

WALLED LAKE
LAKE IMPROVEMENT BOARD MEETING *DRAFT* MINUTES
September 23, 2009

The meeting of the Lake Improvement Board for Walled Lake was held at the Novi Civic Center at 45175 W. 10 Mile Road on September 23, 2009. The meeting was called to order by Dave Galloway, Chairman, at 6:36 p.m.

Present: William Burke, City of Walled Lake
Brian Coburn, Secretary-Treasurer, City of Novi
Karen Warren, Oak. Co. Water Resource Commissioner's Office
Dave Galloway, Chairman and Riparian Representative
Jeff Potter, Oakland County Board of Commissioners Representative

Also Present: Mark Roberts, Attorney, Secrest Wardle
Brian McKissen and Dave Potter, Spalding DeDecker
Paul Rentschler, Applied Science and Technology Inc.

No one spoke at the first public comment.

Moved by Burke, Supported by Potter; CARRIED UNANIMOUSLY: To approve the Minutes of September 23, 2009.

Moved by Potter, Supported by Coburn; CARRIED UNANIMOUSLY: To approve payment of three legal invoices from Secrest Wardle totaling \$1,488.65.

Moved by Warren, Supported by Potter; CARRIED UNANIMOUSLY: To amend motion to add payment to Spalding DeDecker in the amount of \$12,892 (80 percent of the contract award of \$16,115).

Discussion of the Engineering Study followed. Brian McKissen and Dave Potter of Spalding DeDecker and Paul Rentschler of Applied Science and Technology Inc. explained the various tests that were completed to assess the lake. The report concluded that overall Walled Lake was a healthy lake with good water quality. The overall quality of the lake hadn't changed much since the last study was performed 10 years ago. The aquatic weed study showed that there were two kinds of milfoil, native and European, covering approximately 150 acres of the lake and the growth is generally consistent with the underlying soil types in the lake. Spalding DeDecker recommended that the lake board should control the weed growth in the lake using a mix of chemical and mechanical methods.

Brian McKissen briefly discussed the assessment methods available to the board. The two options were to either 1) assess only the 376 lakefront owners or 2) assess lakefront owners, backlot owners and splits. Dave Potter noted that, because the lake was healthy and needed minimal weed control, it may be easier and more cost efficient to assess only the lakefront owners. He estimated that it would cost \$100-\$200 per lakefront owner to raise \$50,000 a year for lake control (aquatic plant management).

A brief discussion was held to determine a date to schedule a public hearing to determine practicability of the project; the date selected was Thursday, November 5th, at 6:30 p.m.

Moved by Potter, Supported by Coburn; CARRIED UNANIMOUSLY: To adopt Resolution No. 1 scheduling the public hearing for November 5, 2009 at 6:30 p.m. at the Novi Civic Center to review the engineering and economic reports and to determine the practicability of the project.

At public comment, several people thanked the Lake Board for its hard work and commented that they were happy to hear that the lake was healthy. There was division among the public as to the assessment of costs if the aquatic weed control project were deemed practicable.

ADJOURNMENT: There being no further business to come before the Lake Board, the meeting was adjourned at 7:41 p.m.

Brian Coburn, Secretary-Treasurer

Proposed Rules for Public Hearings

- (a) Public Hearings shall be scheduled and due notice given in accordance with the provisions of the Inland Lake Improvement Act.
- (b) Except in extraordinary circumstances found to exist by the Walled Lake Improvement Board, no Public Hearings shall be held within five (5) business days after a holiday recognized by the City of Novi.
- (c) The order of presentation shall be as follows:

- Introduction by Lake Board and/or Lake Board Consultants, describe purpose of hearing
- Reference to rules of the hearing
- Document the notice given
- Open Public Hearing
 - Description of Project and Cost Estimate
 - Review of Correspondence
 - Open Floor for Comment
- Close Public Hearing**

- (d) Any member of the public wishing to address the Lake Board during a Public Hearing shall fill out a card giving his/her name and address.
 - 1) The general public shall limit their remarks to three (3) minutes each. Speakers shall not exceed the time limit of this rule without permission from the Chairperson.
 - 2) Any person speaking of behalf of a group shall limit his/her remarks to five (5) minutes, provided that all those in the audience being represented identify themselves.
 - 3) Speakers shall address their remarks only to the Chairperson.
 - 4) No member of the audience shall be allowed to address an issue for Public Hearing following the closing of that Public Hearing by the Chairperson.

- (e) The Chairperson shall instruct all those who wish to speak during the Public Hearing to sum up their remarks when the Chairperson or Lake Board members feel that they have exceeded their time limit, strayed from the pertinent facts, or have become repetitive or disrespectful.

WALLED LAKE IMPROVEMENT BOARD

NOTICE OF PUBLIC HEARING

**TO THE OWNERS OF ALL PROPERTIES ABUTTING AND/OR
WITH DEEDED ACCESS TO WALLED LAKE, LOCATED WITHIN THE
CITIES OF NOVI AND WALLED LAKE, OAKLAND COUNTY, MICHIGAN.**

Notice is hereby given that the Walled Lake Improvement Board, located within the cities of Novi and Walled Lake, County of Oakland, will meet at the **Novi City Hall located at 45175 West Ten Mile Road, Novi, Michigan 48375-3024 at 6:30 p.m. on Thursday, November 5, 2009** to conduct a Public Hearing to review the Lake Improvement Study for Walled Lake, an engineer's report required under section 30909 of Part 309 of Public Acts No. 451 of 1994, as amended, currently on file at the City of Novi Clerk's Office and the City of Walled Lake Clerk's Office for public examination. The report may also be viewed online at www.cityofnovi.org/lakeboard.

