



SCANNER NOTE:

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ORDINANCE NO. 88-95 AC CMS

AN ORDINANCE APPROVING AN AGREEMENT FOR PARTICIPATION IN A
WATER QUALITY STUDY WITH THE VILLAGE OF WELLINGTON, OHIO

WHEREAS, the City of Oberlin, Ohio, operates a water system for the benefit of its residents and businesses; and

WHEREAS, the City of Oberlin, Ohio, has an obligation to protect the water supply of that water system; and

WHEREAS, the City of Oberlin, Ohio, along with the Village of Wellington, Ohio, and the Village of Grafton, Ohio (hereinafter Villages), all having common interests wish to cooperate in the protection of said water supply; and

WHEREAS, in futherance of said cooperation the City of Oberlin, Ohio, and the Villages have jointly retained the services of special legal counsel to consult with and advise them in matters pertaining to the protection of their water supply; and

WHEREAS, the Administration of the City of Oberlin and the Villages, after issuance of a Request for Proposals (attached hereto as Appendix A), recieved two proposals from technical and engineering firms for environmental assistance regarding protection of their water supplies; and

WHEREAS, of the two proposals received, the proposal of Stilson and Association (attached hereto as Appendix B) was most responsive and complete; and

WHEREAS, after consultation between the special legal counsel, NOACA, and Stilson and Associates, the Village of Wellington has agreed to administer the same on behalf of the Villages and the City of Oberlin.

NOW, THEREFORE, BE IT ORDAINED by the Council of the City of Oberlin, County of Lorain, State of Ohio, a majority of all members elected thereto concurring:

SECTION 1. That the City Manager be, and hereby is, authorized to enter into a contract with the Village of Wellington, Ohio, which would require Wellington to enter into a contract with Stilson and Associates, to perform the modified scope of services (Appendix B) as modified (Appendix C) and to require the City of Oberlin to pay a pro rata share of the costs of said contract with Stilson and Associates.

SECTION 2. That the City of Oberlin's pro rata share of the costs of the Stilson contract to be paid under the contract with the Village of Wellington shall be apportioned between Oberlin, Grafton, and Wellington on the basis of metered water as follows:

Oberlin	255 Million Gallons per year (60.4%)
Wellington	105 Million Gallons per year (24.9%)
Grafton	62 Million Gallons per year (14.7%)
	<u>422 Million Gallons per year (100%)</u>

SECTION 3. Said charges payable by the City of Oberlin shall not exceed \$29,500.00 without further action by this body.


SECTION 4. It is hereby found and determined that all formal actions of this Council concerning or relating to the adoption of this ordinance were adopted in an open meeting of this Council and that all deliberations of this Council and of any of its committees that resulted in such formal action, were in meetings open to the public in compliance with all legal requirements, including Section 121.22 of the Ohio Revised Code.

SECTION 5. That this ordinance shall take effect at the earliest date allowed by law.

PASSED: 1st Reading - December 19, 1988
2nd Reading - January 3, 1989
3rd Reading - January 17, 1989 EMERGENCY

ATTEST:

Michelle I. Dheator
Clerk of Council


Chairman of Council

POSTED: January 19, 1989

EFFECTIVE DATE: January 17, 1989

APPENDIX A

The Village of Grafton, Ohio
The City of Oberlin, Ohio
The Village of Wellington, Ohio

REQUEST FOR PROPOSALS
FOR
ENVIRONMENTAL ASSISTANCE
REGARDING PROTECTION OF
WATER SUPPLY

Instructions to Applicants

June 15, 1988

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I - PURPOSE AND BACKGROUND

The purpose of this Request For Proposals (RFP) is to seek qualified Applicants to provide the Village of Grafton, The City of Oberlin and the Village of Wellington, all municipal corporations existing pursuant to the Constitution and Laws of Ohio (hereinafter Municipalities) with environmental assessment and advice regarding the identification of potential or actual threats to the purity, healthfulness and safety of the water supplies of the Municipalities. Further, to assist the Municipalities in eliminating, ameliorating and/or regulating any such potential threats. Finally to offer assistance in the promulgation of any appropriate regulations or enactment of any appropriate ordinances designed to protect said water supplies.

