Oakley Neighbors Unite to Plan Site’s Future

By Bill Ellet

This is a story about a church, a neighborhood, and a dilemma.

Three years ago, the Archdiocese of Boston announced that the Our Lady of Mercy property would be sold. That set off alarm bells in the surrounding neighborhood. The property comprises the church, rectory, parking lot, and parish hall on five separate parcels of land roughly bounded by Belmont Street, Oakley Road, and Lawndale Street.

The alarm bells went off because of the economics of the site. The property is zoned for single-family housing, and each of the five parcels exceeds the 9,000-square-foot minimum lot size for a single-family house. However, at the Archdiocese's selling price of $6.1 million, a developer could not make an acceptable profit on single-family homes, unless they could be sold for a very high price—something in the vicinity of $2 million each. That didn't seem feasible because of the proximity of a busy street.

The most likely alternative seemed to be a Chapter 40B proposal. In communities where less than 10% of the year-round housing is subsidized, as in Belmont, Chapter 40B allows developers to dispense with most local zoning laws to build subsidized housing. The downside of 40B is the potential for housing of much higher density than the surrounding neighborhood and all the issues that can arise from a large and fast increase in population. In an effort to combat zoning that allows only costly, low-density housing, 40B provides little incentive for the developer to take local views into account. In light of the recent Uplands experience, The Our Lady of Mercy neighbors were wary of a "hostile" 40B.

Although a group of parishioners appealed the sale to the Vatican, residents of the area "didn't have a choice," says Elizabeth Gibson, a neighbor. In the event the sale was upheld by the Pope—which it was—the neighborhood either had to act or be acted upon. They began to talk among themselves about their vision for the area. Neighbors didn't waste energy fighting the inevitability of higher density on the property but wanted to hold it to a level that didn't fundamentally change their neighborhood.

In the spring of 2005, they met four times with the Belmont Housing Trust. The topic was a "friendly" 40B. According to its 2005 annual report, the Trust would develop affordable housing while preserving the residential character of the neighborhood. At about that time, residents formed the Oakley Neighborhood Association (ONA).

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Charles River One Mile Swim. Saturday, July 21, 8 a.m. Sponsored by the Charles River Swimming Club, this will be the first open water swimming race in the Charles. After decades of pollution, the Charles River has benefited from the ongoing Clean Charles River Initiative, started in 1995 to restore the river’s ecological health. This swim is intended to raise awareness of and celebrate the efforts that went into cleaning the river, as well as to highlight the need for continued clean-up to enable recreational swimming in the future. Come to the river dock near the Hatch Shell on the Esplanade in Boston. For information, visit www.charlesriverswimmingclub.org.

Canoe and Kayak on the Charles River. Saturday, August 18, 10:30 a.m.-12:30 p.m. Meet at Waltham’s Woerd Avenue boat launch for a leisurely paddle downstream and back, with the option of stopping above the falls on Moody St. for lunch at Margarita’s Mexican Restaurant and Watering Hole. Bring your canoe or kayak and flotation devices; some extra canoes may be available with advance notice. For more information contact Karen Patterson at 781-893-3355 or kpatters@walthamlandtrust.org

Wildflower Identification Using Newcomb’s Wildflower Guide. Saturday, July 14, 10 a.m.-noon. If you find yourself wondering what the flowers are that you see as you walk around Fresh Pond, this program may be just right for you! We will demonstrate the use of Newcomb’s, a wildflower guide that really works, then identify some beautiful specimens in the nearby Water Department bio-swale. We have guides and lenses to lend, or you can bring your own. Meet at the Walter J. Sullivan Water Purification Facility, 250 Fresh Pond Parkway, Cambridge. Sponsored by Friends of Fresh Pond Reservation. To register for this free event, e-mail Elizabeth Wylde at friendsoffreshpond@yahoo.com or call (617) 349-4793 and leave your name and number.