Any person may appear and be heard at said Public Hearing, which is called pursuant to the provisions of Section 30910 of Part 309 of Public Acts No. 451 of 1994, as amended, which provides that the lake board chairperson shall hold a meeting of the lake board to review the reports required under section 30909 and to determine the practicability of the weed control project. The lake board shall review the report and determine the practicability of the weed control project after the public hearing.

If the lake board passes a resolution in which it determines the weed control project to be practicable, the lake board shall determine to proceed with the weed control project, shall approve the plans and estimate of costs as originally presented or as revised, corrected, amended, or changed, and shall determine the sufficiency of the petition and/or resolutions for the improvement. The resolution shall be published once in a newspaper of general circulation in the cities of Novi and Walled Lake. After the resolution has been published, the sufficiency of the petition and/or resolutions for the improvement shall not be subject to attack except in an action brought in a court of competent jurisdiction within 30 days after publication.

MEMORANDUM

TO: WALLED LAKE IMPROVEMENT BOARD MEMBERS
FROM: BRIAN COBURN, P.E.; SECRETARY/TREASURER
SUBJECT: PAYMENT OF BILLS
DATE: OCTOBER 28, 2009

We have received three invoices for payment since the last meeting as attached and summarized below:

Payee	Description	Amount
Secrest Wardle	Legal Services Sept 2009	\$636.65
Spinal Column	Legal Notice for Public Hearing (10/14/09 edition)	\$143.75
Spinal Column	Legal Notice for Public Hearing (10/21/09 edition)	\$143.75
TOTAL BILLS DUE:		\$924.15

To authorize payment of the attached bills, I recommend a motion as follows:

Move to approve payment of one Secrest Wardle invoice and two Spinal Column invoices totaling \$924.15.

Please let me know if you have any questions.



SECRET, WARDLE, LYNCH
HAMPTON, TRUEX & MORLEY
30903 NORTHWESTERN HIGHWAY P.O. BOX 3040
FARMINGTON HILLS, MICHIGAN 48333-3040
(248) 851-9500

IRS # 38-1863919

Walled Lake Improvement Board
Brian Coburn
45175 W 10 Mile Road
Novi, MI 48375-3024

October 7, 2009
Invoice # 1194483
Client No. M1104
Matter No. 091331

RE: Walled Lake Improvement Board

INTERIM

Services Rendered: CLAIM #

CURRENT BILLING SUMMARY THROUGH SEPTEMBER 30, 2009

Fees for Professional Services	\$624.00
Expenses Advanced	\$12.65
CURRENT BILL DUE	\$636.65

PLEASE REMIT TO: SECRET, WARDLE, LYNCH,
HAMPTON, TRUEX & MORLEY, PC
P.O. BOX 634213
CINCINNATI, OH 45263-4213

DATE	TKPR	DESCRIPTION	HOURS
09/11/09	MSR	Receipt and review of e-mail correspondence from B. Coburn regarding resolution for the September 23, 2009 Lake Board meeting	0.20
09/11/09	MSR	Review and revise resolution for the September 23, 2009 Lake Board meeting	0.40
09/11/09	MSR	Prepare and send email with attached documents to B. Coburn regarding proposed resolution for the September 23, 2009 Lake Board meeting	0.20
09/11/09	MSR	Receipt and review of e-mail correspondence from B. Coburn regarding September 23, 2009 Lake Board meeting - scheduling public hearing	0.20
09/11/09	MSR	Prepare and send email correspondence to B. Coburn regarding preparing for September 23, 2009 Lake Board meeting	0.20
09/17/09	MSR	Receipt and review draft of engineer study of Walled Lake to be presented and received on 9-23-09	0.40
09/17/09	MSR	Receipt and review e-mail correspondence from B. Coburn re: 9-23-09 meeting packets	0.20
09/17/09	MSR	Prepare and send email correspondence to B. Coburn re: 9-23-09 meeting packets	0.20
09/17/09	MSR	Telephone conference(s) with B. Coburn re: 9-23-09 meeting	0.20
09/23/09	MSR	Receipt and review of agenda packet and review file for the September 23, 2009 Lake Board meeting	0.40
09/23/09	MSR	Attend meeting of the Walled Lake Improvement Board	1.90
09/24/09	MSR	Receipt and review of e-mail correspondence from B. Coburn regarding work needed for the next lake board meeting/public hearing	0.20
09/29/09	MSR	Receipt and review of e-mail correspondence from B. Coburn regarding resolution for next meeting	0.20
09/30/09	MSR	Review public hearing notice requirements for timing requirements and email to B. Coburn	0.30

HOURLY CHARGES:

INIT.	TIMEKEEPER	RATE	HOURS	BILLED
MSR	MARK S ROBERTS, Associate	\$120.00	5.20	\$624.00

TOTAL HOURLY CHARGES: \$624.00

EXPENSES ADVANCED:

09/23/09	ATTORNEY MILEAGE - Vendor: Mark S Roberts (23.00 x 0.55)	12.65
----------	---	-------