The Municipalities have become increasingly concerned with the safety of their respective water supplies and have determined to take appropriate action to preserve and protect them from potential contamination. Recent news events regarding the toxic contamination of other communities' water supplies along the Ohio River, the Cuyahoga River and in nearby Spencer, Ohio have prompted the Municipalities' concerns, as has the proposed siting of a toxic waste incinerator near Nova, Ohio in an area which may threaten each of the Municipalities' water supplies.

II - GENERAL INSTRUCTIONS

A. Filing of Proposals

Ten (10) copies of each Applicant's proposal, appropriately bound, shall be submitted in sealed envelopes or containers with the caption "Water Supply Protection Proposal" which should be addressed to:

The Village of Grafton, Ohio
The City of Oberlin, Ohio
The Village of Wellington, Ohio

& Robert Dupee, Utilities Director
Wellington Municipal Utilities
90 Johns Street
Wellington, Ohio 44290

Proposals may be filed by mail or in person and will be accepted at the above address until 3:00 o'clock p.m., Eastern Daylight Time Monday, August 1, 1988. The Municipalities reserve the right to extend the deadline to any or all Applicants. One copy should also be sent to Special Counsel for the Municipalities:

John W. Bentine, Esq.
Bell & Bentine Co., L.P.A.
33 South Grant Avenue
Columbus, Ohio 43215-3927

B. Scope of Services

The services requested to be covered in the proposal should include:

1. Inventory and evaluation of any and all existing significant threats to the purity of the Municipalities' respective raw water supplies, including threats to the Municipalities' respective reservoirs and the water supplies which replenish said reservoirs;
2. Inventory and evaluation of any known potential threats to the Municipalities' water supplies, including the proposed siting of a toxic waste incinerator near Nova, Ohio; and,
3. Advice and recommendations to the Municipalities regarding what actions, regulations, programs or other steps should be undertaken to eliminate or minimize any significant threats to the Municipalities' water supply and for the prospective protection thereof.

C. Conference

The Municipalities will hold a pre-proposal conference for all interested Applicants in order to further explain and clarify this RFP, including a description of the geographic area of principal concern to the Municipalities. Representatives of the Municipalities will be available to answer any questions from prospective Applicants regarding this RFP and the scope of services. Said conference shall be held at 1:00 o'clock p.m. on Wednesday, July 12, 1988 at 115 Willard Memorial Square, Wellington, Ohio 44090.

D. Contents of Proposal

The proposal, should contain, at a minimum:

1. The firm's qualifications for performing the services requested, including detailed resumes of all key persons who the Applicant proposes to perform work on this project.
2. Professional references of former or current clients, with a short description of the work performed including the name, address and telephone number of a person who may be contacted at the client regarding the Applicant's performance;

3. An estimate of the costs of performing the scope of services including a breakdown of estimated expenses and an indication of whether or not the Applicant will enter into an agreement to perform the scope of services within a not to exceed amount;
4. A proposed time frame for completing the scope of services, stated in terms of number of days from award to the successful Applicant;
5. A statement that the Applicant if selected would comply with all applicable equal opportunity laws. Such compliance would include but not be limited to affording equal employment opportunity to all persons regardless of race, color, religion, national origin, sex or handicapped status.
6. Such other information that the Applicant believes would be helpful in evaluating the Applicant's qualifications and ability to perform the scope of services.
7. The Applicant should also disclose any and all potential conflicts of interests.

8. The Applicant should present evidence or a verified statement that it is licensed to do business in Ohio and is appropriately insured.

F. Amendments to Proposals

Substantive amendments to the proposals will not be considered except to acknowledge involuntary changes such as death, illness or discharge or resignation of key staff.

III - SELECTION PROCEDURE

The Municipalities will evaluate all proposals that comply with this RFP, but also expressly reserve the right to consider any and all proposals. All or a portion of those Applicants responding to this RFP, in the sole discretion of the Municipalities, may be requested to make a further formal presentation. The Municipalities will take final action based upon the qualifications of the Applicant and its proposal, as well as the costs quoted and expressly reserves the right to reject all proposals. The successful Applicant will report to a steering committee made up of representatives of each of the Municipalities and will contract with the Village of Wellington, Ohio which will administer the contract on behalf of all three municipalities.

