

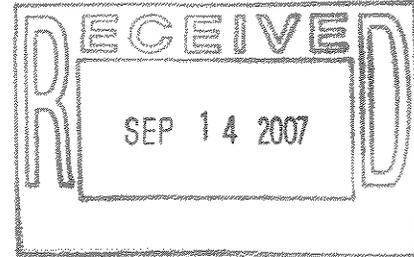
8:05
10/22

BoS Mail
09-14-07
Doug please comment
10/22 (4)

AUDUBON HILL NORTH CONDOMINIUM ASSOCIATION,
INC.

September 11, 2007

Town Manager
Acton Town Hall
472 Main Street
Acton, MA 01720



Subject: Repair of Sewage Disposal System

Reference: Lease dated 1 November 1993 (including First Lease Amendment dated 12 September 2000) for the Acton Senior Center

Dear Sir:

Audubon Hill North Condominium Association (AHNCA) has recently completed extensive repairs to our sewage disposal system as a result of being unable to meet Title 5 requirements. The total cost is expected to exceed \$140,000, including road and landscaping repairs. As a result of this, an assessment totaling \$120,000 has been levied on the unit owners. Sewage from the Acton Senior Center is processed by our system, and for this reason we are requesting that the Town of Acton share the expense of the repairs.

We believe that financial support from the Town of Acton should be provided to AHNCA for the following reasons:

1. At the time the reference lease took effect, the leaching field had to be expanded to accommodate the additional processing capability needed for the Acton Senior Center. The equivalent of two trenches (actually four half-trenches) were added by the town to the original 10 trenches. Thus, the Town of Acton "owns" one-sixth of our processing capability. This is reflected in Article VIII, Section 8.4 of the reference lease where the initial water flow rate (before adding the trenches) was limited. After the trenches were added the allowable flow was increased.
2. The lease agreement in Article VII, Section 7.1, first paragraph, states in part "... the Tenant...shall keep in good order, condition and repair...all...pipes...serving the Building". To date, the Town has not made any contribution to the repair and/or maintenance of the sewage disposal system provided by AHNCA. There has been no fee associated with processing the sewage from the Senior Center.

3. At the time of the original lease in 1993, AHNCA was required to maintain certain aspects of the Acton Senior Center as specified in Article VII, Section 7.1, second paragraph. We believed that it was unfair for us to maintain a facility that was for public use and petitioned the town to relieve us of this responsibility. The town agreed, and the result was the First Lease Amendment that relieved us of the maintenance responsibility. Financial support for the repairs to our shared sewage disposal system is in keeping with the spirit of the First Lease Amendment.

Please respond to me at 111 Audubon Drive, Acton, MA 01720-4258, 978-263-2123, staangle@aol.com.

Very truly yours,

A handwritten signature in cursive script that reads "Stacy L. Angle".

Mr. Stacy L. Angle
President, Board of Governors



292 Great Road • Acton, MA 01720
Tel: (508) 263-0011 • Fax: (508) 635-0421

August 12, 1993

John Murray
Town of Acton
472 Main Street
Acton, MA 01720

Re: Your Letter of 15 July 1993

Dear John,

I have reviewed your letter and make the following comments:

Paragraph 1 Snow Removal - I find no mention of snow removal in the references you quoted. I have given your letter to the two attorneys involved in the original negotiations and have asked for their comments.

Paragraph 2 Your comments sound familiar. Do not forget the roads maintained by the condominium owners are also used by Acton citizens to get to the conservation land.

Paragraph 3 There never was any threat of canceling the South Phase. The South Phase recreational center and all access roads would have been completed. It is likely that the North Phase would not have been built.

There were several reasons on both sides that a compromise or revision to the program was appropriate:

1. The restricted units were not moving well because of the rules and regulations concerning resale--a very common problem throughout the Commonwealth when the real estate market collapsed.
2. The Town of Acton was faced with the loss of five (5) affordable units because funds were not available for their purchase nor for the down payment. I had extended the acceptance date on the first units and switched units in an attempt not to lose them.

The compromise, therefore, benefitted both parties. I received a more saleable product by changing the remaining restricted units into market units thus allowing contingency financing since we used sales receipts to continue construction. The Town of Acton received \$130,000 for the Housing Authority units that clearly would be lost under the existing agreement, a \$450,000 investment

in the Senior Center and an increase in the residential tax basis in excess of \$6,000,000 per year.

Paragraph 4 Septic - I believe, John, that the following facts are correct:

<u>Parcel</u>	<u>Design Capacity</u>	<u>Constructed Capacity</u>
Lot N	6,740	6,951
Lot S	7,700	<u>7,800</u>
		14,751

To make sure that you do not trip review of the system by the State, the system must total less than 15,000 gallons; therefore, we have at this time an excess of 249 gallons (15,000-14,751) gallons per day adjusted to 245 gallons per day to insure compliance. Included in the 6,740 gallons per day is 600 gallons per day for the Senior Center. Add to that the excess of 211 gallons (6,951-6,740) that presently exists and the center has available 811 gallons per day. If you add through construction the 245 gallons per day, the Senior Center will have available 1,056 gallons per day (600 + 211 + 245).

The Senior Center will base its occupancy on 811 gallons per day initially and 1,056 gallons per day with the approval of the design and construction of an expansion of the Lot N septic system to a maximum capacity of 7,196 gallons per day. The costs, of course, belong to the Town of Acton.

Paragraph 8.4 Septic - The tenant will have the 1,000 gallon kitchen grease traps, both located outside the building under the parking lot, cleaned every six months as a minimum. The 1,500 gallon septic tank located in the same general area will be cleaned once a year as a minimum. The landlord will be notified when such cleaning is scheduled. If during cleaning it is apparent that the duration between cleanings is too long, they will be cleaned more frequently. Occupancy is based on 811 gallons per day until the installation of additional trenches is complete increasing the number to a maximum of 1,056 gallons per day. The installation to increase the capacity by 245 gallons per day will be accomplished by the Town of Acton prior to 30 November 1993. Water bills for the Senior Center will be sent to the Audubon Hill North Condominium Association within ten (10) days of receipt.

Yours truly,

Roy C. Smith
 Roy C. Smith



INTERDEPARTMENTAL COMMUNICATION

Acton Board of Health - Telephone 978-264-9634 - Fax 978-264-9630

October 4, 2007

TO: John Murray, Temporary Town Manager

FROM: Doug Halley, Health Director

SUBJECT: Audubon Hill North – Repair of Sewage Disposal System

Attached with this memo are materials related to the repair of the sewage disposal system for Audubon Hill North. The Audubon Hill North Condominium Association has written to the Board of Selectmen requesting financial support for these repairs.

On April 13th of this year the Association's engineer, Duncan Brown, submitted a letter to the Board of Health requesting permission to perform "maintenance" of the sewage disposal system. The work outlined by Mr. Brown included routine maintenance, as well as, inflow/infiltration investigations plus some improvements.

