



CITY COUNCIL WORKSHOP MEETING

AGENDA

March 9, 2015

6:30 p.m.

City Hall

Prospect Heights, IL 60070

- I. CALL TO ORDER**
- II. ROLL CALL**
- III. PLEDGE OF ALLEGIANCE** – Alderman Higgins
- IV. CLOSED SESSION** – Motion to go into executive session pursuant to 5 ILCS 120/2 (c) (5) to discuss: the purchase or lease of real property for the use of the public body.
- V. RESIDENT COMMENTS (Agenda Matters)**
- VI. STAFF AND ELECTED OFFICIALS REPORTS**
 - Interim City Administrator Balling
 - Administrator's report summary for the July 3, 2015 special event at Chicago Executive Airport
 - Department Directors
 - Treasurer's Report
 - City Treasurer
 - Clerk Report
 - Alderman
 - Mayor
- VII. ADOPTION OF CONSENT AGENDA** - All items listed on the Consent Agenda are considered to be routine by the City Council and will be enacted by one motion. There will be no separate discussion of these items unless an Alderman or citizen so requests, in which event the item(s) will be removed from the general order of business and considered under the Approval of Exceptions.
 - A. Approval of the City Council Workshop Minutes for February 23, 2015.
 - B. Resolution urging the Governor and General Assembly to protect full funding of local government distributive fund revenues.
 - C. Approving a construction services agreement with GHA for drainage improvement works on 109 Elm.

VIII. APPROVAL OF EXPENDITURES**D. Approval of Warrants**

General Fund	\$210,129.39
MFT Fund	\$3,378.60
Palatine/Milwaukee TIF	\$125,205.60
Tourism District	\$5,562.00
Development Fund	
DEA Fund	\$1,610.14
Solid Waste Fund	\$31,393.73
SS Area #1	
SS Area #2	
SS Area #3	
SS Area #4	
SS Area #5	\$237.93
SS Area #8 – Levee Wall #37	\$43,669.03
SS Area-Constr #6 (Water Main)	
SS Area- Debt #6	
Road Construction	\$6,095.50
Road Construction Debt	
Water Fund	\$7,981.03
Parking Fund	\$1,029.41
Road/Building Bond Escrow	
TOTAL Expenditures	\$436,292.36
2/20/2015 Payroll	\$133,600.45
TOTAL WARRANT	\$569,892.81

XIII. OLD BUSINESS**XIII. NEW BUSINESS****XIV. WORKSHOP ITEM:**

- E. Discussion of remaining budget items from the February 28 meeting.

POSTED: by Deputy Clerk Karen Schultheis 5:00 PM, March 5, 2015

**This meeting will be televised on the following Prospect Heights Cable Channels:
Comcast and WOW Channel 17 and AT&T U-verse Channel 99**

B

RESOLUTION
URGING THE GOVERNOR AND GENERAL ASSEMBLY TO PROTECT FULL
FUNDING OF LOCAL GOVERNMENT DISTRIBUTIVE FUND REVENUES

WHEREAS, municipalities are front-line providers of government services to citizens and these services include police and fire protection, parks, infrastructure, water, sewer and utility services, and snow removal; and

WHEREAS the State of Illinois has a long-standing tradition of collecting tax revenues on behalf of municipal governments and municipalities have relied on shared income tax revenue to provide services to taxpayers; and

WHEREAS, municipalities have fewer options to raise significant revenue and rely on the full amount of revenue that the State collects on their behalf in order to fund the essential quality-of-life services expected and relied upon by community residents; and

WHEREAS, the General Assembly increased the State income tax without providing any of the new revenues to municipalities and this loss of revenue has left the municipal share at levels collected during the Great Recession; and

WHEREAS, the Governor proposed a 50 percent reduction in the local share of the income tax during his FY2016 Budget Address, reducing local revenues by over \$600 million; and

WHEREAS, the loss of this state-shared income tax revenue would result in elimination of countless jobs, local tax increases, program and service cuts, and could increase debt burdens that would be felt by all citizens.

WHEREAS, the (CITY/VILLAGE/TOWN) of (NAME) would lose (AMOUNT = \$99 X POPULATION DIVIDED BY 2); and

NOW, THEREFORE, BE IT RESOLVED that the (CITY/VILLAGE/TOWN) of (NAME) urges the Governor and the General Assembly to protect full funding of the Local Government Distributive Fund and other revenue sources that allow local governments to provide for the health, safety and general welfare of their residents.



