Winnetka Village Council
RESCHEDULED REGULAR MEETING
Village Hall
510 Green Bay Road
Thursday, April 17, 2014
7:00 p.m.

Emails regarding any agenda item are welcomed. Please email contactcouncil@winnetka.org, and your email will be relayed to the Council members. Emails for the Tuesday Council meeting must be received by Monday at 4 p.m. Any email may be subject to disclosure under the Freedom of Information Act.

AMENDED AGENDA

1) Call to Order
2) Pledge of Allegiance
3) Quorum
   a) May 6, 2014 Regular Meeting
   b) May 13, 2014 Study Session
   c) May 20, 2014 Regular Meeting
4) Filling vacant Village Trustee position
5) Seating of new Trustee
6) Approval of Agenda
7) Consent Agenda
   a) Approval of Village Council Minutes
      i) April 1, 2014 Regular Meeting 3
   b) Approval of Warrant List 6
   c) Ordinance M-4-2014: Disposition of Surplus Vehicles and Equipment – Adoption 7
   d) 2014 Concrete Replacement Program – Municipal Partnering Bid 12
   e) Bid #014-011: Refuse Body Replacement 15
8) Stormwater Monthly Summary Report 68
9) Ordinances and Resolutions
   a) Ordinance MC-5-2014: Amends Village Code to Adopt & Administer the WMO of the MWRD – Intro/Adopt 77
   b) Resolution R-10-2014: Intergovernmental Agreement with Metropolitan Water Reclamation District – Adoption 122
   c) Resolution R-14-2014: Approving and Adopting the Stormwater Master Plan – Adoption 139
10) Public Comment

11) Old Business

12) New Business

a) Proposed 2014 Pavement Rehabilitation Program 244

13) Appointments

14) Reports

15) Executive Session

16) Adjournment

Posted: April 14, 2014, at 3:15 p.m.

NOTICE

All agenda materials are available at villageofwinnetka.org (Government > Council Information > Agenda Packets & Minutes); the Reference Desk at the Winnetka Library; or in the Manager's Office at Village Hall (2nd floor).

Broadcasts of the Village Council meetings are televised on Channel 10 and AT&T Uverse Channel 99 every night at 7 PM**.** Webcasts of the meeting may also be viewed on the Internet via a link on the Village's web site: http://winn-media.com/videos/

The Village of Winnetka, in compliance with the Americans with Disabilities Act, requests that all persons with disabilities who require certain accommodations to allow them to observe and/or participate in this meeting or have questions about the accessibility of the meeting or facilities, contact the Village ADA Coordinator – Megan Pierce, at 510 Green Bay Road, Winnetka, Illinois 60093, 847-716-3543; T.D.D. 847-501-6041.

MINUTES
WINNETKA VILLAGE COUNCIL
REGULAR MEETING
April 1, 2014

(Approved: xx)

A record of a legally convened meeting of the Council of the Village of Winnetka, which was held in the Village Hall Council Chambers on Tuesday, April 1, 2014, at 7:00 p.m.

1) Call to Order. President Greable called the meeting to order at 7:00 p.m. Present: Trustees Arthur Braun, Jack Buck, Richard Kates, and Stuart McCrary. Absent: Trustee Patrick Corrigan and Village Manager Rob Bahan. Also present: Assistant to the Village Manager Megan Pierce, Village Attorney Katherine Janega, and approximately 9 persons in the audience.

2) Pledge of Allegiance. President Greable led the group in the Pledge of Allegiance.

3) Quorum.

   a) April 8, 2014 Study Session. All of the Council members present indicated that they expected to attend.

   b) April 17, 2014 Rescheduled Regular Meeting. All of the Council members present, with the possible exception of Trustee McCrary, indicated that they expected to attend.

   c) May 6, 2014 Regular Meeting. All of the Council members present indicated that they expected to attend.

4) Approval of the Agenda. President Greable announced that Trustee Joe Adams is resigning from the Village Council, effective immediately, and that the vacancy would be filled as directed by State statute. Trustee Braun, seconded by Trustee McCrary, moved to approve the Agenda. By roll call vote the motion carried. Ayes: Trustees Braun, Buck, Kates and McCrary. Nays: None. Absent: Trustee Corrigan.

5) Consent Agenda

   a) Village Council Minutes.

      i) March 11, 2014 Study Session.

      ii) March 20, 2014 Rescheduled Regular Meeting.

   b) Warrant List. Approving the Warrant List in the amount of $442,554.95.

   c) Resolution R-6-2014: Green Bay Road & Oak Street Traffic Signal – Adoption. A Resolution authorizing the expenditure of $250,000 in Motor Fuel Tax funds for the Traffic Signal Modernization Project for Green Bay Road and Oak Street.

   d) Resolution R-8-2014: Approving and Establishing the Salaries of Department Heads Effective April 1, 2014 – Adoption. A Resolution approving and establishing the salaries of the Village's Department Heads, effective April 1, 2014, as required by Village Code.

   e) Resolution R-9-2014: Approving and Establishing Changes in the Base Salary of the Village Manager – Adoption. A Resolution approving and establishing changes to the base salary of the Village Manager, effective April 1, 2014, as required by Village Code.

   f) Replacement of Batting Cages at Duke Childs Field, 1321 Willow Road. Approval of the replacement of two batting cages at Duke Childs Athletic Field with the same dimensions

and in the same location as the existing batting cages, subject to consistency with the plan by Protective Sports Concepts LLC.

g) 2014 Parkway Tree Planting. Awarding the 2014 Parkway Tree Planting Program jointly to St. Aubin Nursery and Acres Group Services, based on lower price per tree species as submitted, for an estimated total amount of $45,624.

Trustee Braun, seconded by Trustee McCrary, moved to approve the foregoing items on the Consent Agenda by omnibus vote. By roll call vote, the motion carried. Ayes: Trustees Braun, Buck, Kates and McCrary. Nays: None. Absent: Trustee Corrigan.

6) Stormwater Update. No report.

7) Ordinances and Resolutions.

a) Ordinance MC-4-2014: Amending the Liquor Control Regulations in WVC Chapter 5.09 – Amend & Adopt. Attorney Janega reviewed the final amendments that were made to the Ordinance since introduction. She noted that she had met with Mr. Kaveh Mirani to resolve concerns he raised when the Ordinance was introduced.

Trustee McCrary suggested a final amendment to change the definition of a serving from an ounce to a jigger, and a pour of wine from four ounces to six.

The Council agreed with Trustee McCrary's suggested amendment to the Ordinance.

Trustee Braun, seconded by Trustee McCrary, moved to amend Ordinance MC-4-2014 as presented, with the additional amendments suggested by Trustee McCrary. By roll call vote, the motion carried. Ayes: Trustees Braun, Buck, Kates and McCrary. Nays: None. Absent: Trustee Corrigan.

Trustee Braun, seconded by Trustee McCrary, moved to adopt Ordinance MC-4-2014 as amended. By roll call vote, the motion carried. Ayes: Trustees Braun, Buck, Kates and McCrary. Nays: None. Absent: Trustee Corrigan.

b) Ordinance M-4-2014: Disposition of Surplus Vehicles and Equipment – Introduction.

Attorney Janega explained that the Village needs to periodically dispose of vehicles and equipment that are no longer used and useful for the Village. The Northwest Municipal Conference (NWMC) holds quarterly live auctions for this purpose, and the subject Ordinance authorizes the disposition of six vehicles that are beyond their useful lives or in poor condition.

Trustee McCrary asked why the vehicles were kept for so long; and Trustee Braun asked if there was data on sales price vs. estimated value when vehicles are auctioned.

Attorney Janega said Staff would research the answers to the questions and respond to the Trustees' questions.

Trustee Braun, seconded by Trustee McCrary, moved to introduce Ordinance M-4-2014. By voice vote, the motion carried.

c) Resolution R-7-2014: Post Office Lease – Adoption. Attorney Janega explained that the current Post Office lease expires on April 30, 2014, and Village Manager Rob Bahan has negotiated a new lease term, which is month-to-month and includes a 12-month termination notice for either party. The new lease agreement maintains a Post Office presence in the community, while granting flexibility to the Village in pursuing alternative uses for the site.

President Greable said redevelopment of the Post Office site is a top priority for the Council, in keeping with the Urban Land Institute recommendations from its Technical Assistance Panel process.

Trustee Braun, seconded by Trustee McCrary, moved to adopt Resolution R-7-2014. By roll call vote, the motion carried. Ayes: Trustees Braun, Buck, Kates and McCrary. Nays: None. Absent: Trustee Corrigan.

8) Public Comment.

Bernard Timmer, 616 Meadows Court, Rantoul. Mr. Timmer said he believes that certain contractors in Winnetka are not meeting the code requirements for window installation and that he discussed his concerns with the Community Development Department.

Attorney Janega explained that the codes had been updated in 2012, and it is possible that some permits were already going through in the approval process with the older code. She said Staff would follow up on the issue.

Darren McCoy, Communications Director of District 36 Schools. Mr. McCoy invited the Council and the Winnetka community to come and meet the District's new Superintendent on April 10 at 5:30 PM, at the Skokie School Community Room.

9) Old Business. None.

10) New Business. None.

11) Appointments. None.

12) Reports.

a) Village President. None.

b) Trustees.

i) Trustee Braun reported on the most recent meeting of the Business Community Development Commission (BCDC), and he commended the Community Development Department for providing very helpful data for the discussion on the Overlay District.

ii) Trustee McCrary said election signs are recyclable and invited anyone having trouble recycling their signs to contact him. He reminded the community that the annual Spring Cleanup begins on April 28.

iii) Trustee Kates said the Plan Commission was unable to meet in March but is eager to see the report from the BCDC on the Overlay Districts.

c) Attorney. Attorney Janega announced that she would be retiring on July 1, 2014, after serving as Village Attorney for 20 years.

d) Manager. None.

13) Executive Session. None.

14) Adjournment. Trustee Braun, seconded by Trustee Kates, moved to adjourn the meeting. By voice vote, the motion carried. The meeting adjourned at 7:37 p.m.

_____

Recording Secretary

Agenda Item Executive Summary

Title: Warrant List

Presenter: Robert M. Bahan, Village Manager

Agenda Date: 04/17/2014

Consent: ☑ YES ☐ NO

☐ Ordinance
☐ Resolution
☐ Bid Authorization/Award
☐ Policy Direction
☑ Informational Only

Item History:

None.

Executive Summary:

The Warrant List for the April 17, 2014 Rescheduled Regular Council Meeting was emailed to each Village Council member.

Recommendation / Suggested Action:

Consider approving the Warrant List for the April 17, 2014 Rescheduled Regular Council Meeting.

Attachments:

None.

Agenda Item Executive Summary

Title: M-4-2014 - Disposition of Surplus Vehicles and Equipment (Adoption)

Presenter: Steven M. Saunders, Director of Public Works

Agenda Date: 04/17/2014

Consent: ☑ YES ☐ NO

☑ Ordinance
☐ Resolution
☐ Bid Authorization/Award
☐ Policy Direction
☐ Informational Only

Item History:

April 1, 2014 Council Agenda, pp. 75 - 79

Executive Summary:

From time to time, it is necessary to dispose of vehicles and equipment that are no longer used and useful for the Village. This is generally done through one of the quarterly auctions held by the Northwest Municipal Conference (NWMC).

Ordinance M-4-2014 was introduced at the April 1, 2014, Council meeting. It authorizes the disposition of six surplus vehicles at the next NWMC live auction is scheduled for May 20, 2014. This auction will again be conducted by Manheim Remarketing, pursuant to an agreement with NWMC. All of the vehicles - one from the Public Works Department, four from the Water & Electric Department, and one from the Police Department - are either well past their useful lives or are in such condition that the cost of operating and maintaining them exceeds their value. The ordinance sets out the details for the auction, including minimum pricing, and authorizes surplus that could not be sold at the auction to be disposed of by other methods, such as on-line sales, conveyance to other municipalities, or sale as scrap.

While introducing the ordinance, there were two questions raised. The first question related to how the actual sale price has historically compared to the estimated values. The Village regularly meets the aggregate total minimum for the vehicles sent to auction. The actual sale price for each vehicle is completely dependent on the number and activity of bidders present for a given item, so occasionally an item is released for less than minimum value.

The second question related to WE#83, a relatively low mileage vehicle in poor condition. This vehicle is assigned to the staff at the Water & Electric Plants. The vehicle rarely leaves Village limits and is primarily used to transport personnel to substations, reservoirs, pump stations, and water sampling locations throughout the Village with occasional trips to a hardware store or distributor warehouse. During maintenance of the vehicle, Fleet Services identified approximately $3,000 of repairs that were required to the front shock tower mounting structures if it was to be retained for a longer period. It was determined that repairs were not cost effective. A 2000 GMC Sonoma small (4 cylinder) pickup with approximately 50,000 miles that was no longer required and scheduled for retirement was assessed to be in better mechanical shape, and was reassigned to the Water & Electric Plant.

Recommendation / Suggested Action:

Consider a motion to adopt Ordinance M-4-2014, titled "An Ordinance Authorizing the Disposition of Certain Surplus Vehicles and Equipment Owned by the Village of Winnetka."

Attachments:

Ordinance M-4-2014 - "An Ordinance Authorizing the Disposition of Certain Surplus Vehicles and Equipment Owned by the Village of Winnetka."

ORDINANCE NO. M-4-2014

AN ORDINANCE AUTHORIZING THE DISPOSITION OF CERTAIN SURPLUS VEHICLES AND EQUIPMENT OWNED BY THE VILLAGE OF WINNETKA

WHEREAS, the Village of Winnetka ("Village") is a home rule municipality in accordance with Article VII, Section 6 of the Constitution of the State of Illinois of 1970 and has the authority, except as limited by said Section 6 of Article VII, to exercise any power and perform any function pertaining to the Village's government and affairs and to the public health, safety and welfare; and

WHEREAS, the Council of the Village of Winnetka ("Village Council") finds that the disposal of surplus property owned by the Village, including without limitation the surplus property described in this Ordinance, is a matter pertaining to the affairs of the Village and to the public health, safety and general welfare; and

WHEREAS, the Village of Winnetka owns certain vehicles and equipment that are no longer used and useful to the Village, having been retired from service due to their scheduled replacement, obsolescence or damage (the "Surplus Property"), which Surplus Property is described, and its sale value estimated, in the following table:

VIN / Serial Number	Dept. ID	Year	Make &Model	Comments	Estimated Value
1GTCS19Z9S8537288	PW 03	1995	GMC Pick-up	100,000 miles; poor condition; purchased 06/29/1995 for $12,880	$ 800.00
2FAHP71W87X131687	WE 50	2007	Ford Crown Victoria	Beyond useful life; 4-door sedan; 130,000 miles; fair condition; purchased 01/17/2007 for $21,568	$1,600.00
1FAFP231X6G168563	WE 52	2006	Ford 500	Beyond useful life; 120,000 miles; fair condition; purchased 05/18/2006 for $18,557.33	$1,500.00
1FMZU34X2WUB30671	WE 67	1998	Ford Explorer	Beyond useful life; 82,000 miles; poor condition; purchased 01/09/1998 for $24,570	$ 500.00
1FAFP58282G212198	WE 83	2002	Ford Taurus Wagon	Beyond useful life; 44,000 miles; poor condition; purchased 04/11/2002 for $16,975	$500.00
1FAHP27W58G160954	PD 401	2008	Ford Taurus SEL AWD	Beyond useful life; 80,000 miles; poor condition; purchased 02/13/2008 for $22,693	$500.00

WHEREAS, from time to time the Village Manager requests the authorization to dispose of surplus vehicles and other equipment that are no longer used and useful to the Village, by selling them through auctions and other sales conducted by the Northwest Municipal Conference ("NWMC"), or by other means where such auction or public sale has been unsuccessful, or

where the Village Manager has determined that the cost of advertising and publishing the notice of property for sale, as well as personnel costs for maintaining security and conducting such public sale, exceed the value of such items; and

WHEREAS, the NWMC has scheduled an auction of surplus vehicles and equipment to be conducted by Manheim Remarketing on behalf of the Northwest Municipal Conference at 2:00 p.m., Tuesday, May 20, 2014, at the Manheim Arena, 550 S. Bolingbrook Drive, Bolingbrook, Illinois ("NWMC Auction"); and

WHEREAS, the Village Manager has authorized the NWMC to advertise and obtain bids for the sale of the Surplus Property described herein at the NWMC Auction, with the acceptance of any bids being subject to the approval of the corporate authorities of the Village of Winnetka ("Village Council") pursuant to a duly enacted ordinance; and

WHEREAS, the Village Council hereby finds that the Surplus Property described herein is no longer useful to the Village and that it is in the best interests of the Village to dispose of the Surplus Property as provided in this Ordinance; and

WHEREAS, the Village Council hereby finds that disposal of the Surplus Vehicles as provided in this Ordinance is necessary and proper so as to avoid incurring unnecessary additional costs and unnecessary exposure to liability related to storing or disposing of the Surplus Property; and

WHEREAS, the Council of the Village of Winnetka, in the exercise of its home rule powers pursuant to Section 6 of Article VII of the Illinois Constitution of 1970, hereby finds that it is in the best interests of the Village and its citizens to dispose of the Surplus Property in a manner consistent with the provisions of Section 11-76-4 of the Illinois Municipal Code (65 ILCS 5/11-76-4), as more fully set forth in this Ordinance.

NOW, THEREFORE, be it ordained by the Council of the Village of Winnetka as follows:

SECTION 1: The foregoing recitals are hereby incorporated as the findings of the Council of the Village of Winnetka ("Village Council") , as if fully set forth herein.

SECTION 2: Pursuant to the Village's home rule authority and consistent with Section 11-76-4 of the Illinois Municipal Code, the Village Manager is hereby authorized to direct the sale of the Surplus Property at an auction to be conducted by Manheim Remarketing ("Manheim") on behalf of the Northwest Municipal Conference ("NWMC") at 2:00 p.m., Tuesday, May 20, 2014, at the Manheim Arena, 550 S. Bolingbrook Drive, Bolingbrook, Illinois ("NWMC Auction").

SECTION 3: The Village Manager is further authorized to direct the NWMC to advertise the sale of the Personal Property through area newspapers, direct mailings, and such other channels as the NWMC deems appropriate prior to the date of said NWMC Auction.

SECTION 4: The Village Manager is further authorized to enter into an agreement with the NWMC, or with Manheim acting on behalf of the NWMC and the Village of Winnetka, for the sale of the Surplus Property, whereby the Surplus Property shall be sold at NWMC Auction to the highest bidder or bidders, according to the terms set forth in the NWMC's specifications for the sale of vehicles and equipment at NWMC auctions.

SECTION 5: The Village Manager is further authorized to enter into an agreement with the NWMC, or with Manheim acting on behalf of the NWMC and the Village of Winnetka,

for any of the above-described Surplus Property that has not been sold at the NWMC Auction, to be sold through Manheim's On-Line Vehicle Exchange Service, or through any other method authorized in the agreement between the NWMC and Manheim.

SECTION 6: No bid shall be accepted for the sale of any item of the Surplus Property which is less than the minimum value of said item of personal property as set forth in the table in the preamble to this ordinance, with the Kelly Blue Book value being used for any vehicle for which the estimated value is listed as "TBD," unless the Village Manager, or his designee, so authorizes at the time of the auction, and unless the highest bid received for such item is less than the minimum value set forth in this Ordinance.

SECTION 7: Upon payment in full of the auctioned price by the highest bidder or bidders for any item of the Personal Property, the Village Manager is authorized to direct the NWMC to convey and transfer the title and ownership of said item of Personal Property to the highest bidder or bidders.

SECTION 8: In the event that any of the Surplus Property has not been, or cannot be sold in the manner provided in Sections 4 through 7 of this Ordinance, the Village Manager is authorized to dispose of such Surplus Property in any of the following ways: (a) selling the Surplus Property to the highest bidder, with or without advertising, in a live or on-line sale; (b) selling the Surplus Property for scrap; (c) transferring title to any Illinois municipality, with or without advertising and/or competitive bidding; or (d) in any other lawful manner that the Village Manager determines will either generate the most income or result in the lowest cost to the Village. The method, terms and conditions of any disposition of Surplus Property pursuant to this Section 8 shall be established by the Village Manager on a case by case basis, after considering such factors as the estimated value of the Surplus Property, the cost of advertising, the cost of continued storage for possible future sale, and, in the case of transfer to another unit of government, the needs and financial capabilities of such transferee.

SECTION 9: This Ordinance is passed by the Council of the Village Winnetka in furtherance of Article VII, Section 10 of the Constitution of the State of Illinois, and the Intergovernmental Cooperation Act, 220 ILCS 220/1, *et seq.*, which authorizes and encourages intergovernmental cooperation.

SECTION 10: This Ordinance is passed by the Council of the Village of Winnetka in the exercise of its home rule powers pursuant to Section 6 of Article VII of the Illinois Constitution of 1970.

[Remainder of this page intentionally left blank.]

SECTION 11 This Ordinance shall take effect immediately upon its passage, approval and posting as provided by law.

PASSED this 17th day of April, 2014, pursuant to the following roll call vote:

AYES: _____

NAYS: _____

ABSENT: _____

APPROVED this 17th day of April, 2014.

Signed:

_____
Village President

Countersigned:

_____
Village Clerk

Published by authority of the President and Board of Trustees of the Village of Winnetka, Illinois, this ___ day of _____, 2014.

Introduced: April 1, 2014
Passed and Approved:

Agenda Item Executive Summary

Title: 2014 Concrete Replacement Program - Municipal Partnering Bid

Presenter: Steven M. Saunders, Director of Public Works/Village Engineer

Agenda Date:

Consent: ☑ YES ☐ NO

☐ Ordinance
☐ Resolution
☑ Bid Authorization/Award
☐ Policy Direction
☐ Informational Only

Item History: *(reference past Council reviews, approvals, or authorizations)*

The Village of Winnetka has partnered with the municipalities of Glencoe and Northfield to provide for the 2014 Concrete Replacement Program. The idea behind partnering is to combine projects from several municipalities to create economies of scale and obtain reduced pricing.

Executive Summary:

Two bids were submitted and opened. A third bid, from Suburban Concrete, was mistakenly delivered to the Village Hall rather than the Village Yards and was not opened at the time of the bid opening. However, that bid was considered a timely submittal and was opened for consideration. These three bids were submitted by Schroeder & Schroeder, Inc., Suburban Concrete and D'Land Construction, LLC. All bids were reviewed for accuracy and completeness. Bids are summarized as follows:

Bidder	Total Bid	Winnetka Portion
Schroeder & Schroeder. Inc.	$196,784.00	$93,956.00
Suburban Concrete	$211,256.00	$105,338.00
D'Land Construction, LLC	$274,515.00	$131.700.00

The low overall bid was submitted by Schroeder & Schroeder, a qualified contractor for this type of work. Schroeder & Schroeder's pricing is also lowest for Winnetka's portion of the work. Schroeder & Schroeder has successfully completed concrete replacement projects for Winnetka and other communities in the past. They have performed their work to the satisfaction of the Village.

Recommendation / Suggested Action: *(briefly explain)*

Consider awarding the Village of Winnetka's portion of the 2014 Concrete Replacement Program to Schroeder & Schroeder, Inc. in the total amount of $93,956.00.

The FY 2014 Budget (account #100-30-01-650) contains $125,000 for this project. Staff estimated this project at $124,130.00.

Attachments: *(please list individually)*

Bid Tabulation - Total Bid (Glencoe, Northfield and Winnetka)
Bid Tabulation - Winnetka's Portion Only

BID TABULATION
2014 CONCRETE REPLACEMENT PROGRAM
THE VILLAGES OF GLENCOE, NORTHFIELD AND WINNETKA
BID OPENING: APRIL 3, 2014; 11:00 A.M. VILLAGE OF WINNETKA

				SCHROEDER & SCHROEDER, INC. 7306 CENTRAL PARK SKOKIE, IL 60076		SUBURBAN CONCRETE 21227 W COMMERCIAL MUNDELEIN, IL 60060		D'LAND CONSTRUCTION, LLC 600 S COUNTY LINE ROAD, #1N BENSENVILLE, IL 60106	
ITEM NO.	ITEM DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL
1	PCC PAVEMENT PATCH CLASS C (9") REMOVAL AND REPLACEMENT	360	SQ YD	$ 40.00	$ 14,400.00	$ 70.00	$ 25,200.00	$ 60.00	$ 21,600.00
2	PCC DRIVEWAY REMOVAL AND REPLACEMENT	225	SQ YD	$ 36.00	$ 8,100.00	$ 41.00	$ 9,225.00	$ 50.00	$ 11,250.00
3	SIDEWALK REMOVAL	36900	SQ FT	$ 0.20	$ 7,380.00	$ 1.00	$ 36,900.00	$ 1.15	$ 42,435.00
4	PCC SIDEWALK, 5"	38400	SQ FT	$ 4.00	$ 153,600.00	$ 3.30	$ 126,720.00	$ 4.50	$ 172,800.00
5	CURB AND GUTTER REMOVAL AND REPLACEMENT (TYPE M-3.12; B-6.12; B-6.18)	580	FOOT	$ 12.00	$ 6,960.00	$ 13.00	$ 7,540.00	$ 25.00	$ 14,500.00
6	CURB AND GUTTER REMOVAL AND REPLACEMENT (TYPE B-6.24)	45	FOOT	$ 16.00	$ 720.00	$ 15.00	$ 675.00	$ 30.00	$ 1,350.00
7	DETECTABLE WARNINGS (WINNETKA)	128	SQ FT	$ 27.00	$ 3,456.00	$ 21.00	$ 2,688.00	$ 25.00	$ 3,200.00
8	DETECTABLE WARNINGS (NORTHFIELD)	16	SQ FT	$ 18.00	$ 288.00	$ 18.00	$ 288.00	$ 25.00	$ 400.00
9	ADA PANEL INSTALLATION: WET SET (GLENCOE)	4	EACH	$ 95.00	$ 380.00	$ 5.00	$ 20.00	$ 245.00	$ 980.00
10	TREE GRATE INSTALLATION (WINNETKA)	10	EACH	$ 150.00	$ 1,500.00	$ 200.00	$ 2,000.00	$ 600.00	$ 6,000.00
	TOTAL BID (AS CALCULATED):				$ 196,784.00		$ 211,256.00		$ 274,515.00
	TOTAL BID (AS READ):				$ 196,784.00		$ 211,256.00		$ 274,515.00

BID TABULATION
2014 CONCRETE REPLACEMENT PROGRAM
THE VILLAGES OF GLENCOE, NORTHFIELD AND WINNETKA
BID OPENING: APRIL 3, 2014; 11:00 A.M. VILLAGE OF WINNETKA

WINNETKA QUANTITIES ONLY

				SCHROEDER & SCHROEDER, INC. 7306 CENTRAL PARK SKOKIE, IL 60076		SUBURBAN CONCRETE 21227 W COMMERCIAL MUNDELEIN, IL 60060		D'LAND CONSTRUCTION, LLC 600 S COUNTY LINE ROAD, #1N BENSENVILLE, IL 60106	
ITEM NO.	ITEM DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL
1	PCC PAVEMENT PATCH CLASS C (9") REMOVAL AND REPLACEMENT	350	SQ YD	$ 40.00	$ 14,000.00	$ 70.00	$ 24,500.00	$ 60.00	$ 21,000.00
2	PCC DRIVEWAY REMOVAL AND REPLACEMENT	100	SQ YD	$ 36.00	$ 3,600.00	$ 41.00	$ 4,100.00	$ 50.00	$ 5,000.00
3	SIDEWALK REMOVAL	15000	SQ FT	$ 0.20	$ 3,000.00	$ 1.00	$ 15,000.00	$ 1.15	$ 17,250.00
4	PCC SIDEWALK, 5"	16500	SQ FT	$ 4.00	$ 66,000.00	$ 3.30	$ 54,450.00	$ 4.50	$ 74,250.00
5	CURB AND GUTTER REMOVAL AND REPLACEMENT (TYPE M-3.12; B-6.12; B-6.18)	200	FOOT	$ 12.00	$ 2,400.00	$ 13.00	$ 2,600.00	$ 25.00	$ 5,000.00
6	CURB AND GUTTER REMOVAL AND REPLACEMENT (TYPE B-6.24)	0	FOOT	$ 16.00	$ -	$ 15.00	$ -	$ 30.00	$ -
7	DETECTABLE WARNINGS (WINNETKA)	128	SQ FT	$ 27.00	$ 3,456.00	$ 21.00	$ 2,688.00	$ 25.00	$ 3,200.00
8	DETECTABLE WARNINGS (NORTHFIELD)	0	SQ FT	$ 18.00	$ -	$ 18.00	$ -	$ 25.00	$ -
9	ADA PANEL INSTALLATION: WET SET (GLENCOE)	0	EACH	$ 95.00	$ -	$ 5.00	$ -	$ 245.00	$ -
10	TREE GRATE INSTALLATION (WINNETKA)	10	EACH	$ 150.00	$ 1,500.00	$ 200.00	$ 2,000.00	$ 600.00	$ 6,000.00
	TOTAL BID (AS CALCULATED):				$ 93,956.00		$ 105,338.00		$ 131,700.00
	TOTAL BID (AS READ):				$ 93,956.00		$ 105,338.00		$ 131,700.00

Agenda Item Executive Summary

Title: Bid #014-011: Refuse Body Replacement

Presenter: Steven M. Saunders, Director of Public Works/Village Engineer

Agenda Date: 04/17/2014

Consent: ☑ YES ☐ NO

☐ Ordinance
☐ Resolution
☑ Bid Authorization/Award
☐ Policy Direction
☐ Informational Only

Item History:

2014 Budget Item

Executive Summary:

The Village of Winnetka uses 25-cubic yard packing bodies mounted on tandem-axle chassis to provide refuse collection services. Truck #29 is a 2003 25-cubic yard Pak-Mor R225B refuse body mounted on a 2003 Freightliner FL80 chassis. The existing refuse packer body is in poor condition and needs to be replaced, however the chassis is in good condition. Rather than replace the entire unit, staff proposes to purchase a new packer body to be mounted on the existing chassis. Bid #014-011 provides for the purchase and delivery of a 25-cubic yard rear loading refuse body.