On April 23rd the Board of Health considered the Association's request. At that meeting Mr. Brown revealed that the sewage disposal system for Audubon Hill North had experienced malfunctions recently and that the Association desired to prevent future difficulties. Mr. Brown stated that the system was 15 years old, with good soil, but he felt lack of maintenance was the problem. Based on Mr. Brown's presentation and the material he provided the Board of Health unanimously approved the work as outlined.

On August 27th Mr. Brown provided a final report on the work permitted by the Board of Health. Within that report, in item #9, Mr. Brown stated that "the grease tank and septic tank of the Senior Center were pumped and inspected. No problems were discovered. Also, the water use for the Senior Center ... was reviewed. They are using an average of about 140 gallons per day, which is 24% of Title 5 design flow".

At the time of the investigation of the Senior Citizen wastewater components the Town was contacted regarding paying for the pumping of the pump chamber and the septic tank. Both the Health Department and the Municipal Property Department said the pumping was unnecessary as both tanks were maintained appropriately. As noted by Mr. Brown's report that assessment was correct.

In conclusion, throughout the process the work on the sewage disposal system was represented as "maintenance". Prior to the work being done it was noted that the lack of "maintenance" was the problem. At the conclusion of the work it was noted that no problems were discovered concerning wastewater flows from the Senior Center.

DUNCAN M. BROWN, P.E.
REGISTERED PROFESSIONAL ENGINEER
55 WHITCOMB ROAD
BOXBOROUGH, MA 01719-2211
(978) 263-5810 • FAX: (978) 263-5766 • RES: (978) 263-3852

April 13, 2007

Acton Board of Health
Town Hall
472 Main Street
Acton, MA 01720

Re: Project 2388, Investigations, procedures, construction, of existing SSDS, Audubon Hill North Condominium, Acton, MA 01720.

Dear Members,

The following describes investigations, procedures, and minor construction which would be considered maintenance of the Subsurface Sewage Disposal System (SSDS) Leaching Areas for Audubon Hill North Condominiums. The system, as you can see from the list, is in need of routine maintenance, as well as, I/I investigations, plus some improvements, which have come about since its original construction.

The investigations/work will include:

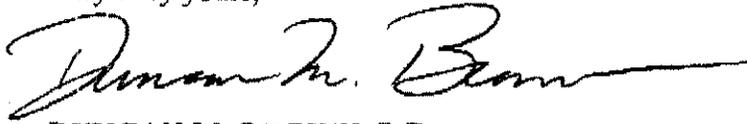
1. Clean out the gravel in the N1 pumping chamber.
2. Check the N1 overflow tank operation.
3. Check the N3 pumping chamber and the N3 overflow chamber.
4. Install Zabel Filters in all the septic tanks outlet tees.
5. Install two 2" monitoring tubes in each of the two leaching areas (total four tubes) to the top and bottom of the stone. Check and record tubes weekly. Proposed initial timing for six months. Extension of time after that, depending upon results.
6. Do an Inflow/Infiltration (I/I) investigation of the sewer collection system including all manholes and sections of pipes. Repair sewer piping (the suspected leak is between SMH-3 and the N1 Pumping Chamber).
7. Install vent manifold pipe and differential height vent pipes at the ends of each of the two leaching fields.
8. Raise existing d-boxes and install inspection Man Holes on the d-boxes.
9. Monitor the water use at the Senior Center.
10. Set up inspection of all system components once per three years for maintenance items.
11. Consider alternating pumps for the N2 gravity flow system to coordinate with the pumps in the N1 pumping station.
12. Consider septic system additives for the two leaching areas, to correct the buildup of solids in the leaching areas. Septic system additives would be used in accordance with Title 5 regulations and procedures. This would only be proposed if the installation of the venting system and raising of the d-boxes do not correct the operations of the leaching areas.

Bd of Health, Main Street, Acton, MA, Audubon No. Condos, SSDS Engr'g Advice 4/13/2007 P2

We understand we are on your agenda for 8:00 pm on April 23, 2007 to discuss these topics and obtain the permit for the work.

If you have any questions, please call.

Very truly yours,



DUNCAN M. BROWN, P.E.

Cc: Mr. Stacy Angle, 111 Audubon Drive
Mr. Ray Warren, 101 Audubon Drive

DUNCAN M. BROWN, P.E.

(978) 263-5810
FAX: (978) 263-5766



MEMORANDUM

Acton Board of Health - Telephone (978) 264-9634

TO: Board of Health

FROM: Brent L. Reagor, R.S. 

RE: Proposed Remediation Plan
Audubon Hill North

DATE: April 13, 2007

The Health Department is in receipt of a letter from Duncan Brown, PE, who is serving as a consultant to the Audubon Hill North Condominium Association. The Association has experienced malfunctions recently in their onsite wastewater system and desires to prevent future difficulties. The onsite wastewater system for Audubon Hill North serves both the condominiums, which are age restricted to those ages 55+, but also the Town's Senior Center.

Audubon Hill North is working to be pro-active to prevent the situation that was faced by Audubon Hill South a couple of years ago. As you may recall, AH-South failed an Official Title 5 Inspection – because of a mechanical component failure – and undertook a series of remedial actions and monitoring over the course of 11 months, which resulted in the rectification of the failure and the acceptance of a passing inspection by the Board of Health.

The Health Department has reviewed the proposed actions and would recommend approval with the following conditions and alterations:

- 1) A written report, including further recommendations, shall be produced detailing the information gained during the investigations listed in #2, #3, #6, #9, and the weekly monitoring tube readings in #5. This report shall be submitted to the Health Department within ninety (90) days.
- 2) Separate minor repair permits will be required for each of the following proposed actions:
 - Installation of the monitoring tubes and the vent pipes
 - Installation of the inspection manholes and elevation of the existing dboxes
 - Any repairs to tanks or sewer lines
 - Application of MassDEP approved additives to soil absorption systems

Acton Board of Health

April 23, 2007

Members Present: Dr. Bill Taylor, Acting Chairman, Pam Harting-Barrat and Joanne Bissetta, Members, Phil Alvarez, Associate Voting for Bill McInnis arrived at 7:39PM. (William McInnis, Chairman was not present)

Staff Present: Brent Reagor and Sheryl Ball.

Others Present: Peg Mikola, League Observer, Karen Rivero, ACES, Robert Hendrie, Alex Parra, Stephen Marsh, William McCracken, Duncan Brown, Alice Shafer and Kirk Fitzpatrick

The meeting was called to order at 7:35 p.m.

Minutes

On a motion made by Ms. Bissetta, seconded by Dr. Harting-Barrat, the Board unanimously voted to approve the minutes of March 26, 2007 as amended.

