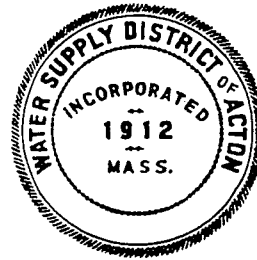


**ANNUAL REPORT**  
OF THE  
**WATER SUPPLY DISTRICT**  
OF  
ACTON, MASSACHUSETTS.



*For the Year Ending December Thirty-first*

**1983**

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## ORGANIZATION - 1983

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### Water Commissioners

Alvin R. Piper	Term expires 1984
Leonard A. Phillips	Term expires 1985
William P. Walsh	Term expires 1986

### Moderator

John Putnam	Term expires 1984
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### Clerk

Anita E. Page	Term expires 1984
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### Finance Committee

Johannes Klinkmueller	Term expires 1984
Joyce E. Foley	Term expires 1985
William L. Kingman	Term expires 1986

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*Commissioners meet on second and fourth Monday of the month  
Whitcomb Station, 693 Massachusetts Avenue, Acton  
7:30 P.M.*

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### Appointment by the Water Commissioners

#### District Manager

John E. MacLeod	Term expires 1986
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#### Treasurer and Collector

Stephen G. Peterson	Term expires 1984
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#### Accountant

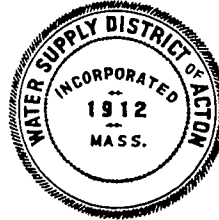
Raymond L. Page	Term expires 1984
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#### Attorney

Charles E. Orcutt, Jr.	Term expires 1984
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COMMONWEALTH OF MASSACHUSETTS

Middlesex, ss.



To the Clerk of the Water Supply District of Acton, GREETINGS:

You are directed to notify the inhabitants of the Town of Acton, qualified to vote in elections and town affairs, to assemble at:

Acton-Boxborough Regional High School Auditorium  
Charter Road at Hayward Road, West Acton  
on WEDNESDAY, MARCH 21, 1984

at 7:30 o'clock P.M.

You are further requested to notify the legal voters of said Town of Acton, as aforesaid, to assemble at their precinct:

Precinct 1 - Clubhouse, Nagog Woods  
Precinct 2 - Center Fire Station  
Precinct 3 - Douglas School - Elm Street  
Precinct 4 - Conant School - Taylor Road  
Precinct 5 - Fire Station - West Acton  
Precinct 6 - Fire Station - South Acton

on MONDAY, APRIL 2, 1984

between 7 o'clock A.M. and 8 o'clock P.M.

Then and there to bring their votes on one ballot for the following officers:

Moderator for one year, one Commissioner for three years, and Clerk for one year.

Then and there to act on the following articles:

ARTICLE 1. To fix the salaries of the elected officers.

ARTICLE 2. To act on the reports of the Commissioners, the Treasurer, and other officers and committees of the District.

ARTICLE 3. To see if the District will vote to authorize the Treasurer, with the approval of the Commissioners, to borrow in anticipation of the revenue for the fiscal year beginning July 1, 1984, in accordance with the provisions of General Laws, Chapter 44, Section 4, and to renew any note or notes as may be given for a period of less than one year, in accordance with the provisions of General Laws, Chapter 44, Section 17, or take any action relative thereto.

ARTICLE 4. To see if the District will vote to instruct the Commissioners to have an audit of the various accounts of the District, or to take any action relative thereto.

ARTICLE 5. To see what sums of money the District will vote to raise and appropriate to defray the usual expenses of the District.

ARTICLE 6. To see if the District will vote to authorize the Commissioners to enter into a written lease not to exceed five (5) years with Bay State Explosives Company, Inc., a Massachusetts Corporation having a usual place of business in Acton, Massachusetts, for the purpose of continued use of three magazines for the storage of explosives on land owned by the District, located off Powder Mill Road and New High Street in said Acton and subject to the terms and conditions of a permit issued by the Town of Acton, or to take any other action relative thereto.

(Submitted at the request of Bay State Explosives Company, Inc. and upon petition of ten or more registered voters of the Town of Acton.)

ARTICLE 7. To see if the District will vote to transfer from Surplus Revenue, or to borrow under Chapter 44 of the General Laws, or to raise and appropriate a certain sum of money for the purchase of a new air compressor and to authorize the Commissioners to trade or sell the 1969 air compressor, or to take any other action relative thereto.

ARTICLE 8. To see if the District will vote to authorize the Commissioners to rescind the vote on Article #1 of the Special Meeting held on November 21, 1983, which authorized a transfer of \$7,000.00 from Surplus Revenue for extending water main 300' on Minuteman Road; and to authorize the Commissioners to transfer the \$7,000.00 unexpended balance in the Surplus Revenue Account, or to take any other action relative thereto.

ARTICLE 9. To see if the District will vote to extend the 6 inch water main together with hydrant and necessary fittings, a distance of approx-

imately 300 feet on Minuteman Road from the end of the existing main, and to raise and appropriate or transfer from any available source or to borrow under authority of Chapter 44 of the General Laws, as amended, a certain sum of money for said purpose, or take any other action relative thereto.

ARTICLE 10. To see if the District will vote to purchase or take by eminent domain, or otherwise acquire, the fee in all or part of the land owned now or formerly by Mary S. Marshall located on the easterly side of Main Street, Acton, Middlesex County, Massachusetts, and being shown on a plan prepared for the Water Supply District of Acton, by Fleming, Bienvenu & Associates, Land Surveyors, North Billerica, Massachusetts, containing about 10.8 acres, more or less and being art of the land shown on Owner's Land Court Certificate 101462, recorded in Land Registration Office, Book 637, Page 112. Said land acquisition is for water supply purposes and for the development of a well field and water source; and to raise and appropriate or tansfer from any available source, or to borrow under authority of Chapter 44 of the General Laws, as amended, a certain sum of money for said purpose and to apply for and accept any Federal or State funds toward the cost of this purchase and upgrading of the water system, or to take any other action relative thereto.

ARTICLE 11. To see if the District will vote to transfer from Surplus Revenue, or to borrow under Chapter 44 of the General Laws, or to raise and appropriate a certain sum of money for repairs to the Flagg Hill Reservoir and to apply for and accept any Federal or State funds towards the cost of this project, or to take any other action relative thereto.

ARTICLE 12. To see if the District will vote to install a 16 inch water main extension on Main Street, North Acton from the existing water main at the intersection of Route 2A and 27 (Main Street) a distance of about 6,000 ft. more or less, together with hydrants and necessary fittings; and to raise and appropriate, or transfer from any available source, or to borrow under Chapter 44 of the General Laws, as amended, a certain sum of money for said purpose; and to apply and accept any Federal or State funds towards the cost of this extension and upgrading of the water system, or to take any other action relative thereto.