Bids were opened and read aloud on April 1, 2014. Two bids were received, summarized below;

Bidder	Unit	Bid Price	Meets Specifications
R.N.O.W. Inc.	Loadmaster Excel-S	$64,720	Yes
Stepp Equipment	Leach 2R-111	$69,691	No - 29 exceptions taken

The low bid submitted by R.N.O.W. meets all of the Village's specifications. The FY 2014 Budget contains $65,000 in account 560.80.01-625 for this purchase. Staff recommends awarding Bid #014-011 to R.N.O.W. Inc. of West Allis, WI for this purchase.

Recommendation / Suggested Action:

Consider awarding Bid #014-011 to R.N.O.W. Inc. of West Allis, WI for the purchase of a new Loadmaster Excel-S 25 Cubic Yard refuse body for $64,720.

Attachments:

Attachment #1: R.N.O.W. Bid Proposal
Attachment #2: Stepp Equipment Bid Proposal

ATTACHMENT #1

R.N.O.W. Bid Proposal

R.N.O.W., Inc.
8636R W. National Avenue West Allis, WI 53227
(414)-541-5700 · (414)-543-9797 FAX · www.rnow-inc.com

March 26, 2014

Raymond Restarski
Village of Winnetka
510 Green Bay Road
Winnetka, IL 60093

Dear Raymond:

We are pleased to present you with the following quotation for a new Loadmaster Excel-S 25 cubic yard rear loading refuse body. This is a new rear load refuse body, is American made, built in Norway, MI which provides close proximity for parts not commonly stocked at our location. The Loadmaster body will be installed on your current Freightliner M2 chassis which we will remove the existing Pak-Mor refuse body and refit with a new Loadmaster body.

This unit is equipped with all the standard features that Loadmaster including a 2-10 cubic yard reeving cylinder and container bump bar, as well a center mounted Diamondback Model 600 cart lifter, and a new PTO and hydraulic pump.

The enclosed quotation is a new custom built machine. If there are additional options you need on the machine to meet your needs we are happy to add those and adjust the quote as needed.

We appreciate the opportunity to bid on this project. Should you have any questions please feel free to call me at 800-201-7669 or contact Jeff Shesler at 414-331-9850.

Sincerely,

R.N.O.W., Inc.

Steven Krall
President

VILLAGE·OF·WINNETKA

Incorporated in 1869

NOTICE TO BIDDERS
BID #014-011
REFUSE BODY

The Village of Winnetka is accepting sealed bids for the purchase and delivery of one (1) 25-Yard Rear Loading Hydraulically Actuated Refuse Body. This unit shall be mounted on an existing 2003 Freightliner FL80 chassis. This unit is equipped with a Pak Mor R225B refuse body which will be removed from chassis and taken as trade. The successful bidder will be solely responsible for guaranteeing the suitability of the unit for its intended use. transportation of the unit from the Village of Winnetka to the equipment installer and delivered back to the Village of Winnetka upon completion. The successful bidder shall include all cost for travel to inspect the unit before delivery. Bid documents are attached. Questions may be directed to the Purchasing Agent by calling by calling 847/716-3504.

Bid Opening: Sealed bids will be received by the Purchasing Agent at the **Winnetka Village Hall, 510 Green Bay Rd., Winnetka IL 60093:** until **11:00 a.m. (local time), Tuesday, April 1, 2014,** at which time or as soon thereafter as possible, bids will be opened and read aloud. Vendors and their agents are invited to attend. **LATE BIDS WILL NOT BE ACCEPTED.**

The Village of Winnetka reserves the right to reject any or all bids in whole or in part, to waive or not to waive any informalities therein, and to accept the bid considered to be in the best interest of the Village of Winnetka.

GENERAL INSTRUCTIONS TO BIDDERS

Before submitting a bid, each bidder shall examine all documents carefully as no allowance shall be made to the bidder on the grounds of the lack of knowledge as to the content of the document. The submission of a bid shall be considered conclusive evidence that the bidder has made such examination.

1. **PROPOSAL FORMS AND CERTIFICATION** must be submitted on the forms provided, signed in ink by an authorized officer or employee of the company and returned in a sealed envelope clearly marked "**SEALED BID**", with the **BID NUMBER** and the date and time of opening.

   The bid envelope **MUST** be received in the PURCHASING OFFICE before the stated time for the opening of bids. Bids received after the opening time will be returned unopened and will not be considered.

2. **WITHDRAWAL OR MODIFICATION** of a bid **MUST** be requested in writing prior to the bid opening time. No bid may be withdrawn after the scheduled opening time for at least 60 days. No telephone bids, fax bids, or telephone modifications will be allowed or considered.

3. **BID PRICES** and notations **MUST** be written in ink or typewritten. Mistakes may be crossed out with corrections typed or printed adjacent; however, such corrections **MUST** be initialed by the authorized employee or officer signing the bid documents.

   Bid prices shall be delivered prices, F.O.B. Village of Winnetka, and delivery shall be made to the using point and unloaded by the successful bidder unless otherwise stated within the specifications.

   Prices must be stated in the units specified and quotations shall be made on each item separately. In case of discrepancy, the unit price shall govern.

   Bidders should specify any prompt payment discounts they wish to offer. Discounts will be deducted from the base bid to determine the low bidder. Discount of less than ten (10) days will not be considered. C.O.D. deliveries will not be accepted.

4. **TAXES** are not applicable to sales made to the Village of Winnetka, and must be excluded from bid prices. This includes City, State of Illinois Sales Tax and Federal Excise Tax. The Village of Winnetka State of Illinois Tax Exempt number is E9998-1246-06.

5. **SAMPLES** of items, when called for by the bid specifications, shall be provided free of charge and held until after the bid award. Samples not destroyed by the bid evaluation process may be removed by the bidder, at his own expense within sixty (60) days of bid award. Samples not removed within 60 days shall become the property of the Village at no cost to the Village. Samples for trial use shall be presented at no cost to the Village.

6. **PROPOSALS TO FURNISH "EQUAL" OR "ALTERNATE"** will be considered provided the bidder clearly states on the bid proposal form exactly what they propose to furnish. Illustrations, drawings, or other descriptive matter **MUST** be included with any bid proposing an "equal". The Purchasing Agent reserves the right to approve as an equal, or reject as not being equal any item a bidder proposes to furnish that contains major or minor deviations from the specifications. The decision of the Purchasing Agent is final.

   If an item is identified by a manufacturer's name, trade name, or catalog name, it is understood that the bidder proposes to furnish the item so identified, unless an "equal" is clearly stated on the bid proposal form.

7. **DELIVERY** dates should be included in the bid proposal, as this may be a factor in determining the bid

award. Delivery shall be made in accordance with the bid specifications or as directed by the Purchasing Agent. If delivery requirements are not listed within the specifications it shall be interpreted to mean prompt delivery required.

Unless otherwise specified, each case, carton, crate, barrel or package delivery shall be plainly marked with the vendor's name, quantity ordered, quantity delivered, description of goods and stock numbers.

Deliveries shall be scheduled to arrive between 7:30 AM and 2:30 PM weekdays. Deliveries at any other time will not be accepted unless previous arrangements have been made.

8. **INSPECTION** will be made after delivery. When deemed necessary, samples of supplies may be taken at random from stock received for submission to a commercial laboratory, or other appropriate inspection agency, for analysis and test as to whether the materials conform to all the specifications and requirements. When the material received does not meet specifications, the expense of the testing shall be borne by the vendor, and the order may be canceled by the Village of Winnetka.

9. **DEFAULT BY THE VENDOR** may cause the Village of Winnetka to procure the article or service from other sources. In such cases, the Village may deduct from unpaid balances due the vendor, or may collect against the bid check, bid bond or surety for excess costs incurred. The prices paid by the Village of Winnetka shall be considered the prevailing market price at the time such purchase is made.

10. **USE OF THE NAME OF THE VILLAGE OF WINNETKA** by the successful bidder is specifically denied in any form or medium for public advertisement unless express written permission is granted by the Village of Winnetka

11. **THE VILLAGE OF WINNETKA IS THE ONLY OFFICIAL SOURCE FOR BID PACKAGES AND SUPPORTING MATERIALS.** Registration with the VILLAGE OF WINNETKA is the only way to ensure bidders receive all Addenda and other Notices concerning this bid. The Village of Winnetka cannot ensure bidders who obtain bid packages from sources other than the Village of Winnetka will receive Addenda and other Notices. All vendors are advised that bids that do not conform to the requirements of the bid package, including compliance with and attachment of all Addenda and other Notices, may, at the Village of Winnetka's discretion, be rejected as non-responsive and/or the bidder disqualified. In such cases, the Village of Winnetka will not rebid the requirement absent extraordinary circumstances.

12. **PATENTS** - The vendor shall hold the Village of Winnetka, its officers, agents and employees harmless from liability of any nature or kind on account of the use of any copyrighted or uncopyrighted composition, secret process, patented or unpatented invention, article or appliance furnished or used in this bid call.

13. **NON APPROPRIATIONS** – The Village of Winnetka reserves the right to reject any and all bids, or any part thereof, or to accept any bid or any part thereof, or to waive any informality in any bid, deemed to be in the best interest of the Village. The Village of Winnetka also reserves the right to terminate the whole or any part of this bid or to reject all bids in the event that sufficient funds to purchase this requirement are not appropriated in the budget.

14. **QUESTIONS PERTAINING TO THESE SPECIFICATIONS MUST BE IN WRITING AND ADDRESSED TO PHILLIP SOLDANO, FLEET SUPERVISOR. QUESTIONS MUST BE RECEIVED BY FAX (847/501-2680) OR EMAIL (psoldano@winnetka.org) A MINIMUM OF FIVE (5) WORKING DAYS PRIOR TO THE BID OPENING.**

VILLAGE·OF·WINNETKA

Incorporated in 1869

Bid No. 014-011

The Village of Winnetka is seeking competitive bids for one (1) 25 Yard rear loading hydraulically actuated refuse body. The unit shall be mounted on an existing 2003 Freightliner FL80 chassis. This unit is equipped with a Pak Mor R225B body which will be removed from chassis and taken in as trade. The successful bidder will be solely responsible for guaranteeing the suitability of the unit for its intended use, transportation of unit from the Village of Winnetka to the equipment installer and delivered back to the Village of Winnetka upon completion. The successful bidder shall include all cost for travel to inspect unit before delivery.

Complete each section with Yes or No, failure to could result in a no bid. Explain all exceptions on pages supplied.

510 Green Bay Road, Winnetka, Illinois 60093
Administration and Finance (847) 501-6000 Fire (847) 501-6029 Police (847) 501-6034
Public Works (847) 716-3568 Water and Electric (847) 716-3558

REFUSE BODY SPECIFICATIONS

Scope: **It is the intent of this specification to describe a hydraulically actuated refuse packer body with the following minimum specifications considered necessary to perform the work assigned and will be the product of a manufacturer actively engaged in the production of refuse collection equipment and will embody their latest improvements in design and construction. The body's construction and specifications shall be in compliance with the applicable standards as promulgated by the American National Standards Institute (ANSI Z245.1).**

I. GENERAL REQUIREMENTS

The body shall be of a rectangular box form, and shall be mounted in a stationary manner that does not require the body to be tilted in order to discharge refuse. The body shall be of a design such that no cutting, welding, and/or material modification of a standard chassis frame forward of the rear axle(s) is required to mount the body. The body shall be equipped with a hydraulically actuated rear-loading tailgate. The body shall be capable of handling brush and trimming collection in addition to residential and commercial refuse collection.

II. BODY

		COMPLY / EXCEPTION
A.	Capacity: The body shall have a minimum capacity of 25 cubic yards. The capacity of the body shall be determined without regard to the capacity of the hopper of the tailgate.	Comply
B.	Dimensions:	
1.	Inside Width: The body shall have an inside width of 90 inches (Max).	Comply
2.	Inside Height: The body shall have an inside height of 82.5 inches (Max).	Comply
3.	Width: The body shall have an overall width of 96 inches (Max.).	Comply
4.	Length: The body shall have an overall length, inclusive of the body front ejection cylinder clevis beam and the tailgate (in lowered position) of 293inches (Max.).	Comply
5.	Height: The body shall have an overall height, exclusive of hydraulic lines, clamps, optional accessories, etc. of 94 inches measured from the top of the frame of the chassis (Max.).	Comply
6.	Weight: The body shall have an overall weight, inclusive of the tailgate, of 15,100 pounds (Max.).	Comply
7.	Body Color: The body shall be painted one (1)color, (2) coats PPG High build epoxy polyurethane finish. Color to be White	Comply

C. Construction:

1. Sidewalls: The body sidewalls shall be constructed from a curved one piece design 8 gauge high tensile steel. The sidewall sheets shall be joined by continuous seam welds. Comply

2. Floor: The body shall have a smooth flat floor without a trough. Floor shall be constructed from ¼" High Tensile Steel. No cylinders, valves or other hydraulic components shall be exposed to refuse packed into the body. Floors with trough or depression are not acceptable. Comply

3. Body Longitudinal: The body longitudinal shall be 8" tall fabricated from 1/4" hi-tensile steel. Comply

   Floor Cross Members: The floor cross members shall be tapered from the long sill outboard to the body side sheet. The floor cross members shall be fabricated from 7 gauge hi-tensile steel. Comply

4. Roof: The body roof shall be fabricated from 8 gauge hi-tensile steel and shall be of a curved design. The roof shall be joined by continuous seam welds. Comply

III. TAILGATE

A. General: The tailgate shall be mounted on the rear of the body. The tailgate shall rotate on 2 hinges located on the upper perimeter of the tailgate equipped with replaceable pins. The tailgate shall be raised by 2 hydraulic cylinders. The lower inside perimeter of the tailgate shall be equipped with a replaceable, watertight seal. Comply

B. Hopper Capacity:

1. General: The hopper of the tailgate shall have a minimum capacity of 3.7 cubic yards measured by the NSWMA (TBEA) rating formula. Comply

C. Dimensions:

1. Hopper Loading Sill Height: The hopper-loading sill shall have a height of 4 inches lower than the top of the frame of the chassis Comply

2. Hopper Inside Width: The hopper shall have an inside width of 75 inches. Comply

3. Hopper Opening Height: The hopper opening shall have a height of 62 inches. Comply

4. Tailgate Overhang Length: The tailgate shall have an overhang length of 94 inches measured from the end of the body floor to the end of the hopper loading sill. Comply

D. **Tailgate:**

1. **Tailgate Sides:** The tailgate sides shall be fabricated from abrasion resistant 3/16" T-1 alloy 100,000 P.S.I. minimum yield strength steel. Comply

2. **Hopper Floor and Chute:** The hopper floor and chute shall be a one piece design fabricated from ¼" AR400 steel plate. Comply

3. **Tailgate Sides:** The tailgate sides shall be reinforced with hi-tensile steel channels interlaced and fully welded to the side sheets. Comply

4. **Hopper and Chute Floor:** The hopper and chute floor shall be reinforced with hi-tensile steel channels. Comply

5. **Turnbuckles:** The tailgate shall be secured to the body with heavy duty 1" DIA turnbuckles equipped with fast spin handles. Comply

6. **Tail Gate Seal:** The tailgate seal shall extend a minimum 50 inches up the body side. Comply

7. **Grab Handles:** Two grab handles shall be located on each side of the tailgate. Comply

8. **Rear Steps:** The rear steps shall be fabricated from open grip strut material with a minimum standing surface of 330 square inches per step. The steps shall comply with A.N.S.I. standards. Steps shall be of a bolt on design. Comply

9. **Hopper Loading Sill:** The hopper loading sill shall be constructed of 3" x 4" x 3/8" wall structural tubing. Comply

E. **Packing Mechanism:**

1. **General:** The packing mechanism shall be contained within the tailgate shell. The packing mechanism shall be comprised of 2 principal components hereinafter described as a sweep blade and the slide blade. The slide blade shall travel in the tracks of the tailgate shell. The packing mechanism shall be actuated by 4 hydraulic cylinders of equal bore diameter hereinafter described as sweep cylinders and slide cylinders. The sweep blade rotation through the hopper of the tailgate (sweep cycle) shall be actuated by the 2 sweep cylinders connected to the sweep/pack blade and pack plate. The packing blade travel (pack cycle) shall be actuated by the 2 pack cylinders connected to the slide plate and the inner surfaces of the tailgate lower-half sidewalls. Packing cylinders located outside of the tailgate are not acceptable. The packing mechanism shall operate such that the sweep cycle terminates

terminates automatically at a point where the sweep/pack blade cutting edge is approximately 7 inches above the hopper loading sill, and must be re-actuated to complete the sweep cycle. The packing mechanism shall operate such that the pack cycle shall be actuated automatically upon the termination of the sweep cycle. The sweep/pack blade and the slide plate shall have the capability to be actuated independently. Comply

a. The packing cycle shall be controlled by a two lever control system that allows the operator to start, stop and reverse the direction of any function at any point during the packing cycle. Comply

b. The tailgate control valve shall be located under the top covers. Comply

2. Construction:

a. The packing blade assemblies shall be mounted on four wear shoe assemblies that travel on hardened steel wear tracks. The shoe assemblies shall be replaceable without removing the packing blade assembly from the tailgate. The sweep blade and the slide blade shall be attached by two 3" DIA. Alloy steel pins. These 3" DIA pins shall be Induction-Hardened and rotating in 4 serviceable hard bushings. These pins shall also support the (2) lower wear block assemblies. Comply

b. The slide blade shall be constructed from 3/16" hi-tensile steel plate. Comply

c. The sweep blade shall be mounted to and pivot on the slide blade. The sweep blade shall be fabricated from 1/4" T-1 steel plate, varying in thickness. Comply

d. The blades shall operate without the use of linkage or link arms. Comply

e. The packing blades shall be powered by two 5" Bore x 3" Rod x 23 ½ stroke sweep cylinders and two (2) 5" Bore x 2 ½" Rod x 43 stroke slide cylinders. Comply

f. The slide and sweep cylinders shall have hardened chrome plated rods and be of cushioned design, to reduce hydraulic shocks, noise, and impact related stresses. Sweep cylinder shall have hardened bushings at rod side pivots. Comply

g. The sweep blade shall stop above the hopper sill to prevent a pinch point. Comply

h. Material in the hopper shall be compacted between the packing panel assembly and the ejector panel. The ejector panel shall hold pressure against the compacted material and be automatically advanced by a hydraulic load control valve without operator assistance. Comply

3. **Packing Mechanism Mounting/Guide Means:**

a. Packing Blade assembly shall ride on four Nylatron NSM shoe assemblies. Metallic type shoes or rollers are unacceptable. Comply

4. **Packing Cycle Time:**

a. The packing mechanism shall be capable of completing the entire sweep and pack cycle in 22 seconds. Comply

F. **Tailgate Locks:**

1. **General:** The tailgate shall be secured by locks at 2 points on the lower side perimeters. The locks shall be manually secured swing-away, screw-type bolt and turnbuckle clamps. Comply

1. **Tailgate Maintenance Props:** The tailgate shall be equipped with a positive means of support that is permanently attached and capable of being locked in position. Comply

IV. EJECTION MECHANISM

A. **General:** The ejection panel shall be activated by a single hydraulic cylinder mounted in an angular attitude. The cylinder shall be connected to the ejection panel and the body front ejection cylinder clevis beam by replaceable pins. The ejection panel shall be capable of traversing the entire length of the body. The ejection mechanism shall be capable of exerting counteracting force against the payload. The ejection mechanism shall be capable of retracting automatically ("drift") as necessary to compact the entire payload. The ejection cycle shall be accomplished by single, full stroke of the ejection mechanism cylinder. Comply

B. **Ejection Panel:** The load shall be ejected by a double acting, telescopic hydraulic cylinder that shall extend and retract the ejector panel the full length of the body without the use of clamp bars or related hardware. Comply

1. **Construction:**

a. Face Sheet: The ejector panel shall have an 3/16" hi-tensile steel face sheet that is reinforced by structural steel tubing and formed channels of high tensile steel. Comply

b. The ejector panel shall be guided in the body by two guide tracks located on the body side 6" above the body floor. The tracks shall be 6" deep, fabricated from ¼" hi-tensile steel and full welded to the body sides. Comply

c. The ejector cylinder shall be mounted diagonally to the body floor and not require a trough or depression in the floor. Troughed floors are unacceptable. Comply

2. **Ejection Panel Mounting/Guide Means:** The ejector panel shall be mounted on 6 high-density Nylatron GSM wear shoes that shall be replaceable without removing the ejector panel from the body. Metallic type shoes are unacceptable. Comply

V. CONTROLS

A. The ejector and tailgate lift controls shall be mounted at the left front of the body. Comply

B. Ejector and tailgate knobbed lever controls shall be mounted directly to the valve spool. Comply

C. A throttle advance switch shall be be located convenient to the ejector and tailgate lift controls. Comply

D. The tailgate controls shall be located at the right rear of the tailgate. The two lever design shall have positive control of movement of the packing mechanism all times. The tailgate controls shall comply with the applicable A.N.S.I. regulations. Comply

E. An automatic throttle advance device shall be incorporated with the tailgate controls. Comply

VI. CONTAINER HANDLING DEVICES

A. **Ninety (90) Gallon Rotary-Tuck Away Cart Lifter:**

Must be compatible with American style plastic carts. Single center installation mounted centerline directly on the hopper sill centerline.	Comply
Design should allow for lifter to be installed on rear load refuse vehicle (units can be used in conjunction with refuse vehicles that also rear load dump commercial containers	Comply
Cart lifter will be designed with a hydraulic fitting/orifice to control speed at a cycle time of 6 -8 seconds. (no in-line flow control valve)	Comply
Lifters face plate constructed of 3/8" HRS (hot roll steel). Face plate is 22" wide.	Comply
Lifters design shall allow for a minimum lifting capacity of 400 lbs at 1600 psi.	Comply
Dual Spring loaded lower bar Latching System shall act like a shock absorber during the dump cycle and also ensure complete cart release well above the ground during the lowering of the cart.	Comply
Lifter shall be compatible with all 60-96 gallon domestic 2 bar style carts. (ANSI Z245.30 standard carts & meet all ANSI Z245.60 Cart specifications).	Comply
Minimum 25K rotary actuator with splined shaft and mating splined collars. (NO keys or Key Ways).	Comply
Lifter must have a sweeping action to allow for ease of cart engagement for when truck and/or cart is on uneven terrain.	Comply
Driver arms minimum 5/8" and Link arms minimum 1" HRS (hot roll steel)	Comply
Lifter should come complete with a Bolt on/off mounting plate allowing for easy installation and or easy removal for repairs.	Comply
Lifters design should allow for a minimum of 45-degree dump angle	Comply
Powder Coated Orange face plate for increased visibility with all other moving parts powder coated black in color.	Comply

Flow Diverter Valve
Shall include a flow diverter valve that accepts 50 gpm input from main packer pressure line, diverts 1.8 gpm to the cart lifter system and sends the remaining flow to the packer blade. Both packer and lifter should be able to operate simultaneously. Comply

Hand valve
Shall be mounted curbside. Directional 4-way hydraulic control valve, three position valve to allow pressure flow into either of its outgoing ports and can then reverse flow direction by moving handle in opposite direction. Comply

Double PO Check Valve
This valve to be mounted on hand valve and shall lock all hydraulic oil flow when cart is not in use to prevent unwanted lifter travel when truck is in motion. Comply

Adjustable Flow Control Valve
Valve shall regulate back pressure to keep lifter motion smooth. Comply

B. **Overhead Cylinder Actuated Container Handling Device:**
A container handling device shall be mounted on the roof of the body. The device shall be capable of engaging, raising, discharging, lowering and disengaging standard rear loader metal containers up to Ten (10) cubic yard capacity. The device shall be actuated by a hydraulic cylinder with ½ inch wire rope cable (6 x 37 class). The device shall have a 14,000 lb. lifting capacity. Container bumper stop bar and container locking ears shall also be installed. Comply

VII. HYDRAULIC SYSTEM

A. Ejection Mechanism Cylinder: The cylinder to actuate the ejection mechanism shall be chrome plated tubes, 4-stage (6 ½" largest bore; then 5 ½; 4 ½'; 3 ½"); trunnion-mount (for "diminutive" dog-housing needs) Comply

B. Tailgate Lift Cylinders: The cylinders to raise the tailgate (see also III A) shall be chrome plated rod, single stage, single acting with a bore diameter of 4-3/4 inches. Comply

C. Sweep Cylinders: The cylinders to actuate the sweep/pack blade shall be chrome plated rod, single stage, double acting with a bore diameter of 5" Bore x 3" Rod Cushioned; Hard Bushed pinnings (rod-side) Comply

D. **Pack Cylinders**: The cylinders to actuate the slide plate shall be chrome plated rod, single stage, double acting with a bore diameter of 5" Bore x 2 ½" Rod with hydraulic Cushioning built in. — Comply

E. **Pump**: 42GPM direct-couple to PTO gear pump and PTO. — Comply

F. **Control Valves**: The main control valve and the tailgate (packing mechanism) control valve shall be sectional type valves. — Comply

G. **Hoses and Fittings**: The hoses shall be double braid wire reinforced with a burst pressure to operating pressure ratio of 4-to-1. All hose fittings shall be JIC female swivel, and/or NPT male. — Comply

H. **In Body Oil Reservoir**:

1. Capacity: The oil reservoir shall have a capacity of 40 gallons (Min). — Comply 45 gallons

2. Location: The oil reservoir shall be mounted on the front corner of the body within the body structure — Comply

3. The Oil Reservoir Shall Be Equipped With The Following:

a. Internal baffling to enhance oil flow and heat dissipation. — Comply

b. A magnetic trap extending into the reservoir to collect metal particles which may enter the hydraulic system. — Comply

c. An oil level sight gauge to permit visual determination of the oil level in the reservoir. — Comply

d. A filler-breather cap capable of straining oil as it is poured into the reservoir, and capable of providing 35 cubic feet of air breathing capacity. — Comply

e. A removable clean-out port equipped with a replaceable oil tight seal. — Comply

f. A 6 micron synthetic MicroGlas tank top return line filter shall be located on the hydraulic tank and be equipped with a condition indicator. Pleated paper filters are not acceptable — Comply

g. A suction screen filter of 100 mesh (141 micron) shall strain all the oil leaving the tank. Suction filter shall be equipped with a 5 P.S.I. bypass valve. — Comply

I. **Shut-Off Valve:** A shut-off valve shall be located in the suction line of the hydraulic system between the oil reservoir and the pump. Comply

J. **Filter:** A 6 micron synthetic MicroGlas tank top return line filter shall be located on the hydraulic tank and be equipped with a condition indicator. Pleated paper filters are not acceptable.
A high pressure filter canister with a replaceable cartridge shall be mounted under packer body, front street side and shall have a warning light in cab to alert operator of diminished flow capacity. Comply

K. **Operating Pressure:** The hydraulic system shall operate at a primary relief pressure of 3200 psi. Comply

VIII. WARNING ALARM

A warning alarm shall be provided that emits an audible, intermittent signal when the transmission of the chassis is in the reverse position, or when the tailgate of the body is not in the fully lowered position. Comply

IX. LIGHTING AND VEHICLE CONSPICUITY

A. **General:** Lights and reflectors shall be mounted on the body in accordance with Federal Motor Vehicle Safety Standard No. 108. The lamps shall be flush mounted in rubber grommets. All lighting to be LED. Comply

1. Rear Mounted 6 Lamp Light Bar: A light bar shall be mounted on the upper-half of the tailgate. The light bar shall have 4 sealed beam red, directional and stop lamps of a 4 inch diameter, and 2 sealed beam white, back-up lamps of a 4 inch diameter. The lamps shall be flush mounted in rubber grommets. Comply

2. Mid-body Marker/Turn Lights: An amber intermediate turn signal lamp shall be mounted on each side of the body approximately at the mid-point of the body. In addition, an amber marker lamp shall be mounted on the upper side of the body directly above the intermediate turn signal lamp. Comply

4. Vehicle Conspicuity Sheeting: The body shall be equipped with retro reflective sheeting that is applied in a pattern of alternating red and white color segments. The sheeting shall be in compliance with ANSI Standard Z245.1-1999 Section 7.2.16. Comply

X. ACCESS DOOR

An access door, 25 inches x 30 inches. shall be located on the streetside of the body sidewall. The door shall be hinged on the front perimeter and securable on the rear perimeter. Comply

XI. TOOL BOX

Two (2) tool boxs . One (1) shall be mounted under the curbside of the body. One (1) shall be mounted on drivers side of body. The box should measure 18 inches high x 18 inches deep x 48 inches long. Comply

XII. SPLASH GUARDS

Comply

A. Rear Splash Guards: Splash guards shall be mounted aft of the rear tires of the chassis.

B. Front And Rear Splash Guards: Splash guards shall be mounted fore and aft of the rear tires of the chassis (total quantity of 4) Comply

XIII. HOPPER LIGHTS

Two (2) white LED hopper lights shall be mounted on the upper-half of the tailgate. The lamps shall be of a 4-inch diameter and surface mounted. The lights shall be actuated manually by a switch located on the curbside of the tailgate and a master switch located in the cab of the chassis. Comply

XIV. STROBE LIGHT

A strobe light that emits a yellow, intermittent signal shall be mounted on the upper-half of the tailgate. The light shall be actuated automatically when the parking brake is applied. Comply

Two (2) Oval Amber LED self contained multiple flash pattern strobes mounted on upper light bar (one on driver's side and one on curbside) and to be activated by single toggle or rocker switch mounted in dash. Strobes are to be mounted in Trucklite Model 60 rubber grommets. Comply

XV. REAR VISION SAFETY CAMERA AND MONITOR SYSTEM

Rear mounted Camera to be removed from old body and remounted onto the new refuse body. Comply

Please Explain and Deviations in the following section: Please list what section and subsection by number and explain in detail what the deviations are.