APPENDIX B

**Proposal for
Environmental Assistance
Regarding Protection of
Water Supply**

August, 1988

submitted to:

**The Village of Grafton, Ohio
The City of Oberlin, Ohio
The Village of Wellington, Ohio**

**STILSON &
ASSOCIATES, INC.**

**ENGINEERING • ARCHITECTURE • PLANNING
170 NORTH HIGH STREET • COLUMBUS, OHIO 43215**

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APPENDIX C

SECTION 2
WORK PLAN
(Revised Dec. 5, 1988)

A. Objectives

The primary objectives the municipalities want to attain in completing this study are:

1. Identify actual and potential sources and conditions that may pose a threat to the purity, healthfulness and safety of each municipality's water supply.
2. Complete a stream sampling program that will establish base line water quality data that can be used for comparative purposes to monitor future water quality trends.
3. Develop a plan for the municipalities to eliminate, ameliorate and/or regulate any such potential threats to protect their water supplies and the areawide environmental setting.

B. Scope of Services

Stilson and Associates, Inc. and its subconsultants will perform the work as outlined in Section B of the RFP. The scope of work to complete these services is separated into three work phases to clarify our management and cost data for the project. The terms "CONSULTANT" and "CLIENT" refer to Stilson & Associates, Inc. (and its subconsultants) and the municipalities of Grafton, Oberlin, and Wellington, respectively.

Exhibit A, Project Study Area is also included at the end of this section for reference purposes.

Phase 1 - Data Collection and Inventory.

The Consultant will review existing data, reports, expertise, etc. that is relevant to the objectives of the project and assemble an inventory of existing and potential sources of pollution that may have an impact on the raw water

supplies for the three municipalities. Potential sources of water pollution to be considered are: municipal and private wastewater treatment plants, on-lot sewage disposal systems, the proposed hazardous and toxic waste incineration plant at Nova, transportation and pipeline facilities in the study area, industrial/commercial operations, ^(including the Ross Incinerator) above-ground storage tanks, feed-lot and agriculture non-point source discharges. Preliminary review of existing studies show 30 to 40 point dischargers that are present in the study area.

Land use maps, zoning maps, aerial photography, and topographic maps will be used to identify the potential areas of surface water pollution. Agencies that will likely be contacted for resource information are:

- Northeast Ohio Area Coordinating Agency (NOACA)
- Local Municipalities
- Ohio Environmental Protection Agency
- U.S. Environmental Protection Agency
- Lorain County Governmental Offices
- Ohio Department of Natural Resources
- Soil Conservation Service
- U.S. Geological Survey
- Local Planning Agencies

A review of the existing local and state laws and regulations regarding water supply protection rights will also be completed.

Upon completion of the data collection and review, the Consultant will review the findings with the Client. This data collected will be used to establish the final stream sampling locations and test parameters that are proposed in Phase 2.

Phase 2 - Stream Sampling and Analysis

The intent for Phase 2 is to develop a stream sampling program that will establish base line water quality data that can be compared to future water quality trends. Tentative stream sampling locations have been selected for the project study area and are shown on Exhibit A. The locations selected were based on the preliminary review of the following information:

1. Discussions with the Client during the pre-proposal meeting and site visits.
2. U.S.G.S. topographic mapping.
3. The 208 Water Quality Management Plan completed by NOACA
4. Preliminary field reconnaissance of the study area.

The above data will be evaluated in more detail as outlined in Phase A and after review with the Client the stream sampling locations will be finalized. The tentative stream sampling plan, as shown on Exhibit A, includes the following sampling by main stream tributary areas and locations: *(Revised to include stream water and stream sediment samples upstream and downstream of the Ross Incinerator.)*

East Branch Black River - (177 Sq. Mi. Area)	10 8 Stream Water 5 3 Stream Sediment Grafton Reservoir
Wellington Creek (29 Sq. Mi. Area)	3 Stream Water 1 Stream Sediment
Charlemont Creek (25 Sq. Mi. Area)	4 Stream Water 2 Stream Sediment Wellington Reservoir
West Branch Black River (68 Sq. Mi. Area)	7 Stream Water 3 Stream Sediment Oberlin Reservoir

Total	24 22 Stream Water Samples 11 9 Stream Sediment Samples 3 Reservoir Water Samples
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The effluent data from existing wastewater treatment plants in the study area will also be reviewed and evaluated.

