LEGISTAR: DISTRICT #: 5

VILLAGE OF LOMBARD REQUEST FOR BOARD OF TRUSTEES ACTION

For Inclusion on Board Agenda

<u>X</u>		ance (Blue)Waive. of Boards, Commissions & (k)	
TO:	PRESIDENT AND	BOARD OF TRUSTEES	
FROM:	David A. Hulseberg	, Village Manager	
DATE:	March 2, 2012	(BOT) Date:	March 15, 2012
SUBJECT:	Intergovernmental Storm Sewer	Agreement with Villa Pa	ark – Washington Boulevard
SUBMITTED BY:	Carl S. Goldsmith, I	Director of Public Works	
BACKGROUND/PO	LICY IMPLICATIO	ONS:	
with the Village of Vil Washington Boulevard	la Park regarding the of the self right-of-way. The se	construction of a twelve (12	isting sewer in the Addison Street
Fiscal Impact/Fundin	ng Source:		
\$55,000 Jobs N	low Funding		
Review (as necessary):	:		
			nte
			nte
		nitted to and approved by , prior to the agenda distr	the Village Manager's Office



March 1, 2012

TO: Village President and Board of Trustees

THROUGH: David A. Hulseberg, Village Manager

FROM: Carl Goldsmith, Director of Public Works

SUBJECT: Intergovernmental Agreement with Villa Park regarding the Washington Street

Storm Sewer

Background

Following the July 23, 2010 storm event, the Village of Lombard undertook efforts to address stormwater and flooding issues throughout the community. The FYE 2011 and FYE 2012 Capital Improvements Plans contained a significant investment and focus on this issue. As part of the ongoing effort, the staff has proposed the construction of a twelve (12) inch storm sewer in the right-of-way of Washington Boulevard, between Kelly Court and Addison Street, to alleviate flooding in the public right-of-way and on private property. The receiving sewer located on Addison Avenue is jointly owned by the Village of Lombard and the Village of Villa Park. As this sewer is jointly owned and the flow is directed into Villa Park, staff approached Villa Park with an intergovernmental agreement that would allow the Village to make the connection into the Addison Street Sewer.

The Village of Lombard developed the plans for this project using in-house engineering staff. The plan was presented to Villa Park for review and comment. In order to ensure that the additional stormwater would not cause damage to the downstream areas, the engineering firm of V3 was retained by Villa Park to evaluate the impact the additional stormwater would have on Villa Park's sewer system. The report, attached as Exhibit B to the IGA, concluded that while the proposed improvement will introduce more water into the Addison Street storm sewer, it is highly unlikely that the proposed Lombard improvements would result in any noticeable impact in flood elevation. The consultant further recommended that the IGA contain a reversion provision requiring Lombard to reconnect the Kelly Court sewer back into the combined sewer system if new flooding problems are identified. The proposed IGA includes such a clause.

The IGA provides that Villa Park will permit the Village of Lombard subject to the following conditions:

- Lombard will fund the full cost of the improvement, which is estimated at \$55,000
- Lombard will submit plans for the project to Villa Park for review and permitting

- Upon completion of the project, the Village of Lombard will be required to submit record drawings to Villa Park
- In the event that Villa Park determines that the project results in repetitive loss due to
 overland flooding, that causes damage to structures and along Addison Street, Lombard
 agrees to reconnect the Washington Boulevard sewer to Lombard's combined system and
 disconnect the sewer from the Addison Street Sewer, or take other mutually acceptable
 mitigation measures.

It is anticipated that the improvements would be completed this summer. The cost of the project is estimated at \$55,000. The source of funding for this project will come from the Local Government Component of the *Jobs Now* program.

The IGA has been reviewed by the Village Attorney and is consistent with past IGAs executed by the Village. The Village of Villa Park has placed this item on their Village Board agenda for their March 12, 2012 meeting. I respectfully request that this item be placed on the Village Board's agenda for the March 15, 2012 meeting.

Recommendation

Staff recommends that the Village Board of Trustees approve an Intergovernmental Agreement between the Village of Lombard and the Village of Villa Park regarding the Washington Boulevard Storm Sewer Improvement.