None

VILLAGE·OF·WINNETKA

Incorporated in 1869

PROPOSAL FORM
BID #014-011
REFUSE BODY

BID OPENING DATE: **APRIL 1, 2014** TIME: **11:00 A.M.**

Bidders **MUST** include a signed and notarized copy of the enclosed compliance affidavit with the returned bid form. The undersigned bidder hereby proposes to furnish and deliver as per terms, conditions and specifications of the attached bid document, one (1) 25-Yard Rear Loading Hydraulically Actuated Refuse Body at the unit price listed below: If addenda have been received, acknowledge receipt by listing addenda numbers: _____
Please mark the outside of bid envelope: BID #014-011.
NOTE: PRICE MUST INCLUDE DELIVERY.

UNIT PRICE AS PER SPECIFICATIONS:

$ 64,720.00

MAKE: Loadmaster

MODEL: Excel-S 25 Cubic Yard

DELIVERY: 45-60 days TERMS: Net 15 days

PROPOSAL FORM (CON'T)

COMPANY NAME: R.N.O.W., Inc.

COMPANY ADDRESS: 8636R W. National Avenue

West Allis, WI 53227

NAME (PRINT): Steven Krall PHONE: 414-541-5700

TITLE: President DATE: 03/26/2014

AUTHORIZED SIGNATURE: 

COMPLIANCE AFFIDAVIT

As a condition of entering into a contract with the Village of Winnetka, and under oath and penalty of perjury and possible termination of contract rights and debarment, the undersigned deposes and states that he has the authority to make any certifications required by this Affidavit on behalf of the bidder, and that all information contained in this Affidavit is true and correct in both substance and fact.

Section 1: BID RIGGING AND ROTATING

1. This bid is not made in the interest of, or on behalf of an undisclosed person, partnership, company, association, organization or corporation;

2. The bidder has not in any manner directly of indirectly sought by communication, consultation or agreement with anyone to fix the bid price of any bidder, or to fix any overhead profit or cost element of their bid price or that of any other bidder, or to secure any advantage against the Village of Winnetka or anyone interested in the proper contract;

3. This bid is genuine and not collusive or sham;

4. The prices, breakdowns of prices and all the contents quoted in this bid have not knowingly been disclosed by the bidder directly or indirectly to any other bidder or any competitor prior to the bid opening;

5. All statements contained in this bid are true;

6. No attempt has been or will be made by the bidder to induce any other person or firm to submit a false or sham bid:

7. No attempt has been or will be made by the bidder to induce any other person or firm to submit or not submit a bid for the purpose of restricting competition;

8. The undersigned on behalf of the entity making this proposal or bid certifies the bidder is not barred from entering into this contract as a result of violations of either Section 33E-3 or Section 33E-4 of the Illinois Criminal Code.

Section 2: TAX COMPLIANCE

1. The undersigned on behalf of the entity making this proposal or bid certifies that neither the undersigned nor the entity is barred from contracting with the Village of Winnetka because of any delinquency in the payment of any tax administered by the State of Illinois, Department of Revenue, unless the undersigned or the entity is contesting, in accordance with the procedures established by the appropriate revenue act, liability of the tax or the amount of tax;

2. The undersigned or the entity making this proposal or bid understands that making a false statement regarding delinquency of taxes is a Class A Misdemeanor and in addition voids the contract and allows the municipality to recover all amounts paid to the entity under the contract in civil action.

Section 3: EQUAL EMPLOYMENT OPPORTUNITY

This EQUAL OPPORTUNITY CLAUSE is required by the Illinois Human Rights Act, 775 ILCS 5/101 et seq.

In the event of the contractor's non-compliance with any provision of the Equal Employment Opportunity Clause, the Illinois Human Rights Act, or the Rules and Regulations for Public Contracts of the Department of Human Rights, the contractor may be declared non-responsive and therefore ineligible for future contractor subcontracts with the State of Illinois or any of its political subdivisions or municipal corporations, and the contract may be canceled or voided in whole or in part, and such other sanctions or penalties may be imposed or remedies involved as provided by statute or regulations.

During the performance of this contract, the contractor agrees:

1. That it will not discriminate against any employee or applicant for employment because of race, color, religion, sex, national origin or ancestry; and further that it will examine all job classifications to determine if minority persons or woman are underutilized and will take appropriate action to rectify any such underutilization;

2. That, if it hires additional employees in order to perform this contract, or any portion hereof, it will determine the availability (in accordance with the Department's Rules and Regulations for Public Contract's) of minorities and women in the area(s) from which it may reasonably recruit and it will hire for each job classification for which employees are hired in such a way that minorities and women are not underutilized;

3. That, in all solicitations or advertisements for employees placed by it or on its behalf, it will state all applicants will be afforded equal opportunity without discrimination because of race, color, religion, sex, marital status, national origin or ancestry, age, physical or mental handicap unrelated to ability, or an unfavorable discharge from military service.

4. That it will send to each labor organization or representative of workers with which it has or is bound by a collective bargaining or other such agreement or understanding, a notice advising such labor organization or representative of the contractor's obligation under the Illinois Human Rights Act and the Department's Rules and Regulations for Public Contract. If any such labor organization or representative fails or refuses to cooperate with the contractor in its efforts to comply with such Act and Rules and Regulations, the contractor will promptly so

notify the Department and contracting agency will recruit employees from other sources when to fulfill its obligation thereunder.

5. That it will submit reports as required by the Department's Rules and Regulations for Public Contracts, furnish all relevant information as may from time to time be requested by the Department or contracting agency, and in all respects comply with the Illinois Human Rights Act and the Department's Rules and Regulations for Public Contracts.

6. That it will permit access to all relevant books, records, accounts, and work sites by personnel of the contracting agency and the Department for purposes of investigation to ascertain compliance with the Illinois Human Rights Act and the Departments Rules and Regulations for Public Contracts.

7. That it will include verbatim or by reference the provisions of this Equal Opportunity Clause in every subcontract it awards under which any portion of the contract obligations are undertaken or assumed, so such provisions will be binding upon such subcontractor. In the same manner as the other provisions of this contract, the contractor will be liable for compliance with applicable provisions of this clause by such subcontractors; and further it will promptly notify the Department in the event any subcontractor fails or refuses to comply therewith. In addition, the contractor will not utilize any subcontractor declared by the Illinois Human Rights Department to be ineligible for contracts or subcontracts with the State of Illinois or any of its political subdivisions or municipal corporations.

Section 4: ILLINOIS DRUG FREE WORK PLACE ACT

The undersigned will publish a statement:

1. Notifying employees that the unlawful manufacture, distribution, dispensation, possession, or a use of a controlled substance is prohibited in the work place;

2. Specifying the actions that will be taken against employees for violating this provision;

3. Notifying the employees that, as a condition of their employment to do work under the contract with the Village of Winnetka, the employee will:

    A. Abide by the terms of the statement;

    B. Notify the undersigned of any criminal drug statute conviction for a violation occurring in the work place not later than five (5) days after such a conviction.

4. Establishing a drug free awareness program to inform employees about:

    A. The dangers of drug abuse in the work place;

B. The policy of maintaining a drug-free work place;

C. Any available drug counseling, rehabilitation or employee assistance programs;

D. The penalties that may be imposed upon an employee for drug violations.

5. The undersigned shall provide a copy of the required statement to each employee engaged in the performance of the contract with the Village of Winnetka, and shall post the statement in a prominent place in the work place.

6. The undersigned will notify the Village of Winnetka within ten (10) days of receiving notice of an employee's conviction.

7. Make a good faith effort to maintain a drug free work place through the implementation of these policies.

8. The undersigned further affirms that within thirty (30) days after receiving notice of a conviction of a violation of the criminal drug statute occurring in the work place he shall:

A. Take appropriate action against such employee up to and including termination; or

B. Require the employee to satisfactorily participate in a drug abuse assistance or rehabilitation program approved for such purposes by a federal, state, or local health, law enforcement, or other appropriate agency.

Section 5: SEXUAL HARRASSMENT POLICY

The undersigned on behalf of the entity making this proposal or bid certifies that a written sexual harassment policy is in place pursuant to Public Act 87-1257, effective July 1, 1993, 775 ILCS 5/2-105 (A).

This Act has been amended to provide that every party to a public contract must have written sexual harassment policies that include, at a minimum, the following information:

1. The illegality of sexual harassment;

2. The definition of sexual harassment under State law;

3. A description of sexual harassment, utilizing examples;

4. The vendor's internal complaint process, including penalties;

5. The legal recourse, investigative and complaint process available through the Department of Human Rights, and the Human Rights Commission;

6. Directions on how to contact the Department and Commission;

7. Protection against retaliation as provided by 6-101 of the Act.

Section 6: VENDOR INFORMATION

1. Is the bidder a publicly traded company? (yes or no) No

If the answer is yes, state the number of outstanding shares in each class of stock. Provide the name of the market or exchange on which the company's stock is traded.

2. Is the bidder 50% or more owned by a publicly traded company? (yes or no) No

If the answer to the above question is yes, name the publicly traded company or companies owning 50% or more of your stock, state the number of outstanding shares in each class of stock and provide the name of the market or exchange on which the stock of such company or companies is traded.

IT IS EXPRESSLY UNDERSTOOD THAT THE FOREGOING STATEMENTS AND REPRESENTATIONS AND PROMISES ARE MADE AS A CONDITION TO THE RIGHT OF THE BIDDER TO RECEIVE PAYMENT UNDER ANY AWARD MADE UNDER THE TERMS AND PROVISIONS OF THIS BID.

SIGNATURE: _____

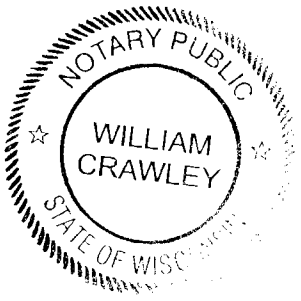
NAME: Steven Krall TITLE: President
(print or type)

Subscribed and sworn to me this 26th day of March,

2014, A.D.

By: William Crawley
(Notary Public)

-Seal-



LOADMASTER

USERS LIST

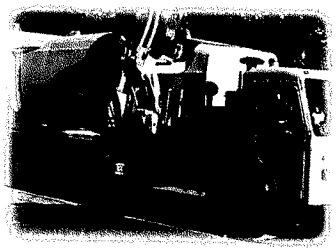
Village of Allouez
1900 Libal Street
Allouez, WI 54301
Contact: Jim Cegrlski
920-448-2800

City of Beloit
2351 Springbrook Ct
Beloit, WI 53511
Contact: Dan Lutz
608-364-5700

City of Green Bay
519 S. Oneida Street
Green Bay, WI 54303
Contact: Nathan Wachtendonk
920-492-3751

City of Watertown
810 S. Second Street
Watertown, WI 53094
Contact: Rick Schultz
920-262-4080

City of Chicago
1685 N. Throop Street
Chicago, IL 60622
Contact: Kevin Campbell
312-744-4594

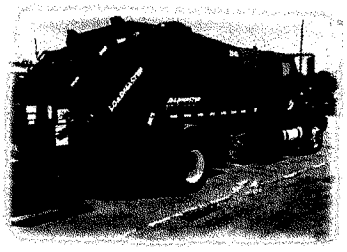


City of Evanston
2020 Asbury Ave
Evanston, IL 60201
Contact: Lonnie Jeschke
847-866-2904

Village of Winnetka
1390 Willow Road
Winnetka, IL 60093
Contact: Phil Soldano
847-716-3267

Forest Preserve of Cook County
536 N. Harlem Ave.
River Forest, IL 60305
Contact: Tom Thompson
708-771-1051

Village of Whitefish Bay
5300 N. Marlborough Drive
Whitefish Bay, WI 53217
Contact: Paul Witte
414-962-6690



City of Rock Island
1309 Mill Street
Rock Island, IL 61201
Contact: Bill Woeckener
309-732-2200

ATTACHMENT #2

Stepp Equipment Bid Proposal

VILLAGE·OF·WINNETKA

Incorporated in 1869

NOTICE TO BIDDERS
BID #014-011
REFUSE BODY

The Village of Winnetka is accepting sealed bids for the purchase and delivery of one (1) 25-Yard Rear Loading Hydraulically Actuated Refuse Body. This unit shall be mounted on an existing 2003 Freightliner FL80 chassis. This unit is equipped with a Pak Mor R225B refuse body which will be removed from chassis and taken as trade. The successful bidder will be solely responsible for guaranteeing the suitability of the unit for its intended use, transportation of the unit from the Village of Winnetka to the equipment installer and delivered back to the Village of Winnetka upon completion. The successful bidder shall include all cost for travel to inspect the unit before delivery. Bid documents are attached. Questions may be directed to the Purchasing Agent by calling by calling 847/716-3504.

Bid Opening: Sealed bids will be received by the Purchasing Agent at the **Winnetka Village Hall, 510 Green Bay Rd., Winnetka IL 60093:** until **11:00 a.m. (local time), Tuesday, April 1, 2014,** at which time or as soon thereafter as possible, bids will be opened and read aloud. Vendors and their agents are invited to attend. **LATE BIDS WILL NOT BE ACCEPTED.**

The Village of Winnetka reserves the right to reject any or all bids in whole or in part, to waive or not to waive any informalities therein, and to accept the bid considered to be in the best interest of the Village of Winnetka.

GENERAL INSTRUCTIONS TO BIDDERS

Before submitting a bid, each bidder shall examine all documents carefully as no allowance shall be made to the bidder on the grounds of the lack of knowledge as to the content of the document. The submission of a bid shall be considered conclusive evidence that the bidder has made such examination.

1. **PROPOSAL FORMS AND CERTIFICATION** must be submitted on the forms provided, signed in ink by an authorized officer or employee of the company and returned in a sealed envelope clearly marked "**SEALED BID**", with the **BID NUMBER** and the date and time of opening.

   The bid envelope **MUST** be received in the PURCHASING OFFICE before the stated time for the opening of bids. Bids received after the opening time will be returned unopened and will not be considered.

2. **WITHDRAWAL OR MODIFICATION** of a bid **MUST** be requested in writing prior to the bid opening time. No bid may be withdrawn after the scheduled opening time for at least 60 days. No telephone bids, fax bids, or telephone modifications will be allowed or considered.

3. **BID PRICES** and notations **MUST** be written in ink or typewritten. Mistakes may be crossed out with corrections typed or printed adjacent; however, such corrections **MUST** be initialed by the authorized employee or officer signing the bid documents.

   Bid prices shall be delivered prices, F.O.B. Village of Winnetka, and delivery shall be made to the using point and unloaded by the successful bidder unless otherwise stated within the specifications.

   Prices must be stated in the units specified and quotations shall be made on each item separately. In case of discrepancy, the unit price shall govern.

   Bidders should specify any prompt payment discounts they wish to offer. Discounts will be deducted from the base bid to determine the low bidder. Discount of less than ten (10) days will not be considered. C.O.D. deliveries will not be accepted.

4. **TAXES** are not applicable to sales made to the Village of Winnetka, and must be excluded from bid prices. This includes City, State of Illinois Sales Tax and Federal Excise Tax. The Village of Winnetka State of Illinois Tax Exempt number is E9998-1246-06.

5. **SAMPLES** of items, when called for by the bid specifications, shall be provided free of charge and held until after the bid award. Samples not destroyed by the bid evaluation process may be removed by the bidder, at his own expense within sixty (60) days of bid award. Samples not removed within 60 days shall become the property of the Village at no cost to the Village. Samples for trial use shall be presented at no cost to the Village.

6. **PROPOSALS TO FURNISH "EQUAL" OR "ALTERNATE"** will be considered provided the bidder clearly states on the bid proposal form exactly what they propose to furnish. Illustrations, drawings, or other descriptive matter **MUST** be included with any bid proposing an "equal". The Purchasing Agent reserves the right to approve as an equal, or reject as not being equal any item a bidder proposes to furnish that contains major or minor deviations from the specifications. The decision of the Purchasing Agent is final.

   If an item is identified by a manufacturer's name, trade name, or catalog name, it is understood that the bidder proposes to furnish the item so identified, unless an "equal" is clearly stated on the bid proposal form.

7. **DELIVERY** dates should be included in the bid proposal, as this may be a factor in determining the bid

award. Delivery shall be made in accordance with the bid specifications or as directed by the Purchasing Agent. If delivery requirements are not listed within the specifications it shall be interpreted to mean prompt delivery required.

Unless otherwise specified. each case, carton, crate, barrel or package delivery shall be plainly marked with the vendor's name, quantity ordered, quantity delivered, description of goods and stock numbers.

Deliveries shall be scheduled to arrive between 7:30 AM and 2:30 PM weekdays. Deliveries at any other time will not be accepted unless previous arrangements have been made.

8. **INSPECTION** will be made after delivery. When deemed necessary, samples of supplies may be taken at random from stock received for submission to a commercial laboratory, or other appropriate inspection agency, for analysis and test as to whether the materials conform to all the specifications and requirements. When the material received does not meet specifications, the expense of the testing shall be borne by the vendor, and the order may be canceled by the Village of Winnetka.

9. **DEFAULT BY THE VENDOR** may cause the Village of Winnetka to procure the article or service from other sources. In such cases, the Village may deduct from unpaid balances due the vendor, or may collect against the bid check, bid bond or surety for excess costs incurred. The prices paid by the Village of Winnetka shall be considered the prevailing market price at the time such purchase is made.

10. **USE OF THE NAME OF THE VILLAGE OF WINNETKA** by the successful bidder is specifically denied in any form or medium for public advertisement unless express written permission is granted by the Village of Winnetka

11. **THE VILLAGE OF WINNETKA IS THE ONLY OFFICIAL SOURCE FOR BID PACKAGES AND SUPPORTING MATERIALS.** Registration with the VILLAGE OF WINNETKA is the only way to ensure bidders receive all Addenda and other Notices concerning this bid. The Village of Winnetka cannot ensure bidders who obtain bid packages from sources other than the Village of Winnetka will receive Addenda and other Notices. All vendors are advised that bids that do not conform to the requirements of the bid package, including compliance with and attachment of all Addenda and other Notices, may, at the Village of Winnetka's discretion, be rejected as non-responsive and/or the bidder disqualified. In such cases, the Village of Winnetka will not rebid the requirement absent extraordinary circumstances.

12. **PATENTS** - The vendor shall hold the Village of Winnetka, its officers, agents and employees harmless from liability of any nature or kind on account of the use of any copyrighted or uncopyrighted composition, secret process, patented or unpatented invention, article or appliance furnished or used in this bid call.

13. **NON APPROPRIATIONS** – The Village of Winnetka reserves the right to reject any and all bids, or any part thereof, or to accept any bid or any part thereof, or to waive any informality in any bid, deemed to be in the best interest of the Village. The Village of Winnetka also reserves the right to terminate the whole or any part of this bid or to reject all bids in the event that sufficient funds to purchase this requirement are not appropriated in the budget.

14. **QUESTIONS PERTAINING TO THESE SPECIFICATIONS MUST BE IN WRITING AND ADDRESSED TO PHILLIP SOLDANO, FLEET SUPERVISOR. QUESTIONS MUST BE RECEIVED BY FAX (847/501-2680) OR EMAIL (psoldano@winnetka.org) A MINIMUM OF FIVE (5) WORKING DAYS PRIOR TO THE BID OPENING.**

VILLAGE·OF·WINNETKA

Incorporated in 1869

Bid No. 014-011

The Village of Winnetka is seeking competitive bids for one (1) 25 Yard rear loading hydraulically actuated refuse body. The unit shall be mounted on an existing 2003 Freightliner FL80 chassis. This unit is equipped with a Pak Mor R225B body which will be removed from chassis and taken in as trade. The successful bidder will be solely responsible for guaranteeing the suitability of the unit for its intended use, transportation of unit from the Village of Winnetka to the equipment installer and delivered back to the Village of Winnetka upon completion. The successful bidder shall include all cost for travel to inspect unit before delivery.

Complete each section with Yes or No, failure to could result in a no bid. Explain all exceptions on pages supplied.

510 Green Bay Road, Winnetka, Illinois 60093
Administration and Finance (847) 501-6000 Fire (847) 501-6029 Police (847) 501-6034
Public Works (847) 716-3568 Water and Electric (847) 716-3558

REFUSE BODY SPECIFICATIONS

Scope: **It is the intent of this specification to describe a hydraulically actuated refuse packer body with the following minimum specifications considered necessary to perform the work assigned and will be the product of a manufacturer actively engaged in the production of refuse collection equipment and will embody their latest improvements in design and construction. The body's construction and specifications shall be in compliance with the applicable standards as promulgated by the American National Standards Institute (ANSI Z245.1).**

I. GENERAL REQUIREMENTS

The body shall be of a rectangular box form, and shall be mounted in a stationary manner that does not require the body to be tilted in order to discharge refuse. The body shall be of a design such that no cutting, welding, and/or material modification of a standard chassis frame forward of the rear axle(s) is required to mount the body. The body shall be equipped with a hydraulically actuated rear-loading tailgate. The body shall be capable of handling brush and trimming collection in addition to residential and commercial refuse collection.