February 25, 2015



Southwestern Illinois
Council of Mayors



The Honorable Bruce Rauner
Governor
207 Statehouse
Springfield, IL 62706

Dear Governor Rauner:

On behalf of municipalities and taxpayers across the state of Illinois, we are writing to express our deep disappointment with certain proposals affecting local government outlined in your February 18 Budget Address to the Illinois General Assembly. We respectfully request that the state craft a budget that does not intercept revenue due to local governments or prohibit actions necessary to balance municipal budgets.

As you know, the Local Government Distributive Fund (LGDF) was established in 1969 when Illinois implemented the state income tax. Local governments utilize LGDF revenues to fund basic governmental services including police, fire, public works and infrastructure improvements. Your proposal for a fifty percent reduction in LGDF payments spells disaster for municipalities, particularly non-home rule communities and those without a broad base of revenue options. Reducing revenue due to local governments will result in the need for massive property tax increases or dangerous cuts to services that our taxpayers have paid for and expect.

In addition to slashing LGDF revenues, you propose to freeze property taxes and exempt police officers and firefighters from any changes in their pensions. This additional one-two punch to local governments will take away the ability to fund the rising costs of basic government services and public safety pensions, which have been well documented as unsustainable.

Finally, you have called for local governments to tighten their belts. It is important to know that, through the Great Recession and beyond, municipalities have worked diligently to balance budgets, operate within our means, adjust service and staffing levels and cut programs that, while important, we simply cannot afford at this time. We ask that the state craft a fiscally responsible budget without further harming local governments and the taxpayers we all serve.

Thank you for your consideration of our request to preserve local revenues and maintain the ability to manage our local budgets. We stand ready to work with you and the General Assembly to identify ways that all levels of government can move forward and best serve the people of Illinois.

Sincerely,

(Signature page attached)

• Barrington Area Council of Governments • DuPage Mayors and Managers Conference
• McHenry County Council of Governments • Metro West Council of Government • Metropolitan Mayors Caucus
• Northwest Municipal Conference • Southwest Conference of Mayors • South Suburban Mayors and Managers Association
• Southwestern Illinois Council of Mayors • West Central Municipal Conference • Will County Governmental League



Robert Kellermann
Chairman
Barrington Area Council of Governments



Gerald R. Bennett
President
Southwest Conference of Mayors



Martin T. Tully
President
DuPage Mayors & Managers Conference



Michael S. Einhorn
President
South Suburban Mayors and Managers Association



Richard E. Mack
President
McHenry County Council of Governments



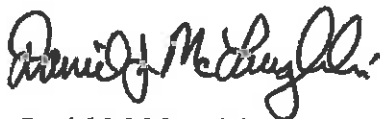
John Miller
President
Southwestern Illinois Council of Mayors



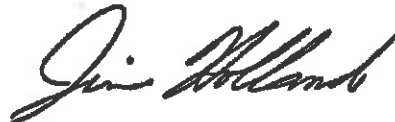
David Kaptain
President
Metro West Council of Government



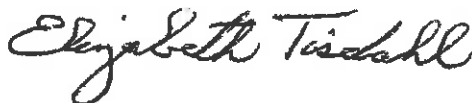
Richard F. Pellegrino
Executive Director
West Central Municipal Conference



Daniel J. McLaughlin
President
Metropolitan Mayors Caucus



Jim Holland
President
Will County Governmental League



Elizabeth B. Tisdahl
President
Northwest Municipal Conference

C



CONSULTING ENGINEERS

625 Forest Edge Drive, Vernon Hills, IL 60061

TEL 847.478.9700 ■ FAX 847.478.9701

www.gha-engineers.com

February 26, 2015

Mr. William Balling
Interim City Administrator
City of Prospect Heights
8 N. Elmhurst Road
Prospect Heights, IL 60070

Re: Proposal for Consulting Engineering Services
100-200 Block of Elm Street
Drainage Improvements & Construction Documents
GHA Proposal No. 2015.M021

Dear Mr. Balling:

Thank you for considering Gewalt Hamilton Associates, Inc. (GHA) to provide Consulting Engineering Services to the City of Prospect Heights with respect to the above captioned project. Our project scope has been based on our prior conversations and also our prior preliminary plans prepared for this location.