RESOLUTION R ____-12

A RESOLUTION AUTHORIZING SIGNATURE OF PRESIDENT AND CLERK ON AN AGREEMENT

WHEREAS, the Corporate Authorities of the Village of Lombard have received an intergovernmental Agreement between the Village of Lombard and the Village of Villa Park regarding the construction of a twelve (12) inch storm sewer in the right-of-way of Washington Boulevard, between Kelly Court and Addison Street, to alleviate flooding in the public right-of-way and on private property. An engineering drawing and estimate of cost are included as attached hereto and marked as Exhibit "A" and Exhibit "B" respectively.

WHEREAS, the Corporate Authorities deem it to be in the best interest of the Village of Lombard to approve such agreement.

NOW, THEREFORE, BE IT RESOLVED BY THE PRESIDENT AND BOARD OF TRUSTEES OF THE VILLAGE OF LOMBARD, DU PAGE COUNTY, ILLINOIS as follows:

SECTION 1: That the Village President be and hereby is authorized to sign on behalf of the Village of Lombard said agreement as attached hereto.

SECTION 2: That the Village Clerk be and hereby is authorized to attest said agreement as attached hereto.

Adopted this 15 ^h day of March, 2012.		
Ayes:		
Nayes:		
Absent:		
Approved this 15 th day of March, 2012.		
	William J. Mueller Village President	
ATTEST:		
Brigitte O'Brien Village Clerk		
APPROVAL AS TO FORM:		
Thomas P. Bayer		
Village Attorney		

AN INTERGOVERNMENTAL AGREEMENT BETWEEN THE VILLAGE OF VILLA PARK AND THE VILLAGE OF LOMBARD IN REGARD TO MODIFICATIONS TO THE ADDISON STREET STORM SEWER

THIS AGREEMENT (hereinafter referred to as the "Agreement"), entered into this _____ day of _____, 2012, by and between the VILLAGE OF VILLA PARK (hereinafter referred to as the "VILLA PARK") and the VILLAGE OF LOMBARD (hereinafter referred to as the "LOMBARD"). VILLA PARK and LOMBARD are hereinafter sometimes individually referred to as a "Party" and collectively referred to as the "Parties."

WITNESSETH

WHEREAS, the Parties are the joint owners of a storm sewer, generally located on the centerline of Addison Street, between Washington Boulevard and Madison Street (hereinafter referred to as the "ADDISON STREET STORM SEWER"); and

WHEREAS, LOMBARD has proposed the construction of a twelve (12) inch storm sewer in the right-of-way of Washington Boulevard, between Kelly Court and Addison Street, to alleviate flooding in the public right-of-way and on private property (hereinafter referred to as the "PROJECT"); and

WHEREAS, VILLA PARK has jurisdiction over that portion of the ADDISON STREET STORM SEWER located east of the centerline of Addison Street; and

WHEREAS, LOMBARD has developed a plan to construct the PROJECT, a copy of which is attached hereto as Exhibit "A" and made part hereof (hereinafter referred to as the "PLAN") and has provided VILLA PARK with calculations on the impact of the PROJECT on areas downstream of the PROJECT; and

WHEREAS, VILLA PARK has retained a consultant to determine the impact the PROJECT would have on the downstream area; and

WHEREAS, VILLA PARK's consultant has presented a memorandum, dated November 30, 2011, a copy of which has been attached as Exhibit "B" and made part hereof, that determined it is unlikely that the PROJECT would result in a noticeable impact in flood elevations on the downstream area; and

WHEREAS, the Parties agree that LOMBARD may construct the PROJECT, subject to the following conditions:

- A. LOMBARD will fund the full cost of the PROJECT;
- B. LOMBARD shall submit plans for the PROJECT to VILLA PARK for review and permitting;

- C. Upon completion of the PROJECT, LOMBARD shall submit record drawings to VILLA PARK;
- D. In the event that VILLA PARK determines that the PROJECT results in repetitive loss due to overland flooding, including but not limited to damage to structures and property to low areas along Addison Street, Lombard agrees to reconnect the Washington Boulevard sewer to Lombard's combined system and disconnect the PROJECT from the ADDISON STORM SEWER, or take other mutually acceptable mitigation measures; and

