



Belmont Citizens Forum

How Could Belmont Build a Pedestrian Tunnel?

By Nick Manos

Many people have proposed a pedestrian tunnel from Channing Road to the Belmont High School under the MBTA commuter rail tracks. How could this tunnel get built?

Currently, the tracks create a barrier between the school and the densely populated area on the northern side of town. Students and other pedestrians visiting the schools, playing fields, library, and town pool must walk to Belmont Center or to Brighton Street to find the nearest safe crossing. These two sites are one mile apart, so many students simply cut across the tracks through a hole in the chain-link fence bordering the tracks, cutting a 20-minute walk down to four minutes.

Dozens of students make this trip every day. For them, the risk and the law are both outweighed by convenience. In recent memory, there have been two deaths of students on the tracks: one in 1982 and another in 2009.

According to a study conducted in 1983 following the death of a high school student on the tracks, approximately 77 students crossed the tracks illegally every day. The observations were made on three weekday mornings in late October and November. Presumably more students cross the tracks when the weather is good and in the afternoon since their parents are not available to drive them home. These numbers indicate

that at least 7 percent of the Belmont High School student population may take the risk of crossing the tracks once or twice per day.

After the 2009 incident, citizens and students suggested a pedestrian bridge over the tracks. The MBTA dismissed the proposal as impractical and unsafe. A bridge would need to be very high in order to clear the trains, it would require constant maintenance, and it would present temptation for mischief. According to the Department of Transportation guidelines, bridges require a minimum clearance of 22.5 feet



Access road to Belmont's railroad tracks, Channing Road near Alexander Avenue.

NICK MANOS

above the rail in addition to considerable space on either side for ramped access.

With a bridge off the table, the alternative for safe access across the railroad track is a pedestrian tunnel. Pedestrian and shared-use tunnels have been built under tracks around the country. Construction methods vary, including precast concrete modules, corrugated culvert-type tunnels, or corrugated aluminum. Most important for Belmont, in recent years several pedestrian tunnels have been constructed under-

neath a live railroad or major roadway without disrupting travel above.

Projects Under Live Rails

The Borough of Malvern, Pennsylvania, built a pedestrian tunnel project under live railroad tracks in 2010 as part of a major station renovation. The project was largely funded by the American Recovery and Reinvestment Act (ARRA), the 2009 federal stimulus package. The design was developed by Southeastern Pennsylvania Transportation Authority (SEPTA), working closely with Urban Engineers and Stantec to ensure that SEPTA's train service was not disrupted.

The Malvern tunnel is 75 feet long and 15 feet in diameter, with six feet of cover to the tracks, and used a working pit of 40 feet by 15 feet. The tunnel shield was hydraulically driven and the walls shored by steel sheeting. The project began on October 18 and was completed by November 21 without disruption of train service. Key to the project's success were numerous test borings and analysis of the geological and subsoil conditions. The tunnel was completed in 2012.

Goshen College in Elkhart, Indiana, installed a 10-foot-long bike-and-pedestrian tunnel within a 24-hour window of normal train stoppage over the July 4 holiday last year. This construction was done by open-pit preparation,

Belmont Citizens Forum

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Belmont Citizens Forum Inc. is a not-for-profit organization that strives to maintain the small-town atmosphere of Belmont, Massachusetts, by preserving its natural and historical resources, limiting traffic growth, and enhancing pedestrian safety. We do this by keeping residents informed about planning and zoning issues, by participating actively in public hearings, and by organizing forums. Our *Newsletter* is published six times a year, in January, March, May, July, September, and November. Published material represents the views of the authors and not necessarily those of the Belmont Citizens Forum. Letters to the editor may be sent to P. O. Box 609, Belmont MA 02478 or to info@belmontcitizensforum.org.



The completed Tallahassee pedestrian tunnel.

18 feet deep, and laying of sections of pre-cast concrete tunnel. Norfolk Southern railroad workers removed 100 feet of track and ties shortly after midnight and returned the following night to restore the tracks for transit by July 5. The \$1.8 million project was funded by a city grant, federal transportation funds, and the college. Though short, the tunnel was essential to prevent students heading to class from dodging freight trains that came through campus more than 10 times per day, sometimes stopping for hours.

Another recent tunnel project based in Tallahassee, Florida, dealt with a disappearing sidewalk. A railroad bridge on Lafayette Street had only a small underpass, just wide enough for a two-lane road. The sidewalk along Lafayette Street ended abruptly at the bridge, forcing pedestrians to walk in the street before rejoining the sidewalk on the other side.

Tallahassee's solution was to build a tunnel through the embankment next to the road underpass. Rather than using a prefabricated tunnel tube, they employed a regular construction crew with front loaders and dump trucks. This project cost less than \$1.2 million. It was funded in large part by the federal stimulus, ARRA, as a "shovel-ready" project.

The Tallahassee project took 90 days. The workers dug a tunnel under the tracks, placing steel plates into the hole as they went. It was a simple and safe procedure that allowed traffic to flow on the adjacent road and the train to continue service on the tracks above.



The Malvern, Pennsylvania, pedestrian tunnel under construction.

Tallahassee's tunnel is 55 feet long and is lit by four "vandal-resistant" fluorescent lights. However, vandalism has been the main issue facing the tunnel, according to Harry Reed, executive director of the Tallahassee's Capital Region Transport Planning Agency, the group that produced the tunnel. Reed is looking into security cameras to discourage vandals.