II. BODY

		COMPLY / EXCEPTION
A.	Capacity: The body shall have a minimum capacity of 25 cubic yards. The capacity of the body shall be determined without regard to the capacity of the hopper of the tailgate.	Yes
B.	Dimensions:	
1.	Inside Width: The body shall have an inside width of 90 inches (Max).	Yes
2.	Inside Height: The body shall have an inside height of 82.5 inches (Max).	Exception
3.	Width: The body shall have an overall width of 96 inches (Max.).	Yes
4.	Length: The body shall have an overall length, inclusive of the body front ejection cylinder clevis beam and the tailgate (in lowered position) of 293inches (Max.).	Yes
5.	Height: The body shall have an overall height, exclusive of hydraulic lines, clamps, optional accessories, etc. of 94 inches measured from the top of the frame of the chassis (Max.).	Yes
6.	Weight: The body shall have an overall weight, inclusive of the tailgate, of 15,100 pounds (Max.).	Yes
7.	Body Color: The body shall be painted one (1)color, (2) coats PPG High build epoxy polyurethane finish. Color to be White	Yes

C. Construction:

1. Sidewalls: The body sidewalls shall be constructed from a curved one piece design 8 gauge high tensile steel. The sidewall sheets shall be joined by continuous seam welds. — Exception

2. Floor: The body shall have a smooth flat floor without a trough. Floor shall be constructed from ¼" High Tensile Steel. No cylinders, valves or other hydraulic components shall be exposed to refuse packed into the body. Floors with trough or depression are not acceptable. — Exception

3. Body Longitudinal: The body longitudinal shall be 8" tall fabricated from 1/4" hi-tensile steel. — Exception

   Floor Cross Members: The floor cross members shall be tapered from the long sill outboard to the body side sheet. The floor cross members shall be fabricated from 7 gauge hi-tensile steel. — Exception

4. Roof: The body roof shall be fabricated from 8 gauge hi-tensile steel and shall be of a curved design. The roof shall be joined by continuous seam welds. — Exception

III. TAILGATE

A. General: The tailgate shall be mounted on the rear of the body. The tailgate shall rotate on 2 hinges located on the upper perimeter of the tailgate equipped with replaceable pins. The tailgate shall be raised by 2 hydraulic cylinders. The lower inside perimeter of the tailgate shall be equipped with a replaceable, watertight seal. — Yes

B. Hopper Capacity:

1. General: The hopper of the tailgate shall have a minimum capacity of 3.7 cubic yards measured by the NSWMA (TBEA) rating formula. — Exception

C. Dimensions:

1. Hopper Loading Sill Height: The hopper-loading sill shall have a height of 4 inches lower than the top of the frame of the chassis — Yes

2. Hopper Inside Width: The hopper shall have an inside width of 75 inches. — Yes

3. Hopper Opening Height: The hopper opening shall have a height of 62 inches. — Exception

4. Tailgate Overhang Length: The tailgate shall have an overhang length of 94 inches measured from the end of the body floor to the end of the hopper loading sill. — Yes

D. **Tailgate:**

1. **Tailgate Sides:** The tailgate sides shall be fabricated from abrasion resistant 3/16" T-1 alloy 100,000 P.S.I. minimum yield strength steel. — Exception
2. **Hopper Floor and Chute:** The hopper floor and chute shall be a one piece design fabricated from ¼" AR400 steel plate. — Exception
3. **Tailgate Sides:** The tailgate sides shall be reinforced with hi-tensile steel channels interlaced and fully welded to the side sheets. — Yes
4. **Hopper and Chute Floor:** The hopper and chute floor shall be reinforced with hi-tensile steel channels. — Yes
5. **Turnbuckles:** The tailgate shall be secured to the body with heavy duty 1" DIA turnbuckles equipped with fast spin handles. — Yes
6. **Tail Gate Seal:** The tailgate seal shall extend a minimum 50 inches up the body side. — Exception
7. **Grab Handles:** Two grab handles shall be located on each side of the tailgate. — Yes
8. **Rear Steps:** The rear steps shall be fabricated from open grip strut material with a minimum standing surface of 330 square inches per step. The steps shall comply with A.N.S.I. standards. Steps shall be of a bolt on design. — Yes
9. **Hopper Loading Sill:** The hopper loading sill shall be constructed of 3" x 4" x 3/8" wall structural tubing. — Exception

E. **Packing Mechanism:**

1. **General:** The packing mechanism shall be contained within the tailgate shell. The packing mechanism shall be comprised of 2 principal components hereinafter described as a sweep blade and the slide blade. The slide blade shall travel in the tracks of the tailgate shell. The packing mechanism shall be actuated by 4 hydraulic cylinders of equal bore diameter hereinafter described as sweep cylinders and slide cylinders. The sweep blade rotation through the hopper of the tailgate (sweep cycle) shall be actuated by the 2 sweep cylinders connected to the sweep/pack blade and pack plate. The packing blade travel (pack cycle) shall be actuated by the 2 pack cylinders connected to the slide plate and the inner surfaces of the tailgate lower-half sidewalls. Packing cylinders located outside of the tailgate are not acceptable. The packing mechanism shall operate such that the sweep cycle terminates

terminates automatically at a point where the sweep/pack blade cutting edge is approximately 7 inches above the hopper loading sill, and must be re-actuated to complete the sweep cycle. The packing mechanism shall operate such that the pack cycle shall be actuated automatically upon the termination of the sweep cycle. The sweep/pack blade and the slide plate shall have the capability to be actuated independently. Yes

a. The packing cycle shall be controlled by a two lever control system that allows the operator to start, stop and reverse the direction of any function at any point during the packing cycle. Yes

b. The tailgate control valve shall be located under the top covers. Yes

2. **Construction**:

a. The packing blade assemblies shall be mounted on four wear shoe assemblies that travel on hardened steel wear tracks. The shoe assemblies shall be replaceable without removing the packing blade assembly from the tailgate. The sweep blade and the slide blade shall be attached by two 3" DIA. Alloy steel pins. These 3" DIA pins shall be Induction-Hardened and rotating in 4 serviceable hard bushings. These pins shall also support the (2) lower wear block assemblies. Exception

b. The slide blade shall be constructed from 3/16" hi-tensile steel plate. Yes

c. The sweep blade shall be mounted to and pivot on the slide blade. The sweep blade shall be fabricated from 1/4" T-1 steel plate, varying in thickness. Yes

d. The blades shall operate without the use of linkage or link arms. Yes

e. The packing blades shall be powered by two 5" Bore x 3" Rod x 23 ½ stroke sweep cylinders and two (2) 5" Bore x 2 ½" Rod x 43 stroke slide cylinders. Exception

f. The slide and sweep cylinders shall have hardened chrome plated rods and be of cushioned design, to reduce hydraulic shocks, noise, and impact related stresses. Sweep cylinder shall have hardened bushings at rod side pivots. Yes

g. The sweep blade shall stop above the hopper sill to prevent a pinch point. Yes

h. Material in the hopper shall be compacted between the packing panel assembly and the ejector panel. The ejector panel shall hold pressure against the compacted material and be automatically advanced by a hydraulic load control valve without operator assistance. Yes

3. **Packing Mechanism Mounting/Guide Means:**

a. Packing Blade assembly shall ride on four Nylatron NSM shoe assemblies. Metallic type shoes or rollers are unacceptable. Exception

4. **Packing Cycle Time:**

a. The packing mechanism shall be capable of completing the entire sweep and pack cycle in 22 seconds. Yes

F. **Tailgate Locks:**

1. **General:** The tailgate shall be secured by locks at 2 points on the lower side perimeters. The locks shall be manually secured swing-away, screw-type bolt and turnbuckle clamps. Yes

1. **Tailgate Maintenance Props:** The tailgate shall be equipped with a positive means of support that is permanently attached and capable of being locked in position. Yes

IV. EJECTION MECHANISM

A. **General:** The ejection panel shall be activated by a single hydraulic cylinder mounted in an angular attitude. The cylinder shall be connected to the ejection panel and the body front ejection cylinder clevis beam by replaceable pins. The ejection panel shall be capable of traversing the entire length of the body. The ejection mechanism shall be capable of exerting counteracting force against the payload. The ejection mechanism shall be capable of retracting automatically ("drift") as necessary to compact the entire payload. The ejection cycle shall be accomplished by single, full stroke of the ejection mechanism cylinder. Yes

B. **Ejection Panel:** The load shall be ejected by a double acting, telescopic hydraulic cylinder that shall extend and retract the ejector panel the full length of the body without the use of clamp bars or related hardware. Yes

1. **Construction:**

a. Face Sheet: The ejector panel shall have an 3/16" hi-tensile steel face sheet that is reinforced by structural steel tubing and formed channels of high tensile steel. Yes

b. The ejector panel shall be guided in the body by two guide tracks located on the body side 6" above the body floor. The tracks shall be 6" deep, fabricated from ¼" hi-tensile steel and full welded to the body sides. Exception

c. The ejector cylinder shall be mounted diagonally to the body floor and not require a trough or depression in the floor. Troughed floors are unacceptable. Exception

2. **Ejection Panel Mounting/Guide Means:** The ejector panel shall be mounted on 6 high-density Nylatron GSM wear shoes that shall be replaceable without removing the ejector panel from the body. Metallic type shoes are unacceptable. Yes

V. CONTROLS

A. The ejector and tailgate lift controls shall be mounted at the left front of the body. Yes

B. Ejector and tailgate knobbed lever controls shall be mounted directly to the valve spool. Yes

C. A throttle advance switch shall be be located convenient to the ejector and tailgate lift controls. Yes

D. The tailgate controls shall be located at the right rear of the tailgate. The two lever design shall have positive control of movement of the packing mechanism all times. The tailgate controls shall comply with the applicable A.N.S.I. regulations. Yes

E. An automatic throttle advance device shall be incorporated with the tailgate controls. Yes

VI. CONTAINER HANDLING DEVICES

A. **Ninety (90) Gallon Rotary-Tuck Away Cart Lifter:**

Must be compatible with American style plastic carts. Single center installation mounted centerline directly on the hopper sill centerline.	Yes
Design should allow for lifter to be installed on rear load refuse vehicle (units can be used in conjunction with refuse vehicles that also rear load dump commercial containers	Yes
Cart lifter will be designed with a hydraulic fitting/orifice to control speed at a cycle time of 6 -8 seconds. (no in-line flow control valve)	Exception
Lifters face plate constructed of 3/8" HRS (hot roll steel). Face plate is 22" wide.	Yes
Lifters design shall allow for a minimum lifting capacity of 400 lbs at 1600 psi.	Yes
Dual Spring loaded lower bar Latching System shall act like a shock absorber during the dump cycle and also ensure complete cart release well above the ground during the lowering of the cart.	Yes
Lifter shall be compatible with all 60-96 gallon domestic 2 bar style carts. (ANSI Z245.30 standard carts & meet all ANSI Z245.60 Cart specifications).	Yes
Minimum 25K rotary actuator with splined shaft and mating splined collars. (NO keys or Key Ways).	Yes
Lifter must have a sweeping action to allow for ease of cart engagement for when truck and/or cart is on uneven terrain.	Yes
Driver arms minimum 5/8" and Link arms minimum 1" HRS (hot roll steel)	Yes
Lifter should come complete with a Bolt on/off mounting plate allowing for easy installation and or easy removal for repairs.	Yes
Lifters design should allow for a minimum of 45-degree dump angle	Yes
Powder Coated Orange face plate for increased visibility with all other moving parts powder coated black in color.	Exception

Flow Diverter Valve
Shall include a flow diverter valve that accepts 50 gpm input from main packer pressure line, diverts 1.8 gpm to the cart lifter system and sends the remaining flow to the packer blade. Both packer and lifter should be able to operate simultaneously.

Exception

Hand valve
Shall be mounted curbside. Directional 4-way hydraulic control valve, three position valve to allow pressure flow into either of its outgoing ports and can then reverse flow direction by moving handle in opposite direction.

Yes

Double PO Check Valve
This valve to be mounted on hand valve and shall lock all hydraulic oil flow when cart is not in use to prevent unwanted lifter travel when truck is in motion.

Exception

Adjustable Flow Control Valve
Valve shall regulate back pressure to keep lifter motion smooth.

Yes

B. **Overhead Cylinder Actuated Container Handling Device:**
A container handling device shall be mounted on the roof of the body. The device shall be capable of engaging, raising, discharging, lowering and disengaging standard rear loader metal containers up to Ten (10) cubic yard capacity. The device shall be actuated by a hydraulic cylinder with ½ inch wire rope cable (6 x 37 class). The device shall have a 14,000 lb. lifting capacity. Container bumper stop bar and container locking ears shall also be installed.

Exception

VII. HYDRAULIC SYSTEM

A. **Ejection Mechanism Cylinder:** The cylinder to actuate the ejection mechanism shall be chrome plated tubes, 4-stage (6 ½" largest bore; then 5 ½; 4 ½'; 3 ½"); trunnion-mount (for "diminutive" dog-housing needs)

Yes

B. **Tailgate Lift Cylinders:** The cylinders to raise the tailgate (see also III A) shall be chrome plated rod, single stage, single acting with a bore diameter of 4-3/4 inches.

Exception

C. **Sweep Cylinders:** The cylinders to actuate the sweep/pack blade shall be chrome plated rod, single stage, double acting with a bore diameter of 5" Bore x 3" Rod Cushioned; Hard Bushed pinnings (rod-side)

Yes

D. **Pack Cylinders:** The cylinders to actuate the slide plate shall be chrome plated rod, single stage, double acting with a bore diameter of 5" Bore x 2 ½" Rod with hydraulic Cushioning built in. — Yes

E. **Pump:** 42GPM direct-couple to PTO gear pump and PTO. — Yes

F. **Control Valves:** The main control valve and the tailgate (packing mechanism) control valve shall be sectional type valves. — Yes

G. **Hoses and Fittings:** The hoses shall be double braid wire reinforced with a burst pressure to operating pressure ratio of 4-to-1. All hose fittings shall be JIC female swivel, and/or NPT male. — Exception

H. **In Body Oil Reservoir:**

1. Capacity: The oil reservoir shall have a capacity of 40 gallons (Min). — Yes

2. Location: The oil reservoir shall be mounted on the front corner of the body within the body structure — Yes

3. The Oil Reservoir Shall Be Equipped With The Following:

a. Internal baffling to enhance oil flow and heat dissipation. — Yes

b. A magnetic trap extending into the reservoir to collect metal particles which may enter the hydraulic system. — Yes

c. An oil level sight gauge to permit visual determination of the oil level in the reservoir. — Yes

d. A filler-breather cap capable of straining oil as it is poured into the reservoir, and capable of providing 35 cubic feet of air breathing capacity. — Yes

e. A removable clean-out port equipped with a replaceable oil tight seal. — Yes

f. A 6 micron synthetic MicroGlas tank top return line filter shall be located on the hydraulic tank and be equipped with a condition indicator. Pleated paper filters are not acceptable — Exception

g. A suction screen filter of 100 mesh (141 micron) shall strain all the oil leaving the tank. Suction filter shall be equipped with a 5 P.S.I. bypass valve. — Yes

I. **Shut-Off Valve:** A shut-off valve shall be located in the suction line of the hydraulic system between the oil reservoir and the pump.

Yes

J. **Filter:** A 6 micron synthetic MicroGlas tank top return line filter shall be located on the hydraulic tank and be equipped with a condition indicator. Pleated paper filters are not acceptable.
A high pressure filter canister with a replaceable cartridge shall be mounted under packer body, front street side and shall have a warning light in cab to alert operator of diminished flow capacity.

Exception

K. **Operating Pressure:** The hydraulic system shall operate at a primary relief pressure of 3200 psi.

Exception

VIII. WARNING ALARM

A warning alarm shall be provided that emits an audible, intermittent signal when the transmission of the chassis is in the reverse position, or when the tailgate of the body is not in the fully lowered position.

Yes

IX. LIGHTING AND VEHICLE CONSPICUITY

A. **General:** Lights and reflectors shall be mounted on the body in accordance with Federal Motor Vehicle Safety Standard No. 108. The lamps shall be flush mounted in rubber grommets. All lighting to be LED.

Yes

1. Rear Mounted 6 Lamp Light Bar: A light bar shall be mounted on the upper-half of the tailgate. The light bar shall have 4 sealed beam red, directional and stop lamps of a 4 inch diameter, and 2 sealed beam white, back-up lamps of a 4 inch diameter. The lamps shall be flush mounted in rubber grommets.

Exception

2. Mid-body Marker/Turn Lights: An amber intermediate turn signal lamp shall be mounted on each side of the body approximately at the mid-point of the body. In addition, an amber marker lamp shall be mounted on the upper side of the body directly above the intermediate turn signal lamp.

Exception

4. Vehicle Conspicuity Sheeting: The body shall be equipped with retro reflective sheeting that is applied in a pattern of alternating red and white color segments. The sheeting shall be in compliance with ANSI Standard Z245.1-1999 Section 7.2.16.

Yes

X. ACCESS DOOR

An access door, 25 inches x 30 inches, shall be located on the streetside of the body sidewall. The door shall be hinged on the front perimeter and securable on the rear perimeter. Yes

XI. TOOL BOX

Two (2) tool boxs . One (1) shall be mounted under the curbside of the body. One (1) shall be mounted on drivers side of body. The box should measure 18 inches high x 18 inches deep x 48 inches long. Yes

XII. SPLASH GUARDS

Yes

A. Rear Splash Guards: Splash guards shall be mounted aft of the rear tires of the chassis.

B. Front And Rear Splash Guards: Splash guards shall be mounted fore and aft of the rear tires of the chassis (total quantity of 4) Yes

XIII. HOPPER LIGHTS

Two (2) white LED hopper lights shall be mounted on the upper-half of the tailgate. The lamps shall be of a 4-inch diameter and surface mounted. The lights shall be actuated manually by a switch located on the curbside of the tailgate and a master switch located in the cab of the chassis. Yes

XIV. STROBE LIGHT

A strobe light that emits a yellow, intermittent signal shall be mounted on the upper-half of the tailgate. The light shall be actuated automatically when the parking brake is applied. Yes

Two (2) Oval Amber LED self contained multiple flash pattern strobes mounted on upper light bar (one on driver's side and one on curbside) and to be activated by single toggle or rocker switch mounted in dash. Strobes are to be mounted in Trucklite Model 60 rubber grommets. Yes

XV. REAR VISION SAFETY CAMERA AND MONITOR SYSTEM

Rear mounted Camera to be removed from old body and remounted onto the new refuse body. Yes

Please Explain and Deviations in the following section: Please list what section and subsection by number and explain in detail what the deviations are.

II-A-2: 90 7/8" / II-C-1: 11ga 80,000 psi, trough 5/16"

II-C-2: Trough / II-C-3: Not required by design (trough)

II-C-4: 11ga 80,000 psi / III-B-1: 3.5 / III-C-3: 54"

III-D-1: 1/4" 175,000 psi / III-D-2: 1/4" 175,000 psi

III-D-6: 49" / III-D-9: Equivalent

III-E-2a: Different design equivalent (rollers) / III-E-2c: 5 1/2" bore x 4 1/2" rod x 30 5/16" stroke

III-E-3a: Rollers / IV-B-1b: guided by trough

IV-B-1c: trough / VI-A-3rd down: adjustable priority flow divider

VI-A-13th down: Safety Yellow / VI-A-14th down: 3 gal

VI-A-16th down: N/A / VI-B: 12,000 lbs capacity

VII-B: 4" bore / VII-G: ORES / VII-H-3f: MicroGlas 10 Micron

VII-H-3j: MicroGlas 10 Micron / VII-H-3k: 2,300 psi

IX-A-1: back-up lamps located in lower lightbar / IX-A-2: Amber marker lamp: N/A

VILLAGE·OF·WINNETKA

Incorporated in 1869

PROPOSAL FORM
BID #014-011
REFUSE BODY

BID OPENING DATE: **APRIL 1, 2014** TIME: **11:00 A.M.**

Bidders **MUST** include a signed and notarized copy of the enclosed compliance affidavit with the returned bid form. The undersigned bidder hereby proposes to furnish and deliver as per terms, conditions and specifications of the attached bid document, one (1) 25-Yard Rear Loading Hydraulically Actuated Refuse Body at the unit price listed below: If addenda have been received, acknowledge receipt by listing addenda numbers: _____
Please mark the outside of bid envelope: BID #014-011.
NOTE: PRICE MUST INCLUDE DELIVERY.

UNIT PRICE AS PER SPECIFICATIONS:

$ 69,691

MAKE: Leach

MODEL: 2 R- 111

DELIVERY: 24 weeks TERMS: Net 30

PROPOSAL FORM (CON'T)

COMPANY NAME: Stepp Equipment

COMPANY ADDRESS: 5400 Stepp Drive

Summit, IL 60501

NAME (PRINT): Bryan K. Beck PHONE: 708-202-0630

TITLE: Sales Rep DATE: 3/31/14

AUTHORIZED SIGNATURE:

COMPLIANCE AFFIDAVIT

As a condition of entering into a contract with the Village of Winnetka, and under oath and penalty of perjury and possible termination of contract rights and debarment, the undersigned deposes and states that he has the authority to make any certifications required by this Affidavit on behalf of the bidder, and that all information contained in this Affidavit is true and correct in both substance and fact.

Section 1: BID RIGGING AND ROTATING

1. This bid is not made in the interest of, or on behalf of an undisclosed person, partnership, company, association, organization or corporation;

2. The bidder has not in any manner directly of indirectly sought by communication, consultation or agreement with anyone to fix the bid price of any bidder, or to fix any overhead profit or cost element of their bid price or that of any other bidder, or to secure any advantage against the Village of Winnetka or anyone interested in the proper contract;

3. This bid is genuine and not collusive or sham;

4. The prices, breakdowns of prices and all the contents quoted in this bid have not knowingly been disclosed by the bidder directly or indirectly to any other bidder or any competitor prior to the bid opening;

5. All statements contained in this bid are true;

6. No attempt has been or will be made by the bidder to induce any other person or firm to submit a false or sham bid:

7. No attempt has been or will be made by the bidder to induce any other person or firm to submit or not submit a bid for the purpose of restricting competition;

8. The undersigned on behalf of the entity making this proposal or bid certifies the bidder is not barred from entering into this contract as a result of violations of either Section 33E-3 or Section 33E-4 of the Illinois Criminal Code.

Section 2: TAX COMPLIANCE

1. The undersigned on behalf of the entity making this proposal or bid certifies that neither the undersigned nor the entity is barred from contracting with the Village of Winnetka because of any delinquency in the payment of any tax administered by the State of Illinois, Department of Revenue, unless the undersigned or the entity is contesting, in accordance with the procedures established by the appropriate revenue act, liability of the tax or the amount of tax;

2. The undersigned or the entity making this proposal or bid understands that making a false statement regarding delinquency of taxes is a Class A Misdemeanor and in addition voids the contract and allows the municipality to recover all amounts paid to the entity under the contract in civil action.

Section 3: EQUAL EMPLOYMENT OPPORTUNITY

This EQUAL OPPORTUNITY CLAUSE is required by the Illinois Human Rights Act, 775 ILCS 5/101 et seq.

In the event of the contractor's non-compliance with any provision of the Equal Employment Opportunity Clause, the Illinois Human Rights Act, or the Rules and Regulations for Public Contracts of the Department of Human Rights, the contractor may be declared non-responsive and therefore ineligible for future contractor subcontracts with the State of Illinois or any of its political subdivisions or municipal corporations, and the contract may be canceled or voided in whole or in part, and such other sanctions or penalties may be imposed or remedies involved as provided by statute or regulations.

During the performance of this contract, the contractor agrees:

1. That it will not discriminate against any employee or applicant for employment because of race, color, religion, sex, national origin or ancestry; and further that it will examine all job classifications to determine if minority persons or woman are underutilized and will take appropriate action to rectify any such underutilization;

2. That, if it hires additional employees in order to perform this contract, or any portion hereof, it will determine the availability (in accordance with the Department's Rules and Regulations for Public Contract's) of minorities and women in the area(s) from which it may reasonably recruit and it will hire for each job classification for which employees are hired in such a way that minorities and women are not underutilized;

3. That, in all solicitations or advertisements for employees placed by it or on its behalf, it will state all applicants will be afforded equal opportunity without discrimination because of race, color, religion, sex, marital status, national origin or ancestry, age, physical or mental handicap unrelated to ability, or an unfavorable discharge from military service.

4. That it will send to each labor organization or representative of workers with which it has or is bound by a collective bargaining or other such agreement or understanding, a notice advising such labor organization or representative of the contractor's obligation under the Illinois Human Rights Act and the Department's Rules and Regulations for Public Contract. If any such labor organization or representative fails or refuses to cooperate with the contractor in its efforts to comply with such Act and Rules and Regulations, the contractor will promptly so

notify the Department and contracting agency will recruit employees from other sources when to fulfill its obligation thereunder.

5. That it will submit reports as required by the Department's Rules and Regulations for Public Contracts, furnish all relevant information as may from time to time be requested by the Department or contracting agency, and in all respects comply with the Illinois Human Rights Act and the Department's Rules and Regulations for Public Contracts.

6. That it will permit access to all relevant books, records, accounts, and work sites by personnel of the contracting agency and the Department for purposes of investigation to ascertain compliance with the Illinois Human Rights Act and the Departments Rules and Regulations for Public Contracts.

7. That it will include verbatim or by reference the provisions of this Equal Opportunity Clause in every subcontract it awards under which any portion of the contract obligations are undertaken or assumed, so such provisions will be binding upon such subcontractor. In the same manner as the other provisions of this contract, the contractor will be liable for compliance with applicable provisions of this clause by such subcontractors; and further it will promptly notify the Department in the event any subcontractor fails or refuses to comply therewith. In addition, the contractor will not utilize any subcontractor declared by the Illinois Human Rights Department to be ineligible for contracts or subcontracts with the State of Illinois or any of its political subdivisions or municipal corporations.

Section 4: ILLINOIS DRUG FREE WORK PLACE ACT

The undersigned will publish a statement:

1. Notifying employees that the unlawful manufacture, distribution, dispensation, possession, or a use of a controlled substance is prohibited in the work place;

2. Specifying the actions that will be taken against employees for violating this provision;

3. Notifying the employees that, as a condition of their employment to do work under the contract with the Village of Winnetka, the employee will:

    A. Abide by the terms of the statement;

    B. Notify the undersigned of any criminal drug statute conviction for a violation occurring in the work place not later than five (5) days after such a conviction.

4. Establishing a drug free awareness program to inform employees about:

    A. The dangers of drug abuse in the work place;

B. The policy of maintaining a drug-free work place;

C. Any available drug counseling, rehabilitation or employee assistance programs;

D. The penalties that may be imposed upon an employee for drug violations.

5. The undersigned shall provide a copy of the required statement to each employee engaged in the performance of the contract with the Village of Winnetka, and shall post the statement in a prominent place in the work place.

6. The undersigned will notify the Village of Winnetka within ten (10) days of receiving notice of an employee's conviction.

7. Make a good faith effort to maintain a drug free work place through the implementation of these policies.

8. The undersigned further affirms that within thirty (30) days after receiving notice of a conviction of a violation of the criminal drug statute occurring in the work place he shall:

A. Take appropriate action against such employee up to and including termination; or

B. Require the employee to satisfactorily participate in a drug abuse assistance or rehabilitation program approved for such purposes by a federal, state, or local health, law enforcement, or other appropriate agency.

Section 5: SEXUAL HARRASSMENT POLICY

The undersigned on behalf of the entity making this proposal or bid certifies that a written sexual harassment policy is in place pursuant to Public Act 87-1257, effective July 1, 1993, 775 ILCS 5/2-105 (A).

This Act has been amended to provide that every party to a public contract must have written sexual harassment policies that include, at a minimum, the following information:

1. The illegality of sexual harassment;

2. The definition of sexual harassment under State law;

3. A description of sexual harassment, utilizing examples;

4. The vendor's internal complaint process, including penalties;

5. The legal recourse, investigative and complaint process available through the Department of Human Rights, and the Human Rights Commission;

6. Directions on how to contact the Department and Commission;

7. Protection against retaliation as provided by 6-101 of the Act.

Section 6: VENDOR INFORMATION

1. Is the bidder a publicly traded company? (yes or no) No

If the answer is yes, state the number of outstanding shares in each class of stock. Provide the name of the market or exchange on which the company's stock is traded.

2. Is the bidder 50% or more owned by a publicly traded company? (yes or no) No

If the answer to the above question is yes, name the publicly traded company or companies owning 50% or more of your stock, state the number of outstanding shares in each class of stock and provide the name of the market or exchange on which the stock of such company or companies is traded.

IT IS EXPRESSLY UNDERSTOOD THAT THE FOREGOING STATEMENTS AND REPRESENTATIONS AND PROMISES ARE MADE AS A CONDITION TO THE RIGHT OF THE BIDDER TO RECEIVE PAYMENT UNDER ANY AWARD MADE UNDER THE TERMS AND PROVISIONS OF THIS BID.

SIGNATURE: _____

NAME: JAMES PFEIFFER TITLE: COO
(print or type)

Subscribed and sworn to me this 31st day of March,

2014, A.D.

By: Deborah A. Bazzel
(Notary Public)

-Seal-

OFFICIAL SEAL
DEBORAH A BAZZEL
Notary Public - State of Illinois
My Commission Expires Jan 11, 2016

Agenda Item Executive Summary

Title: Stormwater Monthly Summary Report

Presenter: Steven M. Saunders, Director of Public Works/Village Engineer

Agenda Date: 04/17/2014

Consent: ☐ YES ☑ NO

☐ Ordinance
☐ Resolution
☐ Bid Authorization/Award
☐ Policy Direction
☑ Informational Only

Item History:

Monthly Report

Executive Summary:

The Village's Stormwater Project Manager has prepared a monthly report for the Village Council that brings together status, cost, and schedule information, for each separate stormwater project, in one place. The report consists of four documents, explained below:

AT Group Project Summary Report (Attachment #1)
This report provides a brief outline and summary of each major stormwater project currently being undertaken by the Village.

One Year Look-Ahead Schedule (Attachment #2)
This document provides an overview schedule for each project.

Program Budget (Attachment #3)
This report provides financial information for the stormwater and sanitary sewer improvement programs.

Program Organization Chart (Attachment #4)
This document presents a one-page "snapshot" view of the status of each project, and how each project fits into the overall stormwater and sanitary sewer management program.

Recommendation / Suggested Action:

Informational report

Attachments:

1. AT Group Project Summary Report
2. One Year Look-Ahead Schedule
3. Program Budget
4. Program Organization Chart

AT Group, Inc.
Managing the Design & Construction Process

James H. Johnson, P.E.

M E M O R A N D U M

DATE: April 9, 2014

TO: Steven Saunders, P.E.
Village of Winnetka

SUBJECT: Project Summary

Spruce Outlet (Tower)

Activity Summary Recently, the project team held a pre-construction meeting with Copenhaver and set an April 14 start date.

Budget Summary The Village budgeted $90,000 for engineering and committed $111,429, and budgeted $1,000,000 for construction and committed $976,036.

6-Month Look Ahead The project team will:

1. Conduct a 4/16 neighborhood pre-construction meeting on the project
2. Construct the project

Spruce Outlet (Lloyd)

Activity Summary Underground project work is complete, and the storm sewer system is operational. Paving of the area will occur in 2014 in coordination with the Park District.