The sample collection in the field will include the following data:

Date and Time of Day	Weather Conditions
Site Photographs	Water and Air Temperature
Stream Flow Characteristics	Odor (Observation)

All stream water samples will be analyzed for the following:

pH	Dissolved Oxygen
Specific Conductance	Fecal Coliform
Alkalinity, Total	Hardness
Dissolved Solids	Phosphorus, total
Ammonia (N)	Nitrate
Calcium	Sulfate
Chloride	Fluoride
Sodium	Magnesium
Barium	Arsenic
Cadmium	Chromium
Iron	Lead
Manganese	Mercury
Selenium	Silver
Nickel	

The stream water samples obtained at each of the Client's stream water intake and the raw water reservoir supply will include the above parameters plus:

Volatile Organic Compounds (VOC's) Scan
 Pesticides and Herbicides
 PCB

The stream sediment samples will be analyzed for the following parameters:

Arsenic

Cadmium

Silver

Selenium

Lead

Pesticides and Herbicides

Barium

Chromium

Nickel

Mercury

PCB

The proposed plan is to collect one set of samples at the selected sampling locations in late Fall/early Winter during a period that water is being withdrawn from the streams to the upground reservoirs. The test results from these samples will present in-sight into the sources, magnitude, and types of water quality variations found in the study area.

If the test results indicate any conclusions of serious pollution at any sampling location, the Client may elect at that time to do additional sampling and amend the Scope of Work to cover such additional work. If no additional work is necessary, Phase 3 will be initiated.

Phase 3 - Data Evaluation and Report

The Consultant will prepare a written report, including maps and exhibits, presenting the information and conclusions developed in Phases 1 and 2. Draft copies will be submitted to the Client for review and followed up with a meeting. Recommendations to be addressed in the report will outline any actions, regulations, or programs that should be implemented by the municipalities to protect their water supplies and the areawide environmental setting.

C. General Provisions

Equal Employment Opportunity - The Consultants will comply with all applicable EEO laws and regulations. The Affirmative Action Program for EEO for Stilson & Associates, Inc. and Stilson Laboratories Inc. are included in Section 5D.

Conflict of Interest - To the extend of the Consultant's knowledge, there are no personal or organizational conflicts of interest known to exist with any of the parties involved with the project.

Business Certification

All of the Consultants are Ohio based companies and are licensed to do business in Ohio. A sample certificate of insurance is included in Section 5D for information purposes showing the insurance coverage for Stilson & Associates, Inc. Stilson Laboratories, Inc. is insured under the same policies with the exception of professional liability. Actual certificates of insurance will be furnished by all the consultants if selected for the project.

SECTION 3
PROJECT MANAGEMENT AND FEES
(Revised Dec. 5, 1988)

A. Organization and Staffing

Stilson and Associates, Inc. will be the Prime Consultant for the project and will coordinate all project activities on behalf of the Client. The project will be under the direction of Mr. Gordon K. Moellman and will be managed on a daily basis by Mr. Ronald F. Huprich. Stilson & Associates, Inc. will be responsible to complete Phase 1 - Data Collection and Inventory, assist Stilson Laboratories Inc. with the stream sampling in Phase 2, and coordinate the evaluation and preparation of the report in Phase 3.

The following subconsultants are also proposed to be part of the Stilson & Associates Inc. project team that will be involved with the project:

Stilson Laboratories, Inc.

170 North High Street
Columbus, Ohio 43215

This firm, as a subsidiary of Stilson & Associates Inc. will complete the stream sampling, analysis, and evaluation in Phase 2 and provide input, conclusions, and recommendations in the Phase 3 Report. Mr. Wilson Walker will supervise the stream sampling program, laboratory testing, and evaluation.