WHEREAS, Article VII, Section 10 of the 1970 Illinois Constitution and 5 ILCS 220/1 through 220/9 provide the authority for this Agreement; and

WHEREAS, it is in the best interests of VILLA PARK and LOMBARD to enter into this Agreement;

- **NOW, THEREFORE**, in consideration of the foregoing, and the mutual covenants and agreements contained herein, and other good and valuable consideration, the receipt and sufficiency of which are acknowledged by the Parties, the Parties hereto agree as follows:
- **1.** <u>INCORPORATION OF PREAMBLES.</u> The preambles hereto, as set forth above, are incorporated herein by reference and are made part hereof.
- **2.** <u>VILLA PARK OBLIGATIONS.</u> In relation to the PROJECT, VILLA PARK hereby grants LOMBARD the authority to construct the PROJECT with the connection of same to that portion of the ADDISON STREET STORM SEWER under the jurisdiction of VILLA PARK, including any and all necessary improvements as identified in the PLAN.
- **3.** <u>LOMBARD OBLIGATIONS.</u> In relation to the PLAN and the PROJECT, LOMBARD agrees to
 - A. Present final plans and specifications to VILLA PARK, prior to the construction of the PROJECT;
 - B. Pay for all costs related to construction, restoration, associated landscaping and maintenance of any additional landscaping until established;
 - C. Provide VILLA PARK, through the use of LOMBARD's engineering staff, all design and resident engineering reports during the construction of the PROJECT; and
 - D. Provide VILLA PARK with record ("as-built") drawings upon completion of the PROJECT.
- **4. SURVEY, DESIGN AND CONSTRUCTION OF THE PROJECT.** LOMBARD shall proceed with the design, bidding, contract award, and construction of the PROJECT, in

accordance with the PLAN. The VILLAGE shall make reasonable efforts to complete the PROJECT prior to June 1, 2012.

- 5. LOMBARD INDEMNIFICATION OF VILLA PARK. LOMBARD shall indemnify and hold harmless VILLA PARK and, and its elected officials, officers, agents and employees, with respect to any claim or loss, including, but not limited to, attorney's fees, costs and expenses of litigation, claims and judgments in connection with any and all claims for damages of any kind which may arise, either directly or indirectly, out of the acts or omissions of LOMBARD, or its elected officials, officers, agents, employees, consultants or contractors, arising from the design or construction of the PROJECT. LOMBARD further agrees to require any contractor to include VILLA PARK, and its elected officials, officers, agents and employees, as additional insureds on the insurance policies required of the contractor relative to the PROJECT, which insurance policies shall be written with insurers and in amounts reasonably satisfactory to VILLA PARK.
- 6. <u>VILLA PARK INDEMNIFICATION OF LOMBARD</u>. VILLA PARK shall indemnify and hold harmless LOMBARD, and its elected officials, officers, agents and employees, with respect to any claim or loss, including, but not limited to, attorney's fees, costs and expenses of litigation, claims and judgments in connection with any and all claims for damages of any kind which may arise, either directly or indirectly, out of the acts or omissions of VILLA PARK, or its elected officials, officers, agents, employees, consultants or contractors, pursuant to this Agreement.
- **7.** NO WAIVER OF TORT IMMUNITY DEFENSES. Nothing contained in Sections 5 or 6 above, or in any other provision of this Agreement, is intended to constitute, nor shall constitute, a waiver of the defenses available to any of the Parties under the Illinois Local Governmental and Governmental Employees Tort Immunity Act (745 ILCS 10/1-101 *et seq.*) with respect to claims by third parties.
- **8. Notice** or other writings which either Party is required to, or may wish to, serve upon the other Party in connection with this Agreement shall be in writing and shall be delivered personally or sent by registered or certified mail, return receipt requested, postage prepaid, addressed as follows:

A. If to LOMBARD:

Village Manager Village of Lombard 255 East Wilson Avenue Lombard, Illinois 60148

C. If to VILLA PARK:

Village Manager Village of Villa Park 20 S. Ardmore Avenue

Villa Park, Illinois 60181

or to such other address, or additional parties, as either Party may from time to time designate in a written notice to the other Party. Service by certified mail shall be deemed given on the third day following the mailing of said notice, and service by personal delivery shall be deemed given upon actual delivery.