ARTICLE 13. To see if the District will vote to transfer from Surplus Revenue, or to borrow under Chapter 44 of the General Laws, or to raise and appropriate a certain sum of money for money for repairs and improvements to upgrade the telemetering equipment and structures, or to take any other action relative thereto.

ARTICLE 14. To see if the District will vote to transfer from Surplus Revenue, or to borrow under Chapter 44 of the General Laws, or to raise and appropriate a certain sum of money for a feasibility study to ascertain the most effective method of correcting the corrosiveness, aesthetics and

water quality of various existing wells of the District, or to take any other action relative thereto.

ARTICLE 15. To see if the District will vote to transfer from Surplus Revenue, or to borrow under Chapter 44 of the General Laws, or to raise and appropriate a certain sum of money for a feasibility study to determine the most appropriate method to artificially recharge the Scribner Wellfield located in South Acton, or to take any other action relative thereto.

ARTICLE 16. To see if the District will vote to transfer from Surplus Revenue, or to borrow under Chapter 44 of the General Laws, or to raise and appropriate a certain sum of money for a feasibility study to determine the most effective method of treating the Whitcomb Well in West Acton for color, or to take any other action relative thereto.

ARTICLE 17. To see if the District will vote to accept the provisions of Chapter 32B of the General Laws, authorizing any county, except Worcester County, city, town or district to provide a plan of contributory group life insurance, group accidental death and dismemberment insurance, and group general or blanket hospital, surgical, medical, dental and other health insurance for certain persons in the service of such county, city, town or district and their dependents, or to take any other action relative thereto.

And you are directed to serve this Warrant by posting copies attested by you in two or more public places in the Water Supply District, fourteen days at least before the time of said meeting, as authorized by Chapter 41, Section 119, of the General Laws.

Hereof fail not and make due returns of this Warrant with your doings thereon to the Water Commissioners on or before the time of holding said meeting.

Given under our hands this 6th day of February in the year one thousand nine hundred and eighty-four.

ALVIN R. PIPER, Sr.  
WILLIAM P. WALSH  
LEONARD A. PHILLIPS  
*Water Commissioners.*

A true copy. ATTEST:

Anita E. Page  
*District Clerk.*

## REPORT OF THE COMMISSIONERS

### Water Supply

The Water Supply District of Acton has been aggressively pursuing many of the issues highlighted in the 1982 Annual Report. Foremost among these have been the problems related to the District's supply of water, which has been severely impacted by the loss of three wells due to chemical contamination of their associated aquifers. The District has met this concern by taking the initial steps toward development of a new aquifer in North Acton, and by implementing the treatment of water from existing wells near the Assabet River. These and other topics addressed by the Commissioners are described in the following sections.

### Water Supply

As mentioned in earlier reports, the District has 8 wells, which combined provide a potential pumping capacity of 3 million gallons per day (gpd). During recent years, the base demand has been approximately 1.5 million gpd, with a peak demand during the summer months somewhat in excess of 2 million gpd. In order to provide a reasonable margin of safety, the Commissioners estimate that a ready supply between 2.5 and 3 million gpd should be maintained at all times.

While the District's pumping capacity appears adequate, Table 2 shows that 1 of the 8 wells is currently inactive because it requires some form of treatment. In addition, the Lawsbrook Well, which lies on the Acton - Concord line, can only be operated with State approval, because the District does not own all of the land within a 400 foot radius around the well, as required by State law. Also, under drought conditions, the actual pumping capacity of the School Street, Scribner, and Whitcomb wells can drop by as much as 50%. The present capacity of the system is approximately 2.5 million gpd, and approaches the margin of safety desired by the Commissioners.

In order to resolve this matter in part, funds were appropriated in a previous Annual Meeting to purchase the Kennedy land in North Acton. Legal complications resulted from the initial refusal of the Massachusetts Department of Environmental Quality Engineering to permit this acquisition because of concern that the Town of Acton's neighboring septage lagoons posed a threat to the intended wellfield. After numerous meetings with the DEQE and a formal hearing, the Commissioners obtained a formal approval to purchase the land. However, this approval is contingent upon the Town's examining and defining precautionary measures that would preclude this potential contamination.

Having achieved this benchmark approval, the Commissioners entered into negotiations with the owners to purchase the land of interest to the



TABLE 1: ACTON WATER DEMAND

Daily Average = 1,500,000 gpd  
 Summer Peak = 2,000,000 gpd  
 Desired Supply = 3,000,000 gpd

TABLE 2: ACTON WATER SUPPLY CAPACITY

WELL	ACTIVE	INACTIVE	OPERATIONAL CONSTRAINTS
Assabet 1 & 2	1,000,000	--	Aeration & Carbon Filtration
School St.	500,000	--	--
Whitcomb	450,000	--	Color Treatment Desirable
Clapp	--	400,000	Treatment Required
Lawsbrook	--	350,000	State Approval Required
Scribner	300,000	--	--
Conant	325,000	--	Desirable for ph, Carbon Dioxide
TOTALS	2,575,000	750,000	
GRAND TOTAL		3,325,000 GPD	

TABLE 3: POSSIBLE NEW SUPPLIES

AQUIFER	CAPACITY (gpd)	STATUS
North Acton	1,000,000	Under Purchase & Development
Conant	500,000	Under Exploration
Lawsbrook	350,000	Requires Artificial Recharge
Assabet	1,000,000	Requires Purchase & Treatment

District. However, after many attempts at negotiating conditions acceptable to both the District and the owners, agreement was not achieved. To resolve this situation, the Commissioners have entered into proceedings to take the land by eminent domain. This action is presently in process.

The installation of the previously described treatment plant at the Assabet Wells in South Acton allows continuous operation of the Assabet 1 well (soon to be joined by Assabet 2), and thus a total of 6 out of the District's 8 wells. The result is a water supply in excess of the summer peak demand. In addition to activated carbon filtration, which is on-line, pilot studies were performed during the summer of 1983 to evaluate the feasibility of supplemental treatment, in particular, aeration. The results of this investigation provided data showing that an aeration tower capable of removing some of the volatile organic contamination from the groundwater could be designed and economically built and operated. Pretreating the groundwater by aeration in such a tower was shown to promise reductions in contamination load, and therefore longer carbon life. The lengthening of carbon service life is important because of the cost of carbon replacement.

