

# **SURVEYOR'S REPORT**

**Specific Purpose Survey of the Piezometer Well  
located at Lyons Road and the E-2 Canal  
Palm Beach County, Florida.**

**South Florida Water Management District's  
Purchase Order number 4500004691**

**Keith and Schnars project number 16434.00,  
Task 22167**

**Report Date: November 2, 2006**

**Submittal: First**

**Prepared for:**

**South Florida Water Management District**

**Prepared by:**



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## SURVEYOR'S REPORT

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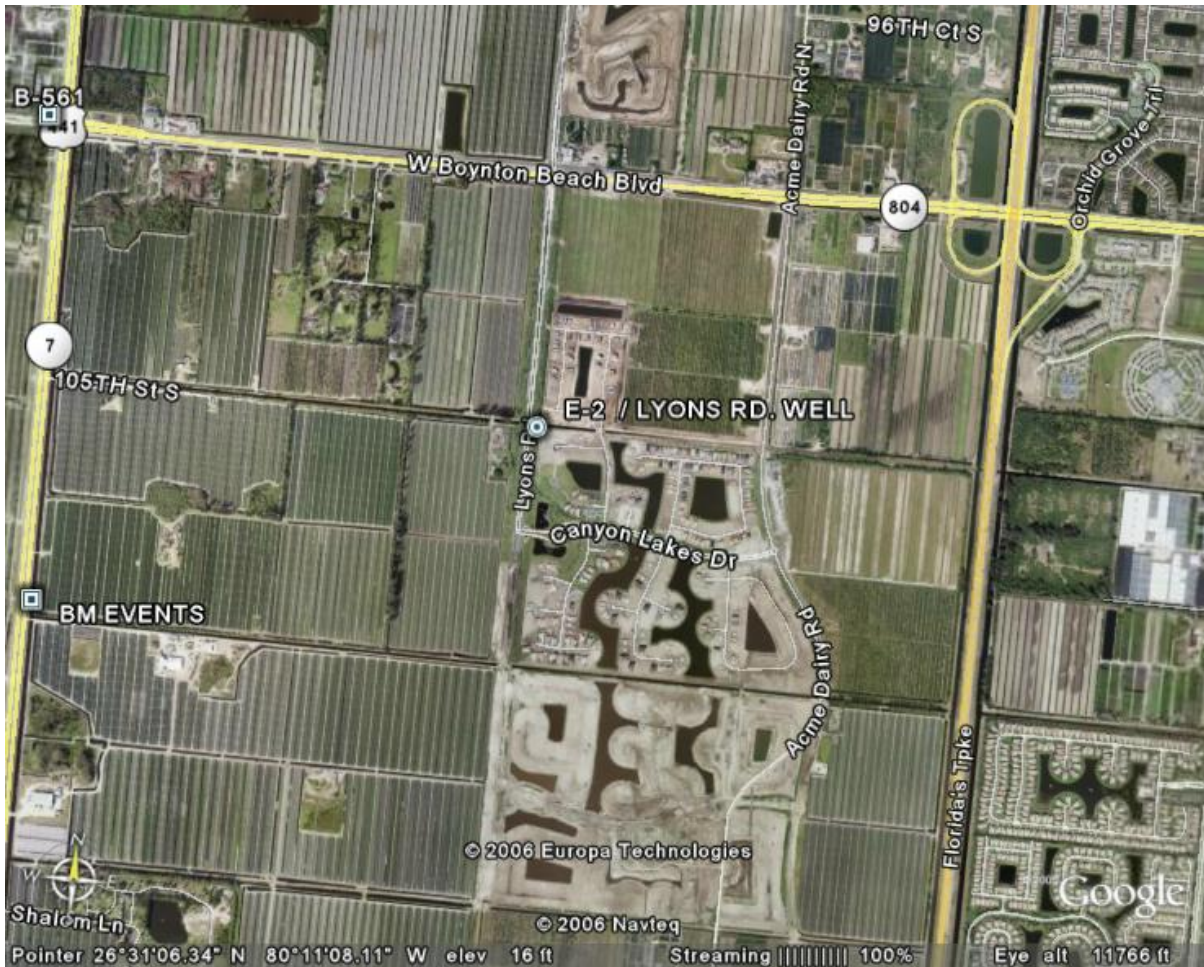
# SURVEYOR'S REPORT

## PURPOSE

To establish vertical data (NAVD 1988 and NGVD 1929) on the Piezometer Well and set a site benchmark.