This proposal is divided into the following sections:

- I. PROJECT UNDERSTANDING
- II. SCOPE OF SERVICES
- III. ADDITIONAL SERVICES & SERVICES NOT INCLUDED
- IV. PROPOSED SCHEDULE OF SERVICES
- V. ENGINEERING STAFF
- VI. COMPENSATION OF SERVICES
- VII. GENERAL CONDITIONS

Please review this proposal, and if you should have any questions or require additional information, please do not hesitate to contact me. Thank you for your consideration.

Sincerely,
Gewalt Hamilton Associates, Inc.

Steven D. Berecz, P.E.
Corporate Secretary
sberecz@gha-engineers.com

**Proposal for Civil Engineering Services
100-200 Block of Elm Street
Drainage Improvements & Construction Documents
GHA Proposal No. 2015.M021**



625 Forest Edge Drive, Vernon Hills, IL 60061

TEL 847.478.9700 ■ FAX 847.478.9701

www.gha-engineers.com

City of Prospect Heights (Client), 8 N. Elmhurst Road, Prospect Heights, IL 60070, and Gewalt Hamilton Associates, Inc. (GHA), 625 Forest Edge Drive, Vernon Hills, IL 60061, agree and contract as follows:

I. Project Understanding

The City wishes to engage an engineering firm to prepare construction drawings and specifications suitable for a public bid for drainage improvements along the west side of Elm Street. GHA previously completed a hydraulic study of this area and the conceptual plan proposed a 36" storm sewer installation

The 36" storm sewer will follow the same alignment as the existing 12" storm sewer and will replace it. Only local permits are anticipated for this project. The estimated construction cost of this improvement is \$190,000.

II. Project Scope of Services

Our scope of work will include the following:

A. Storm Sewer Design Plans & Contract Specifications

1. Existing Conditions and Demolition Plan
2. Design of the storm sewer system in accordance with the conceptual plan previously completed by GHA.
3. Utility and Drainage Plan. This sheet will show the storm system improvements. It will also show the profile view for the 36" storm sewer.
4. Soil Erosion Control and Sediment Control Plan and associated plan details. We will still show standard sediment and erosion control details and practices in plans as a base contract service. An NPDES Phase II permit will not be required, as the parcel size is less than 1.0 acre.
5. Standard Detail Sheets.
6. Civil Specifications will be provided on the Site Improvement Plans.
7. Plans will be done in AutoCAD format on 24" x 36" sheet size.
8. Prepare front end specification and bid specifications suitable for a public bid, using current City bid format.
9. Prepare an engineer's opinion of probable cost for the selected improvements.
10. Prepare any addendum necessary during the bid period.
11. Assisting the City in soliciting bids for the project and make a recommendation for Council consideration of the lowest responsible bidder for the project.

B. Meetings

We anticipate one (1) design review meeting with the City.

III. Additional Services & Services not Included

1. Meetings with public officials, City staff, agencies, homeowners, or consultants beyond those noted in the scope of services; attendance at public hearings.

2. Performing additional surveying, mapping, or investigation/physical location of underground utilities beyond that expressly identified in the scope of services.
3. Wetland investigation, mitigation plans or flood hazard studies.
4. Soil borings.
5. Plat of Survey.
6. Gas, electric, telephone or other public utility services design.
7. Retaining wall design, structural tank design, or other design requiring the services of a structural engineer.
8. Permitting with various review agencies.
9. Review fees, permit fees or utility locate fees.
10. Construction phase services, including observation, staking or construction management.

IV. Proposed Schedule of Services

GHA is prepared to begin work immediately upon receipt of notice to proceed. We anticipate completion of the construction plans, specifications and bid documents in approximately four weeks. GHA will make every reasonable effort expedite the project schedule.

V. Engineering Staff

GHA will provide the City with an experienced team of project management and technical personnel to perform the required professional services. Mr. Steven D. Berecz, P.E. will function as the Project Manager; he will be assisted by Ms. Mei Zhu P.E., CFM, LEED AP. Additional professional and technical staff will provide support as needed.

VI. Compensation for Services

GHA proposes lump sum fees as shown below.

