

SURVEYOR'S REPORT

**Specific Purpose Survey of the Piezometer Well
located at Benoist Farms Road S. and Pioneer Road
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: October 25, 2006

Submittal: First

Prepared for:

South Florida Water Management District

Prepared by:



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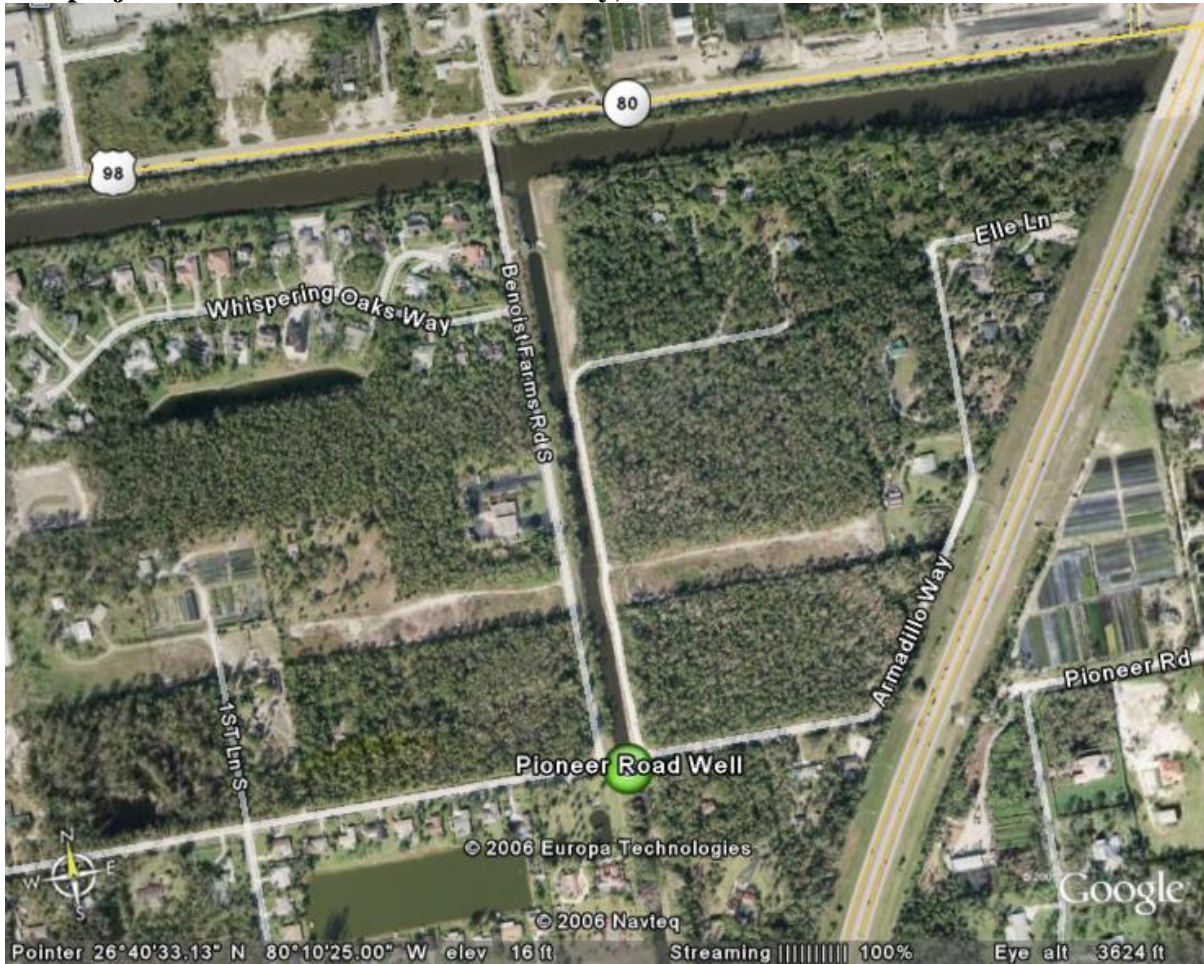
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PURPOSE

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.



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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. NGVD 1929 elevations were derived from the below described level run using Palm Beach County vertical control monuments. NAVD 1988 values were derived by offset (1.39'), subtracting the NAVD 1988 value from the NGVD 1929 value at NGS monuments F-71 and B-97.

LEVELING METHODS

A level loop was run from Palm Beach County benchmark "Ranger" through Palm Beach County benchmark "Kelly 2" through the site benchmark (E2 BENOIST 2006) and back to "Kelly 2". The elevations were established with a Leica NA2 conventional level and three-wire observation method.



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VERTICAL CONTROL

BM RANGER		Elevation:	NAVD 1988	15.706'	NGVD 1929	17.096'
Palm Beach County published benchmark						
State/County FL/Palm Beach						
USGS QUAD Palm Beach Farms						
Horiz. Order Class	Third None		<p>To reach the benchmark from the intersection of Jog Road and S.R. 80, go west on S.R. 80 for 2.4 miles to Sandsburys Way on the right. The benchmark is a Palm Beach County Brass Disk set in concrete and stamped "Ranger". Being 457' north of the centerline of S.R 80, 30' east of the centerline of Sandsburys Way And 3' west –southwest of a witness sign in a wooden power pole and 1 foot below the ground.</p>			
						
						