The combined aeration/carbon filtration system will provide a technically and economically feasible means of ensuring that the purity standards of the District--less than 1 part per billion (ppb) for any organic chemical compound, and no more than 5 ppb for the total suite of organic chemicals--are maintained in water produced by and distributed from these two municipal wells. This treatment system has been developed and installed at the Assabet 1 and 2 sites and will permit water from both wells to be produced at well design capacities. As a consequence, both wells will be back in service by the time of the Annual Meeting.

Barring a severe drought and/or well failure, we anticipate having minimal restrictions on outside water use for the foreseeable future.

The Clapp Well in West Acton was closed due to the detection of approaching chemical contamination, and the Lawsbrook well is not operating, but could be activated under emergency conditions with DEQE approval.

Possible new water supplies that could nearly double our capacity are under development or investigation. In addition to the proven North Acton aquifer now being acquired, the Commissioners are evaluating the potential of the Conant aquifer. In addition, the Commissioners are investigating increasing the capacity of the Lawsbrook aquifer through artificial recharge, and the installation of additional wells, with treatment, at the Assabet aquifer. The District has also applied for funding for purchasing land adjacent to the Assabet wells in the vicinity of Massachusetts Broken Stone Property for the purpose of aquifer protection.

### Water Quality

As mentioned in the previous section, the Water District has pursued a research and development program in water treatment at the Assabet wells in South Acton. This effort has resulted in the design and construction of the first operational treatment system in New England to effectively and economically remove chemicals from a contaminated municipal ground-water supply. This treatment system, which combines the use of aeration and activated carbon filtration, provides water, which meets the Water District's standard of 1 part per billion (ppb) of any one contaminant or 5 ppb of total combined volatile organic contaminants. THIS SYSTEM CAN BE IMPLEMENTED ELSEWHERE WITHIN THE DISTRICT, SHOULD IT BE NEEDED.

The Water District is currently conducting a study under DEQE grant funding to determine the extent and source of chemical contamination at the inactive Clapp Well. This study is the first phase of a three-phase program to eventually cleanse the aquifer supplying this well, and to restore it to operational status.

The Water District has also developed the capability of quickly and economically monitoring water and air quality by the purchase of a portable gas chromatograph. A new water quality analysis laboratory housing the instrument has been designed and built at our Massachusetts Avenue headquarters under the direction of our consulting chemist, Dr. John Swallow. Dr. Swallow, an Acton resident, has operated the facility during its "shakedown" year.

### The Geohydrological Study

The geohydrological study--already completed--of the municipal aquifers is now becoming a vital factor in deriving guidelines for groundwater protection in the Town. In addition, it will constitute a basis for improving the Lawsbrook aquifer through recharge, and will serve to locate areas in the aquifer systems where production wells would optimally located.

#### Advisory Committee

This committee has been actively involved in a number of vital Water District affairs. They were instrumental in developing and monitoring the aeration pilot study at the Assabet wells last summer, and then participated in the review of the full-scale aeration tower design for the Assabet treatment system. They initiated the publication of the well-received quarterly newsletter, "Water Words," which has greatly enhanced communications between the Water District and the citizens of Acton. The Committee Chairman has represented the District on the Town of Acton Groundwater Protection Coordination Committee, which is in the process of developing various aquifer protection measures. The Advisory Committee has also written a summary report describing artificial recharge and its application to increasing the available capacity of the water-table-sensitive Lawsbrook aquifer. In addition the Committee has provided input into this report of the Commissioners.

#### Status of the Lawsuit Against W. R. Grace

The Commissioners have held numerous meetings with officials of W. R. Grace & Co. in an effort to resolve elements of its dispute with the corporation. The objective of this effort was to reach a negotiated settlement and thus avoid the long and expensive courtroom proceedings.

Unfortunately, these negotiations could not be successfully completed. As a result, the Commissioners made the decision to bring the negotiation effort to a halt, and to charge its legal counsel to actively prepare the case for a court trial, where it is firmly believed the District will prevail.

#### Closing Remarks

The Commissioners herewith express appreciation for the diligent and professional performance of its Advisory Committee. The District is indebted to them for the accomplishments of this past year. Furthermore, the Commissioners are grateful for the insights and recommendations of its Finance Committee; they also are to be sincerely commended. Lastly, the Commissioners express their appreciation for the steadfast and professional service of its District Manager. For his effective management of the day-to-day activity of the District and his support of other District personnel, we, the Commissioners, are particularly grateful.

Alvin R. Piper - *Chairman*

Leonard A. Phillips

William P. Walsh, Ph.D.

# ESTIMATED BUDGET EXPENDITURES FOR 1984 - 1985

Group Insurance .....	\$ 18,500.00
Bonds & Interest .....	279,311.00
Salaries & Wages .....	238,000.00
Equipment Rental .....	2,000.00
Lights, Power & Tel .....	100,000.00
Fuel .....	4,500.00
Land Survey .....	Carry Over
Maintenance & Operation .....	50,000.00
MDX. County Retirement .....	24,000.00
Postage .....	4,500.00
Miscellaneous .....	1,000.00
Mass. State Audit .....	Carry Over
Legal & Accountant .....	12,000.00
Land Appraisal .....	Carry Over
Engineering .....	12,000.00
Insurance .....	19,500.00
Meters .....	6,000.00
Auto & Equipment Expense .....	16,000.00
Reserve Fund .....	25,000.00
Office Supplies .....	10,000.00
Laboratory Analysis .....	5,000.00
Survey New Water .....	Carry Over
Special Legal .....	25,000.00
Educational Expense .....	5,000.00
Permanent Paving .....	Carry Over
Water Words Notice .....	2,000.00
Advisory Committee .....	1,000.00
Treatment Plant - Special Analysis .....	5,000.00
<b>TOTAL BUDGET</b>	<b>\$ 865,311.00</b>

## ESTIMATED RECEIPTS

Hydrants .....	\$ 52,910.00
Water Rates .....	783,401.00
Sprinklers .....	9,000.00
Repairs & New Installations .....	20,000.00
<b>TOTAL RECEIPTS</b>	<b>\$ 865,311.00</b>

Alvin R. Piper, Sr.  
William P. Walsh  
Leonard A. Phillips  
*Water Commissioners*

## REPORT OF THE FINANCE COMMITTEE

The voters of the District might find it helpful to know the relationship of receipts and expenditures in the budget.

The estimated expenditures are the amounts that the Commissioners feel are necessary to operate the District for the fiscal year July 1, 1984 through June 30, 1985. These amounts are met by:

1. Estimated receipts
2. An appropriation from surplus revenue.
3. If estimated receipts and surplus revenue are not sufficient,

(a) by an increase in the water rates, or

(b) by an inclusion of any amount needed in the general tax levy of the town.