EXPENSE SUMMARY:

ATTORNEY MILEAGE	\$12.65
TOTAL EXPENSES ADVANCED	\$12.65
TOTAL CURRENT BILL	<u>\$636.65</u>

OUTSTANDING STATEMENTS AS OF October 7, 2009

Statement No: 1190502	6/5/2009	\$696.00
Statement No: 1191901	7/22/2009	\$588.65
Statement No: 1193552	9/8/2009	\$204.00
	TOTAL	\$1,488.65

SECRET, WARDLE, LYNCH
HAMPTON, TRUEX & MORLEY
30903 NORTHWESTERN HIGHWAY P.O. BOX 3040
FARMINGTON HILLS, MICHIGAN 48333-3040
(248) 851-9500

IRS # 38-1863919

Walled Lake Improvement Board
Brian Coburn
45175 W 10 Mile Road
Novi, MI 48375-3024

October 7, 2009
Invoice # 1194483
Client No. M1104
Matter No. 091331

RE: Walled Lake Improvement Board

INTERIM

Services Rendered: CLAIM #

CURRENT BILLING SUMMARY THROUGH SEPTEMBER 30, 2009

Fees for Professional Services	\$624.00
Expenses Advanced	\$12.65
CURRENT BILL DUE	\$636.65

PLEASE REMIT TO: SECRET, WARDLE, LYNCH,
HAMPTON, TRUEX & MORLEY, PC
P.O. BOX 634213
CINCINNATI, OH 45263-4213

REMITTANCE COPY

PLEASE INCLUDE THIS PAGE WITH YOUR PAYMENT

INVOICE

Courtney Brown



- SPINAL COLUMN NEWSWEEKLY
- PREFERRED OAKLAND HOMES
- OAKLAND HOMES
- OAKLAND LAKEFRONT
- MONTHLY ADVERTISER
- WEST OAKLAND DIRECTORY

PAYMENT ADDRESS:
P.O. Box 14
Union Lake, MI
48387-0014

1795710

Phone (248) 360-6397 • (248) 360-7355

CITY OF NOVI
 45175 W TEN MILE ROAD
 NOVI MI 48375

ACCOUNT NO:
 a101986

DUE DATE:
 10/24/09

TOTAL DUE:
 143.75

INSURE PROPER CREDIT TO YOUR ACCOUNT. RETURN THIS PORTION WITH PAYMENT.
 Please make checks payable to SCN COMMUNICATIONS GROUP.

DATE	CODE/CUSTOMER REFERENCE	INV/PO #	SIZE/INCH	RATE	AMOUNT
10/14/09	LEGAL-PUBLIC HEARING	1795710	J	00	143.75
All print ads now online. Spinalcolumnonline.			INVOICE DATE 10/14/09	PAY TOTAL ▶	143.75

oaklandcounty.com / livingstoncounty.com / genesee.com / westernwayne.us / macombcounty.com
preferredhomes.us / oaklandlakefront.com / spinalcolumnonline.com / monthlyadvertiser.com / freemichiganwantads.com

INVOICE



- SPINAL COLUMN NEWSWEEKLY
- PREFERRED OAKLAND HOMES
- OAKLAND HOMES
- OAKLAND LAKEFRONT
- MONTHLYADVERTISER
- WEST OAKLAND DIRECTORY

PAYMENT ADDRESS:
P.O. Box 14
Union Lake, MI
48387-0014

Phone (248) 360-6397 • (248) 360-7355

51797070

CITY OF NOVI
 45175 W TEN MILE ROAD
 NOVI MI 48375

ACCOUNT NO.
 a101986

DUE DATE
 10/31/09

TOTAL DUE
 143.75

INSURE PROPER CREDIT TO YOUR ACCOUNT. RETURN THIS PORTION WITH PAYMENT.
 Please make checks payable to SCN COMMUNICATIONS GROUP.

DATE	CODE/CUSTOMER REFERENCE	INV/PO #	SIZE/INCH	RATE	AMOUNT
10/21/09	LEGAL-PUBLIC HEARING	51797070	J	00	143.75
Fill fall jobs fast with Spinal Column Want Ads!				INVOICE DATE 10/21/09	PAY TOTAL ▶ 143.75

oaklandcounty.com / livingstoncounty.com / geneseecounty.com / westernwayne.us / macombcounty.com
preferredhomes.us / oaklandlakefront.com / spinalcolumnonline.com / monthlyadvertiser.com / freemichiganwantads.com



SPALDING DEDECKER ASSOCIATES, INC.

905 South Boulevard East • Rochester Hills • Michigan 48307 • Tel 248 844 5400 • Fax 248 844 5404

LETTER OF TRANSMITTAL

TO:

Brian Coburn, PE, Secretary/Treasurer
Walled Lake Improvement Board
City of Novi
26300 Delwal Drive
Novi, MI 48375

DATE: October 28, 2009
JOB NO.: MN09011
RE: Walled Lake Improvement Study

WE ARE SENDING YOU:

(x) ATTACHED () HAND DELIVERED () PICK-UP BY _____, THE FOLLOWING ITEMS:

Table with 2 columns: COPIES, DESCRIPTION. Row 1: 1, Addendum to Section 5 of the Draft Study

THESE ARE TRANSMITTED:

() FOR YOUR USE (x) AS REQUESTED () FOR APPROVAL () FOR REVIEW AND COMMENT () FOR DISTRIBUTION

REMARKS:

Please find enclosed a copy of the addendum to the Lake Improvement Study Draft for Walled Lake which includes revisions to Section 5 of the draft report that was presented to the Board on September 23, 2009. The recommendation section was revised based on discussions with the Board at the last meeting. We are recommending that an herbicide treatment program be implemented in the dense areas of Eurasian Milfoil growth (20% of treatment area or 30 acres) and a mechanical weed harvesting program for the remaining areas of Eurasian Milfoil Growth (80% of treatment area or 120 acres). The project budget has been revised based on this approach and to include our fee for the engineering study.