Friends of Fresh Pond Reservation Annual Meeting and Potluck Picnic. Monday, July 16, 6:30 p.m. - 8:30 p.m. Don’t miss this opportunity to get together with members of the Friends group and enjoy a good meal. After we eat we will talk about what we have been doing this year, including several exciting new programs. We will also brainstorm about what we would like to do in the future. Newcomers are welcome. Bring a favorite dish and we will provide tables, drinks, and dinnerware. If it rains we will meet indoors. Meet at the Maynard Ecology Center, basement of Neville Place, 650 Concord Avenue, Cambridge. Sponsored by Friends of Fresh Pond Reservation. To register for this free event, e-mail Elizabeth Wylde at friendsoffreshpond@yahoo.com or call (617) 349-4793 and leave your name and number.

Summer Evening Mushroom Walk. Thursday, July 19 and Wednesday, August 15, 6 p.m.-7:45 p.m. It’s that time of the year when mushrooms of all colors, shapes, and odors start popping up. Join us for a casual walk on the sanctuary as we keep our eyes open for a variety of fungi from puffballs to stinkhorns... and a few surprises along the way. Meet

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Dozens of Belmont and Arlington residents crowded a State House hearing room on June 21 to support an innovative approach to saving the Silver Maple forest at Alewife from development. The Joint Legislative Committee on Bonding, Capital Expenditures, and State Assets heard testimony on a bill proposed by state Representatives Will Brownsberger of Belmont, Jim Marzilli of Arlington, and State Sen. Steve Tolman of Brighton, who represents Belmont. The bill would authorize the state to spend $6 million to buy the 15.6-acre site in Belmont and Cambridge and add the land to the state’s adjacent Alewife Reservation — but only if municipalities and private citizens kick in the rest, based on a state-ordered appraisal of the land.

This site has often been called the Belmont Uplands. However, a portion of the 15.6 acres is in Cambridge, a significant portion is wetlands, and even the “uplands” portion is quite low. The highest point is only 27 feet above sea level.

Witnesses spoke about the importance of the Silver Maple forest to protect the habitat of wildlife species that require both wetlands and uplands, of its role in protecting the area from even worse flooding and water quality, and of the importance of preserving this rare urban wild that is even accessible by subway. The committee did not deliberate on the proposal; committee members are now being polled on a recommendation. However, the testimony seemed well received, and legislators asked a number of questions, including whether other examples could be found of an apparently new state-municipal-private funding effort to save open space.

Organizations testifying in support of the bill included the Mystic River Watershed Association, the Friends of Alewife Reservation, the Friends of the Middlesex Fells, and the Belmont Land Trust; letters in support are also expected from the Sierra Club of Massachusetts and the Environmental League of Massachusetts. Two Belmont Selectmen, Paul

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Solomon and Dan LeClerc, testified in favor of the proposal, as did Selectman Clarissa Rowe of Arlington, who also testified as chairman of the Arlington-Belmont-Cambridge Flooding Board. Arlington’s Director of Planning, Kevin O’Brien, and Charles Tirone of its Conservation Commission also spoke in support of the bill, along with numerous residents of Belmont and Arlington.

Meanwhile, the Belmont Conservation Commission opened a hearing on June 26 on an application from O’Neill Properties, the owner of the Silver Maple forest, to construct their 299-unit apartment building adjacent to protected wetlands. The Con Com will meet again on August 7 in the Selectmen’s meeting room, with the Upland issue scheduled for 8 p.m.

Earlier this spring, a suit was filed in Superior Court by a group of citizens supported by the Friends of Alewife Reservation to block the construction of the apartments. The Belmont Citizens Forum is supporting the FAR litigation with a small pool of funds earmarked by donors for the Belmont Uplands.

— Sue Bass is a Director of the Belmont Citizens Forum.
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at Visitor Center at Habitat Education Center and Wildlife Sanctuary, 10 Juniper Road, Belmont. Sponsored by Habitat. The cost is $10 for Mass Audubon members; $12 for non-members; registration is required. Call (617) 489-5050 for more information.

Northeast Sector Walkabout. Monday, July 30, 6 p.m.-8:30 p.m. Chip Norton, Watershed Manager for the Cambridge Water Department, will give a tour of Fresh Pond Reservation’s Northeast Sector, where an enormous amount of planting has been done this spring. He will answer your questions, and use maps and diagrams to help illustrate the goals for this major restoration project. This two-mile walk will be on paved roads and unpaved paths. Meet at the Walter J. Sullivan Water Purification Facility, 250 Fresh Pond Parkway, Cambridge. Sponsored by Friends of Fresh Pond Reservation. To register for this free event, call (617) 349-4793 and leave your name and number or e-mail Elizabeth Wylde at friendsoffreshpond@yahoo.com.