As noted on the Bonds & Interest schedule it is anticipated that payments on account of Notes and Interest for the year ended June 30, 1984 will total 279,311. The Bonds & Interest debt schedule in this report does not include any additional debt that may be incurred during fiscal 1984.

The Water District has earned \$75,573.04 during the year ended June 30, 1983 from invested free cash. These earnings will be included in the surplus revenue of the District. It is our intention to finance capital items from these earnings whenever possible.

We would like to thank all the members working for the Water District, especially Ray Page, Accountant, our Clerk, Anita Page, and John MacLeod, District Manager for their co-operation and efforts this past year.

JOHANNES KLINKMUELLER, *Chairman*  
JOYCE FOLEY  
WILLIAM KINGMAN  
*Finance Committee*

WATER SUPPLY DISTRICT  
OF  
ACTON, MASSACHUSETTS

AMORTIZATION SCHEDULE - BONDS AND INTEREST

	<u>Original Amount</u>	<u>Balance 7/1/84</u>	<u>1984-1985 Principal Interest</u>	<u>1985-1986 Principal Interest</u>
Water Mains	196,000.	16,000.	\$ 10,000.00 671.00	\$ 6,000.00 183.00
Nagog Hill Reservoir	540,000.	270,000.	30,000.00 14,535.00	30,000.00 12,825.00
Water Bonds	385,000.	160,000.	25,000.00 8,407.50	25,000.00 6,982.50
Water Bonds	220,000.	120,000.	20,000.00 5,335.00	20,000.00 4,365.00
Building	130,000.	80,000.	10,000.00 3,637.50	10,000.00 3,152.50
Water Bonds	910,000.	750,000.	80,000.00 <u>71,725.00</u>	80,000.00 <u>64,125.00</u>
TOTALS	\$ 2,381,000.	\$ 1,396,000.	\$ 279,311.00	\$ 262,633.00

WATER SUPPLY DISTRICT  
OF  
ACTON, MASSACHUSETTS

AMORTIZATION SCHEDULE — BONDS AND INTEREST (CONTINUED)

	Original Amount	Balance 7/1/84	1986-1987 Principal Interest	1987-1988 Principal Interest	1988-1989 Principal Interest	1989-1990 Principal Interest	1990-1991 Principal Interest	1991-1992 Principal Interest	1992-1993 Principal Interest	1993-1994 Principal Interest
Water Mains	196,000.	16,000.								
Nagog Hill Reservoir	540,000.	270,000.	\$ 30,000.00 11,115.00	\$ 30,000.00 9,405.00	\$ 30,000.00 7,695.00	\$ 30,000.00 5,985.00	\$ 30,000.00 4,275.00	\$ 30,000.00 2,565.00	\$ 30,000.00 855.00	
Water Bonds	385,000.	160,000.	25,000.00 5,557.50	25,000.00 4,132.50	25,000.00 2,850.00	20,000.00 1,710.00	20,000.00 570.00			
Water Bonds	220,000.	120,000.	20,000.00 3,395.00	20,000.00 2,425.00	10,000.00 1,697.50	10,000.00 1,212.50	10,000.00 727.50	10,000.00 242.50		
Building	130,000.	80,000.	10,000.00 2,667.50	10,000.00 2,182.50	10,000.00 1,697.50	10,000.00 1,212.50	10,000.00 727.50	10,000.00 242.50		
Water Bonds	910,000.	750,000.	80,000.00 56,525.00	80,000.00 48,925.00	80,000.00 41,325.00	80,000.00 33,725.00	80,000.00 26,125.00	80,000.00 18,525.00	60,000.00 10,725.00	50,000.00 4,875.00
TOTALS	\$2,381,000.	\$1,396,000.	\$244,260.00	\$232,070.00	\$205,265.00	\$193,845.00	\$182,425.00	\$151,575.00	\$101,580.00	\$54,875.00



## REPORT OF THE DISTRICT MANAGER

The following report covers the activities of the District for 1983.

New House Installations .....	30
Old Service Lines Replaced or Renewed .....	15
Old Meters Replaced With New Ones .....	40
Hydrants Damaged and Repaired .....	7
Water Main Breaks and Service Lines .....	17
Old Fire Hydrants Changed to New Ones .....	18

The Water District's Carbon Treatment Plant has proven that we can remove organic chemicals from drinking water and we can supply our water users with a high quality of drinking water.

The Water District's voters approved a New Treatment Plant of Air Stripping. The New Treatment Plant is complete but we will still have to use carbon. The new plant will treat both Assabet Wells and will deliver us with a million gallons of water per day with a chemical level of less than 1 part per billion per chemical, or if several chemicals are present, 5 parts per billion are allowed. If pollutants exceed these amounts the plant will be shut down by the District. We will also take air samples from our new Treatment Plant to insure residents that we will not be polluting the quality of air in our environment. The District will be having an open house in the near future at our Treatment Plant to show residents how it works and to answer any questions that the residents may have.

The District has also sampled our other wells during the past year and the levels of chemicals are all less than one part per billion.

The District has completed its Geohydrological Study of three major aquifers in town. We are waiting for our final report so we can make recommendations to Town Boards on how to protect our water supplies.

The Water District and the Board of Health are near completion of a sodium study surrounding the area of the Conant Well Aquifer in Acton Center. There will be a report out soon to see what procedures we can implement to lower our sodium level in our drinking water.

The District has just approved the first phase of a study to determine where the pollution is coming from that polluted the Clapp Well located in West Acton near the Boxboro town line. We hope to have this well back on line within a year with treatment. This well has been shut down for 18 months now.

The Water District's laboratory located in our office building off Mass. Ave., West Acton is in full operation. The District can monitor a pollution issue in a very short period of time. It saved our District a lot of money compared to having analysis done in a private laboratory.

The District's computer billing system has been successful and we hope to increase the computer's capabilities which will be necessary for the District's future projects.

The District will also soon be undertaking studies addressing stains, color, odor and rust problems in our water supply system.

Several District employees have completed courses, and have attended seminars on water and pollution issues and will continue to do so.

I am also working with several local communities on joining our water problems and deciding on what measures we all can take to make our environment safe for everyone.

The Water District has received several grants from the State of Massachusetts this past year and we will continue to apply for more.

I would like to take this opportunity to express my sincere thanks to the Board of Water Commissioners, Land-Water Management Advisory Committee, Finance Committee, Town Manager, Board of Selectmen, Board of Health, Town of Acton Ground Water Protection Committee, Highway Dept., Planning Board, Conservation Committee, Acton Fire Dept., Acton Police Dept., School Dept. and all the citizens of Acton. Also, thanks to DEQE and EPA and neighboring towns who have helped us with our problems. I also look forward to having better communications with all town, State and Federal agencies that the District works with.