Service	Cost
A. Design Plans & Contract Specifications	\$8,500
B. Meeting	\$250
Lump Sum Total	\$8,750
Estimated Reimbursable Expenses	\$200
Lump Sum + Reimbursables	\$8,950

The aforementioned fees are on the following GHA 2015 Prospect Heights Public Improvements rate schedule. Expansion for overhead, payroll burden and professional fees are included in these hourly rates.

GHA 2015 Prospect Heights Rates	
Principal Engineer	\$156/hr
Senior Engineer	\$132/hr
Professional Engineer	\$114/hr
Registered Land Surveyor	\$110/hr
Staff Engineer	\$104/hr
Senior Engineering Technician	\$104/hr
Engineering Technician II	\$90/hr
Engineering Technician I	\$66/hr
Secretary	\$54/hr

Invoices for our work will be submitted on a monthly basis and will detail specifically the services performed on the project.

VII. General Conditions

The delineated services provided by Gewalt Hamilton Associates, Inc., (GHA) under this Agreement will be performed as reasonably required in accordance with the generally accepted standards for civil engineering and surveying services as reflected in the contract for this project at the time when and the place where the services are performed.

Nothing contained in this Agreement shall create a contractual relationship with or a cause of action in favor of a third party against either the Client or GHA. GHA's services under this Agreement are being performed solely for the Client's benefit, and no other party or entity shall have any claim against GHA because of this Agreement or the performance or nonperformance of services hereunder. In no event shall GHA be liable for any loss of profit or any consequential damages.

The Client and GHA agree that all disputes between them arising out of or relating to this Agreement or the Project shall be submitted to nonbinding mediation in Chicago, Illinois unless the parties mutually agree otherwise.

This Agreement, including all subparts and *Attachment A*, which is attached hereto and incorporated herein as the General Provisions of this Agreement, constitute the entire integrated agreement between the parties which may not be modified without all parties consenting thereto in writing.

By signing below you indicate your acceptance of this agreement in its entirety.

Gewalt Hamilton Associates, Inc.

City of Prospect Heights


Steven D. Berecz, P.E.
Corporate Secretary/Senior Engineer

Printed Name:

Title:

Date: _____

Encl.: Attachment A

**ATTACHMENT A TO GEWALT HAMILTON ASSOCIATES, INC.
PROFESSIONAL SERVICES AGREEMENT**

1. Standard of Care. The services provided by Gewalt Hamilton Associates, Inc., (GHA) under this Agreement will be reasonably performed consistent with the generally accepted standard of care for the Scope of Basic Services called for herein at the time when and the place where the services are provided.

2. Duration of Proposal. The terms of this Agreement are subject to renegotiation if not accepted within 60 calendar days of the date indicated on this Agreement. Requests for extension beyond 60 calendar days shall be made in writing prior to the expiration date. The fees and terms of this Agreement shall remain in full force and effect for one year from the date of acceptance of this Agreement, and shall be subject to revision at that time, or any time thereafter if GHA gives written notice to the other party at least 60 calendar days prior to the requested date of revision. In the event that the parties fail to agree on the new rates or other revisions, either party may terminate this Agreement as provided for herein.

3. Client Information. Client shall provide GHA with all project criteria and full information for its Scope of Basic Services. GHA may rely, without liability, on the accuracy and completeness of the information Client provides, including that of its other consultants, contractors and subcontractors, without independently verifying that information.

4. Payment. Payments are due within 30 calendar days after a statement is rendered. Statements not paid within 60 calendar days of the end of the calendar month when the statement is rendered will bear interest at the rate of one percent (1.0%) per month until paid. The provision for the payment of interest shall not be construed as authorization to pay late. Failure of the Client to make payments when due shall, in GHA's sole discretion, be cause for suspension of services without breach or termination of this agreement. Upon notification by GHA of suspension of services, Client shall pay in full all outstanding invoices within 7 calendar days. Client's failure to make such payment to GHA shall constitute a material breach of the Agreement and shall be cause for termination by GHA. GHA shall be entitled to reimbursement of all costs actually incurred by GHA in collecting overdue accounts under this Agreement, including, without limitations, attorney's fees and costs. GHA shall have no liability for any claims or damages arising from either suspension or termination of this Agreement due to Client's breach. The Client's obligation to pay for GHA's services is in no way dependent upon the Client's ability to obtain financing, rezoning, payment from a third party, approval of governmental or regulatory agencies or the Client's completion of the project.