If a tunnel is built in Belmont, construction could take place from the Channing Road side and move as quickly as possible. Ample space there would allow for the work crew to move around and set up along the tracks. Careful feasibility studies would speed the process along. The length of the tunnel and therefore the cost can be controlled by the angle to the tracks; the more perpendicular it is, the better the sight lines from connecting streets.



PHOTOS COURTESY OF A. RICHARD MILLER, NATICK, MA

Pedestrian tunnel for the Minuteman Battle Road Trail in Lincoln, Massachusetts under Route 2A from the outside (top) and inside (bottom).

Crime

Tunnels are sometimes thought to be a magnet for vandalism and other illicit activities. But just because there is a tunnel does not mean that there is crime. The best way to prevent unwanted activity in the tunnel is to keep it well lit and well monitored by police. The Bruce Freeman Rail Trail once had problems with loitering on

the abandoned train tracks. Once the tracks were transformed into a pedestrian and bike trail, the loitering and crime ceased. Frequently, drug users and others who'd like to avoid attention will move away when an abandoned area is developed.

Other risks can be mitigated by proper planning and design. When the Route 2 bridge and Minuteman Bikeway underpass between Alewife and Arlington were being upgraded, much concern arose about the design of the temporary tunnel, which was built to protect users from falling debris. It was enclosed, dark, long, and blind at the ends. The incidence of muggings at this spot allegedly spiked.

This effect shows why most tunnels are designed to have broad "apron" spaces and funnel type openings, with little in the way of corners to hide in. However, the main deterrents seem to be adequate lighting, good sight lines, and good common-sense awareness of one's surroundings.

Near Bright Road, a public path allows pedestrians to cut through between Shaw Road and Washington Street. It is brightly lit from the Washington Street side at night and does not seem to be a gathering place nor a crime scene, even though it is right next to homes.

ADA Compliance and Design

Guidelines of the 1990 Americans with Disabilities Act set the maximum slope for a ramp at 1:12, or an 8.33 percent grade. If the potential tunnel under the tracks must be 10 feet tall, and there must be 5 feet from the top of the tunnel to the tracks, then the tunnel floor would have to be about 9 feet below ground level, since the track appears to be raised about 6 feet above ground level. That translates to a ramp that is about 108 to 128 feet long, since there must be flat sections for every 30 inches of rise. Most ramps limit the grade to about 5 percent, eliminating the flat sections but needing a ramp more than 180 feet long.

Certainly that requirement presents challenges on the high school side. At best, a 90-degree turn might be needed, although a wide “apron” would ease that turn. A few stairs on the high school side could be sufficient to shorten the entry length but would not be ADA-compliant. Another consideration is where the path should lead, since users from Winn Brook would need to reach either the school or Concord Avenue. Depending on the tunnel’s placement, the nearest logical route might be to the access road at the side of the field house and then to the street. However, this arrangement is unlikely to please the BHS administration if it is used by anyone other than students.

If the Belmont public library is indeed moved across the street, an alternative would be to provide a path parallel to the tracks in the other direction to the library parking lot and then onto the street. This makes sense since non-high school students would be likely to

Community Path Survey

The Belmont Community Path Advisory Committee (CPAC) has released a survey on issues related to a community path through Belmont. CPAC will be accepting responses through March 31.

The web address for the survey is www.surveymonkey.com/s/CommunityPath. Paper copies of the survey are also available in three locations: the Town Clerk’s office in The Belmont Town Hall; the Office of Community Development in the Town Hall Annex; and the Belmont Public Library on Concord Avenue. There is a box for returning completed surveys at each location.



Tunnel on the Cape Cod Rail Trail.

use the path and tunnel to reach the library and pool. If the natural route heads westward, fewer people would be cross the high school property to the driveway. Fencing would still be required since the area has active ball fields.

As Belmont pushes citizens to “be green” and drive less, walk or bike more, it makes sense to investigate and invest in actions that promote that type of behavior.

Discussions—hopefully level-headed—should include representation from all sides of the issue, including students, faculty and administration, neighbors, police and fire personnel, town officials, cyclists, and pedestrians.



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South Davis Bike Path, Davis, California.

Nick Manos is a 2010 graduate of Belmont High School and a junior at the University of California majoring in economics. He was an intern for the Belmont Citizens Forum in the summer of 2012.

CPAC Forum Gets Public Comments

The Community Path Advisory Committee (CPAC) held a forum on February 27 seeking input from the public on the potential community path in Belmont. More than 40 people attended the forum to provide their input.

CPAC chair Jeff Roth gave a brief introduction, explaining that a primary objective is for the community path to connect with both the existing path that links Alewife Station to Brighton Street and the planned Mass Central Rail Trail that will travel west from Waltham, but that other ideas for community paths within Belmont were also of interest.

Participants then broke into five working groups to offer ideas on potential routes, to identify locations and facilities in town to access via a community path, to describe desired characteristics of a community path, and to raise any other issues. Participants were also asked to provide written comments and/or to sketch route alternatives on maps or index cards that were provided to each participant.

About 50 comments were turned in at the close of the forum. The comments are being compiled and will be posted on the CPAC web page on the Belmont town web site, www.town.belmont.ma.us.

Stormwater Bylaw Proposed for Belmont

By Roger Colton

Belmont's Town Meeting this spring faces a long-overdue decision on stormwater management. A proposed stormwater management bylaw would regulate stormwater runoff from new development and prevent or remedy illicit connections to the town's sanitary sewer system.