Insects and Ice Cream. Wednesday, August 1, 6 p.m.-7:30 p.m. Come on a bug treasure hunt as we sweep nets in Habitat's meadow to see what wonderful creatures we can find! We'll listen for cicadas and crickets, look for grasshoppers and spiders, and see how many different kinds of beetles we can find. After our meadow adventure, we'll have ice cream. Meet at the Visitor Center at Habitat Education Center and Wildlife Sanctuary, 10 Juniper Road, Belmont. Sponsored by Habitat. The cost is $7 for adult and child Mass Audubon members, $9 for non-members; registration is required. Call (617) 489-5050 for more information.

Meet Belmont. Thursday, August 23, 6 p.m.-8 p.m. Learn about Belmont's community organizations at the 5th annual Meet Belmont event. This free event will take place at Belmont High School, 221 Concord Avenue, Belmont. For updated information, e-mail meetbelmont@yahoo.com.

Nighthawk Watch. Friday, August 24 and Tuesday, August 28, 6 p.m.-8 p.m. The fall migration of the common nighthawk occurs each year over a relatively short period of time. These interesting birds move south while hunting insects at twilight. Find out more from Bob Stymeist who has been watching them for over 30 years! Meet at the Highland Farm entrance near the corner of Concord Rd. and Somerset St., Habitat Education Center and Wildlife Sanctuary, 10 Juniper Road, Belmont. Sponsored by Habitat. The cost is $10 for Mass Audubon members, $12 for non-members; registration is required. Call (617) 489-5050 for more information.

Night Fliers. Thursday, August 16, 7:30 p.m.-9 p.m. The night sky is alive with the beating of bat and moth wings. Using some tricks and some special equipment we'll get a glimpse into this secret nocturnal world. You never know what we'll discover! This program is appropriate for adults and children ages 6 and up; no younger siblings, please. Meet at the Visitor Center at Habitat Education Center and Wildlife Sanctuary, 10 Juniper Road, Belmont. Sponsored by Habitat. The cost is $6 for adult and child Mass Audubon members, $8 for non-members; registration is required. Call (617) 489-5050 for more information.

www.belmontcitizensforum.org
Farmers’ Market Serves Community

By Evnathia Malliris

Sold out! That is what several Belmont Farmers’ Market vendors reported on opening day, June 14. That is a very good thing for a farmer — and for local citizens who not only enjoy fresh-picked produce and small-batch comestibles, but the opportunity to socialize with friends and neighbors at the market on Thursday afternoons.

“I loved the market,” said Belmont resident Teresa Howe of her opening day experience. “I got to see friends and catch up.” Market vendors have commented about the lively social scene and sense of community at Belmont’s market.

A trumpet fanfare by the Meyer brothers heralded Market Opening Day, along with a full complement of vendors. Local June crops included salad greens, radishes, sweet peas, garden seedlings, tomato plants, and spring flowers. Breads and pastries, chocolates, lamb and pork, honey, cheese—and even soap—complete the offerings. Some vendors will attend the market every other week; check with vendors about their schedules.

Food and the arts seem to be natural partners. Musicians of all ages come and play at the market. July performers include Belmont resident Karen Allendoerfer, viola and fiddle; violin duo Pilar and Devon Hincapie; and the Lockett brothers, both Chenery Middle School students, flute and clarinet. In June, young violinists serenaded shoppers. Performers are rewarded with gift certificates purchased from Belmont Center retailers by the Belmont Farmers’ Market Committee.

This summer also features a Food on Film series, sponsored by the Belmont Farmers’ Market and organized by Carlha Vickers and Joan Teebagy. “I wanted to focus on the importance of food in our lives, and how it is viewed and thought of in many different cultures,” said Vickers. “An underlying hope was that if people understood where their food came from they would do more of their shopping at Belmont Farmers’ Market.”