5. Instruments of Service. The Client acknowledges GHA's plans and specifications, including field data, notes, calculations, and all documents or electronic data, are instruments of service. GHA shall retain ownership rights over all original documents and instruments of service. All instruments of service provided by GHA shall be reviewed by Client within 10 calendar days of receipt. Any deficiencies, errors, or omissions the Client discovers during this period will be reported to GHA and will be corrected as part of GHA's Basic Services. Failure to provide such notice shall constitute a waiver. The Client shall not reuse or make, or permit to be made any modifications to the instruments of service without the prior written authorization of GHA. The Client waives all claims against GHA arising from any reuse or modification of the instruments of service not authorized by GHA. The Client agrees, to the fullest extent permitted by law, to defend and indemnify and hold GHA harmless from any liability, damage, or cost, including attorneys' fees, arising from the unauthorized reuse or modification of the instruments of service by any person or entity. The parties agree that if elements of the Scope of Basic Services identified in this Agreement are reduced and/or eliminated by Client, then Client waives, releases and holds GHA harmless from all claims and damages arising from those reduced and/or eliminated services. If GHA's Scope of Basic Services does not include construction administration phase services, Client assumes responsibility for interpretation of the instruments of service and construction observation, and waives all claims against GHA for any act, omission or event connected thereto. Unless included in GHA's Scope of Basic Services, GHA shall not be liable for coordination with of the services of Client's other design professionals.

6. Electronic Files. The Client acknowledges that differences may exist between the electronic files delivered and the printed instruments of service. In the event of a conflict between the signed / sealed printed instruments of service prepared by GHA and the electronic files, the signed / sealed instruments of service shall control. GHA's electronic files shall be prepared in the current software GHA uses and will follow GHA's standard formatting unless the Scope of Basic Services requires otherwise. Client accepts that GHA makes no warranty that its software will be compatible with other systems or software.

7. Applicable Codes. The Client acknowledges that applicable laws, codes and regulations may be subject to various, and possibly contradictory, interpretations. Client accepts that GHA does not warrant or guarantee that the Client's project will comply with interpretations of applicable laws, codes, and regulations as they may be interpreted to the project. Client agrees that GHA shall not be responsible for added project costs, delay damages, or schedule changes arising from unreasonable or unexpected interpretations of the laws, codes, or regulations applied to the project, nor for changes required by the permitting authorities due to changes in the law that became effective after completion of GHA's instruments of service. Client shall compensate GHA for additional fees required to revise the instruments of service to comply with such interpretations. Client shall also compensate GHA for additional fees required to revise the instruments of service if Client changes the project scope after GHA's completes its instruments of service.

8. Utilities and Soils. When the instruments of service include information pertaining to the location of underground utility facilities or soils, such information represents only the opinion of the engineer as to the possible locations. This information may be obtained from visible surface evidence, utility company records or soil borings performed by others, and is not represented to be the exact location or nature of these utilities or soils in the field. Client agrees that GHA may reasonably rely on the accuracy and completeness of information furnished by third parties respecting utilities, underground conditions and soils without performing any independent verification. Contractor is solely responsible for utility locations, their markings in the field and their placement on the plans based on information they provided. Client agrees GHA is not liable for damages resulting from utility conflicts, mistaken utility locates, unfavorable soils, and concealed or unforeseen conditions, including but not limited to added construction costs and/or project delays. If the Client wishes to obtain the services of a contractor to provide test holes and exact utility locations, GHA may incorporate that information into the design and reasonably rely upon it. If not included in the Scope of Basic Services, such work will be compensated as additional services.

9. Opinion of Probable Construction Costs. GHA's Scope of Basic Services may include the preparation of an opinion of probable construction costs. Client acknowledges that GHA has no control over the costs of labor, materials, or equipment, or over the contractor's methods of determining prices, or over competitive bidding or market conditions. Opinions of probable costs, shall be made on the basis of experience and qualifications applied to the project scope contemplated by this Agreement as well as information provided by Client (the accuracy and completeness of which GHA may rely upon), and represent GHA's reasonable judgment. Client accepts that GHA does not guarantee or warrant that proposals, bids, or the actual construction costs will not vary from opinions of probable cost prepared for the Client. GHA shall not be liable for cost differentials between the bid and/or actual costs and GHA's opinion of probable construction costs. Client agrees it shall employ an independent cost estimator if, based on its sole determination, it wants more certainty respecting construction costs,

