUTHEAST END OF THE BRIDGE WALKWAY AND 0.9 FT
DF6737' NORTHEAST OF THE
DF6737' NORTH FACE OF THE BRIDGE RAIL.
DF6737'
DF6737'
DF6737'
DF6737'

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