Legal Services deleted from Scope of Work
~~Emens, Hurd, Kessler & Bitter Co., LPA~~
~~Attorneys and Counselors at Law~~
~~Capital Square Tower~~
~~65 East State Street~~
~~Columbus, Ohio 43215~~

~~This law firm has been selected as a subconsultant to provide legal counsel as needed in the areas of environmental law and water rights. The firm has~~

~~staff of attorneys with expertise and legal practice experience in zoning, water rights and administrative law. Mr. Peter A. Dauzvardis will be the primary attorney that will be involved with the project and will use other members of the firm if the need arises.~~

The professional qualifications for each of these firms are discussed further in Section 4 and 5 of this proposal. Resumes of key personnel that will be involved with the project are also included in Section 5.

B. Project Schedule

Work on the project will commence immediately upon written authorization to proceed by the Client. If this authorization is received by ^{January 1, 1989} ~~October 1~~, the Phase 1 data collection and inventory can be completed to the extent that the stream sampling can be initiated in ^{early 1989} ~~November~~ to coincide with water withdrawal from the streams to the upground reservoirs. The laboratory analysis and evaluation should then be completed ^{by April 1, 1989} ~~in early 1989~~ to allow sufficient time, if so desired by the Client, to complete any additional stream sampling in the Spring.

If no further sampling is deemed necessary in the Spring, the final report for review by the client will be submitted no later than ^{June 1} ~~April 1~~, 1989. If additional stream sampling is desired in the Spring of 1989, the final report submittal would be delayed until July, 1989.

C. Consultant Fees

The total fees (Phases 1, 2, and 3) for the consultant services, as outlined in Section 2B, will not exceed \$52,980, unless the work scope is changed.
47,850

The fee includes the salary cost times a multiplier for Stilson & Associates, Inc. and Stilson Laboratories, Inc. personnel engaged in the work plus reimbursable costs for travel, equipment, materials, reproduction, etc. ~~The fees for the legal counsel will be handled as a direct cost based on the hourly rates as shown in the firms proposal.~~ The laboratory analysis costs are on a cost per sample basis as listed in the cost summary.

A summary of the estimated hours, salary rates and costs of various personnel categories, estimated rate for overhead, direct costs (expenses), and subconsultants' costs, is presented below:

Phase 1 - Data Collection and Inventory

	<u>Hours</u>	<u>Hourly Rate</u>	<u>Salary Cost</u>
Principal/Manager	80	\$24.00	\$1,920
Engineer/Scientist	70	\$14.00	980
Secretary/Clerical	5	8.00	40
Total Salary Costs			\$2,940
Multiplier			x 2.8
Total Fee - Phase 1			\$8,232

Phase 2 - Stream Sampling and Analysis

	<u>Hours</u>	<u>Hourly Rate</u>	<u>Salary Cost</u>
Principal/Manager	80	\$24.00	\$1,920
Engineer/Scientist	60 74	14.00	840 1,036
Technician	100 113	9.00	1,620 1,710
Secretary/Clerical	10	8.00	80
Total Salary Costs			\$4,460 4,670
Multiplier			x 2.8
Total			13,132 \$12,480

Laboratory Analysis

A. Water Sample Tests

	<u>Cost /Sample</u>
Temperature	
pH	\$ 4.00
Dissolved Oxygen	8.00
Specific Conductance	5.00
Fecal Coliform	16.00
Alkalinity, Total	8.00

Hardness	
Dissolved Solids	16.00
Phosphorus, Total	14.00
Ammonia (N)	10.00
Nitrate	8.00
Calcium	7.00
Sulfate	10.00
Chloride	8.00
Fluoride	26.00
Sodium	7.00
Magnesium	7.00
Barium	11.00
Arsenic	34.00
Cadmium	7.00
Chromium	7.00
Iron	7.00
Lead	11.00
Manganese	7.00
Mercury	16.00
Selenium	34.00
Silver	7.00
Nickel	<u>7.00</u>

Subtotal	\$302.00	
²⁷ x 45 Samples		8,154 \$7,550.00

B. Additional Tests at Intakes and Reservoirs.

	<u>Cost/Sample</u>
VOC's Scan	\$ 125.00
Pesticides & Herbicides	275.00
PCB	<u>120.00</u>