Public Hearing – Changes to Tobacco Regulation

Dr. Taylor opened the Public Hearing at 7:36 PM. Mr. Reagor stated that with the Public Hearing being declared open the Health Department recommends continuation of this hearing to allow Mr. McInnis to be able to attend as he made significant changes to the tobacco regulation. On a motion made by Ms. Bissetta, seconded by Dr. Harting-Barrat, the Board unanimously voted to continue the public hearing until May 7, 2007 at 7:30 PM.

Audubon Hill North - Approval

The Health Department is in receipt of a letter from Duncan Brown, PE who is serving as a consultant to the Audubon Hill North Condominium Association. The association has

experienced malfunctions recently in their onsite wastewater system and desires to prevent future difficulties. The onsite wastewater system for Audubon Hill North serves both the condos which are age restricted to age 55 and older and also the town senior center. The Department was contacted by Duncan Brown, Engineer regarding the difficulties they have had with the onsite septic system. Audubon Hill wants to take a proactive approach to address this issue. Upon reviewing the proposed remediation plan, outlined by Mr. Brown, the Health Department determined that the Board needed to be the decision making authority for this request. Audubon Hill South also had experienced mechanical failures and they spent 1 year working on it and the field has recovered. Mr. Brown stated that the system is 15 years old with good soil but he feels lack of maintenance caused these problems. Some of the problems noted were, gravel in the pump chamber which they think is a result of a broken sewer line, floating scum, trenches are long and need to be vented, D Boxes are tipped, exposed pipes, the existing manhole covers have settled and eroded and the invasion of groundwater. Mr. Brown has proposed ways to fix these problems and would like Board approval to do so. Mr. Brown also stated that he is look at current water usage from the senior center. Mr. Brown stated that they will consider biological additives if needed. On a motion made by Dr. Harting-Barrat, seconded by Mr. Alvarez, the Board unanimously voted to approve the proposed remediation plan for the onsite wastewater system serving the Audubon Hill North Condominiums outlined in a letter from Duncan Brown, PE dated April 13, 2007 with the following conditions:

1. A written report, included further recommendations, shall be produced detailing the information gained during the investigations listed in #2, #3, #6, #9 and the weekly monitoring tube readings in #5. This report shall be submitted to the Health Department within ninety (90) days.
2. Separate minor repair permits will be required for each of the following proposed actions:
 - Installation of the monitoring tubes and the vent pipes.
 - Installation of the inspection manholes and elevation of the existing d-boxes
 - Any repairs to tanks or sewer lines.
 - Application of MassDEP approved additives to soil absorption systems.

Variance – 97 Windsor Ave.

The Health Department is in receipt of an Article 15.384 –Remedial Use Approval, Article 11-8.1 for a reduction in the required minimum disposal area, Article 16-6.2.5 to reduce the separation to groundwater and Article 16-6.2.7 for a reduction in the setback to a vegetated wetland. The Health Department reviewed this request and found low wetlands and the entire lot is surrounded by wetlands. The Health Department recommends approval of this request. On a motion made by Ms. Bissetta, seconded by Dr. Harting-Barrat, the Board unanimously voted to grant a variance from Article 15.384, Article 11-8.1, Article 16-6.2.5 and Article 16-6.2.7 to the property located at 97 Windsor Ave with the following conditions:

1. The system shall, at all times, be in compliance with the most recent Remedial Use Approval issued by Mass. DEP for the Presby Enviro-Septic.
2. The septic tank shall be pumped a minimum of once every two years.
3. The system shall be constructed in accordance with the above conditions and a plan stamped by Kevin Ritchie, PE, to be submitted to the Health Department for approval.

Post Construction Variance – 48 Hayward Road

The Health Department is in receipt of a post construction Remedial Use Approval from 310 CMR 15.284 to allow for the replacement of the malfunctioning onsite wastewater system at 48 Hayward Road. Upon starting the installation of the system, groundwater was found to be at a higher groundwater table. As a result of this finding, the system was redesigned for remedial use. It was determined that the change in groundwater was affected by the removal of five large pine trees.

On a motion made by Dr. Harting-Barrat, seconded by Ms. Bissetta, the Board unanimously voted to grant a post construction Remedial Use Approval, 310 CMR 15.2.84 for the property located at 48 Hayward Road with the following conditions:

1. The system shall, at all times, be in compliance with the most recent Remedial Use approval issued by MassDEP for the Presby Enviro-Septic.
2. The septic tank shall be pumped a minimum of once every two years.

Permit Extension – 93 Taylor Road

The owners of the property have requested Board approval for a septic permit extension at the property located at 93 Taylor Road. This property has been in litigation and the permit expired during the course of litigation. The Health Department is recommending continuation of this request to Monday, May 7th to allow for Mr. McInnis to be present as he is the only Board member currently on the Board that was involved in the original approval. Both of the involved parties were notified of this request and are present tonight. On a motion made by Dr. Harting-Barrat, seconded by Ms. Bissetta, the Board unanimously voted to continue this request until May 7, 2007.

Mr. Marsh stated for the record that he would like to protest this decision due to the timeline that he is under and he further stated that he understands why the Board took this action tonight.

Other

- **Town Meeting** – Mr. Reagor stated that all the sewer articles were passed at town meeting.
- **Hazardous Waste Day** – Mr. Reagor stated that we are looking for volunteers for Hazardous Waste Day on Saturday, May 5, 2007 if any Board members are available. Ms. Mikkola, League Representative, stated that she would ask other League members and that she may be available to help.

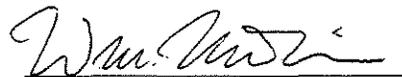
Adjournment

On a motion made by Dr. Harting-Barrat, seconded by Ms. Bissetta, the Board unanimously voted to adjourn at 8:40PM.

Respectfully Submitted,



Sheryl Ball, Health Secretary
Acton Board of Health



William Taylor, Acting Chairman
Acton Board of Health



TOWN OF ACTON
HEALTH DEPARTMENT
472 Main Street
Acton, Massachusetts, 01720
Telephone (978) 264-9634
Fax (978) 264-9630

April 24, 2007

Stacy Angle, President
Audubon Hill North Condominium Association
111 Audubon Hill Road
Acton, MA 01720

Dear Ms. Angle:

At their regularly scheduled meeting on April 23, 2007, the Acton Board of Health unanimously approved the proposed remediation plan for the onsite wastewater system serving the Audubon Hill North Condominiums.

This plan, outlined in a letter to the Board from Duncan Brown, PE, dated April 13, 2007, was approved with the following conditions and alternations:

- 1) A written report, including further recommendations, shall be produced detailing the information gained during the investigations listed in #2, #3, #6, #9, and the weekly monitoring tube readings in #5. This report shall be submitted to the Health Department within ninety (90) days.
- 2) Separate minor repair permits will be required for each of the following proposed actions:
 - Installation of the monitoring tubes and the vent pipes
 - Installation of the inspection manholes and elevation of the existing dboxes
 - Any repairs to tanks or sewer lines
 - Application of MassDEP approved additives to soil absorption systems

If you have any questions, contact the Health Department at (978) 264-9634.