Brian McKissen (handwritten signature)

Brian McKissen, PE
Project Engineer

Engineering Consultants

Infrastructure • Land Development • Surveying

SECTION 5

LAKE IMPROVEMENT RECOMMENDATIONS

Draft

A. GOALS AND OBJECTIVES DISCUSSION

The research performed with this study bears out the fact that Walled Lake functions as a thriving, viable water body. As with any viable lake, an ecological balance must be maintained in order for the lake to survive. The resources utilized behind the research performed have been varied but all necessary to accurately assess Walled Lake's current condition and improvements to the lake that are necessary in order for it to survive and thrive.

In addition to research detailed in prior sections, discussions with the Walled Lake Board identified overall goals and objectives for lake improvement. These included:

- Reduction in aquatic weed growth
- Reduce/eliminate closing of E.V. Mercer Beach due to high E.coli levels

The primary objective for this section of our report is to summarize deficiencies within the Lake and provide practical and economical lake improvement recommendations given the stated goals and objectives of the Lake Board. As with most Lake Improvement Boards, funding for construction improvements is limited. Therefore, a thoughtful approach to remediate the identified lake problems is necessary. Our recommendations are therefore categorized into Short Term and Long Term Lake Management plans.

Short Term Improvements constitute those activities which can be performed with minimal cost and construction impacts to the Lake. These improvements require little if any design or regulatory effort (permits, approvals, etc.). These improvements are intended to be implemented on a yearly basis for the most part.

Long Term Improvements include those activities which will typically require more expense and longer construction timing and which may pose complicated access issues to the lake. The lead time necessary to raise funding for these types of improvements can extend well beyond 1 year. For these reasons we consider Long Term Improvements to be those implemented for year 3 and beyond of the Lake Management Plan.

The Lake Management Plan (Short and Long Term Improvements) timing and costs should constitute the basis behind a Lake Area Special Assessment District for Walled Lake.

Our research on Walled Lake has found that the following conditions exist:

- Low Nutrient Levels

SECTION 5

**LAKE IMPROVEMENT
RECOMMENDATIONS**

- Greater weed growths in depth of 5 to 16 feet in depth and silty and marly bottom substrates
- Abundant Zebra Muscles, which are invasive species

Our Lake Management recommendations include detailed descriptions of the treatment, estimated costs to apply, and the frequency recommended for the treatment. Finally, implementation options and procedures for the management plans are outlined.

B. LAKE MANAGEMENT PLAN

OVERVIEW - Discussion with the Walled Lake Board indicates that the majority of residents of Walled Lake would like to eradicate or reduce the growth of lake weeds in Walled Lake. Short term recommended actions include:

Herbicide Treatment Program - We recommend that an herbicide treatment program be implemented annually. Applications may have to be performed two to three times annually as needed.

The MDEQ Water Bureau has produced a table containing information about the herbicides permitted for aquatic plant and algae control in Michigan (see Appendix I). Considering the August 3rd and 5th vegetation survey results, it appears that an annual application of herbicides may be needed at Walled Lake to control early and mid season growth of Eurasian water-milfoil.

It is important to note that complete eradication of all aquatic plants in a lake is not the objective of an herbicide treatment program. Most plants play a very important role as part of the ecological health of a lake system. Therefore, the purpose of an aquatic plant management program is to manage the growth and proliferation of aquatic nuisance plants from only selected areas. The areas that are to be managed should be based upon those parcels that have existing homes and those areas that need to be cleared for access to the lake.

It is recommended that a product such as 2,4-D, Fluridone, or Diquat Dibromide be used to control the Eurasian Water Milfoil in the areas identified as densely populated. It is estimated that the densely populated encompasses 30 acres of the Lake. The application should be performed in the spring (mid-May), while the Milfoil is still relatively small and won't leave as much decaying plant matter on the bottom of the lake. Approximately 30 days, after the initial application, a second application should be applied as needed to follow up and to control any remaining Milfoil growth. The process will probably have to be applied on an annual basis but the overall treatment area may decrease base on

SECTION 5

LAKE IMPROVEMENT
RECOMMENDATIONS

the effectiveness of the previous year's application, thereby resulting in a reduction of yearly management costs.

The use of contact herbicides should be avoided when using 2,4-D to control the growth of Eurasian Milfoil. The main reason for this concern is that 2,4-D acts as a systemic control method, whereas contact herbicides may kill the tops of the plants and interfere with the systemic action of 2,4-D.

Please refer to Figure 2.6, 2.7 and 2.8 which illustrates the Aquatic Plant densities for Walled Lake, based upon the August 3, 2009, plant survey. The chemical applicator should conduct a pretreatment survey with a representative as designated by the Lake Board, in order to confirm the general limits of the plant growth and finalize the treatment plans.

