

EVANS, MECHWART, HAMBLETON & TILTON, INC. CONSULTING ENGINEERS & SURVEYORS

January 19, 2001

Mr. Karl Wetherholt, City Engineer City of Gahanna 200 South Hamilton Road Gahanna, OH 43230

Re:

Lakes at Harrison Pond; Watershed Study

(Revised)

Dear Karl:

Evans, Mechwart, Hambleton & Tilton, Inc. (EMH&T) is pleased to provide a revised proposal for consulting engineering services for the above referenced watershed study affecting areas within the City of Gahanna. EMH&T has prepared a proposal based upon our understanding of issues from our most recent meetings and conversations. The consulting services described below have been separated by task so that you may consider pursuing only a portion or all of those services.

EMH&T has been involved in the study and design of several residential development sites within the watershed area that is tributary to the Lakes at Harrison Pond site. Each individual site was designed to meet or exceed the stormwater management standards of the respective community (Village of New Albany or City of Gahanna). The scope of work described below focuses on the study of the combined affects of those sites on stormwater runoff within the watershed to the Lakes at Harrison Pond.

Scope of Work

For the purpose of this presentation, only the evaluation of the watershed area tributary to the Lakes at Harrison Pond south of Morse Road is being considered. In order to fully understand the condition at the Lakes at Harrison Pond, it is necessary to assume conditions for the northern tributary to complete the model of the entire watershed area tributary to that development site. For the purpose of this study, the tributary area north of Morse Road will be based on previously established modeling.

I. Evaluate the Watershed Area South of Morse Road.

This task will involve the preparation of a watershed model of the area south of Morse Road, including the stormwater management facilities designed and constructed as part of the Rocky Fork subdivision and the Lakes at Harrison Pond site. The watershed model will be based on previously established models of individual development sites prepared in conjunction with the design of those sites. In addition to preparing the watershed model, EMH&T will provide the services described below:

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Proposal for Professional Services Lakes at Harrison Pond-Watershed Study (Revised)

- A. Perform field reconnaissance to establish the "as-built" condition of storm water detention basins within the watershed area. This effort will be based on visual verification only and will not involve field surveying.
- B. Revise the watershed model as appropriate to reflect any deviation of the as-built detention basins from that represented in the previously established modeling.
- C. If necessary, evaluate a single proposal for a stormwater detention basin to be constructed within the watershed area and upstream of the Lakes at Harrison Pond to determine the benefit of that basin on reducing peak discharge values and to determine the impact of that basin on other adjacent development sites. The evaluation of the impact of the proposed detention basin would be based on an analysis to determine if a basin located along the tributary stream in that watershed would increase flood elevations upstream of its location.

This scope of services does not include an environmental impact assessment of disturbing the existing channel to construct a detention basin/sediment pond, which may be required prior to any future construction activities related to that feature.

A combined watershed model will be prepared that includes both the tributary area north and south of Morse Road to establish the anticipated performance of the outlet structure and pond level fluctuations at The Lakes at Harrison Pond under design storm conditions. At this time, EMH&T does not propose to attempt to analyze observed rainfall events.

II. Evaluate the Existing Channel that Outlets to the Lakes at Harrison Pond Site, from Morse Road.

The purpose of this task is to establish the capacity of the existing channel to convey the peak discharge from the watershed area north of Morse Road and the resultant flow velocities. For this task, EMH&T will determine the capacity and flow carrying velocity or the existing channel using normal depth calculations. The channel cross-sections will be based on a field survey. If necessary, a recommendation will be made for a revised channel cross-section and channel gradient to address identified concerns.

January 19, 2001 EMH&T, Inc.

Cost Proposal

EMH&T propose to provide the services described above for the individual tasks for the estimated fees presented below.

I. Evaluated the Watershed Area South of Morse Road.

\$9,500

II. Evaluate the Existing Channel that Outlets to the Lakes at Harrison Pond Site from Morse Road for stream capacity study.

\$3,000

The services to be provided are specifically limited to those described in the Scope of work and do not include services associated with FEMA flood plain studies, Sub-surface Investigation, Preparation of Construction Drawings or As-Built surveys, except as noted above. EMH&T will prepare a brief summary engineering report that will include the results of each of the tasks described above.

It is understood that the Client hereby grants *EMH&T Inc.* or represents and wartants (if the site is not owned by the Client) that permission has been duly granted for a Right-of-Entry by our firm, agents, staff, consultants and subcontractors, for the purpose of obtaining field information pertinent to the subject project. We propose to provide services related to this project on an hourly basis. The actual cost of services will be based on the actual number of hours spent by the various categories of employee involved. The estimated fees described above will not be exceeded without prior approval from the client. These fees do not include the cost of reimbursable expense, such as prints, copies, deliveries, mileage, film and photographic development.

Invoices for the aforementioned services will be in our standard format and shall be due and payable within thirty (30) days. In the event payment is not made in a timely manner, the overdue balance shall bear interest at a rate of 1.5% per month. If the Client fails to pay any invoice due us within thirty (30) days after the date of billing, we may, without waiving any other claim or right against Client, and without liability whatsoever to Client, terminate our performance of service.

Proposal for Professional Services Lakes at Harrison Pond-Watershed Study (Revised)

We appreciate the opportunity to submit this proposal to you and look forward to working with you on this project. If you have any questions, please do not hesitate to call.

Respectfully,

EVANS, MECHWART, HAMBLETON & TILTON, INC.

Gregory B. Comfort, P.E. Managing Partner

APPRO	OVED TASK:	
I.	Watershed Area South of Morse Road	
II.	Existing Channel that Outlets to the Site	
APPR	OVED BY:	
AUTH	IORIZED SIGNATURE	
PRINT	OR TYPE NAME	
DATE	,	

Cc: Scott McClintock

SM/ad

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