Regards,

Brent L. Reagor, RS
Deputy Health Director

DUNCAN M. BROWN, P.E.
REGISTERED PROFESSIONAL ENGINEER
55 WHITCOMB ROAD
BOXBOROUGH, MA 01719-2211
(978) 263-5810 • FAX: (978) 263-5766 • RES: (978) 263-3852

July 13, 2007

Acton Board of Health
472 Main Street
Acton, MA 01720

Re: Project 2388, Investigation and Possible Replacement of the Subsurface Sewage Disposal System Leaching Areas (SSDS), Audubon Hill North Condominium, Acton, MA 01720.

Dear Board of Health Members:

90 Day Status Letter Report

This report is for compliance with the Acton Board of Health letter of approval for the proposed remediation plan for the onsite wastewater system serving the Audubon Hill North Condominiums dated April 24, 2007. The plan is outlined in a letter to the Board from Duncan M. Brown, PE, dated April 13, 2007. The plan has twelve investigations/construction work items listed. The Acton BOH wanted this first report to include the status of items #2, #3, #6, and #9 and the weekly monitoring tube readings in #5.

Board of Health Permits were applied for and issued on June 20, 2007 as follows:

07-42RR; Install Zabel Filters on Outlets and existing septic tanks.

07-43RR; Repair of Leaking Sewer between SMH N-3 and N-1 Pump Chamber; Repair Leaking SMH N-1.

07-44RR; Install D Box Manholes and raise elevation of D Boxes.

07-45RR; Install monitoring tubes and vent pipes for each of two leaching areas.

Item #1. Clean out the gravel in the N1 pumping chamber. (Not requested in 90 day report, but included because it is important to the overall program.)

The pump chamber was pumped out and sprayed with bleach and water. Once cleaned, a plug was installed into the two inlet sewer pipes to stop the ground water (and sewage) flow into the tank. Once entered, the bottom of the tank was cleaned of mud, gravel, concrete chunks, wood and miscellaneous metal items which had entered the sewer. It was discovered that the mastic strips between the sections were also deteriorated completely, and ground water was seeping into the two horizontal joints between the three sections of the tank. It was also discovered that the hole cut for the force main was oversized and had not been grouted. The joints had to be chipped out and re-grouted with

hydraulic cement to make water tight. The inlet pipes also had to be grouted to fill in the space around the pipe, in the cut holes.

There was a constant flow of ground water into the pump chamber from the two sewer pipes. The flow from the main sewer pipe from manhole N3, was estimated to be about 10 gallons per minute. The flow from the manhole N1-1 was estimated to be about 5 gallons per minute. These two flows represent as much as 21,600 gallons per day going into the septic system in the spring/early summer. This flow is about four times the design flow of the entire system.

Both sewers had to be plugged while the work was being done in the pump chamber.

Item #2. Check the N1 overflow tank operation.

The overflow tank was full of ground water to about 5 inches below the transfer pipe inlet from the pump chamber. All of this ground water had leaked into the tank since March 2007 when the tank had been pumped out. There did not appear to be any sewage overflow into the tank from the pump chamber.

The contractor pumped out the tank, cleaned it with bleach, shoveled out the debris from the bottom, and inspected the tank. It was discovered that the mastic strips which had been placed between the sections of the tank when it was originally installed, had deteriorated completely, and ground water was seeping into the three horizontal joints between the four sections of the tank. The joints had to be chipped out and re-grouted with hydraulic cement to make water tight. There were some miscellaneous holes which were also grouted. The risers were also leaking and were re-grouted. And the two large three foot diameter concrete covers, which could only be lifted off by using a backhoe, were replaced with an eccentric hole manhole cover, and cast iron frame and cover. The frame and covers were set high so that loam could be placed to slope the ground away from the manholes when completed. The area will be seeded.

Item #3. Check the N3 pumping chamber (and the N3 overflow chamber).

There is no overflow chamber connected to the N3 pump chamber, this was an error in my original letter.

The contractor started at N-3 pump chamber on June 12th. It was found that only one pump was operating because the "on" float switch had failed, but the "lead/lag" float switch was working. Thus, one pump was always bypassed in favor of the second pump. It was also found the alarm switch was never installed. There was a block of wood lodged into the second pump. Also, the water level in the pump chamber was too high, above the inlet pipe, because of the setting of the float switches.

The pump chamber was pumped out, the debris cleaned out from the bottom, and four new float switches were installed. The controls, alarm, and lead/lag functions for the two pumps were all tested. The water levels in the tank required to activate the various pumping functions were adjusted so that the water would not flood back into the septic tank. The pump chamber was left in operating mode at the end of the day.

Item #6. Do an Inflow/Infiltration (I/I) investigation of the sewer collection system including all manholes and sections of pipes. Repair sewer piping (the suspected leak is between SMH-3 and the N1 Pumping Chamber).

The N1 manhole has been repaired. Apparently, during construction, the design was changed to provide gravity flow from the N2A and N2B units to the leaching area. The contractor had already installed three sewer stub pipes into manhole N1, one 6" and two 4" pipes. The pipes had loose end caps and the entrance holes were not grouted. This was the source of the 5 gpm groundwater flow into the pump chamber. The stubs were removed and the holes grouted in. Also a brick invert was installed in manhole N1. The N3 manhole was investigated. The water main was located, excavated and exposed. It was found that the 6" sewer pipe has two 45 degree elbows in it to dive the sewer under the 12 ductile iron water pipe, which was obviously constructed first. The sewer then slopes backward toward the pump chamber creating a pocket where sewage is trapped in the pipe. It is just beyond this area where we suspect the pipe is broken and allows groundwater to flow into the pump chamber.

A brick invert was installed into manhole N1-2. No invert had been installed during original construction and sewage was getting trapped in the manhole before the N1 septic tank, creating an odor problem.

The outlet Schedule 20 PVC sewer pipe from septic tank N1 was crushed and had a 6" settlement dip in it about three feet out from the tank. The 6" pipe was replaced with 10 feet of schedule 40 PVC sewer pipe and the Zabel filter installed in the septic tank. This pipe trapping sewage was a source of an odor problem at the septic tank.

Construction on re-laying a new sewer pipe from the pump chamber and reworking manhole N3 as a drop manhole has not been done yet. The ground water flow into the pump chamber N1 has stopped from both pipes. My opinion is that the leakage into the pipe between N3 and the pump chamber (10 gpm) stopped because the ground water is now low. We still will replace the sewer pipe with new 6" schedule 40 PVC pipe.

Item #9. Monitor the water use at the Senior Center.

Initial review of the water use at the Audubon Hill Elderly Center is that the water use is not excessive. It averages between 112 gallons per day (gpd) and 186 gpd. This is about the same water usage as an average house. We will continue to monitor the usage at the Senior Center.