In addition to recommended herbicide treatment modifications an annual aquatic plant survey should be performed, at least for the first three treatment seasons, in order that a plant response can be observed and recorded. These observations will allow the herbicide treatment program to be further modified as needed and may provide an early indication as to the success of the program. A state licensed herbicide applicator can perform this task once the program begins, and can include these observations along with the permit application to the MDEQ.

ESTIMATED COST:

Aquatic Herbicide Treatment Program (Milfoil) – Initial Application

\$375/Acre x 30 Acres	\$11,250.00
Permit Fee	<u>\$ 1,500.00</u>
	\$12,750.00

Aquatic Herbicide Treatment Program (Milfoil) – Follow Up Application

\$375/Acre x 10 Acres	\$ 3,750.00
Project Total (Annual Cost)	\$16,500.00

APPLICATION FREQUENCY - Annually

Mechanical Weed Harvesting – The implementation of a mechanical weed harvesting program would assist in providing aquatic weed control near the top 5 to 6 feet of the lake. This method would not eradicate the invasive plants, such as Eurasian Milfoil, but would have a similar effect as mowing a lawn. It is anticipated that it would be necessary to have a minimum of two subsequent follow up harvestings to manage the aquatic weeds due to regrowth. The level and speed of regrowth will be affected by climatic conditions and can vary from year to year. It should be noted that if the harvesting operation distributes fragmented pieces of Eurasian Milfoil that the Lake may experience new growth from the fragments.

It is recommended that a weed harvesting program is implemented to control excessive weed growth for areas that are not treated by the

SECTION 5

**LAKE IMPROVEMENT
RECOMMENDATIONS**

herbicide program. It is estimated that this area encompasses 120 acres. The initial harvesting program should be conducted two times annually to further evaluate the aquatic weeds response.

ESTIMATED COST:

Mechanical Weed Harvesting (Approximately 120 acres)
\$325.00/Acre x 120 Acres \$39,000.00

Assume 2 times per year

Project Total (Annual Cost) \$78,000.00

FREQUENCY – Annually

Waterfowl Management Program - We recommend that a waterfowl management program be implemented annually to assist in controlling E.coli levels within Walled Lake. A spring and summer program may need to be implemented.

A waterfowl management program is permitted through the Michigan Department of Natural Resources (MDNR). Currently there is not a permit fee but it is anticipated that a fee of approximately \$200 will be required in the future. A waterfowl management company can assist in controlling waterfowl populations. These practices typically include a spring time swan and goose nest destruction. These activities can be performed by residents according to the MDNR parameters and permit.

A follow up goose round up may be required during the summer. (Swans are not controlled in this manner.) The geese are collected during the summer before the young geese are able to fly and when the adult geese have lost their flight feathers. Geese are relocated to swamps, ponds, and lakes throughout Michigan as directed by the MDNR. A select few may be sent to local soup kitchens.

This program is recommended on an annual basis but may be re-evaluated annually upon the effectiveness of the waterfowl removal in preceding years.

A waterfowl management program will reduce the E.coli level contributions from waterfowl, though they may not be the only source of E.coli contributions to the lake. Existing programs, as required through the National Pollutant Discharge Elimination Program, are in effect that require Municipalities to identify and correct sources of E.coli from illicit connections.

ESTIMATED COST:

Spring Nest Destruction
Permit Fee \$ 200.00

Draft

SECTION 5

**LAKE IMPROVEMENT
RECOMMENDATIONS**

Appearance Fee (for Geese)	\$ 100.00
Appearance Fee (for Swans)	\$ 200.00
\$30/nest x 10 nests	<u>\$ 300.00</u>
	\$ 800.00

Summer Goose Round Up

Appearance Fee	\$ 100.00
100 geese	<u>\$1,100.00</u>
Project Total (Annual Cost)	\$2,000.00

Self-Help Program - The MDEQ has developed a program that has been entitled the Cooperative Lakes Monitoring Program http://www.michigan.gov/deq/1,1607,7-135-3313_3686_3731-14766--,00.html. It is recommended that the Lake Improvement Board for Walled Lake, begin such a program on the lake. The data that is collected by the residents of Walled Lake will assist in developing a historical data, by which future projects will be based upon. Several of the items that can be included in such a program are: Secchi disks observations, lake level water observations, temperature, pH, and dissolved oxygen levels, among others. Self imposed restrictions may also be developed that will benefit the lake water quality such as: limited use of phosphorus based fertilizers, encourage the raking of leaves adjacent to shoreline (to prevent the leaves from being blown into the lake), restricted yard waste burning, irrigation schedules and the development of neighborhood environmental awareness programs. A vegetative buffer zone should also be considered as a best management practice (BMP).

These programs also offer the most important aspect that can be available to any organization that share common goals, and that is networking. The association will be able to make contact with other associations and lake improvement boards that have already implemented some of the programs and projects that the residents may be in the process of considering.

ESTIMATED COST – Costs to develop this program can vary. If performed by residents, it is recommended that a budget of \$2,000 be established for year 1 and \$500 for subsequent years.

FREQUENCY – Year 1, updated annually.