## LOCATION OF PROJECT

The project is located in Palm Beach County, Florida.



## **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 National Geodetic Vertical Datum (NGVD) of 1929 and North American Vertical Datum (NAVD) of 1988. NAVD 1988 elevations were derived from the below described level run using NGS monuments "B-561" and "EVENTS". The NGVD 1929 values were derived by offset (1.50'), subtracting the NAVD 1988 value from the NGVD 1929 value at NGS monument "B-561".

### **LEVELING METHODS**

A level loop was run from NGS benchmark "B-561" through the site benchmark (E2 LYONS 2006) then to NGS benchmark "EVENTS". The elevations were established with a Leica NA2 conventional level and three-wire observation method.



# SURVEYOR'S REPORT

## VERTICAL CONTROL

<b>BM B-561</b>		Elevation:	<b>NAVD 1988</b>	<b>17.57</b>	<b>NGVD 1929</b>	<b>19.07</b>
PID	AJ9051					
State/County FL/Palm Beach						
USGS QUAD Greenacres City (1983)						
Horiz. Order	First	<p>To reach the mark from the intersection of Interstate 95 and State Road 804 in Boynton Beach, go west on State Road 804 for 6.3 mi to the intersection of the Florida Turnpike (State Road 91), continue west on State Road 804 for 1.95 mi to the intersection of U.S. Highway 441 (State Road 7) and the mark on the right, on the north side of State Road 804 and the west side of U.S. Highway 441 (State Road 7), a stainless steel rod driven to refusal at a depth of 71.0 ft with a NGS logo cap flush with the ground and about 2.0 ft below the level of U.S. Highway 441 (State Highway 7), the datum point is recessed 0.4 ft below the level of the NGS logo cap located 132.8 ft east of the centerline of the entrance road, 129.0 ft west of the west edge of U.S. Highway 441, 116.8 ft east of the edge of the pavement of the entrance road leading into the Citgo gas station, 68.8 ft west of the west edge of a concrete sidewalk, 61.3 ft north of the edge of the pavement of State Highway 804 westbound lanes, 56.4 ft west of a power pole, 15.7 ft west of a power pole with 3 guy wires attached, 1.5 ft south of the top of a ditch and 1.2 ft south of a carsonite witness post. Note a magnet was imbedded in the ground, 0.2 ft south of the monument.</p> <p>Access to the datum point is had through a 5-inch NGS logo cap.</p>				
Class	II					
						
						

# SURVEYOR'S REPORT

## VERTICAL CONTROL

<b>BM EVENTS</b>		Elevation:	NAVD 1988	17.81'	NGVD 1929	19.31'
PID AJ9054						
State/County FL/Palm Beach						
USGS QUAD Greenacres City (1983)						
Horiz. Order First Class II			<p>To reach the mark from the intersection of Interstate 95 and State Road 804 in Boynton beach, go west on State Road 804 for 6.3 mi to the intersection of the Florida Turnpike (State Road 91) continue west on State Road 804 for 1.95 mi to the intersection of U.S. highway 441 (state road 7), turn left on u.s. highway 441 (State Road 7) and go south for 1.0 mi to the mark on the left, set in the top of a round concrete monument recessed 0.6 ft below the level of the ground and about 1.5 ft below the level of U.S. highway 441, located 227.3 ft north of the approximate centerline of a dim track road leading east into Whitworth Farms Inc., 127.6 ft north of a power pole, 38.6 ft north of the north end of a box culvert, 11.4 ft west of a carsonite witness post, 3.3 ft east of a metal guardrail and 2.2 ft east of a palm beach county metal witness post. Note a magnet was imbedded in the ground, 0.2 ft south of the monument.</p>			
						
						

**SURVEYOR'S REPORT**

**PROJECT RESULTS**

Piezometer Well:

Reference mark:

**Found marker mark on north side  
of PVC pipe.**

New Reference:

**Mark El. 17.04' (NAVD 88)**

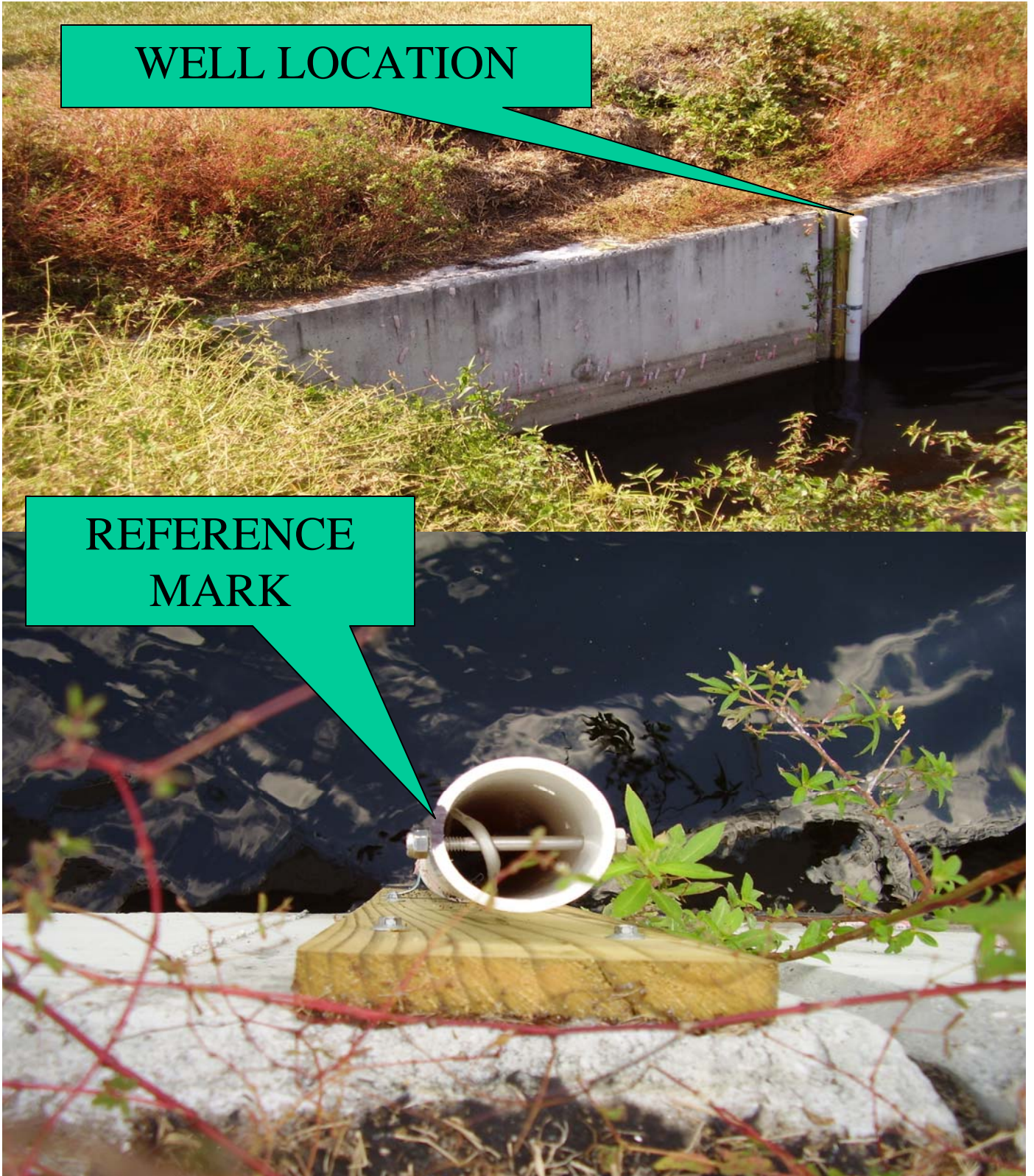
**Mark El. 18.54' (NGVD 29)**

Bottom elevation at well site:

**11.2' (NAVD 88)**

**12.7' (NGVD 29)**

# E-2 Lyons Road Well



10/30/06

Keith and Schnars, P.A.

Piezometer Well



# E-2 Lyons Road Well



10/30/06

Keith and Schnars, P.A.

Benchmark E2 LYONS 2006

## SURVEYOR'S REPORT

Comments:

Party Chief: D. Ferels Field Book: 1231 Page 1-9

Bench Mark: "E2 LYONS 2006" El. 17.31', Vertical Datum: NAVD1988

El. 18.81', Vertical Datum: NGVD1929

Offset: 1.50' SFWMD VALUE (subtract this value to convert to NAVD 1988)

Offset: 1.50' NGS VALUE (subtract this value to convert to NAVD 1988)

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:

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Date of Survey  
October 30, 2006

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Michael M. Mossey, PSM  
Professional Surveyor and Mapper  
State of Florida  
Certificate No. 5660