JOHN E. MACLEOD  
*District Manager*

REPORT OF THE COLLECTOR  
JUNE 30, 1982 TO JUNE 30, 1983

Outstanding June 30, 1982	\$ 45,980.69	
Charges	866,881.87	
Refunds	<u>1,258.76</u>	
Total		\$914,121.32
Payments	\$ 838,310.56	
Adjustments	33.80	
Abatements	5,609.24	
Outstanding June 30, 1983	<u>70,167.72</u>	
Total		\$914,121.32

JUNE 30, 1983 TO DEC. 31, 1983

Outstanding June 30, 1983	\$ 70,167.72	
Charges	510,810.23	
Refunds	<u>39.10</u>	
Total		\$581,017.05
Payments	\$ 505,405.92	
Abatements	1,808.65	
Outstanding Dec. 31, 1983	<u>73,802.48</u>	
Total		\$581,017.05

Stephen G. Peterson  
Collector - Treasurer

# REPORT OF THE DISTRICT ACCOUNTANT

This portion of the report covers expenditures for the fiscal year 1983  
( July 1, 1982 -June 30, 1983 )

Account	Appropriations 7-1-82	Balance 6-30-83
Reserve Fund	\$ 25,000.00	\$ 16,953.11
Bonds & Interest	443,128.22	81,898.86
Salaries & Wages	196,000.00	15,348.82
Insurance	14,500.00	-----
**	404.90	-----
Lights, Power & Tel.	100,000.00	35,902.02
Equipment Rental	2,000.00	-----
**	1,180.00	-----
Auto & Equipment Expense	15,000.00	1,457.17
Fuel	4,000.00	-----
**	443.73	-----
Maintenance & Operation	55,000.00	-----
**	3,002.45	-----
Miscellaneous	1,000.00	648.50
Meters	6,000.00	238.73
Legal Expense	21,840.28	3,696.28
Special Legal Expense	75,000.00	44,238.10
Land Survey	3,000.00	3,000.00
Land Appraisal	3,000.00	3,000.00
Engineering Expense	15,000.00	115.99
Mass. State Audit	5,500.00	5,500.00
Group Insurance	13,000.00	1,656.74
MDX County Retirement	19,500.00	-----
Postage	4,000.00	4.75
Office Supplies	2,500.00	-----
**	3,013.90	-----
Educational Expense	5,000.00	3,774.00
**	1.91.	-----
Permanent Paving	5,000.00	3,774.00
Laboratory Analysis	6,526.24	-----
Sur. for New Water	13,526.00	8,788.51

\*\* From Reserve Fund

## SPECIAL APPROPRIATIONS

Account	Balance 12-31-83
Land-Water Mang. Adv. Comm.	\$ 728.20
Telemeter System	4,856.38
Aeration Treatment - Assabet	47,740.15
System Rehabilitation Acct.	18,640.93
Kennedy Land & Sportsman Club	212,150.00
Master Plan Update	5,000.00
Hydro Study	14,667.04
Lawsbrook Main	200.00
Assabet Building	7,746.85
Conant Well Treatment	2,000.00
Laboratory Equipment	37.97
Water Words Notice	1,000.00
Clapp Well Treatment Plant	45,000.00

Raymond Page  
*District Accountant*

# REPORT OF THE TREASURER

## Checking Accounts

June 30, 1982 to June 30, 1983

BayBank Middlesex, Balance June 30, 1982	\$	1,539.54
Transferred from Savings Account		407,100.00
Deposits		<u>840,668.34</u>
Total	\$	1,249,307.88
Disbursements	\$	883,950.68
Transfers		<u>372,000.00</u>
Total	\$	1,255,950.68
Balance June 30, 1983	\$	(6,642.80)

June 30, 1983 to Dec. 31, 1983

BayBank Middlesex, Balance June 30, 1983	\$	(6,642.80)
Transferred from Savings Account		156,500.00
Deposits		<u>504,644.98</u>
Total	\$	654,502.18
Disbursements	\$	476,689.76
Transfers		<u>175,000.00</u>
Total	\$	651,689.76
Balance Dec. 31, 1983	\$	2,812.42

June 30, 1982 to June 30, 1983

Shawmut Bank, Balance June 30, 1982	\$	(6,177.70)
Deposits		<u>477,900.00</u>
Total	\$	471,722.30
Disbursements	\$	305,383.79
Transfers		<u>165,000.00</u>
Total	\$	470,383.79
Balance June 30, 1983	\$	1,338.51

June 30, 1983 to Dec. 31, 1983

Shawmut Bank, Balance June 30, 1983	\$	1,338.51
Deposits		<u>113,500.00</u>
Total	\$	114,838.51
Disbursements	\$	114,112.85
Balance December 31, 1983	\$	725.66

# BANK INVESTED FUNDS

BayBank Middlesex, Balance June 30, 1982	\$	34.00
Interest		1.86
Balance June 30, 1983	\$	35.86
Shawmut Bank, Balance June 30, 1982	\$	83.64
Interest		4.49
Balance June 30, 1983	\$	88.13
MMDT, Balance June 30, 1982	\$	823,146.07
Interest		75,573.04
Deposits		537,000.00
Withdrawals		617,000.00
Balance June 30, 1983	\$	818,719.11

## June 30, 1983 to December 31, 1983

BayBank Middlesex, Balance June 30, 1983	\$	35.86
Interest		.97
Balance June 30, 1983	\$	36.83
Shawmut Bank, Balance June 30, 1983	\$	88.13
Interest		2.34
Balance June 30, 1983	\$	90.47
MMDT, Balance June 30, 1983	\$	818,719.11
Interest		35,672.41
Deposits		175,000.00
Withdrawals		270,000.00
Balance June 30, 1983	\$	759,391.52

## WATER MEETING

Abstract of the proceedings of the Annual Meeting of the Water Supply District of Acton, held in the Acton-Boxborough Regional High School Auditorium, Charter Road, West Acton.

WEDNESDAY, MARCH 16, 1983, at 7:30 PM

ARTICLE 1. VOTED: To fix the salaries of the District Officers as follows:

Chairman of the Commissioners	\$900.00 per year
Two (2) Commissioners	\$700.00 per year
Moderator	\$25.00 per meeting
Clerk	\$600.00 per year

(Unanimous)

ARTICLE 2. VOTED: To accept the reports of the District Officers as presented in the 1982 annual report.

(Unanimous)

ARTICLE 3. VOTED: That the District authorize the Treasurer, with the approval of the Commissioners, to borrow in anticipation of the revenue for the fiscal year beginning July 1, 1983, in accordance with the provisions of General Laws, Chapter 44, Section 4, and to renew any note or notes as may be given for a period of less than one year, in accordance with the provisions of General Laws, Chapter 44, Section 17.