Budget Summary The Village budgeted $90,000 for engineering and committed $37,143. The bid award was for $251,488. Based on the bid award, the total project cost estimate has been reduced from $398,786 to $288,631.

6-Month Look Ahead The project team will:

1. Complete paving in 2014

Winnetka Avenue Pump Station

Activity Summary Boller Construction has started work and plans to complete the project in June 2014. The construction sequencing maintains the functionality of the pump station throughout the upgrade. Photos of construction activities are available on the Village's website. Boller is proceeding per the schedule and has installed the trash racks and new inlets. The pumps are scheduled for a mid-May delivery with installation to follow.

Budget Summary The adjusted project budget is $1,188,562, including engineering and construction.

6-Month Look Ahead The project team will:

1. Complete project construction

NW Winnetka (Greenwood/Forest Glen)

Activity Summary Since resident meetings were held, the Village retained Baxter & Woodman (B&W) to review the CBBEL modeling used for the project design. B&W has completed the review and demonstrated the modeling of the protection and overflow in the NW Winnetka area improvements is accurate. The project team will investigate potential improvements to address drainage concerns for the residents in the Boal Parkway and Heather, Hickory, Sumac and Hazel areas.

As previously reported, he Village has received preliminary notice that a grant funding partner will be providing a substantial cost share of this project. The partner and Village staff are finalizing the grant details, and the staff will report on the outcome as soon as possible. The final permit required to approve this project will appear before the Forest Preserve District of Cook County in May.

Budget Summary The Village budgeted $250,000 for engineering and committed $226,874 for engineering. The total project cost estimate – including the Forest Glen improvements - remains $4,266,924.

6-Month Look Ahead The project team will:

1. Complete the permit process
2. Work on the grant funding
3. Complete the review of adjacent drainage areas
4. Let the contract with Village Council approval
5. Construct the project

AT Group, Inc.

Willow Road Tunnel

Activity Summary The Village retained the services of MWH to proceed with permitting and design of the project. The project team and MWH held a Concept Review workshop, and MWH is working on the Permitting Plan and Modeling Verification.

Budget Summary The Village's agreement with MWH is for $2,023,818. The total project cost estimate remains $34,369,048.

6-Month Look Ahead The project team will:

1. Finalize the Concept Review Report
2. Proceed with the Permitting Plan and Modeling Verification
3. Present the Review Point #1 findings to the Village Council

Stormwater Master Plan (SMP)

Activity Summary Following the publication of the final draft Plan, the Master Plan document will appear before the Council for formal adoption on April 17.

Budget Summary The Village budgeted $50,000 and committed $101,220.

6-Month Look Ahead The project team will:

1. Present the Stormwater Master Plan to the Council for formal adoption

Stormwater Utility Implementation

Activity Summary The project team and Municipal & Financial Services Group (MFSG) are proceeding with the implementation phase for a stormwater utility. Staff is now heavily focused on the detail required to build the utility database, in conjunction with continued implementation of the Village's new financial software. Most significantly, a mailer is anticipated to all utility customers in mid-to-late May, which would further inform customers about the utility fee calculation and impact.

Budget Summary The Council awarded a contract to MFSG for implementation assistance in the amount of $89,766.

6-Month Look Ahead The project team will:

1. Proceed with implementation

Sanitary Sewer Evaluation

Activity Summary B&W is proceeding with the detailed I/I evaluation in select areas of the Village to identify specific system repairs and corrections needed.

Budget Summary The Village has budgeted $150,000 and committed $152,157.

6-Month Look Ahead The project team will:

1. Complete detailed evaluations
2. Report findings to the Council
3. Complete design engineering of initial system improvements

Public Outreach

Activity Summary Most recently, a second Stormwater Management Program Special Report was published the first week of March. Additionally, the project team published five weekly E-Winnetka news blasts, reporting on key components of the Village's Stormwater Management Program such as stormwater runoff, green improvements, environmental issues and stormwater utilities. The Stormwater Master Plan website was recently restructured as the Stormwater Management Program website and remains the complete repository for all Village stormwater information.

Budget Summary There is no separate budget associated with this project.

6-Month Look Ahead The project team will continue to update the website and monitor activity.

Ravine/Sheridan Road Improvements

Activity Summary IDOT is planning pavement and drainage improvements for the. Due to the need for easement acquisition, the drainage project is scheduled in IDOT's 2014-2019 5-Year Highway Improvement Program.

Budget Summary This project is funded in its entirety by IDOT.

6-Month Look Ahead The project team will:

1. Monitor IDOT activities
2. Update the Council as needed

Ash Street Pump Station

Activity Summary CBBEL completed plans and specifications for the station, including pump and electrical equipment replacement. Staff also reviewed the project scope as part of the FY 14 budget. Construction is tentatively scheduled for 2014.

Budget Summary This project is funded within the Stormwater Fund Capital Budget.

6-Month Look Ahead The project team will:

1. Budget for the project
2. Proceed with final engineering and construction

Attached are the following documents:

1. One-Year Look-Ahead Schedule including Council Meeting Presentations
2. Program Budget
3. Program Organization Chart

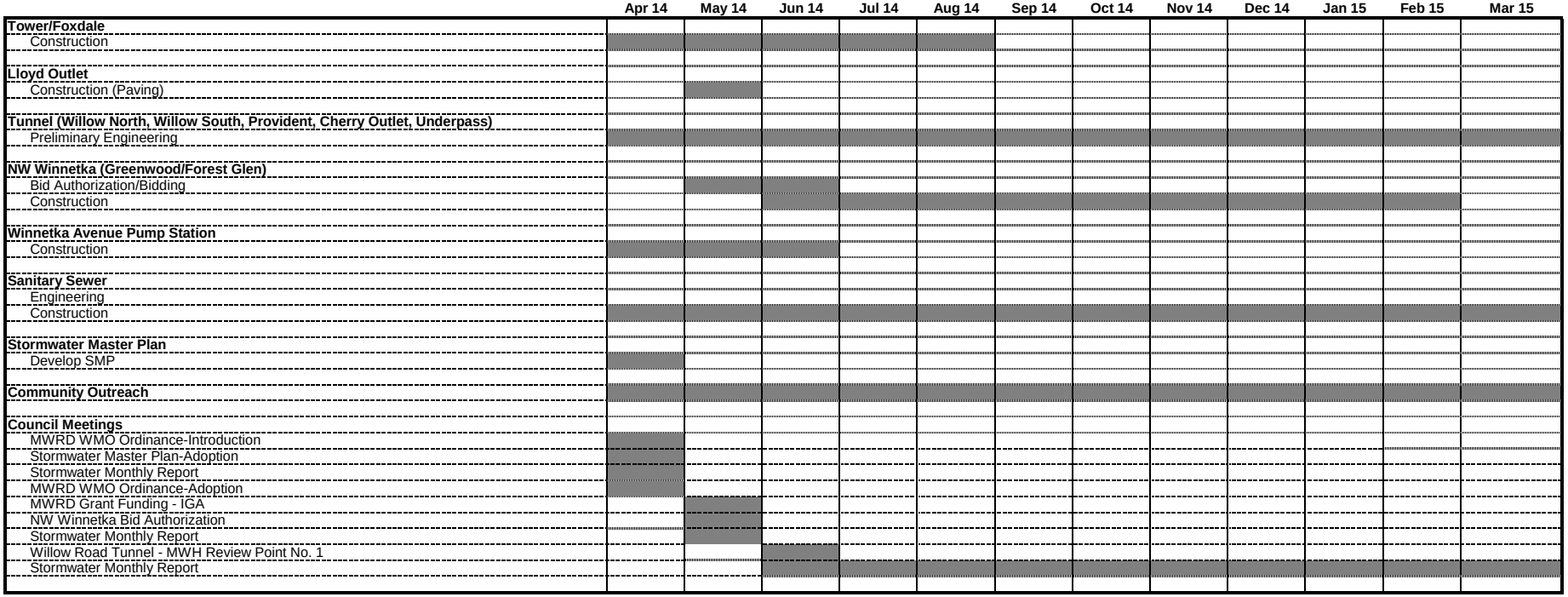
If you have any questions or need additional information, please call me at 847-691-9832, or send an e-mail to jjohnson@theatgrp.com.

AT Group, Inc.

Village of Winnetka
Stormwater Management Program

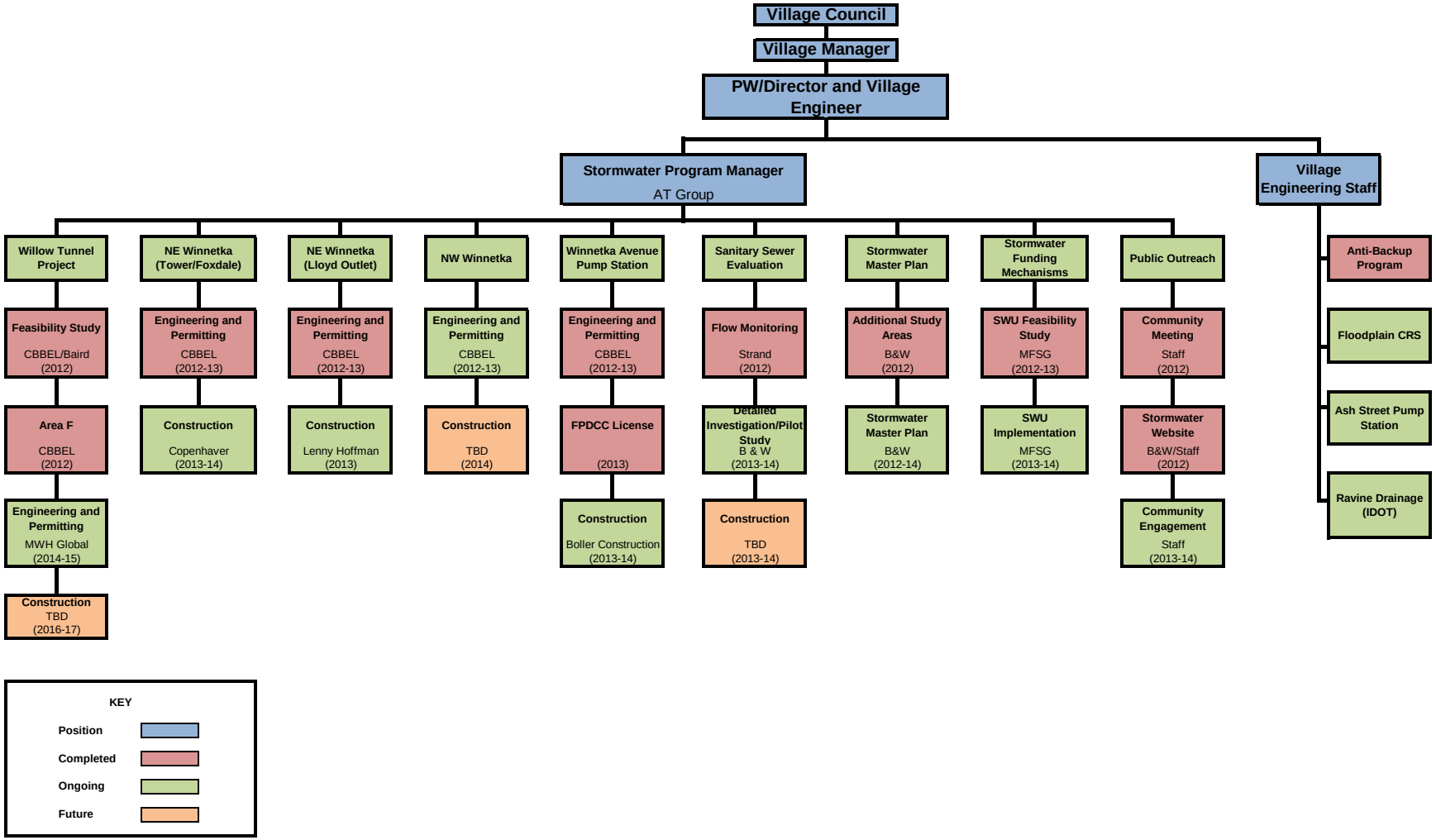
One-Year Look Ahead Schedule

04/11/2014



Village of Winnetka
Stormwater Management Program Budget

Project	Initial Estimated Project Costs	Current Estimated Project Costs	2013/2014 Budget	Council Authorized	Spent	Comments
Stormwater Fund 58.75.640.601						
Winnetka Ave. pump station	$ 1,188,562	$ 1,067,600	$ 750,000	$ 1,067,600	$ 489,241	Council Award 9/17/13
Tower Road/Foxdale	$ 1,419,544	$ 1,087,465	$ 1,000,000	$ 1,087,465	$ 111,429	Council Award 10/15/13
Lloyd Park/Spruce Street	$ 601,030	$ 288,631	$ 414,000	$ 288,631	$ 222,291	Council Award 8/20/13
NW Winnetka Greenwood/Forest Glen	$ 2,880,887	$ 4,266,924	$ 4,040,000	$ 226,874	$ 218,813	Added Forest Glen and included utilities from different line item
Willow Rd tunnel	$ 32,498,697	$ 34,369,048	$ 800,000	$ 37,750	$ 37,705	CBBEL October 2011 budget w/Kenny and Baird estimates
Proposed Area F				$ 17,600	$ 17,407	
Permitting and Design				$ 2,023,818	$ 34,795	MWH Global
Stormwater rate study	$ 50,000	$ 167,316	$ 10,000	$ 167,316	$ 131,766	DPW 2011/12 Budget vs proposal. Additional fee for fifth workshop. Includes Implementation Phase
Stormwater master plan	$ 50,000	$ 101,220	$ 60,000	$ 101,220	$ 100,932	DPW 2011/12 Budget vs proposal (added 6 drainage areas)
Total Stormwater Costs	$ 38,688,720	$ 41,348,204	$ 7,074,000	$ 5,018,274	$ 1,364,379	
Sanitary Sewer Fund 54.70.640.201						
Sanitary Sewer Studies/Engineering	$ 150,000	$ 152,157	$ 50,000	$ 152,157	$ 156,808	
System I & I repairs	$ 1,000,000	$ 1,000,000	$ 300,000	$ -	$ -	
Total Sanitary Sewer Costs	$ 1,150,000	$ 1,152,157	$ 350,000	$ 152,157	$ 156,808	


Village Council
Village Manager
PW/Director and Village Engineer
Stormwater Program Manager
AT Group
Village Engineering Staff
Willow Tunnel Project
Feasibility Study
CBBEL/Baird
(2012)
Area F
CBBEL
(2012)
Engineering and Permitting
MWH Global
(2014-15)
Construction
TBD
(2016-17)
NE Winnetka (Tower/Foxdale)
Engineering and Permitting
CBBEL
(2012-13)
Construction
Copenhaver
(2013-14)
NE Winnetka (Lloyd Outlet)
Engineering and Permitting
CBBEL
(2012-13)
Construction
Lenny Hoffman
(2013)
NW Winnetka
Engineering and Permitting
CBBEL
(2012-13)
Construction
TBD
(2014)
Winnetka Avenue Pump Station
Engineering and Permitting
CBBEL
(2012-13)
FPDCC License
(2013)
Construction
Boller Construction
(2013-14)
Sanitary Sewer Evaluation
Flow Monitoring
Strand
(2012)
Detailed Investigation/Pilot Study
B & W
(2013-14)
Construction
TBD
(2013-14)
Stormwater Master Plan
Additional Study Areas
B&W
(2012)
Stormwater Master Plan
B&W
(2012-14)
Stormwater Funding Mechanisms
SWU Feasibility Study
MFSG
(2012-13)
SWU Implementation
MFSG
(2013-14)
Public Outreach
Community Meeting
Staff
(2012)
Stormwater Website
B&W/Staff
(2012)
Community Engagement
Staff
(2013-14)
Anti-Backup Program
Floodplain CRS
Ash Street Pump Station
Ravine Drainage (IDOT)
KEY
Position
Completed
Ongoing
Future

Agenda Item Executive Summary

Title: MC-5-2014: Amends Village Code to Adopt & Administer the WMO of the MWRD- Intro/Adopt

Presenter: Steven M. Saunders, Director of Public Works/Village Engineer

Agenda Date: 04/17/2014

Consent: ☐ YES ☑ NO

☑ Ordinance
☐ Resolution
☐ Bid Authorization/Award
☐ Policy Direction
☐ Informational Only

Item History:

April 8, 2014 Study Session

Executive Summary:

The Metropolitan Water Reclamation District of Greater Chicago (MWRD) has County-wide stormwater authority and adopted a Watershed Management Ordinance (WMO) on October 3, 2013. The WMO becomes effective on May 1, 2014. The WMO allows for municipalities to become authorized municipalities, which allows those municipalities to issue Watershed Management Permits within their corporate boundaries. The benefits of being an authorized municipality include control over the timing of permit issuance and offering applicants a permit process that involves coordination with fewer government agencies.

At the April 8, 2014 Study Session, the Village Council discussed the process of becoming an authorized municipality under the WMO, and specifically the process of updating the Village's development regulations pertaining to stormwater management to facilitate administration of the WMO. The Council directed staff to prepare the necessary changes to the Village Code for Council consideration. Ordinance MC-5-2014 modifies several sections of the Village Code.

The WMO contains an effective date of May 1, 2014. In order to become an authorized municipality, the Village needs to adopt the WMO by reference, and it is most advantageous to accomplish this prior to the May 1 effective date. At the April 8 Study Session, the Council directed staff to prepare the materials for this item such that introduction of the ordinance could be waived, and the ordinance can be adopted with a single reading.

Recommendation / Suggested Action:

1. Consider a motion waiving introduction of Ordinance MC-5-2014.
2. Consider adoption of Ordinance MC-5-2014: "Amending Title 15 of the Village Code for the adoption and administration of the Watershed Management Ordinance of the Metropolitan Water Reclamation District of Greater Chicago."

Attachments:

1. Agenda Report
2. Ordinance MC-5-2014

Agenda Report

Subject: **Ordinance MC-5-2014: Amending Title 15 of the Village Code to provide for the adoption of and administration of the Watershed Management Ordinance of the Metropolitan Water Reclamation District of Greater Chicago**

Prepared By: Steven M. Saunders, Director of Public Works/Village Engineer

Date: April 11, 2014

Background

The Metropolitan Water Reclamation District of Greater Chicago (MWRD) has County-wide stormwater authority and adopted a Watershed Management Ordinance (WMO) on October 3, 2013. The WMO becomes effective on May 1, 2014. The WMO allows for municipalities to become authorized municipalities, which allows those municipalities to issue Watershed Management Permits within their corporate boundaries. The benefits of being an authorized municipality include control over the timing of permit issuance and offering applicants a permit process that involves coordination with fewer government agencies.

At the April 8, 2014 Study Session, the Village Council discussed the process of becoming an authorized municipality under the WMO, and specifically the process of updating the Village's development regulations pertaining to stormwater management to facilitate administration of the WMO. The Council directed staff to prepare the necessary changes to the Village Code for Council consideration. Ordinance MC-5-2014 modifies several sections of the Village Code as follows:

Section 13.16.150 A.

This section is revised to refer to provisions of the WMO and Winnetka Stormwater Management Code when making connections to the storm sewer system.

Section 15.08.010 J.

This section adopts the countywide WMO by reference.

Chapter 15.24 (Winnetka Sewer Code)

Revisions to this chapter remove references to stormwater management and storm sewers so that the items for sanitary sewers are distinguished. It also removes duplicative construction references contained in the Public Works Department's Engineering Design Guidelines.

Chapter 15.26 (Winnetka Stormwater Management Code – New Section)

This new chapter, the Winnetka Stormwater management Code, is parallel to Chapter 15.24 (Sewer Code) and contains provisions needed to administer the WMO.

Sections 15.32.020, 050, 080
Changes to these sections of Chapter 15.32 insert references to the WMO and Engineering Design Guidelines, and move some provisions to the new Stormwater Management Code.

Chapter 15.68 (Flood Hazard Areas)
The WMO applies to all projects constructed within flood hazard areas, and these changes are necessary to harmonize the Village's regulations and the WMO regulations. There are two key items to note, where the WMO is more restrictive than current Village regulations. While the Village's flood protection standard requires flood protection to one foot above the base flood elevation, the more restrictive WMO requires a flood protection to two feet above the base flood elevation. In addition, the Village's current requirements that allow basements to be constructed within the floodplain in certain instances are now superseded by the more restrictive provisions of the WMO that will severely limit this ability especially on narrower lots.

Procedure and effective date
The WMO contains an effective date of May 1, 2014. In order to become an authorized municipality, the Village needs to adopt the WMO by reference, and it is most advantageous to accomplish this prior to the May 1 effective date. At the April 8 Study Session, the Council directed staff to prepare the materials for this item such that introduction of the ordinance could be waived, and the ordinance can be adopted with a single reading.

Recommendation:
1. Consider a motion waiving introduction of Ordinance MC-5-2014.
2. Consider adoption of Ordinance MC-5-2014, amending Title 15 of the Village Code to provide for the adoption and administration of the Watershed Management Ordinance of the Metropolitan Water Reclamation District of Greater Chicago.

ORDINANCE NO. MC-5-2014

AN ORDINANCE AMENDING TITLE 15 OF THE WINNETKA VILLAGE CODE TO PROVIDE FOR THE ADOPTION AND ADMINISTRATION OF THE WATERSHED MAINTENANCE ORDINANCE OF THE METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

WHEREAS, the Village of Winnetka ("Village") is a home rule municipality in accordance with Article VII, Section 6 of the Constitution of the State of Illinois of 1970 and, pursuant thereto, has the authority, except as limited by said Section 6 of Article VII, to exercise any power and perform any function pertaining to the government and affairs of the Village, including the power to regulate for the protection of the public health, safety and welfare; and

WHEREAS, on November 17, 2004, the Illinois General Assembly passed Public Act 093-1049 (hereinafter the "Act"), which declares that stormwater management in Cook County shall be under the general supervision of the; and

WHEREAS, on October 3, 2013, Board of Commissioners of the Metropolitan Water Reclamation District of Greater Chicago ("District") adopted a Watershed Management Ordinance (hereinafter the "WMO"), effective on May 1, 2014; and

WHEREAS, the Village is located entirely within the boundaries of Cook County and is therefore subject to the requirements of the WMO; and

WHEREAS, pursuant to Article 14 of the WMO, the District may authorize municipalities to locally administer certain provisions of the WMO; and

WHEREAS, to be eligible to become an authorized municipality under the WMO, it is necessary for the Village to adopt the WMO by reference and to amend the Village Code as necessary to administer the WMO; and

WHEREAS, the Council of the Village of Winnetka ("Village Council") finds and determines that providing for the local administration of the WMO is in the best interests of the health, safety and general welfare of the Village and its residents; and

WHEREAS, the Village Council further finds that providing for the local administration of watershed management within the Village, including the local administration of the WMO, is a matter pertaining to the Village's government and affairs.

NOW, THEREFORE, BE IT ORDAINED by the President and Board of Trustees of the Village of Winnetka, as follows:

SECTION 1: The foregoing recitals are hereby incorporated as the findings of the Council of the Village of Winnetka, as if fully set forth herein.

SECTION 2: Subsection A of Section 13.16.150, Stormwater service connections, of Chapter 13.16, Stormwater Utility, of Title 13 of the Winnetka Village Code, Municipal Utilities, is hereby amended to provide as follows:

A. No stormwater service connection shall be installed, repaired, maintained or replaced except by a licensed plumber who has first notified the Public Works

Department. All such work shall be subject to the approval of the Public Works Department and shall be performed in accordance with all applicable provisions of this code, including without limitation the Winnetka Stormwater Management Code and the Watershed Managed Ordinance, and with the rules, regulations, standards and practices of the Public Works Department.

SECTION 3: Section 15.08.010, Adoption of Model Codes by Reference, of Chapter 15.08, Model Codes Adopted by Reference, of Title 15 of the Winnetka Village Code, Buildings and Construction, is hereby amended by adding a new subsection J, which shall provide as follows:

J. Metropolitan Water Reclamation District of Greater Chicago Countywide Watershed Management Ordinance, October 2013, as amended.

SECTION 4: Chapter 15.24, Sewer Code, of Title 15 of the Winnetka Village Code, Buildings and Construction, is hereby amended in its entirety, to provide as follows:

Chapter 15.24
SEWER CODE

Sections:

Section 15.24.010 Title.

This chapter shall be known, cited and referred to as the Winnetka Sewer Code.

(Prior code § 25.01)

Section 15.24.020 Scope.

This chapter establishes the minimum requirements for construction activities in the Village pertaining to sanitary sewers and storm sewers for buildings, including their design, construction, maintenance, operation and connection into the public sewer systems.

(Prior code § 25.02)

Section 15.24.030 Rules of construction.

A. In the event of a conflict between the provisions of this chapter and any other provision of this code or applicable statutes, the provision imposing the stricter regulation, as determined by the Director of Public Works, shall prevail unless such interpretation is otherwise prohibited by law.

B. Words in the singular shall include the plural and words used in the plural shall include the singular.

(Prior code § 25.03)

Section 15.24.040 Definitions.

A. Terms Defined in Other Ordinances and Codes. Terms used in this chapter, but not otherwise defined, shall have the meanings ascribed to them in the Building Code, the Zoning Ordinance, this code or the codes adopted by reference in ~~Section 15.52.010, 15.44.120 and 15.12.010~~ Chapter 15.08 of this code, including, without limitation, the Watershed Management Ordinance adopted by reference in Section 15.08.040(J) of this code, except that wherever the term "Director" is used in the Building Code, for purposes of this chapter it means the Director of Public Works, and wherever the term "Department" is used in the Building Code, for purposes of this chapter it means the Department of Public Works. The following terms shall have the meanings ascribed to them in the Illinois State Plumbing Code, 1993 Edition, as promulgated by the Department of Public Health in Title 77 of the Illinois Administrative Code, Chapter I, subchapter r, Part 890, as amended, which definitions are adopted by reference: building drain, building sewer, sewage, public sanitary sewer, storm sewer, combined building sewer.

B. Definitions. For purposes of this chapter, certain words are defined as follows:

"Control manhole" means a structure located on a site from which industrial wastes are discharged. The purpose of a control manhole is to provide access for a Village representative to sample and/or measure discharges.

"Natural outlet" means any outlet into a watercourse, pond, ditch, lake, or other body of surface or groundwater.

(Ord. MC-192-97 § 16, 1997; prior code § 25.04)

~~**Section 15.24.050 Street openings for sewers.**~~

~~A. Permits Required. No person shall excavate any street, parkway, pavement,~~

~~sidewalk, crosswalk or other public right-of-way, or any part, without first having complied with the applicable requirements of Titles 12 and 15 of this code, including having obtained all required permits.~~

~~B. Safety and Restoration of Excavation Site. All excavations for building sewer installations shall be adequately guarded with barricades and lights so as to protect the public from hazard. Streets, sidewalks, parkways and other public property disturbed in the course of the work shall be restored in conformance with standards, rules and regulations promulgated pursuant to Title 12 of this code.~~

~~(Prior code § 25.05)~~

Section 15.24.050~~060~~ Enforcement and penalties.

Enforcement of this chapter, including penalties for violations, shall be pursuant to the provisions of Section 15.04.080 of this code.

(Prior code § 25.06)

Section 15.24.060~~070~~ Separate systems for sanitary and storm sewers.

Each building shall be provided with a separate sewage outlet for stormwater, and with a separate sewage outlet for sanitary sewage. The building sanitary sewage service pipe shall be connected and fitted into the public sanitary sewer by the owner of the property being served, and the building stormwater service pipe shall be connected and fitted into the public stormwater sewer, if any, by the owner of the property being served. No sewer connections that will permit sanitary sewage to drain into any public stormwater sewer shall be made. No storm or surface water from any building or property shall be permitted to drain into any public sanitary sewer.

(Prior code § 25.07)

Section 15.24.070~~080~~ Separate sewer connection for each building.

A Every building shall be separately and independently connected to a public sewer by a separate building service sewer pipe, when there is any such public sewer in the street adjoining the lot or parcel of land on which such building is erected.

