



Water Supply Investigation, Permitting and Development Services for the Pinehills Community

The Pinehills, LLC

The Horsley Witten Group, Inc. (HW) provides water supply, wastewater planning and design engineering services for the Pinehills, an innovative 3,000-acre private, residential, and commercial development in Plymouth, Massachusetts. At buildout, the development will consist of open space, 3,000 homes, three golf courses, a hotel and conference center, and more than one million square feet of commercial space.

HW permitted, and assisted with the design and construction inspection of approximately 20 miles of various sizes of potable water supply mains. Permits included new source approval for a public water supply well, four Water Management Act permits for drinking water supply, golf course irrigation, and landscape irrigation, and a groundwater discharge permit for a wastewater treatment facility. HW worked with the client and MA DEP to develop a creative permit strategy that allows use of both onsite septic systems for limited residential wastewater disposal and an advanced wastewater treatment plant for the majority of the development.

HW conducted assessments of potential impacts to: regional hydrology, a drinking water aquifer used by the town, and surface water resources. Impact assessment utilized extensive subsurface investigations and advanced computer groundwater modeling. Groundwater modeling was used to:

- Map groundwater flow fields within confined and unconfined aquifers;
- Delineate a wellhead protection area for the Pinehills public water supply well; and
- Model contaminant transport to predict time of travel between the wastewater disposal area and interceptor wells designed to capture and reuse nutrient-rich groundwater for golf course irrigation.

Client: John Judge, President
The Pinehills, LLC
508-209-9002

HW Contact:
Mark Nelson, P.G.



www.horsleywitten.com

- Civil & Environmental Engineering
- Wetlands Management
- Coastal Management
- Hydrogeology & Water Supply
- Stormwater Management
- Wastewater Management
- Site Assessment & Remediation
- Land Use Planning
- Education & Outreach



Sandwich, MA

90 Route 6A
Sandwich, MA 02563
tel: 508-833-6600

Newburyport, MA

30 Green Street
Newburyport, MA 01950
tel: 978-499-0601

Providence, RI

370 Ives Street
Providence, RI 02906
tel: 401-272-1717