C. BUDGETS AND FINANCING OPTIONS

The budgets that are developed below are to be used for estimating purposes only. As one begins the process of planning, designing, construction and maintenance phases of projects involving lakes, a word of advice would be to proceed, prudently.

SECTION 5

**LAKE IMPROVEMENT
RECOMMENDATIONS**

If the projects are to be financed for a period of several years, then interest cost would need to be accounted for and added to the cost shown below.

Lake Management Budget

Year 1

A.	Herbicide Treatment (40 acres)	\$ 16,500.00
B.	Mechanical Weed Harvesting (120 acres)	\$ 78,000.00
C.	Waterfowl Management Program	\$ 2,000.00
D.	Self Help Program (year 1)	\$ 2,000.00
E.	Lake Improvement Study	\$ 16,115.00
F.	Administrative/Legal Fees	\$ 20,000.00
G.	Lake Management Fees	\$ 1,500.00
	Year 1 Total	\$ 136,115.00

Subsequent Years

A.	Herbicide Treatment (20 acres)	\$ 9,000.00
B.	Mechanical Weed Harvesting (120 acres)	\$ 78,000.00
D.	Waterfowl Management Program	\$ 2,000.00
D.	Self Help Program (year 1)	\$ 500.00
E.	Administrative/Legal Fees	\$ 10,000.00
F.	Lake Management Fees	\$ 1,500.00
	Subsequent Year Annual	\$101,000.00

D. IMPLEMENTATION

Since it is unknown how the Walled Lake Improvement Board will develop the special assessment district (SAD) at the time of writing of this report a cost distribution per riparian parcel will be used to assist in planning purposes. If the cost is distributed equally amongst the riparian parcels each parcel would be assessed approximately \$362.00 for year 1 and \$268.00 for subsequent years.

In order to implement any one of the above outlined projects on a conceptual basis, the Lake Improvement Board will need to take the following actions:

1. Adopt a project or program and its estimated budget.
2. Set a date for the Hearing of Practicability. During this meeting, the Lake Improvement Board for Walled Lake approves a project and its associated estimated budget.
3. Set a date for the Assessment Hearing. During this meeting, the Board approves the assessment formula, and the associated

Draft

SECTION 5

LAKE IMPROVEMENT RECOMMENDATIONS

Assessment Roll. Once approved, the roll is forwarded to the City Clerks with authorization to spread the approved assessments.

4. Contract Documents are usually prepared next. The contract documents generally include the plans and specifications for the approved project.
5. A bid opening date is set and the project is then advertised.
6. The bids received are opened and the bids are evaluated.
7. The project is awarded.
8. The project begins.

Items 1 - 8, listed above are but a simple summary of all of the tasks and events that generally need to take place when proceeding with project associated with lake improvements.

When the project implementation process has been completed for a particular project or program, the above noted items will generally need to be repeated on an annual basis.

F. CLOSING REMARKS

The project would like to thank the Walled Lake Improvement Board for having given our project team the opportunity to prepare this report.

Walled Lake is a beautiful Lake. The fact that its residents have made a commitment to take the initial steps to preserve the lake and its water quality is a clear indication that Walled Lake is in good hands. We wish you all the best of times.

**WALLED LAKE IMPROVEMENT BOARD
NOTICE OF PUBLIC HEARING
TO THE OWNERS OF ALL PROPERTIES ABUTTING
AND/OR WITH DEEDED ACCESS TO WALLED LAKE,
LOCATED WITHIN THE CITIES OF NOVI AND
WALLED LAKE, OAKLAND COUNTY, MICHIGAN**

Notice is hereby given that the Walled Lake Improvement Board, located within the cities of Novi and Walled Lake, County of Oakland, will meet at the Novi City Hall located at 45175 West Ten Mile Road, Novi, Michigan 48375-3024 at 6:30 p.m. on Thursday, November 5, 2009 to conduct a Public Hearing to review the Lake Improvement Study for Walled Lake, an engineer's report required under section 30909 of Part 309 of Public Act No. 451 of 1994, as amended, currently on file at the City of Novi Clerk's Office and the City of Walled Lake Clerk's Office for public examination. The report may also be viewed online at www.cityofnovi.org/lakeboard.

Any person may appear and be heard at said Public Hearing, which is called pursuant to the provisions of Section 30910 of Part 309 of Public Acts No. 451 of 1994, as amended which provides that the lake board chairperson shall hold a meeting of the lake board to review the reports required under section 30909 and to determine the practicability of the weed control project. The lake board shall review the report and determine the practicability of the weed control project after the public hearing.

If the lake board passes a resolution in which it determines the weed control project to be practicable, the lake board shall determine to proceed with the weed control project, shall approve the plans and estimate of cost as originally presented or as revised, corrected, amended, or changed, and shall determine the sufficiency of the petition and/or resolutions for the improvement. The resolution shall be published once in a newspaper of general circulation in the cities of Novi and Walled Lake. After the resolution has been published, the sufficiency of the petition and/or resolutions for the improvement shall not be subject to attack except in an action brought in a court of competent jurisdiction within 30 days after publication.

Maryanne Cornelius, CMC, City Clerk

SC: 10.14.09

Carney

**AFFIDAVIT OF PUBLICATION
STATE OF MICHIGAN
COUNTY OF OAKLAND**

MABLE McCULLOUGH being duly sworn, deposes and says that the annexed printed copy of a notice was taken from the SPINAL COLUMN NEWSWEEKLY, a newspaper printed and circulated in said State and County, and that said notice was published in said newspaper on the following date(s):

OCTOBER 14, 2009 (PUBLIC HEARING)

That (s)he is the agent of the printers of above said newspaper and knows well the facts stated herein.