- **9.** <u>COUNTERPARTS.</u> This Agreement shall be executed simultaneously in two (2) counterparts, each of which shall be deemed an original, but all of which shall constitute one and the same Agreement.
- 10. <u>ENTIRE AGREEMENT.</u> This Agreement contains the entire understanding between the Parties and supersedes any prior understanding or written or oral agreements between them regarding the within subject matter. There are no representations, agreements, arrangements or understandings, oral or written, between and among the Parties hereto relating to the subject matter of this Agreement which are not fully expressed herein.
- 11. **EFFECTIVE DATE.** This Agreement shall be deemed dated and become effective on the date on which the last of the Parties executes this Agreement as set forth below.

IN WITNESS WHEREOF, LOMBARD, pursuant to authority granted by the adoption of a [Motion/Resolution] by its Board of Trustees, has caused this Agreement to be executed by its President and attested by its Clerk; and VILLA PARK, pursuant to authority granted by the adoption of a [Motion/Resolution] by its Board of Trustees, has caused this Agreement to be signed by its President and attested by its Clerk.

By:

William J. Mueller
Village President

ATTEST:

Brigitte O'Brien
Village Clerk

Dated:

VILLAGE OF LOMBARD

Village of Villa Park

By:		
	Thomas Cullerton	
	Village President	
ATTI	EST:	
	Hosanna Korynecky	
	Village Clerk	
Dated	d·	

STATE OF ILLINOIS)
) SS
COUNTY OF DuPAGE)

I, the undersigned, a Notary Public, in and for the County and State aforesaid, DO HEREBY CERTIFY that the above-named William J. Mueller and Brigitte O'Brien, personally known to me to be the Village President and Village Clerk the Village of Lombard, and also known to me to be the same persons whose names are subscribed to the foregoing instrument as such Village President and Village Clerk, respectively, appeared before me this day in person and severally acknowledged that as such Village President and Village Clerk they signed and delivered the signed instrument, pursuant to authority given by the Village of Lombard, as their free and voluntary act, and as the free and voluntary act and deed of said Village of Lombard, for the uses and purposes therein set forth, and that said Village Clerk, as custodian of the corporate seal of said Village of Lombard, caused said seal to be affixed to said instrument as said Village Clerk's own free and voluntary act and as the free and voluntary act of said Village of Lombard, for the uses and purposes therein set forth.

GIVEN under my hand and Nota	ary Seal, this day of	, 2012
	Notary Public	
My Commission Expires:		

STATE OF ILLINOIS)
) SS
COUNTY OF DuPAGE)

I, the undersigned, a Notary Public, in and for the County and State aforesaid, DO HEREBY CERTIFY that the above-named Thomas Cullerton and Hosanna Korynecky, personally known to me to be the Village President and Village Clerk the Village of Villa Park, and also known to me to be the same persons whose names are subscribed to the foregoing instrument as such Village President and Village Clerk, respectively, appeared before me this day in person and severally acknowledged that as such Village President and Village Clerk they signed and delivered the signed instrument, pursuant to authority given by the Village of Villa Park, as their free and voluntary act, and as the free and voluntary act and deed of said Village of Villa Park, for the uses and purposes therein set forth, and that said Village Clerk, as custodian of the corporate seal of said Village of Villa Park, caused said seal to be affixed to said instrument as said Village Clerk's own free and voluntary act and as the free and voluntary act of said Village of Lombard, for the uses and purposes therein set forth.