Bylaw Stems from EPA Pledge

Belmont is considering this stormwater bylaw because of an agreement the town made a decade ago with the federal Environmental Protection Agency (EPA). The EPA granted Belmont a water quality permit in 2003 that required a local "ordinance or other regulatory mechanism" to control stormwater runoff from construction sites. In 2005, Belmont promised in an annual filing with the EPA to present such a bylaw to Town Meeting in 2006. That never happened. Today, with the town needing to renew its permit with EPA, even though it has not fully complied with the 2003 permit, Sustainable Belmont offered to help the town draft a local bylaw.

Why Manage Stormwater?

Stormwater runoff damages Belmont in several ways, but its most striking impact is on the town's sanitary sewers.

Water migrates from Belmont's stormwater system into the sanitary-sewer system, according to Justin Gould of the engineering firm Fay Spofford and Thorndike (FST), the town's sewer engineering consultant. Because Belmont's pipes are old, Gould said, both sets of pipes leak. The stormwater fills up the sanitary sewer pipes and is sent to Deer Island for processing by the Massachusetts Water Resources Authority—at the expense of every sewer ratepayer in Belmont. Belmont is replacing and repairing its system, but the expense of this effort makes it a long-term proposition.

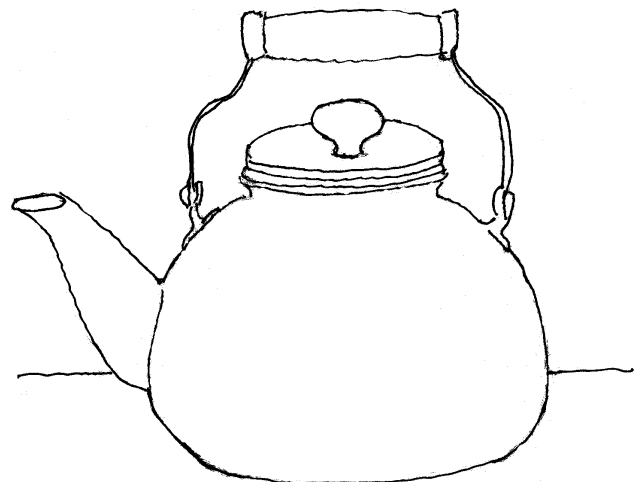
Gould spoke at a February 2013 public forum sponsored by Sustainable Belmont. That forum featured the town's hydrological model, a model that shows, on a pipe-by-pipe basis, where each gallon of rain water that falls in Belmont ends

up, either in the sanitary or in the stormwater sewer systems.

Both Belmont's stormwater system and its sanitary sewer system are old and leaky. The town's hydrological model shows that every time it rains in Belmont, the amount of water in the sanitary sewer system spikes. That excess water creates pressure in sewer pipes, which then seeks release. "The lower your house, the more likely your home will be a release point," Gould said, "and the more likely your home will get backup." That's one reason, he said, that the Winn Brook neighborhood gets hit so hard.

"When things go awry," Gould said, "is when more water comes in than the pipes can handle. If the sanitary pipe is full, the water goes 'up' to get out anywhere it can." That release might be through manholes in the streets or into the basements of Belmont homes.

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be through manholes in the streets or into the basements of Belmont homes.

The town has improved the sewer system to address backup problems in Winn Brook, replacing aging pipes and increasing the size of the pipes there. The larger stormwater pipes have, in effect, added storage capacity in Winn Brook to reduce the pressure caused by runoff spikes in storms.

Stormwater Leaks Are Costly

The stormwater in Belmont's sanitary sewer system does not simply cause water backups in low-lying neighborhoods: it costs money. The town is charged for every gallon of sewage that must be treated at Deer Island—including the stormwater that rushes into the sewers during storms. These sewage-treatment charges are passed on to all Belmont ratepayers.

And the leaks in Belmont's pipes go both ways. Sanitary waste leaks into the stormwater system as well. The Mystic River Watershed Association (MyRWA) routinely finds high pollution levels at Wellington Brook and Little Pond. That pollution reflects the sanitary waste in Belmont's stormwater runoff.

Stormwater runoff is largely created by impermeable surfaces that keep water from being absorbed into the ground. Roofs and most pavement are impermeable. When it rains, Gould said, water "hits the roof, runs into the street, and enters the stormwater system." If

water can be directed over grass or captured by vegetation instead, the runoff into the stormwater system is lessened. "The less impervious surface you have, the less runoff you have," Gould said. "It's not one to one, but it helps."

