



Sarah Kenney <skenney@barringtonhills-il.gov>

VBH IT as Reported

1 message

Robert Kosin <rkosin@barringtonhills-il.gov>**Sun, Jan 9, 2011 at 9:28 AM**

To: phennelly@barringtonhills-il.gov

Cc: Sarah Kenney <skenney@barringtonhills-il.gov>

Bucolic Barrington Hills hotbed of technology
By Madhu Krishnamurthy Daily Herald
Article updated: 1/8/2011 06:33 PM

[PHOTO] More than 100 miles of newly-installed fiber-optic cables underground and 23 antennas on utility poles throughout Barrington Hills are expected to give residents better cellular service and wireless access to the fastest Internet connections. The antennas are connected via fiber to a hub at village hall moving data at the speed of light. Mark Welsh | Staff Photographer

[PHOTO] In rural Barrington Hills, Pat Hennelly, top right, with his iPad, and fellow residents have hope for much faster Wi-Fi connection. Village leaders say the more than 100 miles of newly-installed fiber-optic cables underground and 23 antennas on utility poles throughout town will provide more dependable cellular service and wireless access to the fastest Internet connections. MARK WELSH | Staff Photographer

[PHOTO] Horses from Hill 'N Dale Farm in the fog on Lake Cook and Ridge roads in Barrington Hills. Daily Herald File Photo

[PHOTO] Barrington Hills village leaders say the more than 100 miles of newly-installed fiber-optic cables underground and 23 antennas on utility poles throughout town will provide residents more dependable cellular service and wireless access to the fastest Internet connections. Mark Welsh | Staff Photographer

Nestled among rolling hills, massive horse farms, 5-acre minimum lot homes and thousands of acres of forest preserve, Barrington Hills remains unadulterated by suburban sprawl. Straddling roughly 29 square miles over four counties — Cook, Kane, Lake and McHenry — the village has little more than 3,900 residents, lots of trees and open space.

But along with the benefits of living in a quintessential rural setting comes spotty cellular phone service and dropped Internet connections.

Plans in the works could solve those problems, which have some residents concerned about emergency response time and other safety issues.

"There's a lot of people that rely on their cell phone and when you dial 9-1-1 the Barrington Hills Police Department can tell where you are at physically in town, provided your call gets through," said Pat Hennelly, who has lived in town 20 years. "There are sections in my house where, if I fall over with a stroke, I couldn't get connected to

the 9-1-1 service.”

Connectivity issues are affecting the safety of residents, Hennelly's wife, Nancy, chimed in.

“I do a lot of horseback riding and when I would ride in the forest preserve I would see people that had fallen off their horses and I couldn't get a connection to call 9-1-1,” she said.

An area one-tenth the size of the city of Chicago with no public sidewalks, water towers, monuments or tall structures, the physical environment of the village poses a unique challenge to current methods of receiving and sending wireless information, Village Administrator Robert Kosin said.

“It is rare for an urban area to have such large-scale service interruptions that cannot be readily supplemented by antennas,” Kosin said. “We are on the edge of edge.”

Village leaders hope to change all that and put the community on the cutting edge of technology. Officials authorized American Tower Co. to embed more than 100 miles of fiber-optic cables underground and place 23 antennas on top of traditional utility poles throughout town to give residents better cellular service and wireless access to the fastest Internet connections. The antennas are connected via fiber to a hub at village hall moving data at the speed of light.

“The performance of the fiber is staggering,” Barrington Hills Village President Robert Abboud said. “You can haul the information in the entire Library of Congress.”

AT&T, one of six wireless carriers serving the village, paid for installation of the network, which recently came online, to supplement its signaling coverage. Though it presently carries only AT&T cellular service, it eventually will be available to other wireless service providers.

As part of the deal allowing American Tower Co. access to village right-of-way, the village secured its own dedicated fiber-optic strands that can be used to improve emergency communications, disseminate information to residents, and perhaps even provide free municipal Wi-Fi service someday.

“It virtually guarantees everywhere in the village that you will have 3G and ultimately 4G performance,” Abboud said. “Ultimately, one of the goals is to have every home be able to connect to fiber backbone as an optical connection as opposed to cable or copper.

“It's not something we're going to do next week” he added. “It's part of the larger infrastructure upgrade of the village, and done at no cost to the village. Part of the mission, while we continue to remain extremely rural and equestrian, is to have the best infrastructure in the United States.”

Alex Gamota, director of Distributed Antenna System strategic relations and network policy for American Tower Co., said few rural communities around the country have access to such a fiber-optic network.

“The village board was very astute in taking advantage of this opportunity,” Gamota said. “That's really up to the village to decide what they are going to do with it. Conceivably, they could run public safety over those strands. The only limitations would be that it's only for municipal purposes.”

Village officials are exploring options for how to use the roughly 100 miles of fiber-optic cables — known as dark fiber since it currently carries no traffic — at their disposal.

“The village has to develop a business plan to see which type of technology will be carried on that fiber network,” Kosin said. “Some of the uses (are) monitoring pavement temperatures, stream gauges, remote weather recordings, supplemental transmissions for our radio

and public service frequencies.”

Kosin said the village currently doesn't own the telephone system at village hall and contracts with AT&T for that and the 9-1-1 system.

“The dark fiber will carry a signal to which we won't have to pay anyone for (use),” Kosin said. “Now the village can investigate the variety of technologies that are out there.”

Eventually, residents would be able to connect wirelessly, as well as directly, to the village's four fiber-optic channels that run along major roadways. Whether the service would be free depends on whether the village is willing to purchase access to certain destinations on behalf of the residents.

“We are now at a point where people are only limited by their technology,” Kosin said.

###