Subtotal	\$ 520.00	
⁸ x 8 samples		4,160 \$3,120

C. Stream Sediment Samples

	<u>Cost/Sample</u>	
Arsenic	\$ 68.00	
Barium	22.00	
Cadmium	14.00	
Chromium	14.00	
Silver	14.00	
Nickel	14.00	
Selenium	68.00	
Mercury	32.00	
Lead	22.00	
PCB	120.00	
Pesticides & Herbicides	<u>275.00</u>	
Subtotal		\$663.00
" x 9 samples		\$5,967 7,293.00

Total		\$16,637.00 \$17,607.00
less 15% volume discount		<u>2,497.00</u> 2,341.00
Total Cost Lab. Analysis		\$14,140.00 16,000.00
Total Fee - Phase 2		\$26,628.00 27,798.00

Phase 3 - Data Evaluation and Report

	<u>Hours</u>	<u>Hourly Rate</u>	<u>Salary Cost</u>
Principal/Manager	110	\$24.00	\$2,640
Engineer/Scientist	20	14.00	280
Technician	10	9.00	90
Secretary/Clerical	20	8.00	<u>160</u>
Total Salary Costs			\$3,170
Multiplier			x 2.8
Total Fee Phase 3			\$8,876

Other Direct Costs (All Phases)

Travel Expenses	\$1,500	
Reproduction	200	
Telephone, postage, misc. costs	<u>114 74</u>	
Legal Counsel	<u>7,350</u>	
Emens, Hurd, Kogler & R.H. & Ritter		
co., L.P.A. (Cost Proposal in Section 5C)		* 1794.00
Total Direct Costs		<u><u>8,164</u></u>
Total Consultant Fee		
Phase 1, 2, and 3		48,700
(Not to exceed)		<u><u>\$52,864</u></u>

Any additional work requested by the Client beyond the scope of services described in Section 2B will be completed in accordance with the above rates and unit prices.

SECTION 2
WORK PLAN
(Revised Dec. 5, 1988)

A. Objectives

The primary objectives the municipalities want to attain in completing this study are:

1. Identify actual and potential sources and conditions that may pose a threat to the purity, healthfulness and safety of each municipality's water supply.
2. Complete a stream sampling program that will establish base line water quality data that can be used for comparative purposes to monitor future water quality trends.
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B. Scope of Services

Stilson and Associates, Inc. and its subconsultants will perform the work as outlined in Section B of the RFP. The scope of work to complete these services is separated into three work phases to clarify our management and cost data for the project. The terms "CONSULTANT" and "CLIENT" refer to Stilson & Associates, Inc. (and its subconsultants) and the municipalities of Grafton, Oberlin, and Wellington, respectively.

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The Consultant will review existing data, reports, expertise, etc. that is relevant to the objectives of the project and assemble an inventory of existing and potential sources of pollution that may have an impact on the raw water

supplies for the three municipalities. Potential sources of water pollution to be considered are: municipal and private wastewater treatment plants, on-lot sewage disposal systems, the proposed hazardous and toxic waste incineration plant at Nova, transportation and pipeline facilities in the study area, industrial/commercial operations (including the Ross Incinerator), above-ground storage tanks, feed-lot and agriculture non-point source discharges. Preliminary review of existing studies show 30 to 40 point dischargers that are present in the study area.

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Local Municipalities

Ohio Environmental Protection Agency

U.S. Environmental Protection Agency

Lorain County Governmental Offices

Ohio Department of Natural Resources

Soil Conservation Service

U.S. Geological Survey

Local Planning Agencies

A review of the existing local and state laws and regulations regarding water supply protection rights will also be completed.

Upon completion of the data collection and review, the Consultant will review the findings with the Client. This data collected will be used to establish the final stream sampling locations and test parameters that are proposed in Phase 2.

Phase 2 - Stream Sampling and Analysis

The intent for Phase 2 is to develop a stream sampling program that will establish base line water quality data that can be compared to future water

quality trends. Tentative stream sampling locations have been selected for the project study area and are shown on Exhibit A. The locations selected were based on the preliminary review of the following information:

1. Discussions with the Client during the pre-proposal meeting and site visits.
2. U.S.G.S. topographic mapping.
3. The 208 Water Quality Management Plan completed by NOACA
4. Preliminary field reconnaissance of the study area.