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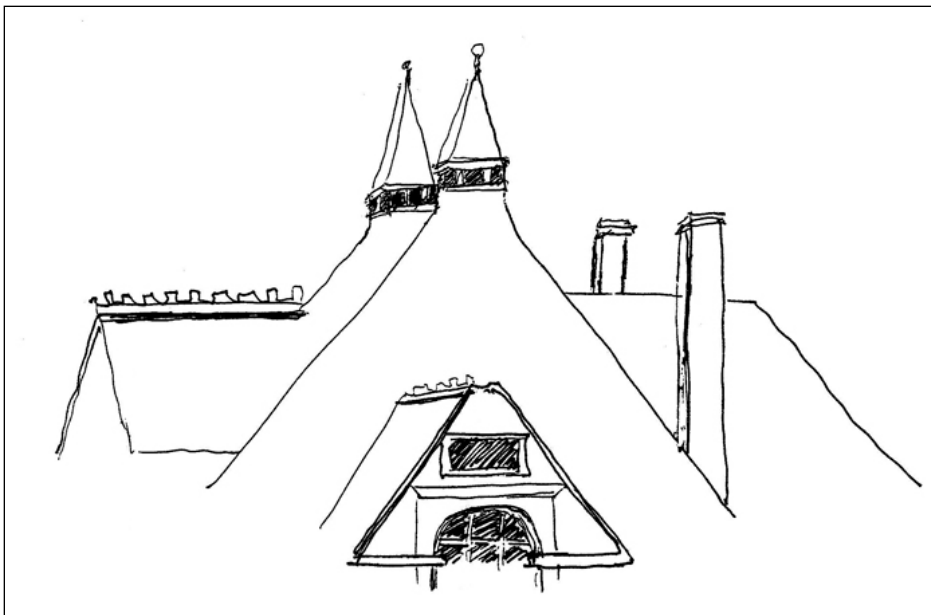
Increasing permeable surfaces would help address sewage backup problems. "When rainwater gets transferred to the sanitary sewer system," Gould said, "the sanitary sewers are not available for the purposes for which they are intended"—holding sewage.

The Problem of Illicit Connections

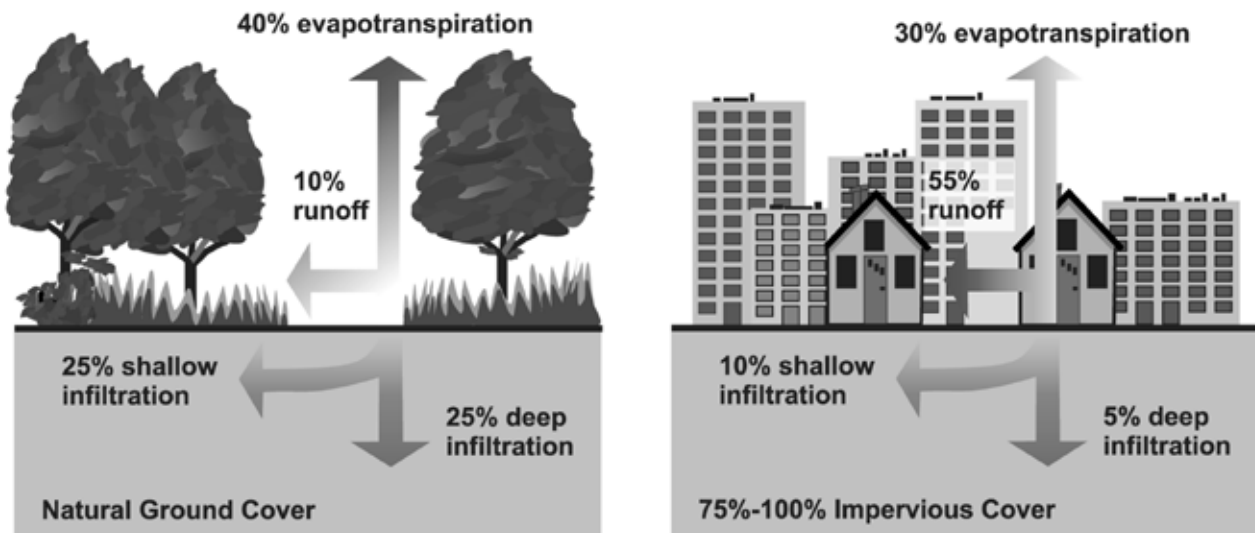
Not all stormwater in Belmont's sanitary sewer system can be traced back to stormwater runoff; some stormwater comes from illicit connections, where drainage pipes that should be connected to the stormwater system are connected to the

sanitary sewer instead. Illicit connections often involve sump pumps which people use to drain their basements according to Glenn Clancy, Belmont's director of the Office of Community Development. While connecting a sump pump to the sewer system is against the law, homeowners may not know that their sump pump is improperly connected, Clancy noted.

Of Belmont's 8,000 to 10,000 homes, Clancy said perhaps "several hundred" have illicit connections to dump stormwater into the sanitary sewers.



Town Hall roofs.



U.S. EPA

Relationship between impervious surface (pavement, buildings) and stormwater runoff. According to the U.S. EPA, as little as 10 percent impervious surface in a watershed can produce measurable deterioration in water quality in streams.

But “it doesn’t take many,” he said, to cause downstream problems.

The Proposed Bylaw

The proposed stormwater bylaw has three major aspects. First, it would require stormwater runoff associated with new development and redevelopment to meet the state’s “best practices” for stormwater control. Different project sizes require different levels of stormwater management. As projects get larger, stricter stormwater controls are required.

Second, the proposed bylaw will authorize town officials to become more active in finding and fixing illicit connections. Remedying illicit connections requires a joint effort by homeowners and the town, Clancy emphasized. Current homeowners may be blameless for the illicit connection, and fixing the connections can be expensive. Nonetheless, such connections still need to be fixed.

Finally, the proposed bylaw directs the Board of Selectmen to create a stormwater utility, a way of allowing the town to charge stormwater disposal costs to individual properties. Sites with more impermeable surfaces would pay more than sites where water can soak into the ground. Today, efforts to control and manage stormwater runoff are paid for by everyone through sewer rates. Property owners have little

incentive to reduce their own stormwater runoff. A stormwater utility would also help the town access low-cost state and federal funding, both to improve its stormwater system and to help residents address illicit connections.