Item #5. Install two 2" monitoring tubes in each of the two leaching areas (total four tubes) to the top and bottom of the stone. Check and record tubes weekly.

As of this report, the monitoring tubes have not been installed in the two leaching areas.

Very truly yours,



DUNCAN M. BROWN, P.E.

CC: Audubon Hill North Condominiums

PERMIT NUMBER: 07-45RR

FEE: 60

TOWN OF ACTON – BOARD OF HEALTH

DATE: June 20, 2007

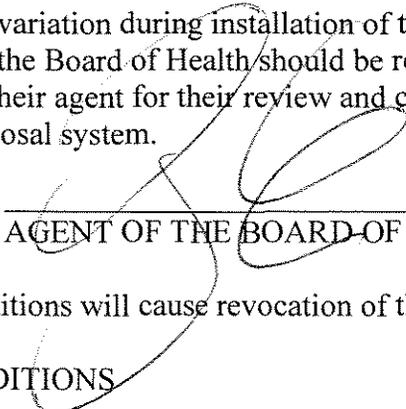
THIS IS TO CERTIFY THAT **Audubon Hill North Condo of C/o Wellington Property Management PO Box 1492 Westboro, MA 01581** Is Hereby granted permission to have a licensed installer install a **SEWERAGE DISPOSAL SYSTEM** on the premises at **Audubon Hill North**

In accordance with an application received by the Board of Health on June 20, 2007 and the approved plans:

Install monitoring tubes & vent pipes for each of two leaching areas

Approval is subject to limiting the rate of sewage disposal to not more than **No Change** gallons per day and pumping the septic tank every two years.

This permit expires on **June 20, 2009**. Any variation during installation of the sewerage disposal system from the plans approved by the Board of Health should be reported to the design engineer and the Board of Health or their agent for their review and comment prior to continuing construction of the sewerage disposal system.


AGENT OF THE BOARD OF HEALTH

Violation of any of the requirements or conditions will cause revocation of this permit.

GENERAL REQUIREMENTS AND CONDITIONS

This installation requires compliance with Acton Board of Health regulations #11-2, #11-3, #11-3.1, #11-3.2, #11-11, #11-11.1, #11-11.2, #11-11.3. In summary these regulations require that the owner of the land is responsible for all work being done in compliance with the approved applications and plans. All work performed must be by a Disposal Works Installer who is licensed by the Town of Acton and all work must be inspected and approved by the Board of Health or its agent.

- In addition the Board of Health requires inspection of all construction by a Registered Professional Engineer and requires that such engineer certify in writing that all work has completed in accordance with the terms of the permit and the approved plans.

APPROVED

JUN 20 2007

ACTON BOARD
OF HEALTH

RECEIVED

JUN 13 2007

ACTON BOARD OF HEALTH

60



No. 07-45RR

Fee \$12k-

THE COMMONWEALTH OF MASSACHUSETTS
BOARD OF HEALTH
TOWN OF ACTON

Application for Disposal Works Construction Permit

Application is hereby made for a Permit to Construct () or Repair () an Individual Sewage Disposal System at:

AUDUBON HILL NORTH CONDOMINIUMS
Location - Address
11 " " " " ASSOCIATION
Owner Address
BONICA EXCAVATION, INC.
Installer Address

Map and Parcel Number
Type of Building CONDOMINIUMS Size Lotsq. ft.
Dwelling - No. of Bedrooms 60 Garbage Grinder ()
Other - Type of Building REC. HALL No. of Persons/Seats Showers () - Cafeteria ()
Design Flow 8,341 gallons per day. REC. CR 420 GPD
Septic Tank - Liquid Capacity gallons ELDERLY CR 1159 GPD
Disposal Trench - No. 12 Width 3 Total Length 70 Total Leaching Area 5040 sq. ft. 2' D
Disposal Field - No. Length Width Total Leaching Area sq. ft.
Soil Testing Results Performed By Date

Description of Soil
.....

Nature of Repairs or Alterations - Answer when Applicable
INSTALLATION OF MONITORING TUBES & VENT PIPES FOR EACH OF TWO LEACHING AREAS.

Agreement:
The undersigned agrees to install the aforescribed Individual Sewage Disposal System in accordance with the provisions of TITLE 5 of the State Environmental Code and the applicable regulations of the Acton Board of Health - The undersigned further agrees not to place the system in operation until a Certificate of Compliance has been issued by the Acton Board of Health.

Applicant's Signature [Signature] Date: 6/13/2007
Natural Resources _____ Date: _____
Engineering Dept. _____ Date: _____

PERMIT NUMBER: 07-44RR

FEE: 60

TOWN OF ACTON – BOARD OF HEALTH

DATE: June 20, 2007

THIS IS TO CERTIFY THAT **Audubon Hill North Condo**
of c/o **Wellington Management PO Box 1492 Westboro, MA 01581**

Is Hereby granted permission to have a licensed installer install a
SEWERAGE DISPOSAL SYSTEM on the premises at
Audubon Hill North

In accordance with an application received by the Board of Health on June 20, 2007
and the approved plans:

Install D Box manholes and raise elevation of D Boxes

Approval is subject to limiting the rate of sewage disposal to not more than **No Change** gallons
per day and pumping the septic tank every two years.

This permit expires on **June 20, 2009**. Any variation during installation of the sewerage
disposal system from the plans approved by the Board of Health should be reported to the
design engineer and the Board of Health or their agent for their review and comment prior to
continuing construction of the sewerage disposal system.

AGENT OF THE BOARD OF HEALTH

Violation of any of the requirements or conditions will cause revocation of this permit.

GENERAL REQUIREMENTS AND CONDITIONS

This installation requires compliance with Acton Board of Health regulations #11-2, #11-3,
#11-3.1, #11-3.2, #11-11, #11-11.1, #11-11.2, #11-11.3. In summary these regulations require
that the owner of the land is responsible for all work being done in compliance with the
approved applications and plans. All work performed must be by a Disposal Works Installer
who is licensed by the Town of Acton and all work must be inspected and approved by the
Board of Health or its agent.

- In addition the Board of Health requires inspection of all construction by a Registered
Professional Engineer and requires that such engineer certify in writing that all work has
completed in accordance with the terms of the permit and the approved plans.