Films are free, and are shown on the second Tuesday of the month at the Belmont Public Library. The July 10 film is Dinner Rush (2002), directed by Bob Giraldi, and described as gourmet cinema. Director and restauranteur Giraldi casts his own New York eatery as a TriBeCa hot spot where the owner (Danny Aiello) presides over a busy night of fine dining and mob entanglements.

The August 14 film, Babette’s Feast, directed by Gabriel Axel, was the Best Foreign Film Academy Award winner in 1988. This Danish film is visually lovely, and one that makes us think about choices, talent, gratitude, friendship, grace, and hope.

The September 11 movie will be announced. Vickers said, “We would love people to send in their ideas for a movies and documentaries. This would help make Food on Film very participatory.”

To send in suggestions, or to get market day reminder e-mails, see belmontfarmersmarket.org. You’ll get news about what’s at the market, delicious recipe ideas, the latest issue of the Market’s newsletter Roots & Sprouts, and reminders about special Market happenings.

—Evanthia Malliris is a Director of the Belmont Citizens Forum and serves on the Belmont Farmers’ Market Committee.
Bakery Could Bring New Life to Concord Ave

By Sue Bass

After more than four years as a vacant eyesore, the Murray Sandler Skate Shop may soon be cooking up something new. Kay Wiggin, owner of Quebrada Baking Co. in Arlington and Wellesley, is contemplating opening a third bakery, this one in her home town. Wiggin met in May with Belmont planner Jay Szklut and a group of abutters to discuss the shop.

“She had them literally eating out of her hand,” said Ann Verrilli, a neighbor. “She brought a lot of pastries.”

The area of Concord Avenue east of Belmont High School may be newest frontier for Belmont planning. A neighborhood group, the Concord Avenue Neighbors Association, has been meeting for nearly four years. The group got organized when a Walgreen Drug Store was proposed for the skate shop site, after neighbors of the former Volkswagen dealership on Trapelo Road shot down the idea of a Walgreen’s on that site — which now has a CVS.

The next proposal for the skate shop site was a small 40B housing development. Bill Ellet, one of the organizers of the Concord Avenue Neighbors Association, said many people in the neighborhood favored that, once the skirmishes over the size had been resolved at about 18 units of housing. But the developer, Eli Jammal, didn’t pursue it, Ellet said.

Last fall, the group asked the Belmont Planning Board to begin a formal planning process for the entire area — not only the small commercial section on Concord Avenue east of the high school, but extending as far north as the Purecoat plant across the railroad tracks. The Planning Board agreed but has recently withdrawn that commitment, Ellet said. Szklut confirmed that. “Two meetings ago, the Planning Board put transitional zones [between residential and business neighborhoods] on hold and is focusing on Waverley Square and Belmont Center,” Szklut said.

Even if a Quebrada bakeshop cleans the dirty windows of the skate shop and brings new life to the site, the neighborhood association is going to pursue its dream of thoughtful planning for the whole area, Ellet said. “We want to go ahead on our own even if we don’t have the town’s help. At least we can take the town’s vision statement and work up one for the area.” He said the neighborhood association will call a meeting, this summer if possible, to get started.

The area faces plenty of challenges just on Concord Avenue itself, which is a mixture of houses interspersed with small businesses — a barber shop, gas station, dry cleaner, Chinese restaurant, beauty shop, building contractor, lodge for the Sons of Italy in America, and offices for law firms, dentists, a real estate business, an insurance agency, and various counselors.

Parking is a problem, especially for 100 Concord Avenue. The two-story frame building holds 13 small offices for group and individual counseling — bringing one or more cars every hour for each office, plus those belonging to the counselors themselves. The building generates more traffic and has far less parking — only three on-site spaces — than the three-story brick building with law offices across Watson Road at 90 Concord Avenue.

The area is dangerous for pedestrians, Ellet said. Many children who live near the high school and attend the Burbank School don’t make the short walk because they’d have to cross Concord Avenue. “Why do these kids get hit?” Ellet asked. “This area is crying out for traffic calming.”