10. Contractor's Work. Client agrees that GHA does not have control or charge of and is not responsible for construction means, methods, techniques, sequences or procedures, or for site or worker safety measures and programs including enforcement of Federal, State and local safety requirements, in connection with construction work performed by the Client or the Client's construction contractors. GHA is not responsible for the supervision and coordination of Client's construction contractors, subcontractors, materialmen, fabricators, erectors, operators, suppliers, or any of their employees, agents and representatives of such workers, or responsible for any machinery, construction equipment, or tools used and employed by contractors and subcontractors. GHA has no authority or right to stop the work. GHA may not direct or instruct the construction work in any regard. In no event shall GHA be liable for the acts or omissions of Client's construction contractors, subcontractors, materialmen, fabricators, erectors, operators or suppliers, or any persons or entities performing any of the work, or for failure of any of them to carry out their work as called for by the Construction Documents. The Client agrees that the Contractor is solely responsible for jobsite and worker safety, and warrants that this intent shall be included in the Client's agreement with all prime contractors. The Client agrees that GHA and GHA's personnel and consultants (if any) shall be defended/indemnified by the Contractor for all claims asserted against GHA which arise out of the Contractor's or its subcontractors' negligence, errors or omissions in the performance of their work, and shall also be named as an additional insured on the Contractor's and subcontractors' general liability insurance policy. Client warrants that this intent shall be included in the Client's agreement with all prime contractors. If the responsible prime contractor's agreement fails to comply with the Client's intent, then the Client agrees to assume the duty to defend and indemnify GHA for claims arising out of the Contractor's or subcontractors' negligence, errors or omissions in the performance of their work.

11. Contractor Submittals. Shop drawing and submittal reviews by GHA shall apply only to the items in the submissions that concern GHA's scope of Basic Services and only for the purpose of assessing if, upon successful incorporation in the project, they are generally consistent with the GHA's Instruments of Service. Client agrees that the Contractor is solely responsible for the submissions and for compliance with the Instruments of Service. Owner agrees that GHA's review and action in relation to the submissions does not constitute the provision of means, methods, techniques, sequencing or procedures of construction or extend to jobsite or worker safety. GHA's consideration of a component does not constitute acceptance of an assembled item.

12. Hazardous Materials. Client agrees that GHA has no responsibility or liability for any hazardous or toxic materials, contaminants or pollutants.

13. Record Drawings. If required by the Scope of Basic Services, record drawings will be prepared which may include unverified information compiled and furnished by others, the accuracy and completeness of which GHA may reasonably rely upon. Client accepts that GHA shall not verify the information provided to it and agrees GHA will not be responsible for any errors or omissions in the record drawings due to incorrect or incomplete information furnished by others to GHA.

14. Disputes. Client agrees to limit GHA's total aggregate liability to the Client for GHA's alleged acts, errors or omissions to \$50,000 or the amount of GHA's paid fees for its services on the project, whichever is greater. GHA makes no guarantees or warranties, either expressed or implied, including any warranty of habitability or fitness for a particular purpose. The parties agree to waive all claims against the other for any and all consequential damages, including attorneys' fees. The parties agree to waive against each other all rights and claims otherwise covered by property insurance, by builder's risk insurance or by all risk insurance, including but not limited to subrogation rights regardless of whether the claims arise during or post-construction and regardless of final payment to GHA.

All disputes arising out of or relating to this Agreement shall first be negotiated between the parties. If unresolved, the dispute shall be submitted to mediation as a condition precedent to litigation. Mediation shall take place in Chicago, Illinois unless the Client and GHA mutually agree otherwise. The fees and costs of the mediator shall be apportioned equally between the parties. If mediation is unsuccessful, litigation shall be the form of dispute resolution and shall be filed in the jurisdiction where the project was pending. The controlling law shall be the law of the jurisdiction where the project was located. Client agrees that all causes of action under this Agreement shall be deemed to have accrued and all statutory limitations periods shall commence no later than the date of GHA's services being substantially completed. Client agrees that any claim against GHA arising out of this Agreement shall be asserted only against the entity and not against GHA's owners, officers, directors, shareholders, or employees, none of whom shall bear any liability and may not be subject to any claim.