APPROVED

JUN 20 2007

ACTON BOARD
OF HEALTH

RECEIVED

JUN 13 2007

ACTON BOARD OF HEALTH



No. 07-44RR

Fee ~~\$100~~ - 60

THE COMMONWEALTH OF MASSACHUSETTS
BOARD OF HEALTH
TOWN OF ACTON

Application for Disposal Works Construction Permit

Application is hereby made for a Permit to Construct () or Repair () an Individual Sewage Disposal System at:

AUDUBON HILL NORTH CONDOMINIUMS
Location - Address

" " " " ASSOCIATION
Owner Address

BONICA EXCAVATION, INC
Installer Address

Map and Parcel Number

Type of Building... CONDOMINIUMS Size Lot.....sq. ft.
Dwelling - No. of Bedrooms 60 Garbage Grinder ()
Other - Type of Building REC HALL No. of Persons/Seats Showers () - Cafeteria ()
Design Flow gallons per day. REC CTR 420 GPD
Septic Tank - Liquid Capacity gallons ELDERLY CTR 1159 GPD
Disposal Trench - No. 12 Width 3 Total Length 70 Total Leaching Area 5040 sq. ft. 2'D
Disposal Field - No. Length Width Total Leaching Area sq. ft.
Soil Testing Results Performed By Date
Test Pit No. 1 Depth of Test Pit Depth to groundwater Perc Test 1mpi
Test Pit No. 2 Depth of Test Pit Depth to groundwater Perc Test 2mpi
Test Pit No. 3 Depth of Test Pit Depth to groundwater
Test Pit No. 4 Depth of Test Pit Depth to groundwater

Description of Soil

Nature of Repairs or Alterations - Answer when Applicable
INSTALLATION OF D-BOX MANHOLES AND RAISING
ELEV. OF D-BOXES (2) - D-BOXES

Agreement:
The undersigned agrees to install the aforescribed Individual Sewage Disposal System in accordance with the provisions of TITLE 5 of the State Environmental Code and the applicable regulations of the Acton Board of Health - The undersigned further agrees not to place the system in operation until a Certificate of Compliance has been issued by the Acton Board of Health.

Applicant's Signature Domenic Perry PE Date: 6/13/2007

Natural Resources _____ Date: _____

Engineering Dept. _____ Date: _____

PERMIT NUMBER: 07-43RR

FEE: 60

TOWN OF ACTON – BOARD OF HEALTH

DATE: June 20, 2007

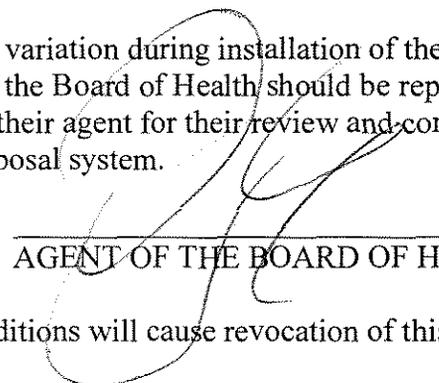
THIS IS TO CERTIFY THAT **Audubon Hill North Condo**
of c/o Wellington Management PO Box 1492 Westboro, MA 01581
Is Hereby granted permission to have a licensed installer install a
SEWERAGE DISPOSAL SYSTEM on the premises at
Audubon Hill North

In accordance with an application received by the Board of Health on June 20, 2007
and the approved plans:

**Repair of Leaking Sewer Between SMH N-3 and N-1 Pump Chamber; Repair Leaking
SMH N-1**

Approval is subject to limiting the rate of sewage disposal to not more than **No Change** gallons
per day and pumping the septic tank every two years.

This permit expires on **June 20, 2009**. Any variation during installation of the sewerage
disposal system from the plans approved by the Board of Health should be reported to the
design engineer and the Board of Health or their agent for their review and comment prior to
continuing construction of the sewerage disposal system.


AGENT OF THE BOARD OF HEALTH

Violation of any of the requirements or conditions will cause revocation of this permit.

GENERAL REQUIREMENTS AND CONDITIONS

This installation requires compliance with Acton Board of Health regulations #11-2, #11-3,
#11-3.1, #11-3.2, #11-11, #11-11.1, #11-11.2, #11-11.3. In summary these regulations require
that the owner of the land is responsible for all work being done in compliance with the
approved applications and plans. All work performed must be by a Disposal Works Installer
who is licensed by the Town of Acton and all work must be inspected and approved by the
Board of Health or its agent.

- In addition the Board of Health requires inspection of all construction by a Registered
Professional Engineer and requires that such engineer certify in writing that all work has
completed in accordance with the terms of the permit and the approved plans.

APPROVED

JUN 20 2007

ACTON BOARD
OF HEALTH

RECEIVED

JUN 13 2007

ACTON BOARD OF HEALTH



No. 07-43RR

Fee ~~\$120~~ - 60

THE COMMONWEALTH OF MASSACHUSETTS
BOARD OF HEALTH
TOWN OF ACTON

Application for Disposal Works Construction Permit

Application is hereby made for a Permit to Construct () or Repair () an Individual Sewage Disposal System at:

AUDUBON HILL NORTH CONDOMINIUMS
Location - Address
" " " " ASSOCIATION
Owner Address
BONICA EXCAVATION, INC.
Installer Address

Map and Parcel Number
Type of Building CONDOMINIUMS Size Lot.....sq. ft.
Dwelling - No. of Bedrooms 6.0 Garbage Grinder ()
Other - Type of Building REC HALL No. of Persons/Seats Showers () - Cafeteria ()
Design Flow gallons per day. 1250 CTR 420 GPD
Septic Tank - Liquid Capacity gallons ELDERLY CTR 1159 GPD
Disposal Trench - No. 12 Width 3 Total Length 70 Total Leaching Area 5040 sq. ft. 2'D
Disposal Field - No. Length Width Total Leaching Area sq. ft.
Soil Testing Results Performed By Date

Description of Soil

Nature of Repairs or Alterations - Answer when Applicable
REPAIR OF LEAKING SEWER BETWEEN SMH N-3 AND
N-1 PUMP CHAMBER, REPAIR LEAKING SMH N-1.

Agreement:

The undersigned agrees to install the aforescribed Individual Sewage Disposal System in accordance with the provisions of TITLE 5 of the State Environmental Code and the applicable regulations of the Acton Board of Health - The undersigned further agrees not to place the system in operation until a Certificate of Compliance has been issued by the Acton Board of Health.

Applicant's Signature Domenico M. Berra PE Date: 6/13/2007
Natural Resources _____ Date: _____
Engineering Dept. _____ Date: _____

PERMIT NUMBER: 07-42RR

FEE: 60

TOWN OF ACTON – BOARD OF HEALTH

DATE: June 20, 2007

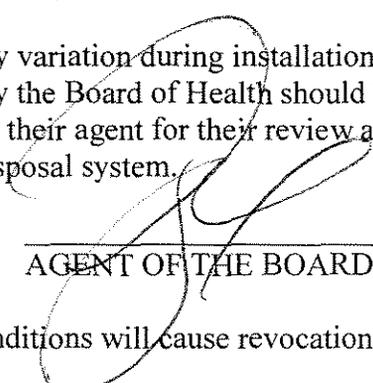
THIS IS TO CERTIFY THAT **Audubon Hill North Condos**
of c/o **Wellington Management PO Box 1492 Westboro, MA 01581**
Is Hereby granted permission to have a licensed installer install a
SEWERAGE DISPOSAL SYSTEM on the premises at
Audubon Hill North

In accordance with an application received by the Board of Health on June 20, 2007
and the approved plans:

Install Zabel Filters on Outlets and existing septic tanks

Approval is subject to limiting the rate of sewage disposal to not more than **No Change** gallons
per day and pumping the septic tank every two years.