Subscribed and sworn to before this FOURTEENTH day of OCTOBER 2009 A.D.

Carolyn J Petherbridge

Carolyn J Petherbridge
Notary Public, Oakland County, Michigan
Acting in the County Of Oakland
My Commission Expires March 27, 2014

WALLED LAKE IMPROVEMENT BOARD

NOTICE OF PUBLIC HEARING

**TO THE OWNERS OF ALL PROPERTIES
ABUTTING AND/OR
WITH DEEDED ACCESS TO WALLED LAKE,
LOCATED WITHIN THE CITIES OF NOVI AND
WALLED LAKE, OAKLAND COUNTY,
MICHIGAN.**

Notice is hereby given that the Walled Lake Improvement Board, located within the cities of Novi and Walled Lake, County of Oakland, will meet at the Novi City Hall located at 45175 West Ten Mile Road, Novi, Michigan 48375-3024 at 6:30 p.m. on Thursday, November 5, 2009 to conduct a Public Hearing to review the Lake Improvement Study for Walled Lake, an engineer's report required under section 30909 of Part 309 of Public Acts No. 451 of 1994, as amended, currently on file at the City of Novi Clerk's Office and the City of Walled Lake Clerk's Office for public examination. The report may also be viewed online at www.cityofnovi.org/lakeboard.

Any person may appear and be heard at said Public Hearing, which is called pursuant to the provisions of Section 30910 of Part 309 of Public Acts No. 451 of 1994, as amended, which provides that the lake board chairperson shall hold a meeting of the lake board to review the reports required under section 30909 and to determine the practicability of the weed control project. The lake board shall review the report and determine the practicability of the weed control project after the public hearing.

If the lake board passes a resolution in which it determines the weed control project to be practicable, the lake board shall determine to proceed with the weed control project, shall approve the plans and estimate of costs as originally presented or as revised, corrected, amended, or changed, and shall determine the sufficiency of the petition and/or resolutions for the improvement. The resolution shall be published once in a newspaper of general circulation in the cities of Novi and Walled Lake. After the resolution has been published, the sufficiency of the petition and/or resolutions for the improvement shall not be subject to attack except in an action brought in a court of competent jurisdiction within 30 days after publication.

Maryanne Cornelius, CMC, City Clerk

AFFIDAVIT OF PUBLICATION
STATE OF MICHIGAN
COUNTY OF OAKLAND

CITY OF NOVI
CITY CLERK'S OFFICE

2009 OCT 27 A 11:23

MABLE McCULLOUGH being duly sworn, deposes and says that the annexed printed copy of a notice was taken from the SPINAL COLUMN NEWSWEEKLY, a newspaper printed and circulated in said State and County, and that said notice was published in said newspaper on the following date(s):

OCTOBER 21, 2009 (PUBLIC HEARING)

That (s)he is the agent of the printers of above said newspaper and knows well the facts stated herein.

Subscribed and sworn to before this TWENTY-FIRST day of OCTOBER 2009 A.D.

Carolyn J. Petherbridge

Carolyn J Petherbridge
Notary Public, Oakland County, Michigan
Acting in the County Of Oakland
My Commission Expires March 27, 2014

WALLED LAKE IMPROVEMENT BOARD

NOTICE OF PUBLIC HEARING

**TO THE OWNERS OF ALL PROPERTIES
ABUTTING AND/OR
WITH DEEDED ACCESS TO WALLED LAKE,
LOCATED WITHIN THE CITIES OF NOVI AND
WALLED LAKE, OAKLAND COUNTY,
MICHIGAN.**

Notice is hereby given that the Walled Lake Improvement Board, located within the cities of Novi and Walled Lake, County of Oakland, will meet at the Novi City Hall located at 45175 West Ten Mile Road, Novi, Michigan 48375-3024 at 6:30 p.m. on Thursday, November 5, 2009 to conduct a Public Hearing to review the Lake Improvement Study for Walled Lake, an engineer's report required under section 30909 of Part 309 of Public Acts No. 451 of 1994, as amended, currently on file at the City of Novi Clerk's Office and the City of Walled Lake Clerk's Office for public examination. The report may also be viewed online at www.cityofnovi.org/lakeboard.

Any person may appear and be heard at said Public Hearing, which is called pursuant to the provisions of Section 30910 of Part 309 of Public Acts No. 451 of 1994, as amended, which provides that the lake board chairperson shall hold a meeting of the lake board to review the reports required under section 30909 and to determine the practicability of the weed control project. The lake board shall review the report and determine the practicability of the weed control project after the public hearing.

If the lake board passes a resolution in which it determines the weed control project to be practicable, the lake board shall determine to proceed with the weed control project, shall approve the plans and estimate of costs as originally presented or as revised, corrected, amended, or changed, and shall determine the sufficiency of the petition and/or resolutions for the improvement. The resolution shall be published once in a newspaper of general circulation in the cities of Novi and Walled Lake. After the resolution has been published, the sufficiency of the petition and/or resolutions for the improvement shall not be subject to attack except in an action brought in a court of competent jurisdiction within 30 days after publication.

