

E&M Engineers and Surveyors, PC

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Your Place on the Web

By Glenn D. Cooley, P.E.

Is your clerk or secretary on the phone all the time just answering simple questions? “What’s the phone number for Mr. Doe?” “When does the Planning Board meet?” “What is your fax number?” If this sounds like your town, village or business, maybe you need an Internet web site.

A web site can answer a lot of “faq’s” (frequently asked questions) and provide your residents or customers e-mail access to you. You can post results of studies or other important information as it becomes available.

You want a web site, but say you can’t afford it? E&M can set one up for you that is very inexpensive. Our one year “Starter” web site includes:

1. Acquiring your domain (www.yourname.com or www.yourname.org) and one year registration.
2. Setting up an account with a web hosting company (where your pages are stored on Internet computers) and one year service.
3. Up to 4 web pages with organization description, contact names, phone numbers, miscellaneous text, etc.
4. Up to 20 e-mail accounts.
5. Two content updates.

All you need to do is supply the information and text you want, any photographs or logos in digital or ready to scan format. We’ll do the setup and let you proof it and then upload it to the net.

The “Starter” web package costs \$815.00 for one year. Second and following years can be maintained for as little as \$565.00.

For more information on other web site plans or to schedule a meeting, please call me at (800) 339-5971.

Mold: Not Just Another 4 Letter Word

Roy R. Pedersen, P.E.

There has been considerable discussion in recent years about the existence of and problems caused by mold in our homes, schools and work places.

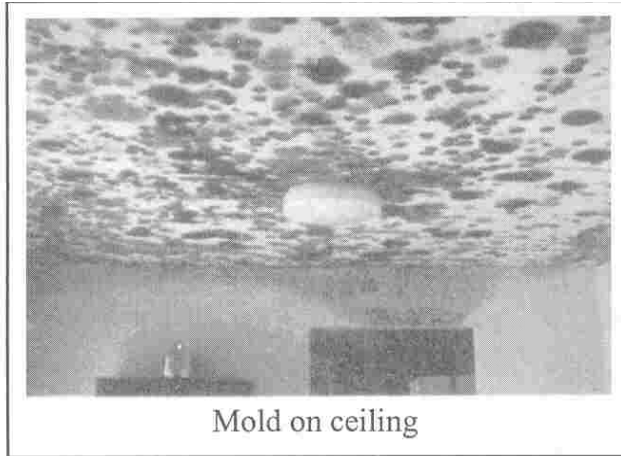
While mold is not new, or recently discovered (there are references in the Old Testament of the Bible about treating mold) it seems to be more in the news lately. A possible explanation for this is that modern construction methods of homes and commercial buildings are making new buildings tighter and less drafty. This is good from an energy conservation perspective, but not so good from a ventilation perspective. Older, draftier buildings were probably drier and less prone to mold development.

Mold is known to cause health problems for sensitive individuals. Symptoms typically are similar to hay fever.

Molds can gradually destroy the things they grown on. If mold is discovered, it must be removed as quickly as possible, and the moisture source that encouraged its growth must be eliminated. The use of bleach or other biocide to kill the mold is not recommended by the USEPA as a routine practice. Mold can be hidden. If your room smells musty or moldy, but you cannot see the mold, it may be

growing in an out of sight location such as the back of dry wall or wallpaper, under a rug, or inside of duct work.

The primary way to prevent or control mold is moisture control. The following tips to prevent mold are excerpted from a USEPA publication titled "Mold Remediation in Schools and Commercial Buildings".



Mold on ceiling

Mold Prevention Tips:

- C Fix leaky plumbing and leaks in the building envelope as soon as possible
- C Watch for condensation and wet spots. Fix source(s) of moisture problem(s) as soon as possible.
- C Prevent moisture due to condensation by increasing surface temperature or reducing the moisture level in air (humidity). To increase surface temperature, insulate or increase air circulation. To reduce the moisture level in air, repair leaks, increase ventilation (if outside air is cold and dry), or dehumidify (if outdoor air is warm and humid).
- C Keep heating, ventilation, and air conditioning (HVAC) drip pans clean, flowing properly, and unobstructed.
- C Vent moisture-generating appliances, such as dryers, to the outside where possible.
- C Maintain low indoor humidity, below 60% relative humidity (RH), ideally 30-50%, if possible.
- C Perform regular building/HVAC inspections and maintenance as scheduled.
- C Clean and dry wet or damp spots within 48 hours.
- C Don't let foundations stay wet. Provide

drainage and slope the ground away from the foundation. The insurance industry has generally clarified their policies to specifically exclude coverage for structure damage or health problems caused by mold.

For more information on the subject you can go to www.epa.gov/iaq/molds.

Town of Portland Water Main Construction

by Garrett M. Hacker, Project Engineer

The Town of Portland, Chautauqua County New York has historically been plagued with poor ground water quantity mainly due to its geographic location. The Town is located in northwest Chautauqua County on the shores of Lake Erie. Property owners utilize individual private wells as the sole supply of water. These wells typically run shallow as bedrock shale lies close to the surface. In addition to poor water quantity, water quality is of great concern. Approximately 60 percent of individual wells tested contain total coliform bacteria with the worst having levels in excess of 80 times the allowable limits.

E&M Engineers and Surveyors began discussing the Town's water dilemma in the year 2000. Hydrant flow tests were conducted and it was determined that the Village of Brocton had sufficient pressure and capacity to supply the new district. A map, plan and report was prepared describing the proposed Water District No. 5 boundary, estimated project cost and projected yearly user fees. The Town Supervisor and Board then held a series of public hearings to present the project to the public. E&M researched available funding sources, wrote grant applications and within two grant cycles were successful in obtaining \$942,900.00 in grant funds and \$327,100.00 in loans.

