

VILLAGE OF GRAYSLAKE  
ENGINEERING SERVICES WORK ORDER  
GHA PROJECT NO. 4990.021

625 Forest Edge Drive, Vernon Hills, IL 60061  
TEL 847.478.9700 ■ FAX 847.478.9701

www.gha-engineers.com

**Project: Heritage Center Flooding Investigation**

Following rainfall totals on July 11 and 12, 2017 that exceeded a 100-year return interval, the Grayslake Heritage Center at 164 Hawley Street experienced significant basement flooding, covering the basement floor to a depth of approximately 6'. To date a cause of the flooding has not been identified, as storm sewers downstream of the Heritage Center were flowing full and four sump pumps remained in operation throughout the flooding event. The Village has requested that GHA investigate the existing drainage and infrastructure to report on our findings.

**Scope of Services**

The work required consists of the following tasks:

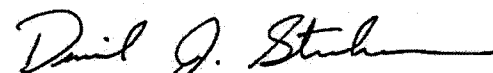
- ◆ GHA will research available GIS data for the area in order to understand existing drainage patterns affecting the Heritage Center. This research will include a review of Lake County 1' contours, Village storm sewer atlases, and the Heritage Center engineering plans to be provided by the Village.
- ◆ GHA will contact Heritage Center staff to request a meeting and walk-thru of the basement areas. GHA will visit the site, walk the areas affected by flooding, and take photos as needed.
- ◆ GHA will prepare a summary memo outlining our findings.

The scope of our work for these investigations will not include any detailed stormwater modeling, surveying, design of proposed improvements, or any other work beyond the items noted above. If further detailed design or study is needed, a separate work order will be provided.


**Estimate of Manhours and Fee**

Billing for the project will be on a time and material basis with an estimated budget of \$1,360.00 based on 10 manhours anticipated. This fee will not be exceeded without written prior approval of the Village.

Gewalt Hamilton Associates, Inc.  
Submitted By:

  
Daniel J. Strahan, P.E., CFM  
Associate/Senior Engineer

Village of Grayslake  
Accepted By:

BR   
Name: Michael J. Ellis  
Title: Village Manager  
Date: 8-17-17

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**Project: 2017 Residential Drainage Investigation**

Following rainfall totals on July 11 and 12, 2017 that exceeded a 100-year return interval, a number of residential areas in the Village of Grayslake experienced significant flooding. While recognizing the severity of the storm event, the Village of Grayslake would like to investigate these areas to determine whether the existing storm water infrastructure performed as expected and/or if modifications to the system can be made to lessen the severity or duration of flooding during future rainfall events. The Village has requested that GHA investigate six residential areas (1119 Chesterfield, 310 Hojem, 471 Somerset, 329 Behm, 263 S. Seymour, and the Pierce Court/Bonnie Brae area) affected by flooding and report on our findings.

**Scope of Services**

The work required consists of the following tasks:

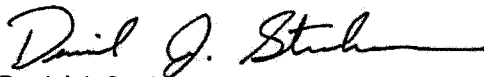
- ◆ GHA will research available GIS data for the affected areas in order to understand existing floodplain limits and drainage patterns. This research will include a review of current FIRM panels, Lake County 1' contours, Village storm sewer atlases, and any available building permit documents provided by the Village.
- ◆ GHA will contact the affected resident at each location and request a site meeting. GHA will meet with the resident, walk the areas affected by flooding, and take photos as needed.
- ◆ GHA will prepare a summary memo outlining our findings.

The scope of our work for these investigations will not include any detailed stormwater modeling, surveying, design of proposed improvements, or any other work beyond the items noted above. If further detailed design or study is needed, a separate work order will be provided.

**Estimate of Manhours and Fee**

Billing for the project will be on a time and material basis with an estimated budget of \$6,540.00 based on 48 manhours anticipated. This fee will not be exceeded without written prior approval of the Village.

Gewalt Hamilton Associates, Inc.  
Submitted By:



Daniel J. Strahan, P.E., CFM  
Associate/Senior Engineer

Village of Grayslake  
Accepted By:



Name: Michael J. Ellis

Title: Village Manager

Date: 8-17-17