Roger Colton is a Town Meeting Member from Precinct 6.

Development Can Ease Runoff

Not all new development creates more stormwater runoff. Runoff increases only when the development replaces permeable surfaces with impermeable pavement or buildings. The proposed development at the Belmont Uplands would increase impermeable surfaces by replacing vegetated areas with buildings and pavement.

But new development can reduce the impermeable surface. The Cushing Village proposal would replace a surface that is currently nearly 100 percent pavement and buildings with some vegetated areas. Parking lots are to be surfaced in part with permeable pavement. As a result, Cushing Village will likely reduce rather than increase stormwater runoff.

Selectmen Candidate Answers BCF Questions

Every year, Belmont voters elect one member of the town's three-person Board of Selectmen. This year, Mark Paolillo is running for reelection. The Belmont Citizens Forum asked the candidate to respond to the following questions. He was given eight questions and limited to 800 words total, or an average of 100 words in response to each question.

1. The Community Path Advisory Committee plans to wrap up its work by the end of June. What is the next step in moving towards implementation of a community path?

It is premature to answer that question at this time without first seeing the final report from CPAC, reviewing the options for a path that CPAC recommends, evaluating the path's financial requirements, and weighing the benefits that a path would provide to our community against the likely concerns of residents who may be directly impacted by the community path.

2. What can the town do about rush-hour traffic through Belmont?

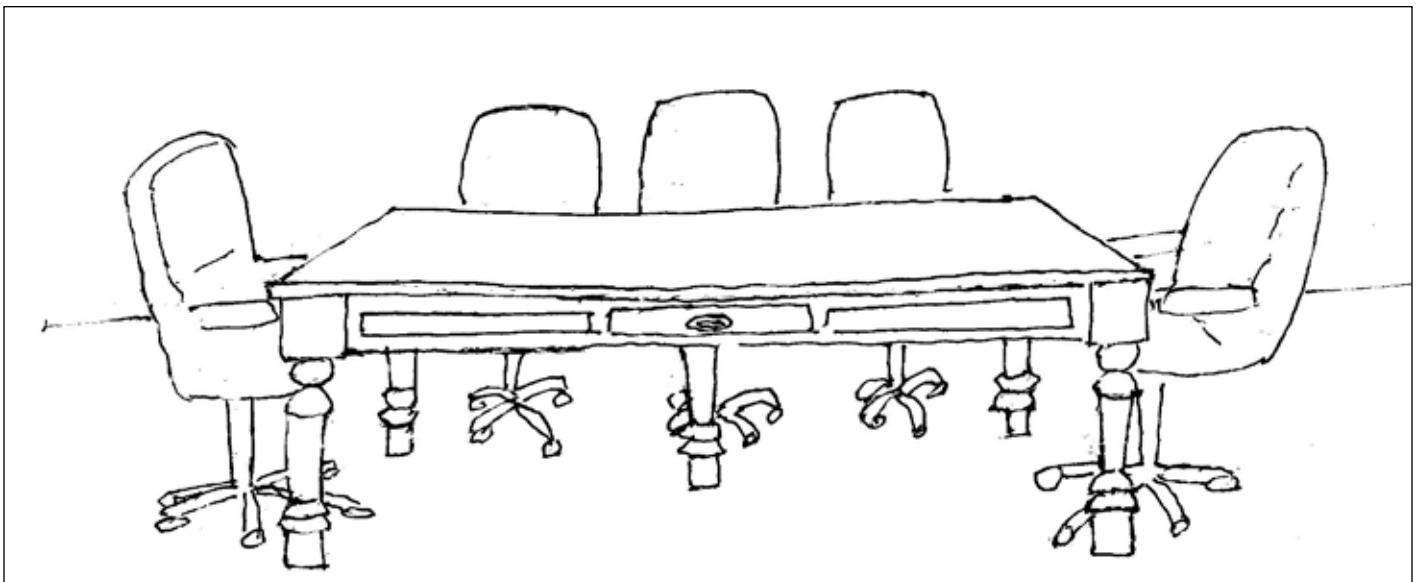
One of the contributing factors to the level of rush-hour traffic in our town is the amount of cut-through traffic that we experience. This is an issue I have been looking at since I was the chair of the Traffic Advisory Committee. I believe that

in order to decrease the amount of cut-through traffic we need to change the behavior of those motorists that are cutting through by slowing down the traffic via traffic calming and increased traffic enforcement. If it takes someone longer to cut through Belmont to get to their destination, then perhaps they will choose an alternate route. Reduction of rush-hour traffic will greatly enhance pedestrian safety.

3. Is Belmont adequately served by the reduced schedule of T buses? Should there be a paid shuttle bus from Alewife to the Belmont business districts? If so, should the town establish one?

No, Belmont is not adequately served by the reduced schedule of T buses. Clearly, increased service to our community would be better. There are a number of residents in our town that rely heavily on public transportation. Increased use of public transportation reduces the number of cars on our roadways which has beneficial effects both on public safety and our environment. The board will continue to work with our state legislators to lobby for increased service.

Finally, as to the issue of a paid shuttle, the town is currently under substantial financial pressure to preserve its core services such as education. Given the very high likelihood that a shuttle would require a financial subsidy from



the town I do not see how it could be supported at the present time.