— Sue Bass is a Director of the Belmont Citizens Forum.
Farm Animals Harken to Belmont’s Past

Photos and research by Georgia Howe

Belmont was mostly farmland when the town was first incorporated in 1859. The town was full of pigs and cattle, pears and strawberries. By 1915, Belmont’s greenhouses sheltered 75,000 square feet of crops from the elements — and from wandering livestock.

The Sergi farm between Glenn and Blanchard Roads is the last commercial vegetable grower in Belmont; there are also still traditional farm animals to be found in town. Chickens are growing more popular, and a horse lives near Waverley Square. Your flowers are most likely visited by bees nurtured by one of Belmont’s beekeepers. Even in a town of homes, the agricultural past survives.

Young chicks in their Belmont coop. Models courtesy of Evanthia Malliris.
Willa Howe leads Charm, a full-grown miniature horse. Charm lives on Waverley Street with Ralph Melanson. For 15 years, Charm worked at the Lovelane Therapeutic Riding Center in Lincoln, where he would give gentle rides to children with a variety of special needs, including autism, cerebral palsy, and Down syndrome. Now 20 years old, Charm is retired, but retains his sweet disposition.
Eventually, an alternative to a friendly 40B cropped up in the discussions about the property: Chapter 40R. Passed by the legislature in 2004 and signed by Governor Mitt Romney, Chapter 40R gives municipalities financial rewards for adopting special zoning districts for the construction of multi-family housing and single-family housing on small lots. It also gives town departments and neighbors far more influence than 40B does. To be eligible, a property must meet "smart growth" requirements set down in the legislation such as accessibility to public transportation.

Chapter 40R isn't a change in zoning. It is an "overlay" of zoning on existing zoning, allowing the property to be developed under either. A companion measure tied to Chapter 40R, 40S, provides funds for local schools to help with the costs of additional students living in 40R housing.

The ONA pursued this option in concert with the town. Two members of ONA, David Johnson, an architect, and Nancy Conlin, a lawyer, provided pro bono analysis and guidance. Jay Szklut, Belmont town planner, the Planning Board, and the Board of Selectmen worked with the association to develop an overlay proposal. Szklut obtained a state grant to fund a consultant specializing in Chapter 40R. That consultant, Concord Square Development, moves the process forward to help realize a proposal that would pass muster with the State Department of Housing and Community Development and the town.

Before a town can adopt a 40R overlay district, the Massachusetts Department of Housing and Community Development (DHCD) must review the application, which takes 90 days. The Board of

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Simplified map of the proposed overlay district, based on materials provided by Concord Square Development.
Selectment approved submitting the 40R proposal to the state on June 25, for submission on June 30. (The DHCD only accepts applications on the last day of the month.) The application will now move to DHCD for review. Johnson said the hope is that the proposal will be ready for the fall 2007 town meeting. However, it also needs to be approved by the Planning Board, which will hold a public hearing on the 40R overlay district. Over the next few months, Szklut will hold a number of meetings with the ONA and revise the 40R application to reflect changes that DHCD may request, to include the Planning Board's revisions, and to make improvements in the draft design standards for the overlay district — the rules that affect how the buildings will look from the street.

The Our Lady of Mercy Smart Growth Overlay District permits up to 20 units per acre that meet smart growth standards with 20 percent to be deed-restricted as affordable. In return, the town would receive "modest" financial benefits, according to Johnson's analysis. ONA members would like to see a maximum of 18 units and preferably 16.

Even with all the work and the persistence of the neighborhood, there is no guarantee of a 40R development that meets the desired density and scale. There is some uncertainty whether the overlay district would preclude a 40B. If the proposal receives all of the necessary approvals, a developer willing to meet the church's selling price and work with the parameters of the overlay district has to come forward or be found.

Nevertheless, the pro-active collaboration of residents and town government has created the potential for an economically viable development that adds to the town's stock of affordable housing and is compatible with the kind of neighborhood residents want to live in. Although the story is unfinished, this should be recognized as a significant accomplishment and a possible model for development in other neighborhoods.

