

H. H. HOLMES TESTING LABORATORIES, INC.



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April 3, 2007

Project ID: 138-3

Toll Brothers Land Development
1153 West Dundee Road
Arlington Heights, IL 60004

Re: Hawthorn Woods Country Club
Heritage Oaks Park- Pond
Hawthorn Woods, IL

RE: Slope failure on the south side of detention basin 23

Mr. Hepler:

Based on the review of the boring logs, on site inspection meetings, and conversations with Mr. Kalisz of Mc Dowell and Associates and Mr. Palkovics of DelVal Soil & Environmental Consultants Inc., we have prepared the following recommendation for repair of the slope failure on the south side of detention basin 23, immediately west of the existing cell tower.

It is our professional opinion that area of failure should be excavated to the bottom depth of the existing high moisture content mixed organic material, under the supervision of an experienced soil technician. Once the bottom elevation has been reached, the excavator should place suitable fill material in properly compacted 12" lifts, back to the design elevation. Once the design elevation has been reached, we recommend the area be stabilized with vegetation as soon as possible.

We further recommend the use of an aggregate drain system in the slope. This system should be constructed of large sized aggregates with minimal fines, and be enclosed by a permeable geotextile fabric. The locations of these drains should be determined in the field based on visual observation of the highly saturated soils. These drains should run from the top of the slope down to the normal water elevation. Each drain should be connected by an additional drain located adjacent and parallel to the walking path. We feel the use of this drain system will provide adequate drainage for the impacted area, and will minimize future saturation of the underlying material, thus assisting in the stabilization of the slope.

If you have any questions, please contact our office.

Respectfully submitted,

Chuck Cranford
H. H. Holmes Testing Laboratories

William E. Palkovics, PhD
Del Val Soil Environmental Consultants Inc.

John Kalisz
Mc Dowell & Associates