Maryanne Cornelius, CMC, City Clerk

Published: October 15, 2009

0508676520 2x6.5

STATE OF MICHIGAN

COUNTY OF OAKLAND

WALLED LAKE IMPROVEMENT BOARD

RESOLUTION APPROVING PROJECT AND PROPERTIES
TO BE INCLUDED IN DISTRICT

RECITATIONS:

The Walled Lake Improvement Board, pursuant to the authority given in MCL §324.30908, determined to consider weed harvesting and/or chemical weed control measures as a lake improvement authorized under MCL §324.30902(1) and having retained Spalding DeDecker Associates, Inc. to prepare the engineering study and economic report as required by MCL §324.30909, and received the study and scheduled a public hearing as required by MCL §324.30910, and following the public hearing finds;

1. As required by MCL §324.30909(3), a tentative Special Assessment District has been described in the engineering study and economic report, namely, the property to be referenced as the Lake Board District, which includes all lake front parcels and all parcels with deeded access rights to the waters of the lake to be benefited by The Project.
2. The plan for The Project and an estimate of the costs of The Project in the amount of \$136,115.00 have been prepared and notice has been published according to law to the owners of property within the Lake Board District with respect to a hearing for the purpose of presenting any objections to the engineering study and economic report regarding The Project.
3. The hearing was conducted consistent with the Notice, following which the Lake Board determined to proceed with The Project and to authorize the preparation of a special assessment roll.

NOW THEREFORE, BE IT RESOLVED AS FOLLOWS:

1. That the engineering study and economic report is determined to be sufficient.

2. That the Lake Board shall proceed with The Project.
3. The plans prepared for The Project and the cost estimate are approved.
4. The Special Assessment District shall consist of the Lake Board District, described above, against which 100 percent of the cost of The Project shall be assessed.
5. The duration of the Special Assessment District shall be five (5) years.
6. The Assessors for the Cities of Walled Lake and for Novi shall prepare a special assessment roll which shall include all parcels of land to be assessed with the names of the respective record owners of each parcel, if known, and also including the total amount to be assessed against each of the parcels of land. The amount to be assessed against each parcel of land shall represent the relative portion of the whole sum to be levied against all parcels of land in the District as the benefit to the parcel bears to the total benefit of all parcels of land in the District.
7. When the Assessors complete the assessment roll, the Assessors shall affix their certificates to the roll stating that the roll has been made pursuant to a resolution of the Lake Board adopted on this date and that, in making the assessment roll, the Assessors according to their best judgment have conformed in all respects to the directions contained in this resolution and in the statutes of the State of Michigan.

AYES:
NAYS:
ABSTENTIONS:
ABSENT:

CERTIFICATION

It is hereby certified that the foregoing Resolution is a true and accurate copy of the Resolution adopted by the Walled Lake Improvement Board at a meeting duly called and held on the 5th day of November, 2009.

Walled Lake Improvement Board

BY: _____
Brian Coburn, Secretary-Treasurer

WALLED LAKE
LAKE IMPROVEMENT BOARD MEETING MINUTES
May 13, 2009

The meeting of the Lake Improvement Board for Walled Lake was held at the Novi Civic Center at 45175 W. 10 Mile Road on May 13, 2009. The meeting was called to order by Brian Coburn, Secretary-Treasurer, at 6:35 p.m.

Present: William Burke, City of Walled Lake
Brian Coburn, Secretary-Treasurer, City of Novi
Eugene Snowden for Karen Warren, Oak. Co. Water Resource Commissioner's Office
Dave Galloway, Riparian Representative
*Jeff Potter, Oakland County Board of Commissioners Representative

Also
Present: Mark Roberts, Attorney, Secrest Wardle

At the Public Comment portion of the meeting, a resident spoke about the purpose for formation of the Lake Board, which was strictly for weed control.

Correspondence: Letter from Steve Loe requesting creation of assessment district and project cost estimate prior to awarding bid for engineering study.

Moved by Coburn and Supported by Burke to approve the Minutes of February 11, 2009 and first meeting continuation of March 10, 2009. Motion carried unanimously.

Brian Coburn summarized the eight proposals submitted as bids for the engineering feasibility study. Mark Roberts reminded the Board that all requirements of the law must be addressed by the engineering firm in its bid in order to be viable; some of the firms failed to address all aspects of the Request for Proposals. A member from LAHA requested that Progressive AE's rating be read aloud; the Board complied.

Moved by Potter and Supported by Coburn to award the engineering contract to Spalding DeDecker & Associates. Motion carried unanimously.

Discussion was held regarding attorney fees for the Lake Board; Mark Roberts informed the Board that, once everything was in place, attorney fees would be minimal.

Moved by Potter and Supported by Coburn to approve attorney fees for Mark Roberts from Secrest Wardle. Motion carried unanimously.

Mark Roberts indicated that he will review the contract for Spalding DeDecker. Brian Coburn will check with Spalding DeDecker to determine if it will accept delayed payment.

Wednesday, June 3, 2009, at 6:30 p.m. was selected as the next meeting date to review the contract with Spalding DeDecker. Moved by Burke and Supported by Potter that the meeting be adjourned. Motion carried unanimously at 7:48 p.m.

* Jeff Potter arrived at 6:45 p.m.

Brian Coburn, Secretary-Treasurer