4. What are you doing to preserve the Belmont Uplands?

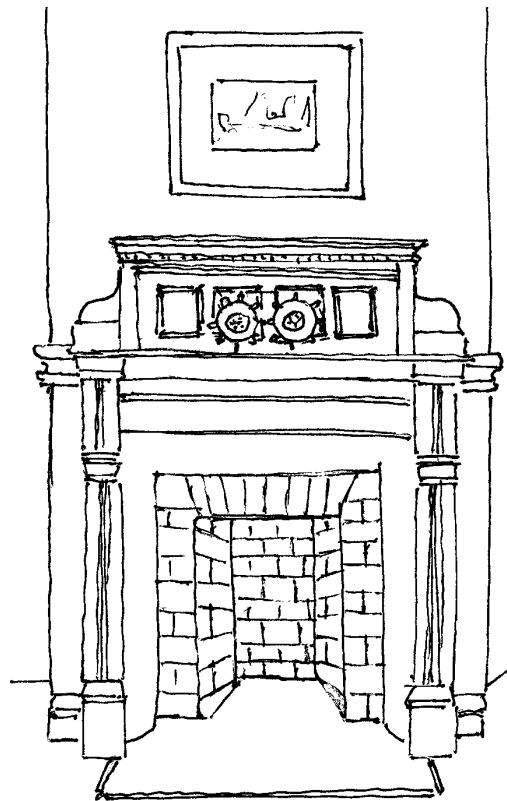
I remain committed to doing everything that I can as a member of the Board of Selectmen to preserve the Belmont Uplands. The board has continued to support the Conservation Commission's efforts on the legal front. In addition, the board has attempted to open the lines of communication with the developer to discuss this matter. Finally, I have contacted public officials in both Cambridge and Arlington to enlist their support in the preservation of the Uplands.

5. During the "Water Trouble" stormwater forum in September 2012, you said you were committed to tackling this problem. What is Belmont doing about it?

The town has three major initiatives related to the issues raised at the stormwater forum. First, we have advertised, and soon will open bids for, work to reline, replace, and repair sanitary sewers and storm drains. This work will directly improve the quality of stormwater from Belmont that discharges into the Wellington Brook, Winn Brook, Little River, Alewife Brook, and the Mystic River. Second, we are working on a new stormwater and erosion control bylaw. Lastly, we will bid out work by early summer on an infiltration/inflow removal project which will mitigate sewer surcharging during heavy rain events.

6. Should South Pleasant Street be rezoned for additional development—including residential development—when so much development is already authorized for the other side of that street, on the McLean land?

At the present time, I see no need to change the zoning of South Pleasant Street. It is important to keep in mind that South Pleasant Street is the only purely commercial district and Belmont does need the kind of revenue that a commercial development generates. That said,



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we will continue to evaluate the need to rezone depending upon the type of development opportunities that are presented to the town.

7. Was the Cushing Square Overlay District a good idea, or should the bylaw have been more specific about the scale of development that would be allowed? Should other parts of Belmont be rezoned along similar lines?

I am optimistic that it will prove to be a good idea and we will have a development in Cushing Square that revitalizes the square, enhances the quality of life of our residents, and is consistent with the character of the surrounding community and Belmont.

8. The Belmont Historic District Commission will introduce a new demolition delay bylaw at town meeting this spring. Do you support the new bylaw? Should Belmont take other measures to preserve its architectural heritage?

I will definitely support a new bylaw that is consistent with those adopted by other comparable communities and covers genuinely significant properties.

Judge Questions Map in Uplands Hearing

By Idith Haber and Meg Muckenhoupt

Legal challenges to the proposed Uplands development on a site abutting the Alewife Reservation continued with a January 16 hearing before three justices of the Massachusetts Appeals Court. The Coalition to Preserve the Belmont Uplands challenged the Massachusetts Department of Environmental Protection's (DEP) ruling in favor of the Uplands developer, AP Cambridge Properties II LLC, on the basis of four issues: that the DEP's presiding officer ignored four days of hearing testimony, improperly judged the developer's witnesses' credibility,

disregarded the significance of the upper floodplain, and failed to make sufficient findings about the conditions for wildlife habitat replication sites to support her ultimate conclusion.

Associate Justice Scott Kafker seemed to agree that the DEP decision was based in part on incomplete findings. One of the wetlands regulations that affects this project, CMR 10.60(3), has four general conditions for wildlife habitat replication sites, untouched areas on the property designed to substitute for areas that are destroyed by construction. The two general conditions which were missing from the DEP's findings specify that:

- the groundwater level in the replicated habitat must be equal to the level in the lost area, and
- the new replacement habitat must be "within the same general area as the lost area."

In an area subject to flooding—which the Uplands site is—the new habitat must also be the same distance to the water body which floods as the lost area.

AP Cambridge Partners II, LLC's legal counsel asserts that regulation 10.60(3) was found to be satisfied by both the DEP's presiding officer and the Superior Court judge.

Kafker held up the developer's habitat map and stated that it didn't look as if one of the replication areas was the same distance from the waterway as the lost areas. (See map on p. 13). The western lost areas, labeled B and D on the map, are 500 feet from both replication areas. The replication areas are at least 120 feet and as much as 640 feet farther from the Little River than the lost areas. The developer's legal counsel responded that the replicated habitat and the original are in the same general area and cited the DEP's reviewing officers' statements.

The three-judge panel is expected to issue a ruling in late spring.

Idith Haber is president and co-chair of the Coalition to Preserve the Belmont Uplands and Winn Brook Neighborhood. Meg Muckenhoupt is editor of the Belmont Citizens Forum *Newsletter*.