— Bill Ellet is a member of the Belmont Citizens Forum Newsletter committee.
McLean Decision OKs More Belmont Sewage

By Sue Bass

Despite evidence of continued sewage overflows in the Winn Brook neighborhood, an administrative magistrate has ruled that Belmont has enough sewer capacity to handle the additional flows from 750,000 square feet of development on the McLean hospital site. The additional 83,000 gallons per day, which will flow through the Winn Brook area, will not threaten public health and safety, according to a recommended decision by Bonney Cashin, administrative magistrate in the state Division of Administrative Law Appeals. The decision will not be final until confirmed by Arleen O’Donnell, commissioner of Environmental Protection, and if confirmed may be appealed to the Superior Court.

In her recommended decision, Cashin noted evidence of sewage problems. She acknowledged that town engineer Glenn Clancy provided evidence of five places in the Winn Brook neighborhood where sewage spewed into the streets through manholes during the May 2006 Mother's Day storm and 11 places where sewage backed up into houses. She also recognized that the Massachusetts Water Resources Authority had provided evidence of seven times that Belmont was trying to send more sewage into the MWRA’s Flanders Road connection than it could hold. Despite that information, Cashin said she was not convinced “that these problems are the result of inadequate system capacity.”

The Belmont Citizens Forum and 12 citizens had
challenged the state’s decision to issue a sewer connection permit allowing the additional 83,000 gallons per day of sewage. Two principal issues were cited: that the state’s review of the application was inadequate, consisting of little more than seeing that all the appropriate boxes were checked on the form; and that the additional sewage flows would “result in impermissible surcharges and overflows or otherwise fails to protect public health and safety.” Cashin recommended against the Citizens Forum and the citizen-petitioners on both grounds.

The Citizens Forum had particularly advocated an actual study of the sewer system’s downstream capacity in wet weather, instead of basing mitigation decisions on rules of thumb or what other communities were requiring. The town’s sewer consultant, Fay Spofford Thorndike, had recommended such a study in negotiations with McLean, according to correspondence and meeting minutes, but the firm was apparently overruled.

“It’s an engineering problem, and you would think that a town like Belmont would have an engineering assessment,” remarked a recent victim of sewage, Rebecca Graham of Dean Street in Winn Brook. Sewage backed up into her basement laundry tub during the Mother’s Day storm of 2006, Graham said. At her plumber’s recommendation, she stuffed a rag down the sink and was able to stop the backflow; but neighbors who were out of town had a lot of damage from sewage, losing both their hot water heater and their furnace. “As far as I know, the town hasn’t done anything,” Graham said.

Doug Massidda of Cross Street said he got hit with three sewage backups in three or four months last year, one of them from the Mother’s Day storm. After one of the storms the family had to shower at a neighbor’s house for several days. “I have a manual shutoff [valve in the basement to prevent backflows] but you have to remember to shut it off,” he said. Massidda also recalled sewage bubbling up from a manhole in Cross Street.

If the magistrate’s recommendation is endorsed by Commissioner O’Donnell, the Citizens Forum has an opportunity to ask the Commissioner to reconsider, citing the evidence — the significance of which Cashin apparently missed. (Until the Commissioner has ruled, neither the petitioners nor anyone else may contact her on the subject.) If O’Donnell reaffirms the ruling, the petitioners will have to decide whether to appeal to Superior Court.

American Retirement Corp., now a subsidiary of Brookdale Senior Living Inc., plans more than 600,000 square feet of a continuing care retirement community, advertised as Freedom Commons, on the McLean property high on Belmont Hill over Waverley Square. Adjoining that will be a 150,000-square-foot research and development or office complex planned by Belmont ValueRealty Corp. New sewer pipes would run along Olmsted Drive, the new road being carved out of the hillside above Pleasant Street opposite Shaw’s Market. At Pleasant Street they would connect to the Belmont system and would run through the Winn Brook area en route to the Flanders Road connection to the MWRA system, along with 80 percent of Belmont’s sewage.

— Sue Bass is a Director of the Belmont Citizens Forum.
Sewer Linings continued from page 16

that day was weak; the sewage was diluted by a constant flow of inflow and infiltration (I&I) water, the clean water that leaks into old sewer pipes and causes big trouble at the bottom of the Belmont Hill. The new lining will plug up the leaks.