This permit expires on **June 20, 2009**. Any variation during installation of the sewerage
disposal system from the plans approved by the Board of Health should be reported to the
design engineer and the Board of Health or their agent for their review and comment prior to
continuing construction of the sewerage disposal system.


AGENT OF THE BOARD OF HEALTH

Violation of any of the requirements or conditions will cause revocation of this permit.

GENERAL REQUIREMENTS AND CONDITIONS

This installation requires compliance with Acton Board of Health regulations #11-2, #11-3,
#11-3.1, #11-3.2, #11-11, #11-11.1, #11-11.2, #11-11.3. In summary these regulations require
that the owner of the land is responsible for all work being done in compliance with the
approved applications and plans. All work performed must be by a Disposal Works Installer
who is licensed by the Town of Acton and all work must be inspected and approved by the
Board of Health or its agent.

- In addition the Board of Health requires inspection of all construction by a Registered
Professional Engineer and requires that such engineer certify in writing that all work has
completed in accordance with the terms of the permit and the approved plans.

APPROVED

JUN 20 2007
ACTON BOARD
OF HEALTH

RECEIVED

JUN 13 2007

ACTON BOARD OF HEALTH



No. 07-42RR-

Fee 60
~~\$170-~~

THE COMMONWEALTH OF MASSACHUSETTS
BOARD OF HEALTH
TOWN OF ACTON

Application for Disposal Works Construction Permit

Application is hereby made for a Permit to Construct () or Repair () an Individual Sewage Disposal System at:

AUDUBON HILL NORTH CONDOMINIUMS

Location - Address

" " " " ASSOCIATION

Owner

Address

BOVICA EXCAVATION, INC

Installer

Address

Map and Parcel Number

Type of Building CONDOMINIUMS Size Lot _____ sq. ft.

Dwelling - No. of Bedrooms 60 Garbage Grinder ()

Other - Type of Building REC HALL No. of Persons/Seats _____ Showers () - Cafeteria ()

Design Flow _____ gallons per day.

REC CTR 420 GPD

Septic Tank - Liquid Capacity _____ gallons

ELDERLY CTR 1159 GPD

Disposal Trench - No. 12 Width 3 Total Length 70 Total Leaching Area 5040 sq. ft.

Disposal Field - No. _____ Length _____ Width _____ Total Leaching Area _____ sq. ft.

Soil Testing Results Performed By _____ Date _____

Test Pit No. 1 Depth of Test Pit _____ Depth to groundwater _____ Perc Test 1 _____ mpi

Test Pit No. 2 Depth of Test Pit _____ Depth to groundwater _____ Perc Test 2 _____ mpi

Test Pit No. 3 Depth of Test Pit _____ Depth to groundwater _____

Test Pit No. 4 Depth of Test Pit _____ Depth to groundwater _____

Description of Soil

Nature of Repairs or Alterations - Answer when Applicable

INSTALL PAPER FILTERS ON OUTLETS OF EXISTING SEPTIC TANKS.

Agreement:

The undersigned agrees to install the aforescribed Individual Sewage Disposal System in accordance with the provisions of TITLE 5 of the State Environmental Code and the applicable regulations of the Acton Board of Health - The undersigned further agrees not to place the system in operation until a Certificate of Compliance has been issued by the Acton Board of Health.

Applicant's Signature Daniel M. Barry PE Date: 6/13/2007

Natural Resources _____ Date: _____

Engineering Dept. _____ Date: _____

*C/o Wellington
Property
Management
PO Box
1492
Washburn
Ma
01581*

DUNCAN M. BROWN, P.E.
REGISTERED PROFESSIONAL ENGINEER
55 WHITCOMB ROAD
BOXBOROUGH, MA 01719-2211
(978) 263-5810 • FAX: (978) 263-5766 • RES: (978) 263-3852

August 27, 2007

Acton Board of Health
Town Hall
472 Main Street
Acton, MA 01720

Re: Project 2388, Certification Letter for Permits 07-42RR through 07-45RR for repairs of existing SSDS, Audubon Hill North Condominium, Acton, MA 01720.

Dear Members,

This Certification Letter accompanies the four Certificates of Compliance for Permits 07-42RR, 07-43RR, 07-44RR, and 07-45RR enclosed. The work described in my letter of April 13, 2007 was accomplished under these four permits.

The work accomplished included:

1. Cleaned out the gravel in the N1 pumping chamber; grouted all the deteriorated seams and openings with hydraulic cement; cleaned off the float switches; replaced the heavy concrete manholes to the surface with concrete risers and standard 24" diameter CI frames and covers. Re-graded the ground surface to eliminate surface water entering the manholes.
2. Cleaned out the N1 overflow tank; grouted all the deteriorated seams and openings with hydraulic cement; replaced the heavy concrete manholes to the surface with concrete risers and standard 24" diameter CI frames and covers. The ground surface was re-graded to eliminate surface water from entering the manholes.
3. The N3 pumping chamber was pumped and the sludge cleaned from the bottom. Several pieces of wood were found in the chamber and removed. The float switches were replaced and the pumps were set up with lead/lag cycles and a separate alarm. There is no overflow chamber for the N3 pump chamber, the top portion of the chamber after the alarm is the reserve volume for pump failures.
4. Zabel Filters were installed in the four septic tanks at N1, N2A, N2B and N3. At the N1 septic tank, the outlet pipe was found to be crushed and was replaced for 12 feet on the outlet end of the tank.
5. Two 4" monitoring tubes in each of the two leaching areas (total four tubes) were installed at the east and west leaching areas. Initial water level readings have been taken. Additional water level readings will be taken and recorded over the next three to six months.
6. An Inflow/Infiltration (I/I) investigation of the sewer collection system was made of all manholes and sections of pipes. The manhole N1 was repaired by removing the three abandoned sewer pipes left in place with faulty end caps and a new brick invert installed.

The 178 feet of 6" sewer piping between N3 manhole and the N1 pumping chamber was entirely replaced. The N3 manhole was replaced with a new drop manhole to allow the sewer to cross under the 12" DI water main at that intersection.

7. Vent manifold piping was installed at the ends of each of the five leaching trenches (east and west) with two short vent pipes and caps. Four short vent pipes and caps were installed at the ends of each of the short, 30 and 40 foot, leaching trenches which were added for the Senior Center sewage flows. There are a total of six short inlet vent pipes to allow air into all the trenches.

