

The Bridge (formerly known as Golf at the Bridge) Groundwater Monitoring Update

Background

The Town Board approved a change-of-zone application for a 281.37 acre portion of 512.18 acre property to Quasi Public Service Use District (QPSUD) by Town Board Resolution No. 797, which includes Local Law No. 25, on July 8, 1997. The Town Board approval was for a single 18-hole golf course.

One of the conditions of the July 8, 1997 Town Board approval required the following -

A Golf Course Monitoring Agreement will be executed by the applicant ,
Suffolk County Water Authority and the Town Board of the Town of
Southampton prior to the approval of a site plan by the Town Planning Board;

Golf Course Monitoring Agreement (Protocol)

The Golf Course Monitoring Agreement has been executed by the Town, the Suffolk County Water Authority and the applicant. A key part of this agreement includes a ground water monitoring contract that provides a protocol that outlines the conditions and requirements for the groundwater monitoring efforts, how the results will be reported and what responses will be triggered by any detection. According to the protocol, its purpose is to:

- 1) “meet the requirements of the Suffolk County Water Authority (SCWA) guidance;
- 2) help ensure the management plan and risk assessment have resulted in a golf course operation that will not impact the ground water quality; and
- 3) help ensure the management plan and risk assessment have resulted in a golf course operation that will not impact ground water quality.”

In order to comply with the Town Board conditions of approval for groundwater protection, the property owners, Bridgehampton Road Races Corp. retained Environmental & Turf Services, Inc. to develop a sophisticated, comprehensive turf management plan and ground water risk assessment to ensure that turf chemicals would not impact ground water quality at the site. Environmental & Turf Services, Inc., is a high tech firm based in Maryland and Vermont. It has a total staff of seven, and three of its four full-time permanent professionals have graduate degrees, two with Ph.D.s. It was founded in January, 1991, and conducts risk assessments and water quality monitoring, provides agronomic support, and develops risk management programs. Its focus is pesticides, heavy metals, and fertilizers. ETS clients include

private developers, town boards (particularly in New York), other government agencies, and industry. Its specialty areas are golf courses and other turf-related areas, agricultural pesticides, and shooting ranges. ETS has done work in well over 20 states, and its President (Dr. Stuart Cohen) worked for the US EPA (HQ) for 11 years. In his last position, he was head of the ground water team in the Office of Pesticide Programs and he has been working in the area of pesticides in ground water since 1979.

The Town Board has retained its own independent expert to oversee the work of ETS and provide the Town with an additional layer of protection to insure that the requirements of the Protocol are being met.

Prior to the construction of the golf course, the Town Board retained the services of A. Martin Petrovic, PhD. to provide an independent review of the groundwater monitoring and test results. Dr. Petrovic has a PhD in Turfgrass Soil Science from Michigan State University and also has a Masters and Bachelor's degree in Turfgrass Management from the University of Massachusetts. He has published one of the cornerstone scientific papers on the fate of nitrogen fertilizers in the environment and he has studied the leaching of turf pesticides as well. Dr. Petrovic is currently a Professor of Turfgrass Science at Cornell University. He is a member of Crop Science Society of America, Soil Science Society of America and American Society of Agronomy, International Turfgrass Research Societies.

In addition to being reviewed by ETS and Dr. Petrovic, the groundwater test results are also reviewed by the Suffolk County Water Authority (SCWA). The SCWA has an extensive laboratory that is used to help monitor the groundwater quality at the golf course. Information about the Suffolk County Water Authority can be found on its website SCWA.com.

Groundwater Monitoring

There are 14 monitoring wells and 22 suction lysimeters, in accordance with the 1997 protocol as amended. The lysimeters test leachate water quality from the putting greens and fairways to provide early warning for detection of any contaminants. One background monitoring well, three down-gradient wells and one shallow perched water well were installed prior to golf course construction. The remaining wells were installed in 2000, at the beginning of the construction phase when the well sites could be cleared. Two baseline-sampling rounds were taken prior to golf course clearing. Thereafter the wells are sampled quarterly for the first five years. Annual sampling will be conducted in perpetuity. Results of the groundwater testing are submitted to the SCWA and the Southampton Department of Land Management.

The groundwater monitoring results are now be posted on the Town's website.

In addition to the routine transmittals of *quarterly* groundwater testing results, more comprehensive reports following the baseline testing and *annual* testing are prepared thereafter.

Water Quality

There has been extensive sampling and testing of the 14 monitoring wells and 22 suction lysimeters since the construction of the golf course was completed in 2001.

Based on the results of the extensive sampling of groundwater monitoring wells, groundwater quality has not been affected by the golf course.

Given the level of review by experts within the Suffolk County Water Authority, the Town of Southampton and by the property owner's expert, this monitoring efforts serves as a model in groundwater protection. To further provide the public with the opportunity to The review and analysis by ETS and Dr. Petrovic of the quarterly groundwater tests will be posted on the Town of Southampton website.

For further information about the golf course and the ongoing groundwater monitoring efforts, contact Jefferson V. Murphree, AICP, Town Planning and Development Administer at (631) 287-5707, ext. 179 or at jmurphree@town.southampton.ny.us



Filip Sinni, SCWA foreground, observed ground water sampling at The Bridge on 6/28/04. This photo - observing water level measurement taken at DOH well TW-1. Photos taken by N. LaJan Barnes, ETS, during 2004 annual water quality sampling audit 6/28-30/04. LBG staff collected samples - this photo David D'Onofrio measuring water level and Jamie Gironda observing.