(Unanimous)

ARTICLE 4. VOTED: To instruct the Commissioners to have an audit of the various accounts of the District under the direction of the Commonwealth of Massachusetts.

(Unanimous)

ARTICLE 5. VOTED: To appropriate from estimated receipts of the District the sum of \$860,625.00 and to transfer from surplus revenue the sum of \$12,646.00 for the maintenance and operation of the District, and specific appropriations as follows:

### Estimated Expenditures

Group Insurance	\$ 15,000.00
Bonds and Interest	302,271.00
Salaries & Wages	200,000.00
Equipment Rental	2,000.00
Lights, Power & Tel.	85,000.00
Fuel	4,000.00
Land Survey	1,000.00
Maintenance & Operation	55,000.00
Postage	4,000.00
Miscellaneous	1,000.00
Mdx. County Retirement	20,000.00
Mass. State Audit	- 0 -
Legal & Accountant	15,000.00
Land Appraisal	1,000.00
Engineering Expense	12,000.00
Insurance	17,000.00
Meters	6,000.00



Auto & Equipment Expense	15,000.00
Reserve Fund	25,000.00
Office Expense	5,000.00
Laboratory Analysis	5,000.00
Survey New Water	- 0 -
Special Legal Expense	75,000.00
Educational Expense	5,000.00
Permanent Paving	3,000.00
Total Budget	<u>\$873,271.00</u>

#### Estimated Receipts

Free Cash	\$ 12,646.00
Hydrants	52,000.00
Water Rates	775,000.00
Sprinklers	8,625.00
Repairs & New Installations	25,000.00
Total Receipts	<u>\$873,271.00</u>

(Unanimous)

ARTICLE 6. VOTED: That the District authorize the Commissioners to enter into a written lease for one (1) year with Bay State Explosives Company, Inc., a Massachusetts corporation having a usual place of business in Acton, Massachusetts, for the purpose of continued use of three magazines for the storage of explosives on land owned by the District located off Powder Mill Road and New High Street in said Acton and subject to the terms and conditions of a permit issued by the Town of Acton, at an annual rental in the sum of \$2,400.00.

(Unanimous)

ARTICLE 7. VOTED: That the District vote to authorize the Commissioners to transfer from surplus revenue the sum of \$8,685.00 for the purchase of a new Dodge Truck to authorize the Commissioners to trade or sell the 1977 Chevrolet Truck.

(Unanimous)

ARTICLE 8. VOTED: That the District authorize the Commissioners to apply for and accept a grant in the sum of \$55,965.00, or such lesser amount as may be determined by review and audit of eligible costs, for water system rehabilitation. Said grant is authorized under the provisions of Chapter 286 of the Acts of 1982 and Chapter 805 of the Acts of 1979.

(Unanimous)

ARTICLE 9. VOTED: That the District authorize the Treasurer, with the approval of the Commissioners, to transfer to the System Rehabilitation Account for the purpose of extending water mains and upgrading the water system, the unexpended balances in the total sum of \$45,718.91 from the various accounts described in Article 9. The total sum represents unexpended balances remaining after the completion of projects described.

(Unanimous)

ARTICLE 10. VOTED: That the District rescind the vote on Article 12 of Annual Meeting held on March 21, 1979 and authorize the Treasurer, with the approval of the Commissioners, to transfer the unexpended balance of \$2,000.00 to the System Rehabilitation Account.

(Unanimous)

ARTICLE 11. VOTED: That the District authorize the Treasurer, with the approval of the Commissioners, to transfer from surplus revenue the sum \$8,226.09 to the System Rehabilitation Account.

(Unanimous)

ARTICLE 12. VOTED: Defeated.

(Unanimous)

ARTICLE 13. VOTED: That the District authorize the Treasurer, with the approval of the Commissioners, to borrow the sum of \$88,000.00 under the provisions of Chapter 44 of the General Laws, as amended, and issue bonds or notes of the District, payable in accordance with the provisions of said Chapter 44, as amended, to the purchase of two steel vessels and fittings and to construct a permanent treatment plant in South Acton for the treatment of water at Assabet wells #1 and #2, and to apply for and accept Federal or State funds toward the cost of said project.

(Unanimous)

ARTICLE 14. VOTED: That the District authorize the Treasurer, with the approval of the Commissioners, to borrow the sum of \$40,000.00 under the provisions of Chapter 44 of the General Laws, as amended, and issue bonds or notes of the District, payable in accordance with the provisions of said Chapter 44, as amended, for the replacement of the granular activated carbon in the vessels located at Assabet well # 1 in South Acton, and to apply for and accept any Federal and State funds towards the cost of the project.

(Unanimous)

ARTICLE 15. VOTED: That the District authorize the Treasurer, with the approval of the Commissioners, to borrow the sum of \$140,000.00 under the provisions of Chapter 44 of the General Laws, as amended, and issue bonds or notes of the District, payable in accordance with the provisions of said Chapter 44, as amended, to build an air stripping packed column with air blower, pumps, electrical controls, underground sumps and building to house the pumps and to construct a permanent treatment plant for treatment of water at Assabet Wells #1 and #2, and to apply for and accept any Federal and State funds towards the cost of the project.

(Unanimous)

Adjourned: 9:35 PM

A true copy:

Attest:

Anita E. Page  
Clerk

March 16, 1983

WATER MEETING

Abstract of the proceedings of the annual election of officers of the Water Supply District of Acton, held on

MONDAY, APRIL 4, 1983

at the six precincts of the Town of Acton (Polls open from 7:00 A.M. to 8:00 P.M.)

Total number of ballots cast: 1873

The following were elected:

Commissioner for 3 years: William P. Walsh 1442

Moderator for 1 year: John Putnam 1440

Clerk for 1 year: Anita E. Page 1454

A true copy:

Attest:

Anita E. Page  
District Clerk

## WATER MEETING

Abstract of the proceedings of the Special Meeting of the Water Supply District of Acton, held in the Acton-Boxborough Regional High School Auditorium, Charter Road, West Acton.

MONDAY, NOVEMBER 21, 1983, at 7:30 PM

ARTICLE 1. VOTED: That the District extend the 6 inch water main on Minuteman Road, together with hydrants and necessary fittings, a distance of approximately 300 feet from the end of the existing main, and to raise and appropriate the sum of \$7,000.00 for said purpose and to authorize the Treasurer, with the approval of the Commissioners, to borrow said sum, if necessary, under Chapter 44 of the General Laws, as amended.