8. The existing d-boxes did not need to be raised. However, eccentric flow equalizers were installed in the six outlets to the trenches from each of the d-boxes. Additionally, two flow equalizers were installed on the d-boxes for the short trenches to equalize the flow. New manholes, frames and covers were installed, two on each of the large d-boxes and one on each of the two small d-boxes. All d-boxes now have ready access. Two new tall vent pipes, with caps, were installed on the large d-boxes. All caps are carbon filter caps, which will need replacement of the carbon on a periodic basis.

9. The grease tank and septic tank at the Senior Center were pumped and inspected. No problems were discovered. Also, the water use for the Senior Center and Audubon North was reviewed. They are using an average of about 140 gallons per day which is 24% of Title 5 design flow. Likewise, the Recreation Center is using about 2% of the design flow. During construction, 63,500 gallons of sewage was pumped from the complex to allow work on the various components. This represents about 1114 gallons per day which is only 13% of the design flow of 8341 gallons per day.

10. Audubon Hill North Condominiums are scheduling for inspection of all system components once per three years for maintenance items. However, in that they need Title 5 inspection reports when units are sold, the inspections may be sooner than once per three years.

11. Discussions were held with the President of the Association to consider alternating pumps for the N2 gravity flow system to coordinate with the pumps in the N1 pumping station. The most economical solution would be to use alternating dosing siphons from N2A and N2B instead of another pumping chamber. However, I was told by the Health Agent that dosing siphons are not allowed under Title 5 at this time. Thus, no changes will be made to the gravity flow system from N2A and N2B.

12. When the ends of the trenches were open for the installation of the vents, the pipes were jet washed for their entire lengths and then flushed out with water. Quite a bit of sludge was removed from all the pipes and was pumped up by the pumper truck. There was some evidence of sludge in the stone at the ends of the trenches, but the trenches drained during the construction of the vent header piping. The d-boxes were flushed out with chlorinated water to facilitate the installation of the equalizers. When the observation pipes were installed at the bottom of stone, there was some water and sludge in the trench stone at those locations. The water in the observation pipes will be monitored to determine the effectiveness of the introduction of air from the vents and the reduction of solids by the Zabel Filters. As the readings are obtained, we will consider septic system additives for the two leaching areas, to correct the buildup of solids in the leaching areas. Septic system additives would be used in accordance with Title 5 regulations and procedures.

"I hereby certify that the work was done in accordance with the four permits, listed above, and the provisions of Title 5 and the Acton Board of Health Regulations".

If you have any questions, please call.

Very truly yours,

A handwritten signature in cursive script that reads "Duncan M. Brown".

DUNCAN M. BROWN, P.E.

Cc: Mr. Stacy Angle, 111 Audubon Drive
Mr. Ray Warren, 101 Audubon Drive



Town of Acton, Massachusetts

Certificate of Compliance

This is to Certify, that the On-site Sewage Disposal System installed or repaired/replaced which was completed on JULY 13, 2007 by BONICA EXCAVATION, INC. for AUDUBON HILL NORTH CONDOS. at AUDUBON HILL NORTH has been constructed in accordance with the provisions of Title 5 and the Disposal System Construction Permit No. 07-42 RR dated JUNE 20, 2007 "INSTALL ZABER FILTERS IN FOUR EXISTING SEPTIC TANKS."

Use of this system is conditioned on compliance with the provisions set forth below:

NO CHANGE IN GALLONS PER DAY.

PUMP SEPTIC TANKS EVERY TWO YEARS.

The issuance of this certificate shall not be construed as a guarantee that the system will function as designed.

Signatures:

Date AUGUST 27, 2007

Designer

Domen M. Brown, P.E.

Date August 27, 2007

Installer

[Signature]

Date 9/4/07

Electrical Inspector

NA CF

Date 9/4/07

Approving Authority

[Signature]



Town of Acton, Massachusetts

Certificate of Compliance

This is to Certify, that the On-site Sewage Disposal System installed or repaired/replaced which was completed on AUGUST 13, 2007 by BONICA EXCAVATION, INC. for AUDUBON HILL NORTH CONDOS. at AUDUBON HILL NORTH has been constructed in accordance with the provisions of Title 5 and the Disposal System Construction Permit No. 07-43RR dated JUNE 20, 2007 "REPAIR LEAKING SEWER BETWEEN SMH N-3 AND N-1 PUMP CHAMB; REPAIR LEAKING SMH N-1."

Use of this system is conditioned on compliance with the provisions set forth below:

NO CHANGE IN GALLONS PER DAY.
PUMP SEPTIC TANK EVERY TWO YEARS.

The issuance of this certificate shall not be construed as a guarantee that the system will function as designed.

Signatures:

Date AUGUST 27, 2007

Designer Richard M. Brown, P.E.

Date August 27, 2007

Installer [Signature]

Date 9/4/07

Electrical Inspector NA

Date 9/4/07

Approving Authority [Signature]



Town of Acton, Massachusetts

Certificate of Compliance

This is to Certify, that the On-site Sewage Disposal System installed or repaired/replaced which was completed on JULY 27, 2007 by BONICA EXCAVATION, INC for AUDUBON HILL NORTH CONDOS. at AUDUBON HILL NORTH has been constructed in accordance with the provisions of Title 5 and the Disposal System Construction Permit No. 07-44RR dated JUNE 20, 2007 "INSTALL D BOX MANHOLES AND RAISE ELEVATION OF D-BOXES."

Use of this system is conditioned on compliance with the provisions set forth below:

NO CHANGE IN GALLONS PER DAY.
PUMP SEPTIC TANKS EVERY TWO YEARS.

The issuance of this certificate shall not be construed as a guarantee that the system will function as designed.

Signatures:

Date AUGUST 27, 2007

Designer

[Signature], P.E.

Date August 27, 2007

Installer

[Signature]

Date 9/4/07

Electrical Inspector

UA

Date 9/4/07

Approving Authority

[Signature]



Town of Acton, Massachusetts

Certificate of Compliance

This is to Certify, that the On-site Sewage Disposal System installed or repaired/replaced which was completed on _____ by BONICA EXCAVATION, INC for AUDUBON HILL NORTH CONDOS. at AUDUBON HILL NORTH has been constructed in accordance with the provisions of Title 5 and the Disposal System Construction Permit No. 07-45RR dated JUNE 20, 2007. ^u INSTALL MONITORING TUBES & VENTS PIPES FOR EACH OF TWO LEACHING AREAS

Use of this system is conditioned on compliance with the provisions set forth below:

- NO CHANGE IN GALLONS PER DAY.
- PUMP SEPTIC TANKS EVERY TWO YEARS.

The issuance of this certificate shall not be construed as a guarantee that the system will function as designed.

Signatures:

Date AUGUST 27, 2007 Designer Donna M. Blum, P.E.
Date August 27, 2007 Installer ABM
Date 9/4/07 Electrical Inspector NA, CB
Date 9/4/07 Approving Authority [Signature]