The above data will be evaluated in more detail as outlined in Phase A and after review with the Client the stream sampling locations will be finalized. The tentative stream sampling plan, as shown on Exhibit A, includes the following sampling by main stream tributary areas and locations: (Revised to include stream water and stream sediment samples upstream and downstream of the Ross Incinerator.)

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The sample collection in the field will include the following data:

Date and Time of Day	Weather Conditions
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All stream water samples will be analyzed for the following:

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Specific Conductance	Fecal Coliform
Alkalinity, Total	Hardness
Dissolved Solids	Phosphorus, total
Ammonia (N)	Nitrate
Calcium	Sulfate
Chloride	Fluoride
Sodium	Magnesium
Barium	Arsenic
Cadmium	Chromium
Iron	Lead
Manganese	Mercury
Selenium	Silver
Nickel	

The stream water samples obtained at each of the Client's stream water intake and the raw water reservoir supply will include the above parameters plus:

Volatile Organic Compounds (VOC's) Scan
Pesticides and Herbicides
PCB

The stream sediment samples will be analyzed for the following parameters:

Arsenic	Barium
Cadmium	Chromium
Silver	Nickel
Selenium	Mercury
Lead	PCB

The proposed plan is to collect one set of samples at the selected sampling locations in late Fall/early Winter during a period that water is being withdrawn from the streams to the upground reservoirs. The test results from these samples will present in-sight into the sources, magnitude, and types of water quality variations found in the study area.

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C. General Provisions

Equal Employment Opportunity - The Consultants will comply with all applicable EEO laws and regulations. The Affirmative Action Program for EEO for Stilson & Associates, Inc. and Stilson Laboratories Inc. are included in Section 5D.

Conflict of Interest - To the extend of the Consultant's knowledge, there are no personal or organizational conflicts of interest known to exist with any of the parties involved with the project.

Business Certification

All of the Consultants are Ohio based companies and are licensed to do business in Ohio. A sample certificate of insurance is included in Section 5D for information purposes showing the insurance coverage for Stilson & Associates, Inc. Stilson Laboratories, Inc. is insured under the same policies with the exception of professional liability. Actual certificates of insurance will be furnished by all the consultants if selected for the project.

SECTION 3
PROJECT MANAGEMENT AND FEES
(Revised Dec. 5, 1988)

A. Organization and Staffing

Stilson and Associates, Inc. will be the Prime Consultant for the project. It will coordinate all project activities on behalf of the Client. The project will be under the direction of Mr. Gordon K. Moellman and will be managed on a daily basis by Mr. Ronald F. Huprich. Stilson & Associates, Inc. is responsible to complete Phase 1 - Data Collection and Inventory, assist Stilson Laboratories Inc. with the stream sampling in Phase 2, and coordinate evaluation and preparation of the report in Phase 3.

The following subconsultants are also proposed to be part of the Stilson & Associates Inc. project team that will be involved with the project:

Stilson Laboratories, Inc.
170 North High Street
Columbus, Ohio 43215

This firm, as a subsidiary of Stilson & Associates Inc. will complete stream sampling, analysis, and evaluation in Phase 2 and provide conclusions, and recommendations in the Phase 3 Report. Mr. J. Walker will supervise the stream sampling program, laboratory testing and evaluation.

The professional qualifications for each of these firms are discussed further in Section 4 and 5 of this proposal. Resumes of key personnel that will be involved with the project are also included in Section 5.

B. Project Schedule

Work on the project will commence immediately upon written authorization to proceed by the Client. If this authorization is received by January 1, 1989, the Phase 1 data collection and inventory can be completed to the extent that the stream sampling can be initiated in early 1989 to coincide with water withdrawal from the streams to the upground reservoirs. The laboratory analysis and evaluation should then be completed by April, 1989 to allow sufficient time, if so desired by the Client, to complete any additional stream sampling in the Spring.

If no further sampling is deemed necessary in the Spring, the final report for review by the client will be submitted no later than June 1, 1989. If additional stream sampling is desired in the Spring of 1989, the final report submittal would be delayed until July, 1989.