B. The entire plumbing and drainage system of every building shall be entirely separate and independent from that of any other building, except that two buildings may be connected with the same stub on the public sewer by means of a manhole in the parkway in such manner as the Director of Public Works may direct.

(Prior code § 25.08)

Section 15.24.080~~085~~ Sewer Back-up Prevention Program.

A. Cost-sharing program. Subject to the terms and conditions established in this section, a property owner who meets the eligibility standards of this section may apply to

the Village for reimbursement of a portion of the cost of the initial installation of an overhead sewer or anti-back-up device.

B. Terms and conditions of the program.

1. Participants must meet the eligibility standards established by this section.

2. The maximum reimbursement made to any person under this program shall be as follows:

a. The maximum reimbursement for the initial installation of an overhead sewer shall be 50% of the cost of the initial installation or $5,000, whichever is less.

b. The maximum reimbursement for the initial installation of an anti-back-up device, 50% of the cost of the initial installation, or $3,500, whichever is less.

3. Only those costs associated with the initial installation of anti-back-up device or overhead sewer shall be considered eligible for reimbursement. No reimbursement shall be allowed either for the replacement, upgrade, repair or maintenance of any anti-back-up device or overhead sewer, or for the replacement of any anti-back-up device with an overhead sewer.

4. Reimbursements pursuant to this section shall be available only if the Village Council has allocated funds for such purpose in the Village's annual budget. The Village Council shall retain the sole and exclusive discretion to determine, for each fiscal year, whether and to what extent the program shall be funded.

5. The cost-sharing program established by this section:

a. shall be a voluntary undertaking of the Village, which the Village shall be entitled to terminate or suspend at any time for any reason;

b. shall not be construed as an assumption of responsibility for, or legal liability arising from the design, installation, operation, maintenance, repair or replacement of any private sewer line, overhead sewer or anti-back-up device, including without limitation, any damages or injuries arising from the failure or malfunction of such sewer line, overhead sewer or anti-back-up device; and

c. shall not be construed as a waiver of any statutory or common law defenses or immunities the Village may be entitled to raise in response to any actions or claims of liability for damage or injuries arising from the design, installation, use, operation or maintenance of any public or private sewer line or of any overhead sewer or anti-back-up device, including without limitation, damages or injuries arising from the failure or malfunction of any such sewer line, overhead sewer or anti-back-up device.

C. Eligibility standards. No person shall be eligible for reimbursement under this section unless all of the following conditions are met:

1. The applicant must be the owner of record of a single family home that was built before 1970 and that is not currently protected with any overhead sewer or anti-back-up device.

2. The reimbursement request must be for the initial installation of an overhead sewer or anti-back-up device. The cost of replacement, upgrade, repair or maintenance of

an existing overhead sewer or anti-back-up device is not eligible for reimbursement.

3. The property owner or a qualified contractor acting on the owner's behalf, shall procure all necessary permits from the Village or other agencies to install the overhead sewer or anti-back-up device. All work shall comply with all applicable provisions of this Code, including all necessary inspections, contractor bonds or licenses. The property owner or the owner's contractor shall be responsible for scheduling all necessary inspections, and no reimbursement will be made for work that does not pass all required inspections.

4. The application for reimbursement shall be submitted with the permit application for the installation of the overhead sewer or anti-back-up device. The application form shall be provided by the Director

5. The application for reimbursement shall include a waiver, signed by the owner of record, waiving any and all claims against the Village for damages or injuries of any kind arising from the installation, operation, maintenance or repair of the overhead sewer or anti-back-up device, including without limitation, the failure or malfunction of the overhead sewer or anti-back-up device. The statement of the waiver shall be prescribed by the Village.

6. The property owner shall arrange for a pre-construction inspection, to be performed by the Village or its authorized agent, to locate any prohibited sources of stormwater inflow or infiltration to the sanitary sewer system. If this inspection reveals any prohibited sources of stormwater inflow or infiltration to the sanitary sewer system, the property owner shall correct them or cause them to be corrected, and arrange for a re-inspection by the Village or its authorized agent. All such prohibited sources of stormwater inflow or infiltration to the sanitary sewer system shall be corrected to the Village's satisfaction before the applicant is eligible for reimbursement under this section.

7. No reimbursement shall be made until the work has been completed and has passed the final inspection as required by the applicable provisions of the Winnetka Sewer Code and .the Winnetka Building Code.

8. No reimbursement shall be made unless the property owner provides the Village with evidence, in the form of a signed and sworn contractor's statement certifying that the contractor has been paid in full for the completed work.

D. Authority of Director. The Director of Public Works shall have the authority and discretion to administer the cost-sharing program established by this section, subject to the control and direction of the Village Manager. The Director of Public Works shall establish such administrative procedures as may be necessary to implement the program, which shall include, but shall not be limited to, establishing administrative priorities for processing and granting reimbursement requests based on such factors as the time of filing, time of completion, location in the floodplain or in flood-prone areas, and availability of funding.

(MC-8-2011, Amended, 09/20/11; MC-3-2006, Added, 05/02/06)

Section 15.24.090 Sewer permits.

A. Permits Required. No building drain, private sanitary or stormwater sewer for connection to any public sewer system shall be laid, nor shall any person lay, alter or disturb any part of any public sewer or drain connected into any public sewer system without first having obtained a permit for such work from the Director of Public Works. All sewer construction shall meet the applicable requirements of this chapter, the Public Works and Engineering Design Guidelines, and the WMO. In the event a permit from the Metropolitan Water Reclamation District of Greater Chicago is required for ~~connection to the sewer system~~ qualified sewer construction, such permit shall be obtained before the Village permit becomes effective and before any work begins.

B. Responsibility of Owner.

1. Except as provided in the following paragraph 2, the owner of the property to which sewer service is supplied shall be responsible for installing, repairing and maintaining, at the owner's expense, all drains, connections and fittings for the building sewer connections into the public sewer systems.

2. All repairs to that portion of the main public sewer line or pipe encompassed within its outer circumference shall be made by and at the expense of the Village. All repairs to the building sewer, including that portion of the connection, "Y," or "T" lying outside of the outer circumference of the main public sewer line or pipe, shall be made by and at the expense of the owner of the premises served. Where the depth of a portion of the building sewer requiring repair under a public right-of-way exceeds 12 feet below grade, repairs shall require the inspection and approval of the Village Engineer prior to the commencement of and at the completion of any repair work, and the Village shall reimburse the owner of the premises served 50% of the reasonable and customary cost of the below grade sewer repair work approved by the Village Engineer. Notwithstanding any of the foregoing, the owner of the premises served shall in all circumstances be responsible for the entire cost of surface restoration required as the result of any repair work.

3. In the event that a failure develops or occurs in that portion of the building sewer to be maintained by the owner of the premises, the Village may close the public water service valve and discontinue the service of water to the premises until the required repairs are made to the defective portion of the building sewer by the owner of the premises.

(Amended MC-16-2002, 12/31/02)

C. Permit Applications. Applications for sewer permits shall be submitted by the owner on forms provided by the Director of Public Works. The application shall be accompanied by all required fees and deposits, which shall be set by resolution of the Village Council. The sewer contractor shall have a permit bond on file with the Director of Public Works prior to Village's acceptance of a sewer permit application. Any remaining permit or other fees owed to the Village shall be paid in full prior to any approved permit being released or in force.

(Prior code § 25.09)

Section 15.24.100 Inspection of sewer connection.

A written notice of intention to make a connection with a public sewer shall be filed at the office of the Director of Public Works at least twenty-four (24) hours before such connection is made. Every connection shall be left uncovered until it has been inspected and approved by the Director of Public Works, or an inspector from his or her office.

(Prior code § 25.10)

~~**Section 15.24.110 Sewer connections.**~~

~~A. Connections. The connection between the soil or waste pipe and the vitrified tile sewer extending to the public sewer shall be constructed with Portland cement mortar, made with one part cement and two parts clean, sharp sand.~~

~~B. Permitted Connections. Wherever practicable, the building sewer shall connect with the public sewer by means of a "Y" junction in the public sewer left for such purpose. If such a "Y" junction is not available, and the public sewer is of vitrified tile ten (10) inches or less in diameter, a length of pipe shall be removed, and a "Y" substituted to which the house or building sewer shall connect. If the public sewer is of greater diameter than ten (10) inches, the sewer main may be cored and the service inserted into a saddle containing a flexible boot. The saddle shall be firmly affixed to the exterior of the public sewer.~~

~~C. Prohibited Connections. Break-in connections shall not be permitted. Direct connection of a house or building sewer to a manhole or catch basin on the public sewer is prohibited, unless the written permission of the Director of Public Works is first obtained.~~

~~D. Director of Public Works. All connections of any kind with the public sewer shall be made under the supervision of and in a manner satisfactory to the Director of Public Works.~~

~~(Prior code § 25.11)~~

~~**Section 15.24.120 Manholes.**~~

~~A. Required Locations. Where it is necessary to make a change in direction of the building sewer between the building and the public sewer, such change of direction shall be made by means of a manhole to be constructed as the Director of Public Works shall direct.~~

~~B. Construction of Manholes. All manholes and gravel basins shall be constructed of concrete, either monolithic or block, composed by volume of one part Portland cement, two parts sand, and four parts gravel or crushed stone, mixed with sufficient water. They shall be circular in section, with an interior diameter of three feet, except that the top shall be drawn in to two feet beginning at a point three feet below the top, so as to fit and support the cover. The walls of such manhole or gravel basin shall be four inches in thickness if built monolithic, or five inches if built of blocks with full joints of mortar composed of one part Portland cement to two parts of sharp, clean sand, mixed with~~

~~sufficient water. Each manhole or gravel basin shall be provided with a six inch concrete floor with the invert, if any, molded smoothly in the concrete or formed of sections of vitrified pipe imbedded in the concrete. Each such manhole or gravel basin shall be provided with a cast-iron cover and cast-iron or concrete frame. The floor of all gravel basins shall be three feet below the flow line of the outlet.~~

~~(Prior code § 25.12)~~

~~Section 15.24.130 Sewer pipe.~~

~~A. Sizes. Pipe for both sanitary sewers and building storm drains shall be at least six inches in diameter, except that when cast-iron pipe is used for sanitary building sewers a minimum of four inches in diameter shall be required. Where larger capacity is required, sewers shall be of a size which the Director of Public Works may consider adequate.~~

~~B. How Laid. Building sewers shall be laid on solid ground or supported so as to prevent settlement or breakage in a manner satisfactory to the Director of Public Works. In no case shall such sewers be laid on loose fill or on soft, wet ground.~~

~~C. Grade. All building sewers shall be laid with a fall toward the public sewer main of not less than one-eighth inch per running foot where practicable. Any deviation from such grade shall require the prior approval of the Director of Public Works.~~

~~(Prior code § 25.13)~~

~~Section 15.24.140 Storm and surface water connections.~~

~~A. General Requirement. Except as provided in subsection B of this section, all storm or surface water connections , including downspouts for draining roofs, shall be connected to an approved building stormwater service pipe.~~

~~B. Roof Downspouts. No roof downspout shall drain onto the ground unless the owner of the property first obtains a permit from the Director of Public Works. All such permits shall require an approved drainage plan, which shall include means of approved splash blocks. No such permit shall be approved unless the Director of Public Works finds that there will be no significant adverse effect on other private or public property from such drainage, and the permit shall remain valid only so long as such adverse effects can be avoided. If it appears, after issuance of a permit, that either property is adversely affected, the Director of Public Works shall revoke the permit and require the property owner to connect roof downspouts to an available storm sewer.~~

~~(Prior code § 25.14)~~

Section 15.24.~~110~~150 Use of public sewers.

A. Prohibited Uses. It is unlawful to discharge or permit to be discharged any of the following described waters or wastes to any public sewer:

1. Any gasoline, benzene, naphtha, fuel oil, or other flammable or explosive liquid, solid or gas;

2. Any waters or wastes containing toxic or poisonous solids, liquids or gases in sufficient quantity, either singly or by interaction with other wastes, to injure or interfere with any sewer treatment process, constitute a hazard to humans or animals, create a public nuisance, or create any hazard in the receiving waters of the sewage treatment plant;

3. Any waters or wastes having a pH lower than 5.5 or having any other corrosive property capable of causing damage or hazard to structures, equipment and personnel of the sewage works;

4. Solid or viscous substances in quantities or of such size capable of causing obstruction to the flow in sewers, or other interference with the proper operation of the sewage works such as, but not limited to, ashes, cinders, sand, mud, straw, shavings, metal, glass, rags, feathers, tar, plastic, wood, unbound garbage, whole blood, paunch-belly manure, hair and flashings, entrails and paper dishes, cups and milk containers, either whole or ground by garbage grinders.

B. Uses Requiring Approval of Director. It is unlawful to discharge or cause to be discharged the following described substances, materials, waters or wastes if it appears likely in the opinion of the Director of Public Works that such works can harm either the sewers, sewerage treatment process or equipment; have an adverse effect on the receiving stream; or can otherwise endanger life or public property, or constitute a nuisance. In forming an opinion as to the acceptability of these wastes, the Director of Public Works will give consideration to such factors as the quantities of subject wastes in relation to flows and velocities in the sewers, materials or construction of the sewers, nature of the sewage treatment plant, and maximum limits established by regulatory agencies. The substances prohibited are:

1. Any liquid or vapor having a temperature higher than one hundred fifty (150) degrees F (sixty-five (65) C);

2. Any waters or wastes containing toxic or poisonous materials; or oils, whether emulsified or not, in excess of one hundred (100) mg/l or containing substances which may solidify or become viscous at temperatures between thirty-two (32) degrees F and one hundred fifty (150) F (zero (0) degrees C and sixty-five (65) degrees C);

3. Any garbage that has not been properly shredded. The installation and operation of any garbage grinder equipment with a motor of three-quarter horsepower (0.76 hp metric) or greater shall be subject to the review and approval of the Director of Public Works;

4. Any waters or wastes containing strong acid, iron pickling wastes or concentrated plating solution whether neutralized or not;

5. Any waters or wastes containing iron, chromium, copper, zinc, or similar objectionable or toxic substances; or wastes exerting an excessive chlorine requirement, to such degree that any such material received in the composite sewage at the sewage treatment works exceeds the limits established by the Director of Public Works for such materials;

6. Any waters or wastes containing phenols or other taste or odor producing substances, in such concentrations exceeding limits which may be established by the

Director of Public Works as necessary after treatment of the composite sewage, to meet the requirements of the state, federal, or other public agencies having jurisdiction for such discharge to the receiving waters;

7. Any radioactive wastes or isotopes of such half-life or concentration as may exceed limits established by the Director of Public Works in compliance with applicable state and federal regulations;

8. Any wastes or waters having a pH in excess of 9.5;

9. Any mercury or any of its compounds in excess of 0.0005 mg/l as HG at any time except as permitted by the Director of Public Works in compliance with applicable state and federal regulations;

10. Any cyanide in excess of two mg/liter at any time except as permitted by the Director of Public Works in compliance with applicable state and federal regulations;

11. Materials which exert or cause:

a. Unusual concentrations of inert suspended solids (such as, but not limited to, Fullers earth, lime slurries and lime residues) or of dissolved solids (such as, but not limited to, sodium chloride and sodium sulfate),

b. Excessive discoloration (such as, but not limited to, dye wastes and vegetable tanning solutions),

c. Unusual biochemical oxygen demand, chemical oxygen demand, or chlorine requirements in such quantities as to constitute a significant load on the sewage treatment works,

d. Unusual volume of flow or concentrations of wastes;

12. Waters or wastes containing substances which are not amenable to treatment or reduction by the sewage treatment processes employees, or are amenable to treatment only to such degree that the sewage treatment plant effluent cannot meet the requirements of agencies having jurisdiction over discharge to the receiving waters.

C. Authority of Director. If any waters or wastes are discharged or are proposed to be discharged to the public sewers, which waters contain the substances or possess the characteristics enumerated in subsection B of this section, and/or which are in violation of the standards for pretreatment provided in the applicable federal regulations, and which in the judgment of the Director of Public Works may have a deleterious effect upon the sewage works, processes, equipment or receiving waters, or which otherwise create a hazard to life or constitute a public nuisance, the Director of Public Works may, in his or her discretion, do any of the following:

1. Reject the wastes;

2. Require pretreatment to an acceptable condition for discharge to the public sewers;

3. Require control over the quantities and rates of discharge; and/or

4. Require payment to cover the added costs of handling and treating the wastes not covered by existing taxes or sewer charges.

If the Director of Public Works permits the pretreatment or equalization of waste flows, the design and installation of the plants and equipment shall be subject to the review and approval of the Director of Public Works, and subject to the requirements of all applicable codes, ordinances and laws.

(Prior code § 25.15)

Section 15.24.120~~160~~ Access to records.

The state and federal environmental protection agencies shall have access to any books, documents, papers and records of the Village which are applicable to the Village's system of sanitary sewer user charges for the purpose of making audit, examination, excepts and transcripts to insure compliance with the terms of any applicable state or federal rules, regulations or conditions.

(Prior code § 25.16)

SECTION 5: Title 15 of the Winnetka Village Code, Buildings and Construction, is hereby amended by adding a new Chapter 15.26, which shall be titled "Stormwater Management Code" and shall provide as follows:

Chapter 15.26

STORMWATER MANAGEMENT CODE

Section:

Section 15.26.010 Title.

This chapter shall be known, cited and referred to as the Winnetka Stormwater Management Code.

Section 15.26.020 Scope.

This chapter establishes the minimum requirements for construction activities in the Village pertaining to storm sewers for buildings, including their design, construction, maintenance, operation and connection into the public stormwater sewer systems.

Section 15.26.030 Rules of construction.

A. In the event of a conflict between the provisions of this chapter and any other provision of this code or applicable statutes, the provision imposing the stricter regulation, as determined by the Director of Public Works, shall prevail unless such interpretation is otherwise prohibited by law.

B. Words in the singular shall include the plural and words used in the plural shall include the singular.

Section 15.26.040 Definitions.

A. Terms Defined in Other Ordinances and Codes. Terms used in this chapter, but not otherwise defined, shall have the meanings ascribed to them in the Building Code, the Zoning Ordinance, this code or the codes adopted by reference in Chapter 15.08 of this Code, including without limitation, the Watershed Management Ordinance adopted by reference in section 15.08.040(J) of this code, except that wherever the term "Director" is used in the Building Code, for purposes of this chapter it means the Director of Public Works, and wherever the term "Department" is used in the Building Code, for purposes of this chapter it means the Department of Public Works. The following terms shall have the meanings ascribed to them in the Illinois State Plumbing Code, 1993 Edition, as promulgated by the Department of Public Health in Title 77 of the Illinois Administrative Code, Chapter I, subchapter r, Part 890, as amended, which definitions are adopted by reference: building drain, building sewer, sewage, public sanitary sewer, storm sewer, combined building sewer.

B. Definitions. For purposes of this chapter, certain words are defined as follows:

"Natural outlet" means any outlet into a watercourse, pond, ditch, lake, or other body of surface or groundwater.

Section 15.26.050 Enforcement and penalties.

Enforcement of this chapter, including penalties for violations, shall be pursuant to the provisions of Section 15.04.080 of this code.

Section 15.26.060 Separate systems for sanitary and storm sewers.

Each building shall be provided with a separate outlet for stormwater. The building stormwater service pipe shall be connected and fitted into the public stormwater sewer, if any, by the owner of the property being served. No sewer connections that will permit sanitary sewage to drain into any public stormwater sewer shall be made. No storm or surface water from any building or property shall be permitted to drain into any public sanitary sewer.

Section 15.26.070 Watershed management permits.

A. Permits Required. No building drain, private stormwater sewer for connection to any public sewer system shall be laid, nor shall any person lay, alter or disturb any part of any public sewer or drain connected into any public sewer system, nor shall any person perform

land grading, stormwater management, or other development regulated by the Cook County Watershed Management Ordinance, without first having obtained a permit for such work from the Director of Public Works. In the event a permit from the Metropolitan Water Reclamation District of Greater Chicago is required for connection to the sewer system, such permit shall be obtained before the Village permit becomes effective and before any work begins.

B. Permit Applications. Applications for sewer permits shall be submitted by the owner on forms provided by the Director of Public Works. The application shall be accompanied by all required fees and deposits, which shall be set by resolution of the Village Council. The sewer contractor shall have a permit bond on file with the Director of Public Works prior to Village's acceptance of a sewer permit application. Any remaining permit or other fees owed to the Village shall be paid in full prior to any approved permit being released or in force.

Section 15.26.080 Responsibility of Owner.

A. Except as provided in the following paragraph 2, the owner of the property to which storm sewer service is supplied shall be responsible for installing, repairing and maintaining, at the owner's expense, all drains, connections and fittings for the building sewer connections into the public sewer systems.

B. All repairs to that portion of the main public sewer line or pipe encompassed within its outer circumference shall be made by and at the expense of the Village. All repairs to the building sewer, including that portion of the connection, "Y," or "T" lying outside of the outer circumference of the main public sewer line or pipe, shall be made by and at the expense of the owner of the premises served. Where the depth of a portion of the building sewer requiring repair under a public right-of-way exceeds 12 feet below grade, repairs shall require the inspection and approval of the Village Engineer prior to the commencement of and at the completion of any repair work, and the Village shall reimburse the owner of the premises served 50% of the reasonable and customary cost of the below grade sewer repair work approved by the Village Engineer. Notwithstanding any of the foregoing, the owner of the premises served shall in all circumstances be responsible for the entire cost of surface restoration required as the result of any repair work.

C. In the event that a failure develops or occurs in that portion of the building sewer to be maintained by the owner of the premises, the Village may close the public water service valve and discontinue the service of water to the premises until the required repairs are made to the defective portion of the building sewer by the owner of the premises.

Section 15.26.090 Inspection of stormwater sewer connection.

A written notice of intention to make a connection with a public stormwater sewer shall be filed at the office of the Director of Public Works at least twenty-four (24) hours before such connection is made. Every connection shall be left uncovered until it has been inspected and approved by the Director of Public Works, or an inspector from his or her office.

Section 15.26.100 Construction requirements.

A. Public Works and Engineering Design Guidelines. All design and construction of storm sewers, detention facilities, stormwater management facilities, and land grading, and other stormwater management or runoff control activities shall be in conformance with the Public Works and Engineering Design Guidelines.

B. Drainage of Surface Water. To diminish or remove any adverse impact of surface water drainage and run-off on an adjacent property, no new building, other structure or addition shall be constructed which will result in the surface water run-off, during and following construction of any such improvement, at a rate greater than the water run-off immediately prior to such construction and no building permit shall be issued unless and until the Village Engineer determines that the construction complies with the applicable requirements of this chapter, the Public Works and Engineering Design Guidelines, and the Watershed Management Ordinance.

C. Land Grading. No permit shall be issued for any land grading that will permanently alter the existing land elevation or grade of a parcel of property so as to cause surface water runoff to be diverted onto or detained on abutting or nearby property, significantly alter existing drainage patterns, or increase or concentrate stormwater runoff onto abutting or nearby property.

D. Stormwater Detention Required. Developments required to provide storm water detention on site, include, but are not limited to multiple lot single family residential subdivisions, single family residential subdivisions of an individual lot, multi-family residential development and commercial developments.

E. Stormwater Detention design Standards.

1. New home construction on a previously developed lot shall provide storm water detention for the volume difference between using the runoff coefficient based upon the maximum impermeable lot coverage, per the Village of Winnetka's Zoning Code, and the runoff coefficient based upon the existing condition, for a 100-year storm event. The allowable release rate for both conditions will be determined by using a runoff coefficient of 0.15 and the rainfall intensity for a 3-year storm event. New home construction on a previously undeveloped site, or the redevelopment of a site for a different use (i.e. single family to multi-family, or commercial redevelopment) shall provide storm water detention for the total required detention volume based upon a 100-year storm event, using a runoff coefficient based upon the maximum impermeable lot coverage, and the allowable release rate using a runoff coefficient of 0.15 and a rainfall intensity for a 3-year storm event.

2. Improvements to an existing home and/or lot, causing an increase in impermeable lot coverage greater or equal to 25%, shall provide storm water detention for the difference between the proposed and existing condition, for a 100-year storm event and an allowable release rate based upon a 3-year storm event and a runoff coefficient of 0.15. The actual proposed lot coverage may be used to calculate the proposed runoff coefficient.

3. The storm water detention facilities shall be designed in accordance with the MWRDGC's requirements for storm water detention as modified by the rainfall frequencies set forth in Bulletin 70 "Frequency Distribution and Hydroclimatic Characteristics of Heavy Rainstorms in Illinois" prepared by the Illinois State Water Survey, 1989. Design high water level (HWL) will consist of the elevation of the storm water in a 100-year storm event.

4. Stormwater storage volume located within best management practices, such as a rain garden or the aggregate base of permeable pavement, that are not otherwise required for site development shall be credited toward the required detention volume.

5. For projects required to provide storm water detention by the WMO, the detention design shall meet the requirements of Article 5 of the Watershed Management Ordinance.

Section 15.26.110 Storm and surface water connections.

A. General Requirement. Except as provided in subsection B of this section, all storm or surface water connections, except downspouts for draining roofs, shall be connected to an approved building stormwater service pipe.

B. Roof Downspouts. All downspouts shall drain onto the ground unless doing so will result in an adverse effect on other private or public properties from such drainage. Downspouts drainage shall be diverted toward and on-site drainage system such as a yard inlet or swale, prior to entering the public storm sewer system. No roof downspout shall connect to the storm sewer service line unless the owner of the property first obtains a permit from the Director of Public Works.

Section 15.26.120 Use of stormwater sewers.

A. Prohibited Uses. It is unlawful to discharge or permit to be discharged to any public or private or public storm sewer any substances, materials, or waters if it appears likely in the opinion of the Director of Public Works that such works can harm either the sewers or equipment; have an adverse effect on the receiving water body; violate limits established by regulatory agencies having jurisdiction over discharge to the receiving waters; or can otherwise endanger life or public property, or constitute a nuisance.

SECTION 6: Subsection A of Section 15.32.010, Permits and Fees, of Chapter 15.32, Construction Permits, of Title 15 of the Winnetka Village Code, Buildings and Construction, is hereby amended to provide as follows:

Section 15.32.020 Permit fees and costs

A. Fees Set by Village Council. The Village Council shall establish all fees, costs, deposits and bonding requirements pertaining to the review and processing of all applications for any construction activity, including but not limited to building permits, permits for electrical work, plumbing work, HVAC or mechanical work, watershed management permits, permits for awnings, fences, impermeable surfaces, driveways and work affecting any public right-of-way; all inspections, development agreements and other actions involved in the administration and enforcement of the provisions of this code; all applications requesting any other action by the Village, or any board, commission or committee of the Village, related to construction activities and the compliance of such activities with this code. The nature and amount of all such fees,

costs, deposits and bonds shall be set from time to time by resolution of the Village Council.

SECTION 7: Subsection J of Section 15.32.050, Applications for Permits, of Chapter 15.32, Construction Permits, of Title 15 of the Winnetka Village Code, Buildings and Construction, is hereby amended to provide as follows:

J. Applications for Land Grading Permits. Any application for a land grading permit shall be accompanied by a topographical survey of the property for which the permit is sought, which shall depict existing land elevations on the property and the areas immediately adjacent to the property. The application shall also provide such other information as set forth in Section I.A of the Public Works and Engineering Design Guidelines.~~the Village Engineer may deem necessary in order to determine the nature and extent of the grade alteration and its impact on natural stormwater drainage patterns and rates of flow.~~

SECTION 8: Section 15.32.050, Applications for Permits, of Chapter 15.32, Construction Permits, of Title 15 of the Winnetka Village Code, Buildings and Construction, is hereby amended by inserting a new subsection K, Applications for Watershed Management Permits, and redesignating current subsection K as subsection L, Permits for Wireless Telecommunications Services Facilities, as follows:

K. Applications for Watershed Management Permits. Any application for a Watershed Management Permit shall meet the requirements of Article 3 of the Watershed Management Ordinance.