GIVEN under my hand and Not	ary Seal, this day of	, 2012
	Notary Public	
My Commission Expires:		

Exhibit "A"

Washington Boulevard Storm Sewer PLAN

(see attached)

Proposed Storm Sewer Improvements for Kelly Court





Exhibit "B"

$Consultant \ (V3) \ Evaluation \ of \ PROJECT$

(see attached)



MEMORANDUM

DATE:

November 30, 2011

TO:

Vydas Juskelis, Village of Villa Park

FROM:

Derrick Martin, V3

CC:

Rich Salemo & Vassili Voskresenski - Villa Park; Jeff Kline - V3

RE:

Evaluation of Village of Lombard's Proposed Kelly Court Storm Sewer

Improvements

As a follow up to the meeting previously held at the Village and attended Dave Gorman with the Village of Lombard, V3 has performed some basic hydrologic and hydraulic computations in an effort to better understand the potential impact of the proposed Kelly Court storm sewer improvements on the Village of Villa Park's storm sewer system and adjacent flood prone areas. As discussed at the meeting, a comprehensive flood study that considered all of the complex interactions between both Village's storm sewer and combined sewer systems was not considered to be a cost-effective approach to evaluating the potential impacts. Although everyone seemed to intuitively feel that the proposed improvements would not create new flooding issues for the Village of Villa Park, it was determined that some calculations should be provided to get a sense of the magnitude of the impact (if any).

The proposed Kelly Court storm sewer improvements would transfer storm sewer discharge associated with the Kelly Court drainage area (approx. 16.7 acres) from the Village of Lombard's combined sewer system, which ultimately discharges to the East Branch of the DuPage River, to the Addison Road storm sewer system, which is alternately owned by Villa Park and Lombard and ultimately discharges to Salt Creek via Sugar Creek. The majority of the Kelly Court tributary area drains to an existing stormwater basin / depressional area that discharges to Lombard's combined sewer system.

There was some discussion at the last meeting that in larger storm events, the Kelly Court area overflows to the north and ultimately bypasses the Addison Avenue and associated Madison Street storm sewer systems. Based on the aerial topography provided by the Village/County, it appears that overland flow from the Kelly Court area will ultimately make it to the Addison Avenue storm sewer system by either overflowing through side and back yards to the east of Kelly Court (entering the system at the low point north of Madison Street) or by overflowing north and east along Washington Street (entering the system at the intersection of Washington and Addison). If the overflow is to the north and east along Washington Street, it is possible that in extreme events, flow continues east past Addison

Avenue and ultimately flow south along Wisconsin Avenue before entering the Madison Street system. Based on this information, it appears that the proposed improvements will not alter the natural drainage route as dictated by existing topography (see the provided Drainage Exhibit).

Additional calculations were performed to determine how frequently runoff from the Kelly Court area makes it to the Addison Avenue system via overland flow and to evaluate if the additional volume of runoff will have adverse impacts on the Villa Park residents adjacent to the Addison Avenue low area just north of Madison Street. The Addison Avenue storm sewer system was evaluated with Hydraflow Storm Sewers, a computer program for urban hydrosystems engineering. As-built plan information from past Addison Avenue improvements was provided by Villa Park and supplemented with information and calculations initially provided by Lombard. Where no information was available, engineering judgment was used.

Since the primary concern identified is the low area of Addison Avenue just north of Madison Street, the evaluation focused on the potential impact to this area from the additional flow that would be diverted as a result of the improvements. Both the Kelly Court area and the existing low area on Addison Avenue were evaluated similar to how a detention basin or any other storage area would be evaluated. The drainage areas directly tributary to these area were delineated and the runoff was calculated and routed through the existing storage (detention basin, naturally occurring low areas, etc.) using TR-20, a hydrologic computer program. It should be noted that some assumptions were made with respect to the tributary drainage areas. Specifically, the area tributary to the Addison Avenue low area may be significantly larger depending on the presence and/or capacity of existing storm sewer and/or combined sewer systems in the Village of Lombard (no information was provided) as well as the specific grading at key intersections such as Addison and Madison which can re-direct flow in different directions. That said, the goal is get a sense of the impact associated with the proposed improvements and not necessarily calculate calibrated water surface elevations.

The discharges from these storage areas were based on an evaluation of the storm sewer system (existing and proposed) and/or the flow capacity of the natural overland flow path. The system was evaluated for the critical duration range of storm events. In both the existing and proposed conditions, runoff from the Kelly Court drainage area was routed though the Kelly Court storage area and then combined with the runoff from the drainage area directly tributary to the Addison Avenue low area. This combined runoff was then routed through the storage area on Addison Avenue to calculate existing and proposed water surface elevations. In the existing conditions analysis (no Kelly Court storm sewer improvements), the discharge from this area to the Addison Avenue system only considered overland flow.