David Walker, Inc. of Acton, Massachusetts, shall deposit the total sum of \$7,000.00 with the Treasurer of the District prior to the commencement of any work under this article; said deposit to be used to purchase materials, engage a contractor to install pipe and necessary fittings, and to pay for the cost of engineering, police and inspections and all other expenses incurred to complete the work under this Article.

(Unanimous)

ARTICLE 2. VOTED: That the District authorize the Treasurer, with the approval of the Commissioners, to transfer from surplus revenue the sum of \$12,000.00 to pay Goldberg, Zorino to complete the District's Hydrogeological Study.

(Unanimous)

ARTICLE 3. VOTED: That the District authorize the Treasurer, with the approval of the Commissioners, to transfer from surplus revenue the sum of \$500.00 to cover expenses, including but not limited to printing, graphics and secretarial services, to be incurred by the Land-Water Advisory Committee of the District.

(Unanimous)

ARTICLE 4. VOTED: That the District authorize the Treasurer, with the approval of the Commissioners, to transfer from surplus revenue to the Reserve Fund the sum of \$14,000.00.

(Unanimous)

ARTICLE 5. VOTED: That the District vote to authorize the Treasurer, with the approval of the Commissioners, to transfer from surplus revenue the sum of \$1,000.00 to pay for the mailing and publication expenses of the District's quarterly publication entitled, Water Words.

(Unanimous)

ARTICLE 6. VOTED: That the District authorize the Commisioners to apply for, accept, receive and expend funding under the provisions of General Laws, Chapter 44, Section 53 in the sum of \$45,000.00, or such lesser amount as may be determined by review and audit of eligible costs, for the construction of a temporary water treatment plant at the Clapp Well Site located on Massachusetts Avenue, West Acton, and to undertake aquifer clean up and a hydrogeological study at said well site; and to authorize the Treasurer, with the approval of the Commissioners, to transfer from surplus revenue the sum of \$45,000.00 for the project described herein.

The funding for this project is authorized under the provisions of Chapter 286 of the Acts of 1982 and administration and disbursement of the grant funds is in accordance with the standards and guidelines established by the Department of Environmental Quality Engineering.

(Unanimous)

Adjourned: 8:05 PM

A true copy:

Attest:

Anita E. Page  
Clerk

November 22, 1983

## WATER RATES

Water District rates and charges effective as of April, 1980 are as follows:

If a meter gets out of order and fails to register, the consumer will be charged at the average daily consumption as shown by the meter when in order.

13. The Water Commissioners reserve the right to shut off water for the purpose of making alterations or repairs; and they may shut off the water from any taker for disregard of the Rules and Regulations and for non-payment of water rates when due. When water has been shut off because of disregard of rules or non-payment of rates, it will be let on again when the Commissioners are satisfied that there will be no further cause for complaint and the payment of Five Dollars. The Commissioners reserve the right to restrict the use of water if necessary.

18. The water may be turned off without notice when bills for water remain unpaid for fifteen (15) days after they become due. Owners of premises will be held responsible for the water rate of their tenants.

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Unpaid water bills are now a lien on real estate and collection may be made by the sale of the property, Mass. Legislature, Acts 1923, Chapter 391.

Effective April 1, 1980 water users will be billed as follows: Minimum price at which water will be furnished, including the use of the meter, will be \$12.00 quarterly. This will allow the use of 1000 cubic feet each 6 months, with no refund or abatement for amounts of water less than 1000 cubic feet used.

On Jan. 1 and July 1 a minimum charge of \$12.00 will be made to each user. Excess water for each 6 months period will be billed in October 1st and April 1st as follows:

All over 1000 cubic feet @ \$1.20 per 100 cubic feet.

Minimum charge shall apply to each family or living unit. Minimum charge shall apply to all non-residential users in accordance with applicable sections of Rules, Regulations and Rates. Larger quantities of water beyond the minimum shall be charged as set forth above.

New owners having had possession of property less than 30 days and using less than 1,000 cubic ft. of water will be billed at the rate of \$1.20 per 100 cubic ft.

There will be a minimum closing charge of \$5.00 for final water meter reading.

Hydrant Rental	\$ 65.00 each per year
Sprinkler System	125.00 each per year

Demand charge for new service installations are as follows:  
These do not include materials or labor.

¾" line	\$ 500.00
1" line	630.00
1½" line	1,140.00
1½" line	1,186.00
2" line	3,680.00
Over 2" line	5,000.00
Multi-dwelling (per apt. or each living unit)	300.00

EFFECTIVE - AUGUST 22, 1983  
SPRINKLER DEMAND CHARGES

Buildings up to 20,000 square feet =	\$ 500.00
Buildings between 20,000 square feet and 40,000 square feet =	\$1,000.00
Buildings between 40,000 square feet and 60,000 square feet =	\$1,500.00
Buildings between 60,000 square feet and 80,000 square feet =	\$2,000.00
Buildings over 80,000 square feet =	\$2,500.00

**BYLAWS TO REGULATE THE NOMINATION AND  
ELECTION OF OFFICERS OF THE DISTRICT**

- I The purpose of the Bylaws hereinafter set forth are to regulate the nomination and election of officers for the District so that the voters of the District may have knowledge of the candidates prior to an election.
- II All elections to any office in the District shall be by means of a printed ballot. This ballot shall be caused to be printed by the Commissioners acting as election officers from information furnished to them by the Clerk of the District as provided hereinafter.
- III No person's name shall be printed on the ballot unless he or someone on his behalf has submitted nomination papers signed by fifty registered voters of the District, setting forth the office for which he is a candidate and containing a statement signed by the candidate that he will accept the office, if elected. Nomination papers of a candidate for office of the District shall be filed with the Clerk of the District in accordance with Chapter 53, Section 10 of the General Laws. Submission to the Registrar of Voters shall be in accordance with Chapter 41, Section 115 of the General Laws.
- IV Nothing herein shall be construed as preventing a vote by stickers or writing in the name of a candidate, all as provided in the General Laws, except that no such sticker or write-in candidate shall be deemed to be elected unless he has received valid votes equivalent to 1% of the total of the number of registered voters in the District, as hereinafter determined.
- V The Commissioners, acting as election officers, shall prepare as of twenty (20) days prior to the annual Election, a list of eligible voters from the official voting list of the Town of Acton as of that time. This list shall remain closed until after the annual meeting of the District. The list shall then be reviewed and revised for all subsequent special meetings, up to the day of the special meeting. These lists shall then be used to determine the right of any person to vote at any election or any meeting of the District.
- VI All candidates elected to offices in the District shall be sworn to the performance of their duties by the Clerk of the District, except in the case of the Clerk, who shall be sworn by any of the Commissioners. The Clerk shall make a record of the facts in the minutes of the meeting.
- VII Elections and Nominations of district officers shall be conducted in accordance with chapters fifty to fifty-six, inclusive, of the General Laws so far as applicable, except as otherwise provided in sections one hundred and fourteen to one hundred and seventeen of Chapter 41 of the General Laws, inclusive, and except as otherwise provided by the district bylaw.