Lone Tree Hill Earth Day Clean Up

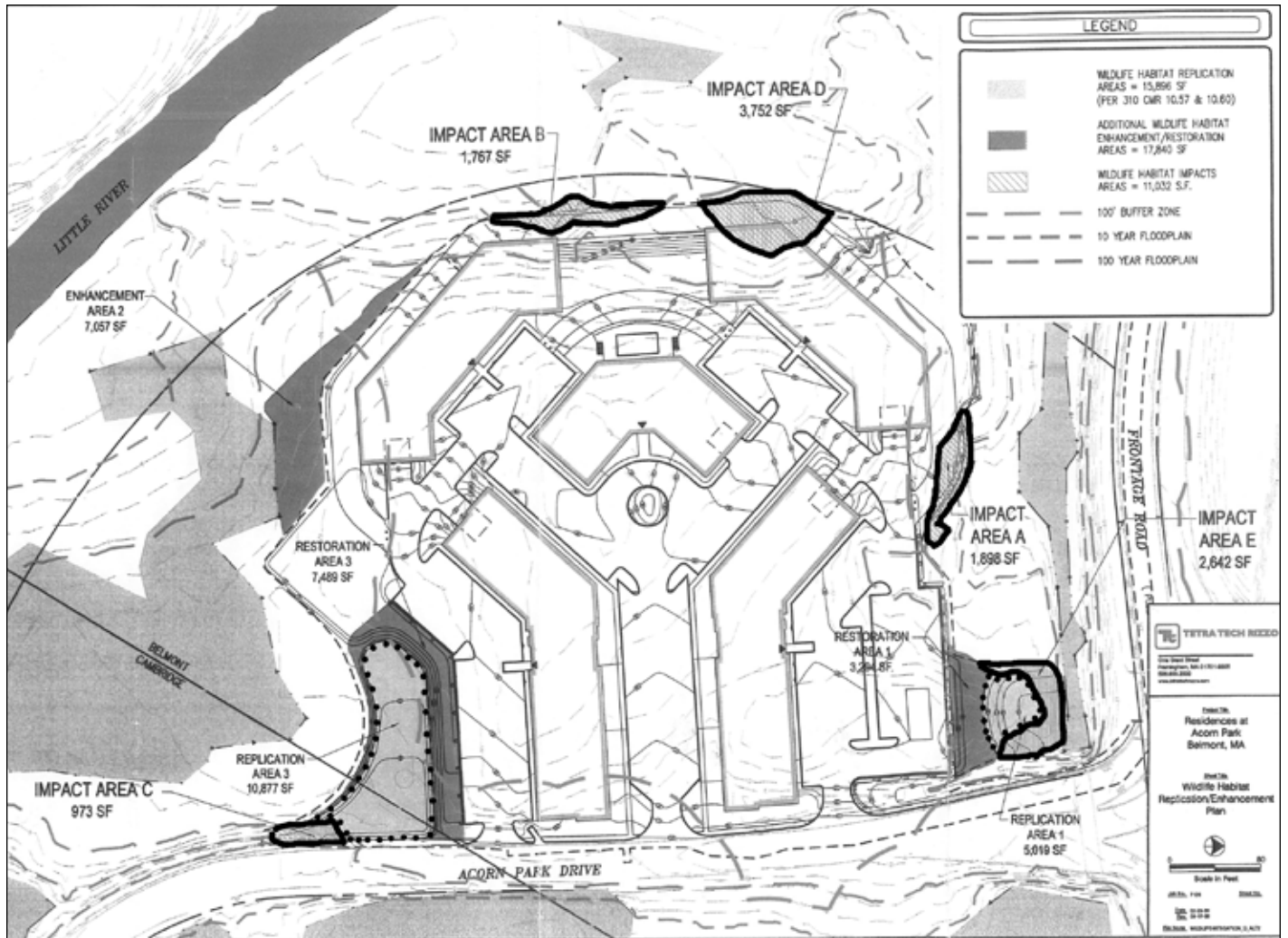
Come work together with fellow Belmont residents for a hands-on clean up and to perform trail maintenance on Belmont's Lone Tree Hill Conservation Land.

Lone Tree Hill is a parcel of Belmont's conservation land that spans close to 100 acres. The site is shaped like a backwards C and is enclosed by Concord Avenue, Pleasant Street, and Mill Street. It was dedicated as town conservation land in October 2011.

Come learn more about this valuable piece of Belmont's open space while helping maintain the area. Learn more about the trails that run through Lone Tree Hill and the meadows and open space that are home to many species of birds and mammals, and other organisms.

Meet on Saturday, April 20, at 10 a.m. at the Mill Street parking lot.

For a map of Lone Tree Hill, see the Judith K. Record Fund web site, jkrfund.org. For more information, contact Karen Parmett, bcfprogramdirector@gmail.com.



IDITH HABER

A map of the proposed Uplands development, showing the wildlife areas which would be destroyed (thick black lines) and the proposed replication areas (dotted lines).

Environmental Events

By Jenny (Yoon Jae) Kim

Garden as Community: Planting by Guild Monday, March 18, 1:30-3 p.m.

Kristina Jones, director of the Wellesley College Botanic Gardens, will explore the functions and interrelationships of natural plant communities, and how they can be modeled in our gardens. Jones will use the Edible Ecosystem Teaching Garden at Wellesley College as a case study. Fee \$10 member, \$15 nonmember. Register at my.arboretum.harvard.edu. *Wellesley College Botanic Gardens Visitor Center, 106 Central Street, Wellesley.*

Sustainable Arlington Monthly Meeting Tuesday, March 19, 7:30-9 p.m.