Once installed, the lining of an eight-inch sewer pipe is blue, tough, about a quarter-inch thick, smooth on the inside, pressed tightly against the original clay pipe, and strong enough to be a pipe all by itself. The formulation of the lining is a proprietary secret, but is fiberglass, more or less. These linings are expected to last 50 or 85 years, depending on who you ask. Linings for eight-inch pipes cost about $32 a linear foot, installed. By reducing I&I during storms, they will both reduce the terrible sanitary sewer surcharges that spill raw sewage into Winn Brook neighborhood basements, and they will give cute baby otters and foxes that live downstream in the Mystic River watershed a cleaner habitat. The linings will also cut the amount of wastewater flowing from Belmont to the Deer Island treatment plant, lowering our water bills.

Insituform Forms Linings On Site

Glenn Clancy, head of Belmont’s Community Development Department, was pleasantly surprised when a bid for lining sewer pipes came in about 25 percent lower than expected (See “What’s the Cost to Fix Belmont’s Sewers?,” Belmont Citizens Forum Newsletter, November 2006, p. 13, www.belmontcitizensforum.org/newsletters/2006/nov/BCFNov06.pdf). The low bidder was Insituform. Their proprietary technology and efficient, alert workmen impress me. If you pick stocks, you might want to check them out.

How Insituform Sewer Linings are Installed

1. A resin-saturated, coated felt tube is inverted (left) or pulled (right) into a damaged pipe.

2. Next, hot water or steam is used to cure the resin and form a tight-fitting, jointless and corrosion-resistant replacement pipe.

3. Lateral service is restored internally with robotically controlled cutting devices, and the pipe is inspected via closed-circuit TV.

Source: www.insituform.com/content/190/how_insituform_cipp_is_installed.aspx
Insituform’s linings are made of fiber with an impermeable film on one face. The fiber is sewn into a tube, and impregnated with a two-part resin. When the resin is heated, it cures, and the liner becomes a hard, strong composite material. Linings are shipped in refrigerated trucks to keep them flexible. When the liner arrives on site, it is inside out, with the impermeable film on the outside. It is hundreds of feet long and has the consistency of a pair of new, stiff jeans.

People who live beside the sewer to be lined receive two notices — one week and one day before work commences — that installation hours would be a bad time to take a long shower. You do not need to refrain from using water while your sewer gets lined, but there are strict limits to water usage; otherwise, your lateral connecting pipe gets filled and sewage starts overflowing from your lowest plumbing fixture.

After preliminary smoothing, cleaning, and video inspection of the inside of the pipe, the lining is inserted. A refrigerated truck with the lining, an air compressor, a steam-generating truck, and two men surround an open manhole. Above the manhole, supported by a tripod, is the central piece of equipment: a metal shell with lips on top, a short tube pointing toward the manhole on the bottom, and a compressed-air hose in the middle. After insertion, the liner is pulled and into the lips which are tight so the liner is able to press. During the hour of curing, the crew relaxes. They are happy to explain their work to strangers.

— Sumner Brown is a Director of the Belmont Citizens Forum.
People Are Asking

How do Sewers Get Relined?

By Sumner Brown

I was out running in early April when by chance I saw what at first appeared to be a virtuoso video game player with a public works crew. I watched a young man sitting before multiple video monitors and a rack of industrial electronics, manipulating images in front of him with a joystick, keyboard, and switches. He was inside a specialized truck parked beside the rotary where Park Avenue ends at the Belmont Hill School.

The virtuoso was guiding a remote machine tool deep inside a sanitary sewer to cut holes in a sanitary sewer pipe lining. The lining had just been installed in an old eight-inch clay sewer pipe, and had to be cut to re-open lateral sewer connections to homes. He had accomplices in another truck 500 feet closer to Route 2, and he occasionally gave them terse instructions by a radio link.

Sometimes the joystick virtuoso also descends into sanitary sewer manholes, lowered and raised by a winch and a harness. Two of his colleagues died near Des Moines a few years ago after entering a manhole with a ladder. They lost consciousness due to suffocating gases, and drowned. You do not want to use a ladder to retrieve a 200-pound unconscious man from a sewer manhole filled with poisonous gas.

The sewage odor from the Park Avenue manholes continued on page 14