L. Permits for Wireless Telecommunications Services Facilities. All applications for a building permit for wireless telecommunications services facilities, as defined in Title 17 of this code, shall also satisfy the requirements of Section 17.48.010(A) of that title.

SECTION 9: Subsection F of Section 15.32.080, Criteria for Permit Approval, of Chapter 15.32, Construction Permits, of Title 15 of the Winnetka Village Code, Buildings and Construction, is hereby amended to provide as follows:

F. Flood Hazard Areas. No building permit for new structures or additions shall be issued for property within a flood hazard area, as defined in Chapter 15.68 of this code, unless the applicant has first complied with all applicable provisions of that chapter and the Watershed Management Ordinance.

SECTION 10: Subsection G of Section 15.32.080, Criteria for Permit Approval, of Chapter 15.32, Construction Permits, of Title 15 of the Winnetka Village Code, Buildings and Construction, is hereby amended to provide as follows:

G. Drainage of Surface Water. No building permit for new structures, additions, impermeable surfaces, or grading activities shall be issued unless the applicant has complied with all applicable provisions of Chapter 15.26 and the Watershed Management

Ordinance.~~To diminish or remove any adverse impact of surface water drainage and run-off on an adjacent property, no new building, other structure or addition shall be constructed which will result in the surface water run-off, during and following construction of any such improvement, at a rate greater than the water run-off immediately prior to such construction and no building permit shall be issued unless and until adequate provision is made by connecting to available storm sewers or by other means (in the form of drainage swales, detention areas or such other form of water control mechanism as shall be approved by the Director of Public Works) to so limit such water run-off and provide for the proper control and drainage of surface water.~~

SECTION 11: Subsection L of Section 15.32.080, Criteria for Permit Approval, of Chapter 15.32, Construction Permits, of Title 15 of the Winnetka Village Code, Buildings and Construction, is hereby amended to provide as follows:

L. Land Grading. No permit shall be issued for any land grading that will permanently alter the existing land elevation or grade of a parcel of property unless the applicant has complied with all applicable provisions of Chapter 15.26 and the Watershed Management Ordinance,~~and until the Village Engineer has determined, upon a review of the permit application, that the proposed grading will not cause surface water runoff to be diverted onto or detained on abutting or nearby property, will not significantly alter existing drainage patterns, and will not increase or concentrate stormwater runoff onto abutting or nearby property.~~

SECTION 12: Section 15.32.080, Criteria for Permit Approval, of Chapter 15.32, Construction Permits, of Title 15 of the Winnetka Village Code, Buildings and Construction, is hereby amended by inserting a new subsection M, titled Watershed Management, and redesignating the current subsection M as subsection N, Waste Reduction and Recycling Plan, as follows:

M Watershed Management. No permit shall be issued for any development regulated by the Watershed Management Ordinance unless and until the Village Engineer has determined, upon review of the permit application, that the proposed development meets all applicable requirements of the Watershed Management Ordinance.

N. Waste Reduction and Recycling Plan. No permit shall be issued for any construction activity that is covered work, as that term is defined in Section 15.54.040 of this Code, unless and until the Director has reviewed and approved the waste reduction and recycling plan required for such work pursuant to Section 15.54.080 of this Code.

SECTION 13: The definition of "Flood protection elevation" in Section 15.68.020 of Chapter 15.68, Flood Hazard Protection Regulations, of Title 15 of the Winnetka Village Code, Buildings and Construction, is hereby amended to provide, as follows:

"Flood protection elevation (FPE)" means the elevation of the base flood or one hundred (100) year frequency flood plus ~~one foot~~ two feet of freeboard at any given location in the Special Flood Hazard Area.

SECTION 14: The definition of Minimum Average Lot Grade" in Section 15.68.020 of Chapter 15.68, Flood Hazard Protection Regulations, of Title 15 of the Winnetka Village Code, Buildings and Construction, is hereby amended to provide, as follows:

"Minimum Average Lot Grade" is the number arrived at by applying the following formula: ~~624.5~~(BFE-1.0) – [(Total Required Side Yard – 12) x 0.0833].

SECTION 15: Subsection D of Section 15.68.030, Duties of the Director, of Chapter 15.68, Flood Hazard Protection Regulations, of Title 15 of the Winnetka Village Code, Buildings and Construction, is hereby amended to provide, as follows:

D. Other Permit Requirements. The Director shall ensure that any and all required federal, state and local permits are received prior to the issuance of a ~~floodplain development permit~~ Watershed Management Permit.

SECTION 16: Subsection E of Section 15.68.030, Duties of the Director, of Chapter 15.68, Flood Hazard Protection Regulations, of Title 15 of the Winnetka Village Code, Buildings and Construction, is hereby amended to provide, as follows:

E. Plan Review and Permit Insurance. The Director shall ensure that all development activities in SFHAs under the jurisdiction of the Village meet the requirements of this chapter. The Director shall issue a ~~floodplain development permit~~ Watershed Management Permit in accordance with the provisions of this chapter and other regulations of the Village only if the development meets the conditions of this chapter and other applicable regulations of the Village.

SECTION 17: Subsection C of Section 15.68.040, Base Flood Elevation, of Chapter 15.68, Flood Hazard Protection Regulations, of Title 15 of the Winnetka Village Code, Buildings and Construction, is hereby amended to provide, as follows:

C. Base Flood for AH and AO Zones. The base flood or one hundred (100) year frequency flood elevation for each SFHA delineated as an AH zone or AO zone shall be ~~that elevation (or depth) delineated on the Countywide Flood Insurance Rate Map of Cook County~~as described in §601.4.B-C of the WMO.

SECTION 18: Subsection D of Section 15.68.040, Base Flood Elevation, of Chapter 15.68, Flood Hazard Protection Regulations, of Title 15 of the Winnetka Village Code, Buildings and Construction, is hereby amended to provide, as follows:

D. Base Flood for A Zones. The base flood or one hundred (100) year frequency flood elevation for each of the remaining SFHAs delineated as an A zone on the Countywide Flood Insurance Rate Map of Cook County shall be according to the best

existing data available in the Illinois State Water Survey Flood Plain Information Repository. When no base flood or one hundred (100) year frequency flood elevation exists, the base flood or one hundred (100) year frequency flood elevation ~~for a riverine SFHA shall be determined from a backwater model, such as HEC-II, WSP-2, or a dynamic model such as HIP. The flood flows used in the hydraulic mode shall be obtained from a hydrologic model such as HEC-1, TR-20 or HIP, or by techniques presented in various publications prepared by the United States Geological Survey for estimating peak flood discharges~~shall be determined according to §601.6 of the WMO. Flood flows should be based on anticipated future land use conditions in the watershed as determined from adopted local and regional land use plans. Along any watercourse draining more than one square mile, the above analyses shall be submitted to IDNR/OWR for approval; once approved it must be submitted to the Illinois State Water Survey Floodplain Information Repository for filing. For a nonriverine SFHA, the base flood elevation shall be the historic flood of record plus three (3) feet, unless calculated by a detailed engineering study and approved by the Illinois State Water Survey.

SECTION 19: Section 15.68.050, Occupation and use of flood fringe areas, of Chapter 15.68, Flood Hazard Protection Regulations, of Title 15 of the Winnetka Village Code, Buildings and Construction, is hereby amended to provide, as follows:

Section 15.68.050 Occupation and use of flood fringe areas.

Development in and/or filling of the flood fringe is subject to the provisions of this section and will only be permitted if protection is provided against the base flood or one hundred (100) year frequency flood by proper elevation and if other applicable requirements of this chapter are met. No use will be permitted if it adversely affects the capacity of drainage facilities or systems. Developments located within the flood fringe shall meet the requirements of this section, along with the requirements of Section 15.68.080 of this chapter.

A. ~~Development Permit~~ Watershed Management Permit Required. No person, firm, corporation or governmental body, other than exempt organizations, shall commence any development in the SFHA without first obtaining a ~~development permit~~Watershed Management Permit from the Director or the MWRD, as applicable.

B. Application and Site Plan. Application for a ~~development permit~~ Watershed Management Permit shall be made on a form provided by the Director. The application shall ~~be accompanied by drawings of the site, drawn to scale, showing property line dimensions, the legal description for the property and the location and dimensions of all existing and proposed buildings and additions. Grade elevations shall be shown in North American Vertical Datum (NAVD, 1988) for both existing conditions and for all changes in grade resulting from excavation or filling.~~ meet the requirements of Article 3 of the WMO. For all proposed buildings, the elevation of the lowest floor (including basement) and lowest adjacent grade shall be shown on the submitted plans and the development will be subject to the requirements of Section 15.68.080 of this chapter. The drawing shall be sealed by a registered professional engineer ~~or land surveyor~~.

C. Review of Application. Upon receipt of a ~~development permit~~ Watershed Management Permit application, the Director shall compare the elevation of the site to the base flood or one hundred (100) year frequency flood elevation. If, upon review, the Director determines that the development is located on land that is higher than the base flood elevation of the current Flood Insurance Rate Map and that has not been filled since the date of the site's first Flood Insurance Rate Map identification, the property shall be considered outside of the SFHA and, therefore, not subject to the requirements of this chapter. The Director shall maintain documentation of the existing ground elevation at the development site and certification that this ground elevation existed prior to the date of the site's first Flood Insurance Rate Map identification.

D. Duties and Responsibilities of Director. The Director shall be responsible for obtaining from the applicant copies of all other local, state and federal permits, approvals or permit-not-required letters that may be required for the proposed activity. The Director shall not issue a permit unless copies of all other local, state and federal permits have been submitted by the applicant.

E. Preventing Increased Damages. No development in the flood fringe shall create a threat to public health and safety.

F. Use of Fill to Elevate Site.

1. Fill shall not be used to elevate a site unless the Average Lot Grade is equal to or greater than the Minimum Average Lot Grade.

2. If fill is being used to elevate the site above the base flood or one hundred (100) year frequency flood elevation, the applicant shall submit sufficient data and obtain a Letter of Map Revision from FEMA for the purpose of removing the site from the floodplain. Notwithstanding anything to the contrary in the Letter of Map Revision or in this chapter, no person who obtains a map revision removing a site from the floodplain shall be entitled to build the lowest floor of a residential building below the BFE, except as provided in Section 15.~~5~~6~~8~~.050(G) of this chapter.

(Prior code § 28.05)

G. Constructing Lowest Floor Below BFE. A person who has obtained a Letter of Map Revision that removes a site in the flood fringe from the floodplain due to the use of fill to elevate the site above the BFE, may apply for a permit from the Village to construct the lowest floor of a residential building below the BFE in the flood fringe. The Director shall not issue such a permit unless the applicant has complied with all of the criteria set forth in the following paragraphs of this subsection.

1. Compensatory storage shall be provided in compliance with the requirements of §602.9-11 of the WMO~~this chapter~~.

2. The elevation of the lowest opening in the basement wall (*i.e.* window wells, access ways) shall be at or above the FPE.

~~3~~. The lowest grade adjacent to the foundation shall ~~be at or above the FPE, for a minimum distance of ten (10) feet beyond the outside face of the structure. However, if site conditions are such that this requirement cannot be obtained, the Director may waive the ten (10) foot minimum setback if an Illinois Registered Soils Engineer and an Illinois~~

~~Registered Structural Engineer both certify that an alternative method to protect the building from damage due to hydrostatic pressures has been met. The certifications shall be in the form of a detailed soils analysis bearing the seal of the Registered Soils Engineer and a structural design analysis bearing the seal of the Registered Structural engineer, which shall both be submitted to the Director for review. The Director may require such additional documentation as he deems necessary to prove that the proposed shorter setback distance will keep the structure reasonably safe. In no case shall the setback distance be less than four (4) feet.~~meet the requirements of §602.3.A of the WMO.

~~4.~~ The applicant shall demonstrate that the building and building site are reasonably safe from flooding according to the minimum design standards in FEMA Technical Bulletin 10-01. Where the requirements of this chapter are higher than the federal minimum NFIP standards, the more restrictive standards shall apply.~~The grade around the perimeter of the structure, measured at a distance of twenty (20) feet from the structure, shall be above the BFE. However, if site conditions are such that this requirement cannot be obtained, the Director may waive the twenty (20) foot minimum setback distance if an Illinois Registered Soils Engineer and Structural Engineer certify that an alternative method to protect the building from damages due to hydrostatic pressures have been met. A detailed soils analysis and structural design proving that a shorter setback distance will keep the structure reasonably safe from flooding, shall be submitted to the Village for review. In no case shall the setback distance be less than four (4) feet.~~

5. The ground around the building shall be compacted fill that meets all requirements of this subsection (G) and is at least five (5) feet thick under the basement floor slab. Nothing in this subsection (G) shall be interpreted to require the removal or replacement of fill that was placed as part of a LOMR-F permit, if such fill consists of material, including soil of similar classification and degree of permeability, that meets the requirements of this subsection (G).

6. The fill material shall be compacted to at least 95% of Standard Laboratory Maximum Dry Density (Standard Proctor), according to ASTM Standard D-698. Fill soils shall be fine-grained soils of low permeability, such as those classified as CH, CL, SC, or ML according to ASTM Standard D-2487, Classification of Soils for Engineering Purposes.

7. The fill material must be homogeneous *i.e.*, all of one material, and isotropic, *i.e.*, having the engineering properties must be the same in all directions.

8. All fill material and compaction shall be designed, certified and inspected by an Illinois Registered Professional Engineer or Registered Soils Engineer, as warranted by the site conditions.

9. The basement floor shall be at an elevation that is no more than five (5) feet below the BFE.

10. There shall be a granular drainage layer beneath the floor slab, and a minimum of ¼-horsepower sump pump with a backup power supply shall be provided to remove the seepage flow. The pump shall be rated at four (4) times the estimated

seepage rate and shall discharge above the BFE and away from the building in order to prevent flooding of the basement or uplift of the floor under the effect of the seepage pressure.

11. The drainage system shall be equipped with a positive means of preventing backflow.

12. All foundation elements shall be designed to withstand hydrostatic pressure in accordance with accepted engineering practices.

~~13. If an applicant is unable to meet all of the requirements set forth in the preceding paragraphs 1 through 12, the Director may allow the construction of a basement below the BFE only if the applicant demonstrates, to the satisfaction of the Director, that the proposed fill and structure meet the guidelines and requirements set forth in FEMA Technical Bulletin 10-01 and are reasonably safe from flooding. In order to demonstrate that the proposed structure is reasonably safe from flooding, the applicant shall submit a detailed engineering analysis of the proposed fill and foundation wall. The engineered basement study shall be completed in accordance with the latest edition of FEMA Technical Bulletin 10-01, with the analysis of the fill being prepared by an Illinois Registered Soils Engineer or geologist and the analysis of the foundation wall being prepared by an Illinois Registered Structural Engineer.~~

H. Compensatory Storage.

1. Whenever any portion of a floodplain is authorized for use, the volume of space which will be occupied by the authorized fill or structure below the BFE shall be compensated for and balanced by a hydraulically equivalent volume of excavation taken from below the BFE, provided all of the conditions §602.9-11 of the WMO and of the following paragraphs 2 and 3 ~~through 6~~ 3 of this subsection shall be met.

~~2. The excavation volume shall be at least equal to one (1) times the volume of storage lost due to the fill or structure.~~

~~3. In the case of streams and water courses, the excavation for the compensatory storage shall be made opposite or adjacent to the areas to be filled or occupied.~~

~~4. All excavations for compensatory storage shall be constructed to drain freely and openly to the watercourse.~~

~~5. If any floodplain storage is lost below the existing 10-year flood elevation, the off-setting compensatory storage shall also be placed below the 10-year flood elevation.~~

2. ~~6.~~ In no case shall the depth of excavation for any compensatory storage in the front and side yards of the lot exceed eighteen (18) inches, as measured from the previously existing natural grade. The rear yard may be permitted to have a greater depth of excavation, if necessary.

3. ~~7.~~ The use of mechanical means to drain the compensatory storage area will not be permitted.

SECTION 20: Section 15.68.060, Occupation and use of identified floodways, of Chapter 15.68, Flood Hazard Protection Regulations, of Title 15 of the Winnetka Village Code, Buildings and Construction, is hereby amended to provide, as follows:

15.68.060 Occupation and use of identified floodways.

Any development, redevelopment, site modification or building modification within a regulatory floodway is subject to the provisions of this section and shall be permitted only if the criteria of this section and applicable requirements of this chapter are met. All floodway modifications shall be the minimum necessary to accomplish the purpose of the project. The development shall also meet the requirements of Section 15.68.080 of this chapter.

A. ~~Development Permit~~Watershed Management Permit. No person, firm, corporation or governmental body not exempted by state law shall commence any development in a floodway without first obtaining a ~~development permit~~Watershed Management Permit from the Director or the MWRD, as applicable.

B. Application. Application for a ~~development permit~~Watershed Management Permit shall be made on a form provided by the Director, which shall include at least the ~~following information~~information required by Article 3 of the WMO.

~~1. Name and address of applicant.~~

~~2. Site location of the property, showing its location on the regulatory floodway map. The site location map shall include the legal description of the property and shall indicate whether it is proposed to be in an incorporated or unincorporated area.~~

~~3. Name of stream or body of water affected.~~

~~4. Description of proposed activity.~~

~~5. Statement of purpose of proposed activity.~~

~~6. Anticipated dates of initiation and completion of activity.~~

~~7. Name and mailing address of the owner of the subject property (if different from the applicant).~~

~~8. Signature of applicant or the applicant's agent.~~

~~9. If the applicant is a corporation, the president or other authorized officer shall sign the application form.~~

~~10. If the applicant is a partnership, each partner shall sign the application form.~~

~~11. If the applicant is a land trust, the trust officer shall sign the name of the trustee as trust officer. A disclosure affidavit shall be filed with the application, identifying each beneficiary of the trust by name and address and defining the respective interests of each beneficiary.~~

~~12. Plans of the proposed activity including at least the following:~~

~~a. A vicinity map showing the site of the activity, name of the waterway, boundary lines, names of roads in the vicinity of the site, graphic or numerical scale, and~~

~~north arrow;~~

~~b. A plan view of the project and engineering study reach showing existing and proposed conditions, including principal dimensions of the structure or work, elevations in North American Vertical Datum (NAVD 1988), proposed activity and navigation channel, adjacent property lines and ownership, drainage and flood control easements, regulatory floodway limit, floodplain limit, location and orientation of cross-sections, north arrow, and a graphic or numerical scale;~~

~~c. Cross-section views of the project and engineering study reach showing existing and proposed conditions, including principal dimensions of the work as shown in plan view, existing and proposed elevations, normal water elevation, ten (10) year frequency flood elevation, one hundred (100) year frequency flood elevation, and graphic or numerical scales (horizontal and vertical); and~~

~~d. A copy of the regulatory floodway map, marked to reflect any proposed change in the regulatory floodway location.~~

~~13. Copies of all local, state and federal permits or approval letters that may be required for the proposed development.~~

~~14. Engineering calculations and supporting data showing that the proposed work will meet the permit criteria of subsection D of this section.~~

~~15. If the regulatory floodway delineation, base flood or one hundred (100) year frequency flood elevation will change due to the proposed project, the application will not be considered complete until IDNR/OWR has indicated conditional approval of the regulatory floodway map change. No structure shall be approved for construction until a Letter of Map Revision has been approved by FEMA.~~

~~16. The application for a structure shall be accompanied by drawings of the site, drawn to scale and showing property line dimensions, existing ground elevations, all changes in grade resulting from any proposed excavation or filling, and floodplain and floodway limits. The site drawings shall also include the location and dimensions of all buildings and additions to buildings, and the elevation of the lowest floor (including basement) of all proposed buildings subject to the requirements of Section 15.68.080 of this chapter. The site drawings shall be sealed by an Illinois registered professional engineer or registered land surveyor.~~

C. Review and Approval of Permit Applications. The Director shall be responsible for obtaining from the applicant copies of all other local, state and federal permits and approvals that may be required for the proposed activity. The Director shall not issue the ~~development permit~~Watershed Management Permit unless copies of all required federal and state permits have been submitted by the applicant. A registered professional engineer under the employ or contract of the Village shall review and approve applications reviewed under this section.

D. Preventing Increased Damages; List of Appropriate Uses. No development shall be allowed in a floodway unless it is for appropriate uses that will not cause a rise in the base flood elevation, will not create a damaging or potentially damaging increase in flood heights or velocity and will not be a threat to public health and safety. Only those appropriate uses listed in 17 Ill. Adm. Code 3708 and §602.29 of the WMO will be

allowed. Appropriate uses do not include the construction or placement of any structures, fill, building additions, buildings on stilts, fencing (including landscaping or planting designed to act as a fence) and storage of materials except as specifically defined above as an appropriate use. ~~The approved appropriate uses are as follows.~~

~~1. Flood control structures, dikes, dams and other public works or private improvements relating to the control of drainage, flooding, erosion, or water quality or habitat for fish and wildlife;~~

~~2. Structures or facilities relating to the use of, or requiring access to, the water or shoreline, such as pumping and treatment facilities, and facilities and improvements related to recreational boating, commercial shipping and other functionally water dependent uses;~~

~~3. Storm and sanitary sewer outfalls;~~

~~4. Underground and overhead utilities;~~

~~5. Recreational facilities such as playing fields and trail systems including any related fencing (at least fifty (50) percent open when viewed from any one direction) built parallel to the direction of flood flows, and including open air pavilions;~~

~~6. Detached garages, storage sheds, or other nonhabitable accessory structures to existing buildings; provided that, they do not have toilet facilities that will not block flood flows and will not reduce floodway storage;~~

~~7. Bridges, culverts, roadways, sidewalks, railways, runways and taxiways and any modification to the same;~~

~~8. Parking lots and any modifications to such parking lot (where depth of flooding at the one hundred (100) year frequency flood event will not exceed one foot) and aircraft parking aprons built at or below ground elevation;~~

~~9. Regulatory floodway regrading, without fill, to create a positive nonerosive slope toward a watercourse;~~

~~10. Floodproofing activities to protect previously existing structures, including the construction of watertight window wells, elevating structures, or construction of floodwalls around residential, commercial or industrial principal structures, where the outside toe of the floodwall shall be no more than ten (10) feet away from the exterior wall of the existing structure, and, which are not considered substantial improvements to the structure;~~

~~11. In the case of damaged or replacement buildings, reconstruction or repairs made to a building that are valued at less than fifty (50) percent of the market value of the building before it was damaged or replaced, and which did not increase the outside dimensions of the building; and~~

~~12. Additions to existing buildings at or below the BFE, provided that they do not increase the building's footprint and are valued at less than fifty (50) percent of the market value of the building.~~

E. Engineering Criteria for Appropriate Uses in the Regulatory Floodway. Within the regulatory floodway as identified on the Countywide FIRMs for Cook County, the

construction of an appropriate use will be considered permissible; provided that, the proposed project meets the requirements of §602.9-11 and 27-28 of the WMO, along with the following engineering criteria, and is so stated in writing with supporting plans, calculations and data by a registered professional engineer; and provided that, any structure meets the protection requirements of Section 15.68.080 of this chapter:

1. Preservation of Flood Conveyance, so as Not to Increase Flood Stages Upstream. For appropriate uses ~~other than bridge or culvert crossings, on-stream structures or dams,~~ all effective regulatory floodway conveyance lost due to the project will be replaced for all flood events up to and including the one hundred (100) year frequency flood. In calculating effective regulatory floodway conveyance, the following factors shall be taken into consideration:

a. Regulatory floodway conveyance,

$$'K' = \frac{1.486}{n} AR^{2/3}$$

where "n" is Manning's roughness factor, "A" is the effective area of the cross-section, and "R" is the ratio of the area to the wetted perimeter (see Open Channel Hydraulics, Ven Te Chow, 1959, McGraw-Hill Book Company, New York);

b. The same Manning's "n" value shall be used for both existing and proposed conditions unless a recorded maintenance agreement with a federal, state or local unit of government can assure the proposed conditions will be maintained or the land cover is changing from a vegetative to a nonvegetative land cover;

c. Transition section shall be provided and used in calculations of effective regulatory floodway conveyance. The following expansion and contraction ratios shall be used unless an applicant's engineer can prove to IDNR/OWR through engineering calculations or model tests that more abrupt transitions may be used with the same efficiency;

i. When water is flowing from a narrow section to a wider section, the water should be assumed to expand no faster than at a rate of one foot horizontal for every four feet of the flooded stream's length.

ii. When water is flowing from a wide section to a narrow section, the water should be assumed to contract no faster than at a rate of one foot horizontal for every one foot of the flooded stream's length.

iii. When expanding or contracting flows in a vertical direction, a minimum of one foot vertical transition for every ten (10) feet of stream length shall be used.

iv. Transition sections shall be provided between cross-sections with rapid expansions and contractions and when meeting the regulatory floodway delineation on adjacent properties.

v. All cross-sections used in the calculations shall be located

perpendicular to flood flows.

2. Preservation of Floodway Storage so as Not to Increase Downstream Flooding. Compensatory storage shall be provided for any regulatory floodway storage lost due to the proposed work from the volume of fill or structures placed and the impact of any related flood control projects. Compensatory storage for fill or structures shall meet the requirements of §602.9-11 of the WMO.~~be equal to at least the volume of floodplain storage lost. Artificially created storage lost due to a reduction in head loss behind a bridge shall not be required to be replaced. The compensatory regulatory floodway storage shall be placed between the proposed normal water elevation and the proposed one hundred (100) year flood elevation. All regulatory floodway storage lost below the existing ten (10) year flood elevation shall be replaced below the proposed ten (10) year flood elevation. All regulatory floodway storage lost above the existing ten (10) year flood elevation shall be replaced above the proposed ten (10) year flood elevation. All such excavations shall be constructed to drain freely and openly to the watercourse. If the compensatory storage will not be placed at the location of the proposed construction, the applicant's engineer shall demonstrate to IDNR/OWR through a determination of flood discharges and water surface elevations that the compensatory storage is hydraulically equivalent~~.

3. Preservation of Floodway Velocities so as Not to Increase Stream Erosion or Flood Heights. For all appropriate uses~~, except bridges or culverts or on stream structures,~~ the proposed work will not result in an increase in the average channel or regulatory floodway velocities, unless a water resource benefit is realized ~~. However, in the case of bridges or culverts or on stream structures built for the purpose of backing up water in the stream during normal or flood flows, velocities may be increased at the structure site if~~ and unless scour, erosion and sedimentation will be avoided by the use of rip-rap or other design measures.

4. Construction of New Bridges or Culvert Crossings and Roadway Approaches. The proposed structures shall not result in an increase of upstream flood stages ~~greater than one-tenth foot~~ when compared to the existing conditions for all flood events up to and including the one hundred (100) year frequency event, unless the area of the increased flood stages is under the ownership or control of the applicant~~; or the upstream flood state increases will be contained within the channel banks (or within existing vertical extensions of the channel banks) such as within the design protection grade of existing levees or flood walls or within recorded flood easements. If the proposed construction will increase upstream flood stages greater than one-tenth feet, the developer must contact IDNR/OWR, Dam Safety Section, for a Dam Safety Permit or waiver~~.

~~———~~a. The engineering analysis of upstream flood stages shall be calculated using the flood study flows, and corresponding flood elevations for tailwater conditions for the flood study specified in Section 15.68.040 of this chapter. ~~Culverts must be analyzed using the U. S. DOT, FHWA Hydraulic Chart for the Selection of Highway Culverts. Bridges must be analyzed using the U. S. DOT/Federal Highway Administration Hydraulics of Bridge Waterways calculation procedures.~~

b. Lost floodway storage shall be compensated for in accordance with subsection (E)(2) of Section 15.68.060.

c. Velocity increases shall be mitigated in accordance with subsection (E)(3) of Section 15.68.060.

d. If the crossing is proposed over a public water that is used for recreational or commercial navigation, an IDNR/OWR permit must be obtained by the applicant.

e. The hydraulic analysis for the backwater caused by the bridge showing the existing conditions and proposed regulatory profile shall be submitted to IDNR/OWR for concurrence that a CLOMR is not required by subsection ~~F~~ E of Section 15.68.060.

f. All excavations for the construction of the crossing shall be designed per subsection (E)(8) of Section 15.68.060.