15. Miscellaneous. Either Client or GHA may terminate this Agreement without penalty at any time with or without cause by giving the other party ten (10) calendar days prior written notice. The Client shall, within thirty (30) calendar days of termination pay GHA for all services rendered and all costs incurred up to the date of termination in accordance with compensation provisions of this Agreement. Client shall not assign this Agreement without GHA's prior written consent. There are no third-party beneficiaries to this Agreement.



CONSULTING ENGINEERS

625 Forest Edge Drive, Vernon Hills, IL 60061

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www.gha-engineers.com

Elm St. Drainage Phase 1 Analysis
Village of Prospect Heights
February 24, 2015
GHA Project #4755.025

Stormwater Management Report

1 Introduction

The Village of Prospect Heights (Village) has retained Gewalt Hamilton Associates (GHA) to analyze the frequent flooding that has been observed at 109 Elm Street. GHA understands that flooding is typically observed to cover the front yard and parts of the driveway at 109 Elm for moderate to severe rain events. GHA has analyzed the existing storm system serving this property to determine the likely cause of flooding and to develop a proposed design that will alleviate flooding issues for future storms.

2 Existing Conditions

The property at 109 Elm Street is serviced by a 12 inch diameter storm sewer that drains approximately 70 acres of residential area. Several inlets in the front yard at 109 Elm drain a depressional area with approximately 0.3 acre-feet of depressional volume. The existing system was analyzed using XPSWMM modeling software. XPSWMM was developed by the XP Software company for use in analysis, design, and simulation of storm and wastewater systems. The XPSWMM model is a dynamic model that is able to compute hydrology and hydraulics simultaneously while accounting for backwater effects, time-varying flowrates, pressurized flow, two-dimensional flow, etc.

The design storm analyzed for this project was a 2 hour duration storm with a 10% chance of occurring in any given year (i.e. a 10-year storm) using a Huff rainfall distribution. This storm was found to be the critical duration event for the existing system. The existing conditions model indicated that the existing 12 inch storm sewer running along Elm Street is dramatically undersized for the storm event analyzed. This condition resulted in surcharging of the system causing water to surcharge or "boil up" out of the drainage structures in the depressional area at 109 Elm Street. These results appear to be consistent with typical flooding observed in this area, see Figure 1 below.



Figure 1 - Existing Conditions Results

3 Proposed Conditions

Several scenarios were analyzed to determine the most effective way to reduce the potential for surcharging of the Elm Street storm sewer system. After extensive modeling, it was determined that increasing approximately 665 feet of the main storm sewer along Elm Street to a 36 inch diameter would substantially decrease the risk of flooding in the depression at 109 Elm. Results of the modeling are shown on Figure 2 below. Conceptual drawings for this improvement are attached. The estimated cost to upsize the existing sewer to 36 inch diameter is \$190,000.

While a portion of this sewer is within the FEMA regulatory floodway, the construction will be considered a maintenance activity and will not require a DNR permit provided existing grades within the floodway limits are not modified and the sewer was originally constructed prior to November 18, 1987 per Title 17.I.h.3708 of the Illinois Administrative Code.



Figure 2 - Proposed Conditions Results

4 Conclusion

Based on the XPSWMM analysis completed for this study, GHA has determined that increasing the main sewer along Elm Street from a 12 inch to a 36 inch per the attached conceptual plans will dramatically decrease the likelihood of flooding the depressional area located at 109 Elm Street.

This report prepared by:
Gewalt Hamilton Associates, Inc.



Michael Baker, P.E., CFM
Civil Engineer

Attachments:
Proposed Improvement Concept Plans

D

APPROVAL OF WARRANTS

3/9/2015 COUNCIL MEETING		
<u>Checks</u>		
General Fund	\$	210,129.39
MFT Fund		3,378.60
Palatine/Milwaukee TIF		125,205.60
Tourism District		5,562.00
Development Fund		
DEA Fund		1,610.14
Solid Waste Fund		31,393.73
S S Area #1		
S S Area #2		
S S Area #3		
S S Area #4		
S S Area #5		237.93
S S Area #8 - Levee Wall #37		43,669.03
S S Area-Constr#6(Water Main)		
S S Area-Debt#6		
Road Construction		6,095.50
Road Construction Debt		
Water Fund		7,981.03
Parking Fund		1,029.41
Road/Building Bond Escrow		
TOTAL	\$	436,292.36
<u>Wire Payments</u>		
2/20/15 PAYROLL		133,600.45
Total Warrant	\$	569,892.81