Bids for the 5.4 mile long water distribution project (phase I of a two phase project) were opened on June 9, 2003. The construction contract was awarded to S. St. George Enterprises G.C. of Fredonia submitting a bid of \$899,560.00. A notice to proceed was issued on July 28 with construction beginning August 1, 2003. To date,

construction has progressed to approximately 2 miles of water main, hydrants and valves installed. Currently crews are directional drilling a 625 foot long crossing below the Thruway and installing an 8-inch high density polyethylene water main made continuous by thermal butt fusing the joints.

An E&M NICET IV (National Institute for Certification in Engineering Technology) construction inspector is onsite full time to inspect construction activities, document material installed and act as a liaison between engineering and construction. Project completion is scheduled for Spring 2004.

OUR LAND - The Beginning of Settlement

By: James A. Nearhood, PLS

In our Spring 2003 Newsletter I wrote of our history from the 1620 Kings James Grant, through the dispute between New York and Massachusetts, the public land ordinance and the purchase of Western New York by the Holland Land Company. I will now tell the tale of the great subdivision from the Pennsylvania border on the south to the shore of Lake Ontario on the north, from the shore of Lake Erie on the west to the east meridian line running north and south on the east.

The Holland Land Company started negotiations to purchase certain tracts number 2 through 5 from Robert Morris in 1791 and 1792, but what to do with the land now? The land was not entirely vacant at the time. There were settlements and individual settlers along the shore line of the lakes and rivers. Also the Indian occupation had to be resolved. The purchase of these Western New York lands was not final until September 15, 1797.

Part of the purchase agreement between the Holland Land Company and Robert Morris required the surveying of the land to be conveyed. Robert Morris left the choice up to the company's agent in the Philadelphia headquarters, Theophile Cazenore. He chose a surveyor named Joseph Ellicott, a man of large and imposing stature, being six-foot-three inches tall. Joseph Ellicott was also a very experienced surveyor of large parcels of land on the frontier. He had assisted his older

brother Andrew Ellicott in the 1785 survey of the western and northern boundaries of Pennsylvania.

In 1789, Joseph also assisted Andrew in the surveying of the southwestern boundaries of New York and made the first measurement of the length of the Niagara River. Then in 1791, Joseph assisted his brother for the last time in the lay out of the Federal Capital that Major L'Enfant had designed.

The Holland Land Company was pleased with the choice of Joseph Ellicott as since 1794 he had been employed by them to survey parcels out of the 1.5 million acres of land they had purchased in western Pennsylvania.

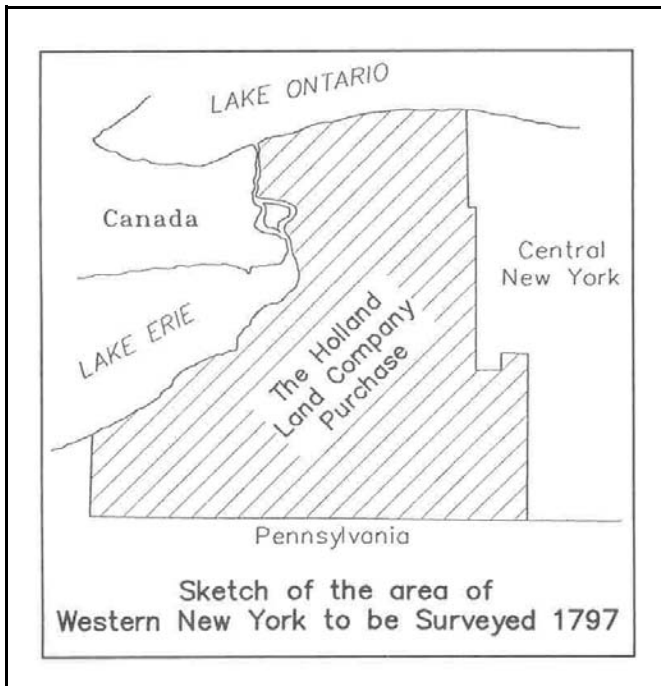
In July 1797, Theophile Czenove supplied Ellicott with a sketch of the "Genesee" lands to be surveyed out. Ellicott then started obtaining equipment, boats, horses, food and other necessities including 200 blankets, 300 pounds of bar iron, 70 axes, 40 bells with collars, candles, hand saws, paper, ledgers, 100 pounds of ropes and also wine, spirits, and medicine.

Ellicott's manpower requirements were 150 men. This included: Two transit engineers, 10 deputy surveyors, ax-men, boatmen, store managers, cooks, messengers and helpers. The start of the Grand Survey was made by Ellicott in early Fall of 1797. With a traverse along the south shore of Lake Ontario, the straights of Niagara and the shore of Lake Erie. This survey was reported to Theophile Cazenove on November 19, 1797. This report also included this complaint "Having much fatigue on account of the foulness of the weather during the latest part of the survey, and in walking through the snow from the western boundary of the preemption a distance of nearly two hundred miles."

I believe this probably was the first notation of what we now call "lake effect snow".

The immense scope of the land to be surveyed is mind boggling. Imagine setting out through virgin large tree forests, swamps, and thickets, up and down the high hills of the Allegheny foot hills, along and across rivers such as the Genesee and

Allegheny, creeks such as the Oswayo, Connewongo, Cattaraugus, Buffalo and Tonawanda. A sketch of this land purchase can be seen below. I will continue next time.



NEWSLETTER - EMAIL VERSION

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