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VERTICAL CONTROL

BM KELLY 2		Elevation:	NAVD 1988	13.560'	NGVD 1929	14.950'
Palm Beach County published benchmark						
State/County FL/Palm Beach						
USGS QUAD Palm Beach Farms						
Horiz. Order Class	Third None		<p>To reach the benchmark from the intersection of Benoist Farms Road S. and S.R. 80, go west on S.R. 80 for 0.25 miles to Kelly road on the right. The benchmark is a Palm Beach County Brass Disk set in concrete stamped "Kelly 2" . Being 629' feet N. of the centerline of S.R. 80 (Southern Blvd.), 30.5' W. of the centerline of Kelly Dr. and 2' E. of a witness sign in a wood power pole.</p>			
						
						

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PROJECT RESULTS

Piezometer Well:

Reference mark:

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

New Reference:

Mark El. 21.77' (NAVD 88)

Mark El. 23.16' (NGVD 29)

Bottom elevation at well site:

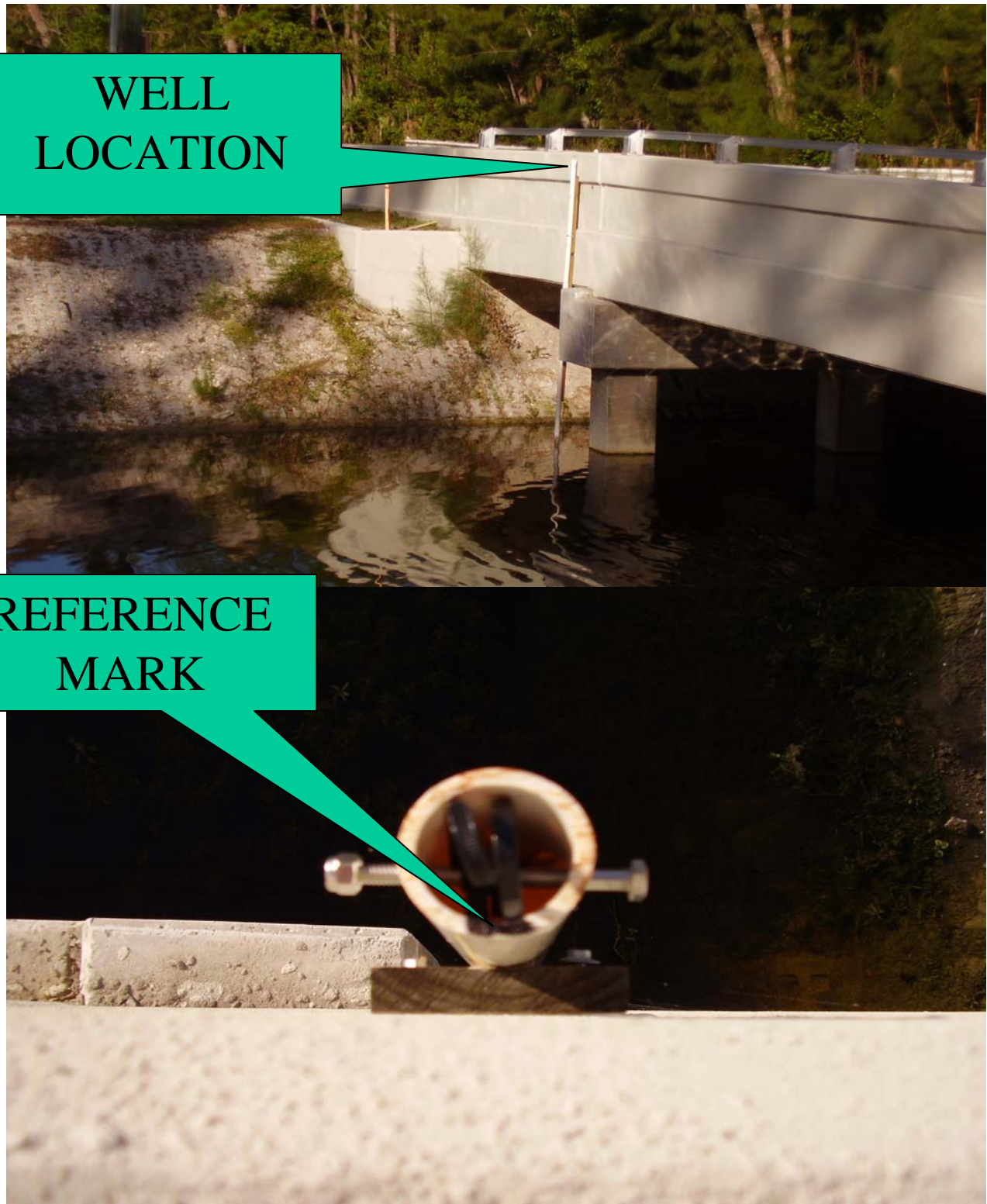
8.2' (NAVD 88)

9.6' (NGVD 29)

E-2 Benoist Well

WELL
LOCATION

REFERENCE
MARK



10/24/06

Keith and Schnars, P.A.

Piezometer Well

E-2 Benoist Well



**BENCHMARK
E2 BENOIST 2006**



10/24/06

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Benchmark E2 Benoist 2006

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Comments:

Party Chief: D. Ferels Field Book: 1224 Page 71-77

**Bench Mark: "E2 BENOIST 2006" El. 18.670', Vertical Datum: NAVD1988
El. 20.060', Vertical Datum: NGVD1929**

Offset: 1.39' SFWMD VALUE (subtract this value to convert to NAVD 1988)

Offset: 1.39' 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:

**Date of Survey
October 25, 2006**

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