**BYLAWS**  
(as adopted and amended to February, 1973)

- I The annual meeting of the Water Supply District shall be held on the third Wednesday of March of each year for the transaction of the necessary business connected with the District, and election of officers shall be held on the first Monday of April of each year. The time and place of holding such election and vote shall be stated in the warrant for the annual meeting and such election and vote shall be deemed part of the Annual District Meeting.
- II All meetings may be called by a majority of the Board of Water Commissioners, directed to the Clerk, or as specified in Chapter 326 of the Acts of 1912, Section 8.
- III All warrants shall be posted at least fourteen (14) days before the time of the meeting.
- IV The Clerk shall preside at each meeting until a Moderator is chosen.
- V At each annual meeting there shall be elected by ballot, one Commissioner for a term of three years, a Clerk and a Moderator who shall serve for one year.
- VI If a vacancy should occur for any cause in the office of Clerk, Treasurer, or any other officer of the District except the Board of Water Commissioners, it may be filled for any such unexpired term by the Water Commissioners.
- VII The Board of Commissioners shall annually in the report to the District, give an estimated budget for the ensuing year.
- VIII
  - a) The Moderator shall appoint a Finance Committee to advise the Commissioners. The Committee shall consist of three voters of the District and shall be appointed in the following manner:
    - One member shall be appointed for one year;
    - One member shall be appointed for two years; and
    - One member shall be appointed for a term of three years.Thereafter, each appointment shall be for a term of three years.
  - ~~b) No member of the Finance Committee shall serve any other standing committee of the District or the Town of Acton having to do with expenditure of funds.~~
  - c) The Finance Committee shall review the budget for the annual meeting and shall make recommendations to the Commissioners on any matters of a financial nature arising out of an annual or special meeting, and shall make recommendations as to the long range fiscal plans of the District.



- IX The Commissioners shall appoint annually a Treasurer-Collector which office shall have all the powers and duties conferred by law upon a collector of taxes and district treasurer.
- X Any person violating any order restricting water use imposed by vote of the Commissioners shall be fined not more than \$200.00 for each offense, which shall inure to the district for such uses as the Commissioners may direct. Fines shall be recovered by indictment or on a complaint before a district court, or by non-criminal disposition in accordance with section Twenty-one D of Chapter 40 of the General Laws. Every day that such violation continues shall constitute a separate offense.
- XI a) A five member Water - Land Management Advisory Committee is hereby established. Two members to be appointed by the Commissioners for a term of three years, two members to be appointed by the Moderator of the District for a term of two years, one member to be appointed by the Selectmen for a term of one year. Thereafter, each appointment shall be for a term of three years.  
  
b) The Advisory Committee shall review and make recommendations to the Commissioners on matters relating to water and land management policies of the district and shall make recommendations to the Commissioners on any matters relating to agreement authorized under the "Bylaw to Regulate the Removal of Sale of Sand and Gravel from Lands in District Use", and shall undertake such other tasks related to water and land management as the Commissioners deem appropriate.

#### NEW BY-LAW

"By-Law to Regulate the Removal and Sale of Sand and Gravel from Lands in District Use".

Section One. The purpose of this bylaw is to regulate the removal of sand and gravel on lands owned or leased by the district so as to promote safe and sound economic development, improvement and management of said land; and protect and preserve the purity of the water supply, wells and aquifers.

Section Two. The Commissioners shall fix a reasonable time for a public hearing on any proposal for removal and sale of sand and gravel from land in district use. Notice of the public hearing shall be given at least two weeks prior to the hearing by publication of the time, place and purpose of the hearing in a local newspaper, and by mailing a copy of said notice to the owners of all property within five hundred (500) feet of the property line of the district land as they appear on the most recent applicable tax list. Included in the list of owners shall be abutters, owners of land directly opposite on any public or private street, and abutters to abutters within the five hundred (500) feet aforesaid.

The public hearing shall be held no later than 21 days prior to the business meeting of the district which includes an appropriate warrant article for action by voters of the district. Action by voters of the district on any article permitting the Commissioners to enter into a written contract for removal and/or sale of earth materials from lands of the district shall require a two-thirds vote. At the public hearing the Commissioners shall present evidence of the need for excavation, removal and/or sale of earth materials from district lands; the depth and limits of excavation; a site specific map of wetlands, limits of 100 year flood plain, vegetation, surface waters, topography (before and after), property lines and adjacent land uses; and estimation of high water table on the land.

Section Three. In entering into a written contract not to exceed one year, the Commissioners shall impose conditions and specifications including but not limited to the following:

- A. A detailed plan showing limits and phases of excavation.
- B. Specific and reasonable hours of operation, including truck arrival and departure.
- C. Required stockpiling of topsoil for use in restoration.
- D. Prohibition of excavation within 10 feet of the annual high water table.
- E. Prohibition of removal within 100 feet of property lines and existing public ways.
- F. Limitation of work faces to 10 vertical feet and requirement that all faces shall be broken down to their natural angle of repose at the end of each working day. Any existing non complying faces shall be reduced as fast as safety and practical engineering permit.
- G. Maintenance of natural vegetation on undisturbed land for screening and noise reduction purposes, and provision for dust suppression on the site.
- H. A requirement that restoration be carried on simultaneously with excavation, so that when any three acres operation area has been excavated, at least two acres shall be restored before work commences on the next contiguous three acres, so that at no time will more than four acres be unrestored.
- I. Provisions to grade slopes safely, loam and revegetate all disturbed areas.
- J. Removal of debris, stumps, boulders, etc. from the site and dispose of in an approved location or, in the case of inorganic matter, buried and covered with at least two feet of soil.
- K. A requirement that all retained subsoil and topsoil be spread over the disturbed area and seeded. Trees or shrubs of prescribed species will be planted to provide screening and reduce erosion during the establishment period.
- L. A requirement that final restoration work be completed within 60 days, weather permitting, after completion of excavation operations.
- ~~M. A requirement of posting of surety bond, performance and payment bond or~~  
other adequate security to insure compliance with terms of the contract.
- N. Regular inspection by the Commissioners or their agent at reasonable hours to insure that contract provisions are being adhered to, and provision for halting operations for any violation.
- O. Other appropriate conditions, limitations and safeguards as the Commissioners deem necessary for the protection of the public health, safety, convenience and welfare, and for protection and preservation of the purity of the water.