This year's focus is on the range of Arlington's outdoor places and spaces, the many ways they can be used, and how to care for and protect them. www.sustainablearlington.org, (617) 794-5531. *First floor, Arlington Town Hall Annex, 730 Massachusetts Avenue, Arlington.*

Climate Change Lecture Series: Renewable Energy Solutions

Wednesday, March 20, 6-8 p.m.

Lewis Milford and Jim Gordon will talk about renewable energy solutions. Milford is the president and founder of Clean Energy Group and the Clean Energy States Alliance. Gordon is the CEO of

Cape Wind Associates and president of Energy Management Inc. Register at www.northeastern.edu/policyschool/lectures-and-seminars/open-classroom/course-schedule. Room 20, West Village, Northeastern University, 360 Huntington Ave, Boston.

ECO Fest 2013

Saturday, March 23, 10 a.m.-2 p.m.

This annual festival will focus on Arlington's range of open spaces, the many ways they are used, how to care for them, and opportunities to participate.



Stanton Joins BCF Board

The Belmont Citizens Forum is pleased to announce that Vincent Stanton Jr. has joined the Forum's board of directors. Vince is a biopharmaceutical consultant and entrepreneur. A lifelong resident of Massachusetts, Vince and his family moved to Belmont in 1992. He is a Precinct 3 Town Meeting Member.

BCF Newsletter editor Meg Muckenhoupt will speak on Arlington's ecological history at 11 a.m. www.sustainablearlington.org. Arlington Town Hall Auditorium, 730 Massachusetts Avenue, Arlington.

River. Space. Design. Towards a New Urban Water Culture

Thursday, March 28, 6 p.m.

Antje Stokman will discuss how humans' relationship with water results in very different landscape and city forms and will outline a vision for reintegrating the dynamics of water into our cities. www.hmn.harvard.edu, hmn@hmn.harvard.edu, (617) 495-3045. Geological Lecture Hall, Harvard Museum of Natural History, 24 Oxford Street, Cambridge. Free event parking in the 52 Oxford Street garage.

38th Annual Gardeners Gathering

Saturday, March 30, 11 a.m.-4:30 p.m.

The Gardeners Gathering is an annual event for community gardeners and other garden enthusiasts. Participate in gardening workshops for community and residential gardeners for both beginner and experienced gardeners. www.bostonnatural.org, info@bostonnatural.org, (617) 542-7696. Egan Engineering/Science Research Center & Raytheon Amphitheater, 120 Forsyth Street AND Shillman Hall, 115 Forsyth Street, Northeastern University, Boston.

Climate Change Lecture Series: The Food Security Challenge

Wednesday, April 3, 6-8 p.m.

Molly Anderson and John Reilly talk about challenges in food security. Anderson is the Patridge chair in Food and Sustainable Agriculture Systems at College of the Atlantic. Reilly is co-director of the Joint Program on the Science and Policy of Global Change Center for Environmental Policy Research at the MIT Sloan School of Management. Register at www.northeastern.edu/policyschool/lectures-and-seminars/open-classroom/course-schedule. Room 20, West Village, Northeastern University, 360 Huntington Ave, Boston.

Landscape Design with Climate in Mind

Wednesday April 3, 7-8:30 p.m.

Sue Reed, author of *Energy-Wise Landscape Design*,

will explain how to manage your landscape to save energy and reduce your carbon footprint. Reed is a landscape architect who specializes in designing beautiful landscapes that are ecologically rich and energy efficient. www.grownativemass.org, (617) 354-0502. *Cambridge Public Library, 449 Broadway, Cambridge.*

Sustainable Belmont General Planning Meeting

Wednesday, April 3, 7-9 p.m.

Join an open discussion on future events, topics of

interest, and organizational housekeeping. All are welcome. www.sustainablebelmont.org, sustainablebelmont@gmail.com. *Belmont Public Library, 336 Concord Ave, Belmont.*

Lone Tree Hill Earth Day Clean Up

Saturday, April 20, 10a.m.-2p.m.

Come work together with fellow Belmont residents for a hands-on clean up and to perform trail maintenance on Belmont's Lone Tree Hill Conservation Land. See box on page 12 for details.

We need you.

If you can volunteer even a few hours a month, you can make a difference. You do not need to be an expert—just a person who cares about our town.

I can devote time to:

- Archaeology & Historic Preservation
- Environmental Protection
- Planning & Zoning
- Community Path
- Walking in Belmont
- Mailings
- Newsletter

I can help pay for this newsletter:

It costs about \$4,000 to publish each issue of our newsletter. Please donate for this purpose:

\$50 \$100 \$150 \$250

Make checks payable to **Belmont Citizens Forum** and mail to Belmont Citizens Forum, P.O. Box 609, Belmont MA 02478, or donate at www.belmontcitizensforum.org.

Thank you!

Name _____

Address _____

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Many companies support employees in their personal philanthropy and fundraising efforts. When you make a donation to the Belmont Citizens Forum, let us know if your employer has a **corporate matching gift** program. Your donation goes farther with matching funds. Thank you!

If you have questions, please e-mail us at info@belmontcitizensforum.org. The Belmont Citizens Forum is a nonprofit 501(c)(3) organization. Your donation is deductible from federal taxes to the full extent provided by law.

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