C. Consultant Fees

The total fees (Phases 1, 2, and 3) for the consultant services, as outlined in Section 2B, will not exceed \$47,850, unless the work scope is changed.

The fee includes the salary cost times a multiplier for Stilson & Associate Inc. and Stilson Laboratories, Inc. personnel engaged in the work plus reimbursable costs for travel, equipment, materials, reproduction, etc. The laboratory analysis costs are on a cost per sample basis as listed in the cost summary.

A summary of the estimated hours, salary rates and costs of various personnel categories, estimated rate for overhead, direct costs (expenses), and subconsultants' costs, is presented below:

Phase 1 - Data Collection and Inventory

	<u>Hours</u>	<u>Hourly Rate</u>	<u>Salary Cost</u>
Principal/Manager	80	\$24.00	\$1,920
Engineer/Scientist	70	\$14.00	980
Secretary/Clerical	5	8.00	<u>40</u>
Total Salary Costs			\$2,940
Multiplier			x <u>2.8</u>
Total Fee - Phase 1			\$8,232

Phase 2 - Stream Sampling and Analysis

	<u>Hours</u>	<u>Hourly Rate</u>	<u>Salary Cost</u>
Principal/Manager	80	\$24.00	\$1,920
Engineer/Scientist	70	14.00	980
Technician	190	9.00	1,710
Secretary/Clerical	10	8.00	<u>80</u>
Total Salary Costs			\$4,690
Multiplier			x <u>2.8</u>
Total			\$13,132

Laboratory Analysis

A. Water Sample Tests

	<u>Cost /Sample</u>
Temperature	
pH	\$ 4.00
Dissolved Oxygen	8.00
Specific Conductance	5.00
Fecal Collform	16.00
Alkalinity, Total	8.00
Hardness	
Dissolved Solids	16.00
Phosphorus, Total	14.00
Ammonia (N)	10.00
Nitrate	8.00
Calcium	7.00
Sulfate	10.00
Chloride	8.00
Fluoride	26.00
Sodium	7.00
Magnesium	7.00
Barium	11.00
Arsenic	34.00
Cadmium	7.00
Chromium	7.00
Iron	7.00
Lead	11.00
Manganese	7.00
Mercury	16.00
Selenium	34.00
Silver	7.00
Nickel	<u>7.00</u>

Subtotal

\$302.00

x 27 Samples

\$8,154.00

B. Additional Tests at Intakes and Reservoirs.

	<u>Cost/Sample</u>	
VOC's Scan	\$ 125.00	
Pesticides & Herbicides	275.00	
PCB	<u>120.00</u>	
Subtotal	\$ 520.00	
x 8 samples		\$ 4,160

C. Stream Sediment Samples

	<u>Cost/Sample</u>	
Arsenic	\$ 68.00	
Barium	22.00	
Cadmium	14.00	
Chromium	14.00	
Silver	14.00	
Nickel	14.00	
Selenium	68.00	
Mercury	32.00	
Lead	22.00	
PCB	120.00	
Pesticides & Herbicides	<u>275.00</u>	
Subtotal	\$ 663.00	
x 11 samples		\$7,293.00
 Total		 \$19,607.00
less 15% volume discount		<u>- 2,941.00</u>
Total Cost Lab. Analysis		\$16,666.00
 Total Fee - Phase 2		 \$29,798.00

Phase 3 - Data Evaluation and Report

	<u>Hours</u>	<u>Hourly Rate</u>	<u>Salary Cost</u>
Principal/Manager	110	\$24.00	\$2,640
Engineer/Scientist	20	14.00	280
Technician	10	9.00	90
Secretary/Clerical	20	8.00	<u>160</u>
Total Salary Costs			\$3,170
Multiplier			x <u>2.8</u>
Total Fee Phase 3			\$ 8,876.00

Other Direct Costs (All Phases)

Travel Expenses	\$1,500
Reproduction	200
Telephone, postage, misc. costs	<u>94</u>

Total Direct Costs	<u>\$ 1,794.00</u>
Total Consultant Fee	\$48,780.00
Phase 1, 2, and 3	
(Not to exceed)	

Any additional work requested by the Client beyond the scope of services described in Section 2B will be completed in accordance with the above rates and unit prices.