This is mentioned as a point of clarification since the resulting water surface elevations calculated for the Kelly Court detention basin are most likely higher than what would be expected for smaller storm events (since some flow would be leaving the combined system). Similarly, this assumption results in calculated water surface elevations that suggest overtopping occurs more frequently than what probably actually happens and subsequently makes the improvement in this area from the storm sewer improvements look a little more significant that what will actually be observed. In the proposed conditions analysis, the discharge from this area is based on the rating curve information previously provided by

Lombard as part of their initial evaluation (it includes the 6" restrictor with the 0.15 cfs Reg-U-Flo Vortex Control devises). A comparison table of the results is included below.

COMPARISON TABLE OF CALCULATED WATER SURFACE ELEVATIONS AT ADDISON AVE LOW AREA

	Max	1-YR	Difference (ft)	Max	5-YR	Difference (ft)	Max	10-YR	Difference (ft)	Max 2	25-YR	Difference (ft)	Max 5	50-YR	Difference (ft)	Max 1	00-YR	Difference (ft)
	EX	PP	PP - EX															
Kelly Court	711.71	709.52	-2.19	712.18	710.90	-1.28	712.27	711.55	-0.72	712.45	711.55	-0.90	712.62	712.36	-0.26	712.82	712.60	-0.22
L																		
Addison Ave Low Area	701.61	701.71	0.10	701.92	702.02	0.10	702.07	702.26	0.19	702.49	702.84	0.35	703.53	703.62	0.09	704.13	704.12	-0.01

Critical Elevations

721 S. Addison: 703.68 725 S. Addison: 704.07 Window

As previously discussed, the results for the Kelly Court area show greater reductions in water surface elevations than what will likely be realized, especially for the more frequent storms. The results also indicate that the Kelly Court area overtops and flows overland towards Addison Avenue at approximately a 25-year storms or larger (assuming an overflow elevation of 712.5 to the east). Based on the proposed conditions results, it is anticipated that overland flow between Kelly Court and the Addison Avenue system likely only occurs for storms greater than a 50-year storm.

As expected, the results show an increase in the water surface elevations at the Addison Avenue Low Area for almost all storm events (the small decrease for the 100-year event is likely a computational/rounding issue or a timing issue). An increase was expected since more runoff volume is being diverted to this area and the existing storm sewer has a limited capacity. Included at the bottom of the table are the critical elevations provided by Villa Park for the residences located near the Addison Avenue low area. Based on the results, the water surface elevations in this area in both existing and proposed conditions may be above the lowest window elevations at the 721 & 725 S. Addison residences for the 100-year storm event.

That being said, it should be reiterated that this evaluation takes a very simplified approach and does not account for all the potential tailwater impacts on the Kelly Court proposed storm sewer system or the potential storage benefits from surcharging at the intersection of Washington and Addison. Similarly, this evaluation did not consider all of the naturally existing storage located between Addison Avenue and Wisconsin Avenue since this would have required a more detailed look at the Wisconsin Avenue storm sewer system.

Conclusion

The proposed improvements will introduce more water into the Addison Avenue storm sewer system than currently goes there today. The results of this cursory evaluation suggest the maximum increase in water surface elevation at the Addison Avenue low area is less than 0.4 feet and is more likely in the neighborhood of 0.2 feet or less. Additionally, the calculations and field survey indicate that any water surface elevation increases from the proposed Kelly Court improvements won't result in elevations that exceed the critical elevations associated with residential low openings (some elevations are exceeded in existing conditions).

Although it would be difficult (if not impossible) to prove no adverse impact to the Village's storm sewer system and/or surrounding areas, it is highly unlikely that the proposed Kelly

Court improvements will result in any noticeable impact in flood elevations. That said, the low area on Addison Avenue is a known flooding problem so the Village may want to establish an agreement with the Village of Lombard that allows a re-connection to their combined system if new flooding problems are identified (not sure exactly how that would work).

. . . e.





KELLY COURT STORM SEWER IMPROVEMENTS