5. Reconstruction or Modification of Existing Bridges, Culverts and Approach Roads.

a. The bridge or culvert and roadway approach reconstruction or modification shall be constructed with no ~~more than one-tenth foot~~ increase in backwater over the existing flood profile for all flood frequencies up to and including the one hundred (100) year event, if the existing structure is not a source of flood damage.

b. If the existing bridge or culvert and roadway approach is a source of flood damage to buildings or structures in the upstream floodplain, the applicant's engineer shall evaluate the feasibility of redesigning the structure to reduce the existing backwater, taking into consideration the effects on flood states on upstream and downstream properties.

c. The determination as to whether or not the existing crossing is a source of flood damage and should be redesigned shall be prepared in accordance with IDNR/OWR Rules 17 Ill. Adm. Code 3708 (Floodway Construction in Northeastern Illinois) and submitted to IDNR/OWR for review and concurrence before a permit is issued.

d. Hydraulically equivalent compensatory storage shall be required to mitigate any potential increase in flow or flood elevations due to the removal or modification of an existing bridge or culvert.

6. On-Stream Structures Built for the Purpose of Backing Up Water. Any increase in upstream flood stages greater than zero feet when compared to the existing conditions, for all flood events up to and including the one hundred (100) year frequency event shall be contained within ~~the channel banks (or within existing vertical extensions of the channel banks) such as within the design protection grade of existing levees or flood walls or within recorded flood easements~~the area under the ownership or control of the applicant. A permit or letter indicating a permit is not required must be obtained from IDNR/OWR, Dam Safety Section, for a Dam Safety Permit or waiver for any structure built for the purpose of backing up water in the stream during normal or flood flow. All dams and impoundment structures as defined in Section 15.68.020 of this chapter shall meet the permitting requirements of 17 Ill. Adm. Code 3702 (Construction and Maintenance of Dams).

7. Floodproofing of Existing Habitable, Residential and Commercial Structures. If construction is required beyond the outside dimensions of the existing building, the

outside perimeter of the floodproofing construction shall be placed no further than ten (10) feet from the outside of the building. Compensation of lost storage and conveyance will not be required for floodproofing activities.

8. Excavation in the Floodway. When excavation is proposed in the design of bridges and culvert openings, including the modifications to and replacement of existing bridge and culvert structures, or to compensate for lost conveyance for other appropriate uses, transition sections shall be provided for the excavation. The following expansion and contraction ratios shall be used unless an applicant's engineer can prove to IDNR/OWR through engineering calculations or model tests that more abrupt transitions may be used with the same efficiency.

a. When water is flowing from a narrow section to a wider section, the water should be assumed to expand no faster than at a rate of one foot horizontal for every four feet of the flood stream's length;

b. When water is flowing from a wide section to a narrow section, the water should be assumed to contract no faster than at a rate of one foot horizontal for every one foot of the flooded stream's length;

c. When expanding or contracting flows in a vertical direction, a minimum of one foot vertical transition for every ten (10) feet for stream length shall be used; and

d. Erosion/scour protection shall be provided inland upstream and downstream of the transition sections.

9. Seeding and Stabilization Plan. For all activities located in a floodway, a seeding and stabilization plan shall be submitted by the applicant.

~~10. Public Flood Control Projects. For public flood control projects, the permitting requirements of this section will be considered met if the applicant can demonstrate to IDNR/OWR through hydraulic and hydrologic calculations that the proposed project will not singularly or cumulatively result in increased flood heights outside the project right-of-way or easements for all flood events up to and including the one hundred (100) year frequency event~~

~~11~~10. General Criteria for Analysis of Flood Elevations.

a. The flood profiles, flows and floodway data in the regulatory floodway study, referenced in Section 15.68.040 of this chapter, shall be used for analysis of the base conditions. If the study data appears to be in error or conditions have changed, the IDNR/OWR shall be contacted for approval and concurrence on the appropriate base conditions data to use.

b. If the one hundred (100) year regulatory floodway elevation at the site of the proposed construction is affected by backwater from a downstream receiving stream with a large drainage area, the proposed construction shall be shown to meet the requirements of this section for the one hundred (100) year frequency flood elevations of the regulatory floodway conditions and conditions with the receiving stream at normal water elevations.

c. If the applicant learns from IDNR/OWR, local governments, or a private owner that a downstream restrictive bridge or culvert is scheduled to be removed,

reconstructed, modified, or a regional flood control project is scheduled to be built, removed, constructed or modified within the next five years, the proposed construction shall be analyzed and shown to meet the requirements of this section for both the existing conditions and the expected flood profile conditions when the bridge, culvert or flood control project is built.

~~12~~11. Conditional Letter of Map Revision. If the appropriate use would result in a change in the regulatory floodway location or the one hundred (100) year frequency flood elevation, the applicant shall submit to IDNR/OWR and to FEMA all the information, calculations and documents necessary to be issued a conditional regulatory floodway map revision and received from IDNR/OWR a conditional approval of the regulatory floodway change before a permit is issued. The final regulatory floodway map will not be changed by IDNR/OWR until as-built plans or record drawings are submitted and accepted by FEMA and IDNR/OWR. In the case of nongovernmental projects, the municipality in incorporated areas and the county in an unincorporated area shall concur with the proposed conditional regulatory floodway map revision before IDNR/OWR approval can be given. No filling, grading, dredging or excavating shall take place until a conditional approval is issued. No further development activities shall take place until a final Letter of Map Revision is issued by FEMA and IDNR/OWR. After receipt of conditional approval of the regulatory floodway change and issuance of a permit and a Conditional Letter of Map Revision, construction as necessary to change the regulatory floodway designation may proceed but no buildings or structures or other construction that is not an appropriate use may be placed in that area until the regulatory floodway map is changed and a final Letter of Map Revision is received. The regulatory floodway map will be revised upon acceptance and concurrence by IDNR/OWR and FEMA of the as-built plans.

~~13~~12. Professional Engineer's Supervision. All engineering analyses shall be performed by or under the supervision of an Illinois registered professional engineer, retained by the applicant.

F. State Review in delegated communities. For those projects listed below located in a regulatory floodway, the following criteria shall be submitted to IDNR/OWR for their review and concurrence prior to the issuance of a permit:

1. IDNR/OWR will review an engineer's analysis of the flood profile due to a proposed bridge pursuant to subsection (E)(4) of Section 15.68.060.

2. IDNR/OWR will review an engineer's determination that an existing bridge or culvert crossing is not a source of flood damage and the analysis indicating the proposed flood profile, pursuant to subsection (E)(5) of Section 15.68.060.

3. The IDNR/OWR will review alternative transition sections and hydraulically equivalent storage pursuant to subsections (E)(1), (2) and (8) of Section 15.68.060.

4. The IDNR/OWR will review and approve, prior to the start of construction, any Department projects, dams (as defined in Section 15.68.120 of this chapter) and all other state, federal and local units of government projects, including projects of the Village.

G. Other Permits. In addition to the other requirements of this chapter, a

~~development permit~~Watershed Management Permit for a site located in a floodway shall not be issued unless the applicant first obtains a permit or written documentation that a permit is not required from IDNR/OWR, issued pursuant to 615 ILCS 5/5, *et seq*. No permit from IDNR/OWR shall be required if IDNR/OWR has delegated this responsibility to the Village.

H. Dam Safety Permits. Any person performing work involving the construction, modification or removal of a dam (as defined in Section 15.68.020 of this chapter) pursuant to 17 Ill. Adm. Code 3702 (Rules for Construction of Dams) shall obtain an IDNR/OWR Dam Safety Permit prior to the start of construction of a dam. If the Director finds a dam that does not have a IDNR/OWR permit, the Director shall immediately notify the Dam Safety Section of IDNR/OWR. If the Director finds a dam that is believed to be in an unsafe condition, the Director shall immediately notify the owner of the dam, IDNR/OWR, Dam Safety Section, and the Illinois Emergency Management Agency(IEMA).

I. Activities That ~~Do Not Require a Registered Professional Engineer's Review~~Qualify for a Regional Permit from IDNR/OWR. The following activities may be permitted without a registered professional engineer's review, provided they meet the other requirements of this chapter.

1. Underground and overhead utilities that:

a. Do not result in any increase in existing ground elevations;

b. Do not require the placement of above ground structures in the floodway,;

c. In the case of underground stream crossings, the top of the pipe or encasement is buried a minimum of three feet below the existing stream bed; and

d. In the case of overhead utilities, no supporting towers are placed in the watercourse and are designed in such a fashion as not to catch debris.

2. Storm and sanitary sewer outfalls that:

a. Do not extend riverward or lakeward of the existing adjacent natural bank slope;

b. Do not result in an increase in ground elevation; and

c. Are designed so as not to cause stream erosion at the outfall location.

3. Construction of sidewalks, athletic fields (excluding fences), properly anchored playground equipment and patios at grade.

4. Construction of shoreline and streambank protection:

a. When such construction does not exceed one thousand (1,000) feet in length;

b. When materials used in such construction are not placed higher than the existing top of bank; and

c. When materials used in such construction are placed so as not to reduce the cross-sectional area of the stream channel or bank of the lake.

5. Temporary stream crossings in which:

a. The approach roads will be one-half foot or less above natural grade;

b. The crossing will allow stream flow to pass without backing up the water above the stream bank vegetation line or above any drainage tile or outfall invert;

c. The top of the roadway fill in the channel will be at least two feet below the top of the lowest bank. Any fill in the channel shall be nonerosive material, such as rip-rap or gravel;

d. All disturbed stream banks will be seeded or otherwise stabilized as soon as possible upon installation and again upon removal of construction; and

e. The access road and temporary crossings will be removed within one year after authorization.

(Prior code § 28.06)

(MC-2-2008, Amended, 05/06/2008)

SECTION 21: Section 15.68.070, Occupation and use of SFHA areas where floodways are not identified, of Chapter 15.68, Flood Hazard Protection Regulations, of Title 15 of the Winnetka Village Code, Buildings and Construction, is hereby amended to provide, as follows:

15.68.070 Occupation and use of SFHA areas where floodways are not identified.

In SFHA or floodplains (including AO zones, AH zones and unnumbered A zones) where no floodways have been identified and no base flood or one hundred (100) year frequency flood elevations have been established and which drains more than one square mile, no development shall be permitted unless the cumulative effect of the proposals, when combined with all other existing and anticipated uses and structures, shall not significantly impede or increase the flow and passage of the floodwaters and will not significantly increase the base flood or one hundred (100) year frequency flood elevation. The development shall also meet the requirements of Section 15.68.080 of this chapter.

A. ~~Development Permit~~Watershed Management Permit. No person, firm, corporation or governmental body, not exempt by state law, shall commence any development in an SFHA or floodplain without first obtaining a ~~development permit~~Watershed Management Permit from the Director or the MWRD, as applicable. Application for a ~~development permit~~Watershed Management Permit shall be made on a form provided by the Director. The application shall be accompanied by ~~drawings of the site, drawn to scale showing property line dimensions; and existing grade elevations and all changes in grade resulting from excavation or filling, sealed by an Illinois registered engineer or surveyor; the location and dimensions of all buildings and additions to buildings; and the elevation of the lowest floor (including basement) of all proposed buildings subject to the requirements of Section 15.68.80 of this chapter. The application for a development permit shall also include the following information:~~the information required in Article 3 of the WMO.

~~1. A detailed description of the proposed activity, its purpose, and intended use.~~

~~2. Site location (including legal description) of the property, drawn to scale, on the regulatory floodway maps, indicating whether it is proposed to be in an incorporated or unincorporated area.~~

~~3. Anticipated dates of initiation and completion of the activity.~~

~~4. Plans of the proposed activity shall be provided which include as a minimum:~~

~~a. A vicinity map showing the site of the activity, name of the waterway, boundary lines, names of roads in the vicinity of the site, graphic or numerical scale, and north arrow;~~

~~b. A plan view of the project and engineering study reach showing existing and proposed conditions including principal dimensions of the structure of work, elevations in North American Vertical Datum (NAVD, 1988), adjacent property lines and ownership, drainage and flood control easements, floodplain limit, location and orientation of cross-sections, north arrow, and a graphical or numerical scale; and~~

~~c. Cross-section views of the project and engineering study reach showing the existing and proposed conditions including principal dimensions of the work as shown in plan view, existing and proposed elevations, normal water elevation, ten (10) year frequency flood elevation, one hundred (100) year frequency flood elevation, and graphical or numerical scales (horizontal and vertical).~~

~~5. Engineering calculations and supporting data shall be submitted showing that the proposed work will meet the criteria of subsection D of this section.~~

~~6. Any and all other local, state and federal permits or approvals that may be required for the proposed development.~~

~~B. Determination of Elevation of Site. Based on the best available existing data according to the Illinois State Water Survey's Floodplain Information Repository, the Director shall compare the elevation of the site to the base flood or one hundred (100) year frequency flood elevation. Should no elevation information exist for the site, the developer's engineer shall calculate the elevation according to subsection (D) of Section 15.68.040 of this chapter. Any development located on land that can be shown to have been higher than the base flood elevation as shown in the current Flood Insurance Rate Map Identification is not in the SFHA and not subject to the requirements of this chapter. The Director shall maintain documentation of the existing ground elevation at the development site and certification that this ground elevation existed prior to the date of the site's first Flood Insurance Rate Map Identification.~~

C. Duties of Director.The Director shall be responsible for obtaining from the applicant copies of all other local, state and federal permits, approvals or permit-not-required letters that may be required for this type of activity. The Director shall not issue the ~~development permit~~Watershed Management Permit unless copies of all required local, state and federal permits have been submitted to the Director by the applicant.

D. Preventing Increased Damages. No development in the SFHA, where a floodway has not been determined, shall create a damaging or potentially damaging increase in flood heights or velocity or threat to public health, safety and welfare.

E. Standards within Riverine SFHAs.Within all riverine SFHA's where the floodway has not been determined, the following standards shall apply.

~~———~~1. The developer shall have a registered professional engineer state in writing and show through supporting plans, calculation and data that the project meets the engineering requirements of §601.4-8 of the WMO.~~Section 15.68.060(E)(1) through (10) of this chapter for the entire floodplain as calculated under the provisions of Section 15.68.040(D) of this chapter. As an alternative, the developer should have an engineering study performed to determine a floodway and submit that engineering study to IDNR/OWR for acceptance as a regulatory floodway. Upon acceptance of their floodway by the IDNR/OWR, the developer shall then demonstrate that the project meets the requirements of Section 15.68.060 for the regulatory floodway. The floodway shall be defined according to Section 15.68.020 of this chapter~~.

2. A ~~development permit~~Watershed Management Permit shall not be issued unless the applicant first obtains a permit from IDNR/OWR or written documentation that a permit is not required from IDNR/OWR.

3. No permit from IDNR/OWR shall be required if the IDNR/OWR has delegated permit responsibility to the Village per 17 Ill. Adm. Code, Part 3708, for regulatory floodways, pursuant to IDNR/OWR's Statewide Permit entitled "Construction in Floodplains With No Designated Floodways in Northwestern Illinois."

4. Dam Safety Permits. Any person performing work involving the construction, modification or removal of a dam (as defined in Section 15.68.020 of this chapter) shall obtain a IDNR/OWR Dam Safety Permit or letter indicating a permit is not required prior to the start of construction of a dam. If the Director finds a dam that does not have a IDNR/OWR permit, the Director shall immediately notify the Dam Safety Section of IDNR/OWR. If the Director finds a dam which is believed to be in unsafe condition, the Director shall immediately notify the owner of the dam, IDNR/OWR, Dam Safety Section, and the Illinois Emergency Management Agency(IEMA).

5. Activities That ~~Do Not Require a Registered Engineer's Review~~Qualify for a Regional Permit from IDNR/OWR. The following activities may be permitted without a registered professional engineer's review or calculations of a base flood elevation and regulatory floodway. Such activities shall meet the other requirements of this chapter:

a. Underground and overhead utilities that:

i. Do not result in any increase in existing ground elevations;

ii. Do not require the placement of above ground structures in the floodway;

iii. In the case of underground stream crossings, the top of the pipe or encasement is buried a minimum of three feet below the existing streambed;

iv. In the case of overhead utility lines, the lines shall be constructed above the estimated 100-year flood elevation or attached above the low chords of an existing bridge (with the permission of the bridge owner). No supporting towers shall be placed in the watercourse and shall be designed in such a fashion as not to catch debris.

v. Disturbance of streamside vegetation shall be kept to a minimum

during construction to prevent erosion and sedimentation.

b. Storm and sanitary sewer outfalls that:

i. Do not extend riverward or lakeward of the existing adjacent natural bank slope;

ii. Do not result in an increase in ground elevation; and

iii. Are designed so as not to cause stream bank erosion at the outfall location.

c. Construction of shoreline and streambed protection:

i. When such construction does not exceed one thousand (1,000) feet in length;

ii. When materials used in such construction are not placed higher than the existing top of bank; and

iii. When materials used in such construction are placed so as not to reduce the cross-sectional area of the stream channel by more than ten (10) percent.

d. Temporary stream crossings in which:

i. The approach roads will be one-half foot or less above natural grade;

ii. The crossing will allow stream flow to pass without backing up the water above the stream bank vegetation line or above any drainage tile or outfall invert;

iii. The top of the roadway fill in the channel will be at least two feet below the top of the lowest bank;

iv. All disturbed stream banks will be seeded or otherwise stabilized as soon as possible upon installation and again upon removal of construction; and

v. The access road and temporary crossings will be removed within one year after authorization.

e. The construction of light poles, sign posts and similar structures.

f. The construction of sidewalks, driveways, athletic fields (excluding fences), patios and similar surfaces which are built at grade.

g. The construction of properly anchored, unwalled, open structures such as playground equipment, pavilions and carports built at or below existing grade that would not obstruct the flow of floodwaters.

h. The placement of properly anchored buildings not exceeding seventy (70) square feet in size, nor ten (10) feet in any one dimension (e.g., animal shelters and tool sheds).

i. The construction of additions to existing buildings which do not increase the first floor area by more than twenty (20) percent, which are located on the upstream or downstream side of the existing building, and which do not extend beyond the sides of the existing building that are parallel to the floodwaters.

j. Minor maintenance dredging of a stream channel where:

i. The affected length of stream is less than one thousand (1,000) feet;

ii The work is confined to reestablishing flows in natural stream channels; or

iii. The cross-sectional area of the dredged channel conforms to that of the natural channel upstream and downstream of that site.

6. The flood carrying capacity within any altered or relocated watercourse shall be maintained.

F. Compensatory Storage. Whenever any portion of a floodplain, (including AO zones, AH zones and unnumbered A zones) where no floodways have been identified and no base flood or one hundred (100) year frequency flood elevations have been established and which drains more than one square mile, is authorized for use, the volume of space which will be occupied by the authorized fill or structure below the base flood or one hundred (100) year frequency flood elevation shall be compensated for and balanced by a hydraulically equivalent volume of excavation taken from below the base flood or one hundred (100) year frequency flood elevation. The excavation volume shall ~~be at least equal to the volume of storage lost due to the fill or structure. In the case of streams and watercourses, such excavation shall be made opposite or adjacent to the areas so filled or occupied. All floodplain storage lost below the existing ten (10) year flood elevation shall be replaced below the proposed ten (10) year flood elevation. All floodplain storage lost above the existing ten (10) year flood elevation shall be replaced above the proposed ten (10) year flood elevation. All such excavations shall be constructed to drain freely and openly to the watercourse.~~meet the requirements of §602.9-11 of the WMO.

(Prior code § 28.07)

(MC-2-2008, Amended, 05/06/2008)

SECTION 22: Section 15.68.080, Permitting requirements applicable to all floodplain areas, of Chapter 15.68, Flood Hazard Protection Regulations, of Title 15 of the Winnetka Village Code, Buildings and Construction, is hereby amended to provide, as follows:

Section 15.68.080 Permitting requirements applicable to all floodplain areas.

In addition to the requirements found in Sections 15.68.050, 15.68.060 and 15.68.070 of this chapter for development in flood fringes, regulatory floodways, and SFHA or floodplains where no floodways have been identified (Zones AO, AH, AE, A1--A30, A99, VO, V1-V30, VE, V, M, E or X), §601 and §602 of the WMO and the following requirements shall be met:

A. Public Health Standards. No developments in the SFHA shall include locating or storing chemicals, explosives, buoyant materials, animals' wastes, fertilizers, flammable liquids, pollutants, or other hazardous or toxic materials below the FPE.

B. Water and Sewer Lines. New and replacement water supply systems, wells, sanitary sewer lines and on-site disposal systems ~~may be permitted providing all manholes or other above ground openings located below the FPE are watertight~~shall meet

the requirements of.§602.19-22 of the WMO.

C. Carrying Capacity and Notification. For all projects involving channel modification, fill or stream maintenance (including levees), the ~~flood carrying capacity of the watercourse shall be maintained~~project shall meet the requirements of §606 and §607 of the WMO. In addition, the Village shall notify adjacent communities in writing thirty (30) days prior to the issuance of a permit for the alteration or relocation of the watercourse.

D. Protecting Buildings. All buildings located within a one hundred (100) year floodplain also known as an SFHA, shall be protected from flood damage below the flood protection elevation in accordance with this Section. However, existing buildings located within a regulatory floodway shall also meet the more restrictive appropriate use standards included in Section 15.68.060 of this chapter. These building protection criteria apply to the following situations:

1. New construction or placement of a new building.

2. A structural alteration to an existing building, if the cost of the alteration equals or exceeds fifty (50) percent of the pre-alteration market value of the building.

3. Installing a manufactured home on a new site or a new manufactured home on an existing site.

E. Building Protection Methods. Building protection requirements may be met by one of the following methods.

1. A residential or nonresidential building, when allowed, may be constructed on permanent land fill in accordance with the following:

a. The lowest floor (including basement) shall be at or above the FPE.

b. The fill shall be placed in layers no greater than one foot deep before compaction and ~~should extend at least ten (10) feet beyond the foundation of the building before sloping below the FPE. The top of the fill shall be above the FPE. However, the ten (10) foot minimum may be waived if an Illinois Registered Structural Engineer certifies an alternative method to protect the building from damages due to hydrostatic pressures~~shall meet the requirements of §602.13 of the WMO. The fill shall be protected against erosion and scour. The fill shall not adversely affect the flow or surface drainage from or onto neighboring properties.

c. In order to construct a home with or without a basement, on a permanent landfill, the following equation must be satisfied:

Minimum Average Lot Grade = ~~624.5~~(BFE-1.0) – ((Total Required Side Yard – 12)*0.0833).

Therefore, if the average lot grade elevation on a site is above the elevation as defined by this equation, then a structure with its lowest floor below the BFE may be constructed. Otherwise, the structure must be protected in accordance with Section 15.68.080.E.2 of this Code.

2. A residential or nonresidential building may be elevated in accordance with the following:

a. The building or improvements shall be elevated on crawl space, stilts, piles, walls, or other foundation that is permanently open to floodwaters and not subject to damage by hydrostatic pressures of the base flood or one hundred (100) year frequency flood. The permanent openings shall be no more than one foot above grade, and consist of a minimum of two openings. The openings must have a total net area of not less than one square inch for every one square foot of enclosed area subject to flooding below the BFE.

b. The foundation and supporting members shall be anchored and aligned in relation to the flood flows and adjoining structures so as to minimize exposure to known hydrodynamic forces such as current, waves, ice and floating debris.

c. All areas below the FPE shall be constructed of materials resistant to flood damage. The lowest floor (including basement) and all electrical, heating, ventilating, plumbing, and air conditioning equipment and utility meters shall be located at or above the FPE. Water and sewer pipes, electrical and telephone lines, submersible pumps, and other waterproofed service facilities may be located below the flood protection elevation.

d. No area below the FPE shall be used for storage of items or materials.

e. When the building wall encloses open space that is below the BFE, gravity storm and sanitary sewer connections are specifically prohibited and overhead sewers are required for the sanitary connections and sumps for the storm sewer connections.

3. Only a nonresidential building may be structurally dry floodproofed instead of being elevated, provided that:

a. An Illinois Registered Professional Engineer, retained by the applicant, shall certify that the building has been structurally dry floodproofed below the FPE, and that the structure and attendant utility facilities are watertight and capable of resisting the effects of the base flood or one hundred (100) year frequency flood.

b. The building design shall take into account flood velocities, duration, rate of rise, hydrostatic and hydrodynamic forces, the effects of buoyancy and impacts from debris or ice.

c. Floodproofing measures shall be operable without human intervention and without an outside source of electricity.

d. For purposes of this subsection, levees, berms, floodwalls and similar works are not considered floodproofing.

4. Detached tool sheds and detached garages on an existing single-family lot of record may be constructed with the lowest floor below the FPE in accordance with the following:

a. The building shall not be used for human habitation.

b. All areas below the base flood or one hundred (100) year frequency flood elevation shall be constructed with waterproof materials.

c. All structures located in a regulatory floodway shall be constructed and placed on a building site so as not to block the flow of floodwaters and shall also meet the appropriate use criteria of Section 15.68.060 and all other requirements of Sections

15.68.050, 15.68.060 and 15.68.070.

d. The structure shall be anchored to prevent flotation.

e. Service facilities such as electrical and heating equipment shall be elevated or floodproofed to the FPE.

f. The building shall be valued at less than twenty-five thousand dollars ($25,000.00) as substantiated by a signed contract, and shall have a roofed lot coverage of less than five hundred (500) square feet.

g. The building shall be used only for the storage of vehicles or tools and may not contain other rooms, greenhouses or similar uses.

(Ord. MC-181-97 § 2, 1997; prior code § 28.08)

h. Any structure with a roofed lot coverage of more than seventy-five (75) square feet shall meet the permanent opening criteria of Section 15.68.080.E.2.a.

5. Nonconforming structures located in a regulatory floodway may remain in use, but may not be enlarged, replaced or structurally altered, except to the extent such enlargement, replacement or alteration is permitted by Section 15.68.060 of this chapter. A nonconforming structure damaged by flood, fire, wind or other natural or man-made disaster may be restored provided the value of the damage is less than fifty (50) percent of the structure's market value before it was damaged, and provided that the restoration conforms to all applicable provisions of this chapter.

(Ord. MC-2-2008, Amends, 05/06/2008; Ord. MC-181-97 § 2, 1997; prior code § 28.08)

F. Retaining Walls and Grading Requirements.

1. When retaining walls are used either to bridge the grade differential between the FPE of the clay building pad for a new structure and the existing Average Lot Grade on the site, or to create a vertical surface for any portion of a side of a compensatory storage area, the cumulative height of the retaining walls in the front and side yards shall not exceed twenty-four inches (24”).

2. When slopes are used to provide a transition between the existing grade and the proposed grade for the top of the permanent fill, or for the construction of a compensatory storage basin, those slopes will be limited to a maximum of 1:6, or 1 foot of vertical rise for every 6 feet of horizontal run.

3. If a proposed construction or development project cannot meet the requirements of this Subsection F, then the use of permanent fill to elevate the structure out of the 100-year flood plain shall be prohibited and the structure shall be protected in accordance with Section 15.68.080.E.2 of this Code.

(MC-4-2006, Amended, 07/18/2006; MC-5-2001, Amended, 08/21/2001; MC-3-2000, Amended, 09/05/2000, Reflects new FEMA maps)

SECTION 23: Section 15.68.100, Variances, of Chapter 15.68, Flood Hazard Protection Regulations, of Title 15 of the Winnetka Village Code, Buildings and Construction, is hereby amended to provide, as follows:

15.68.100 Variances.

No variances shall be granted to any development located in a regulatory floodway, as defined in Section 15.68.020 of this chapter. However, when a development proposal is located outside of a regulatory floodway, and whenever the standards of this chapter place undue hardship on a specific development proposals, the applicant may apply to the Director or to the MWRD for a variance. Only the MWRD may grant variances from the requirements of the WMO. The Director shall review the applicant's request for a variance from Village standards that exceed the requirements of the WMO and shall submit his or her recommendation to the Village Council.

A. No variances shall be granted unless the applicant demonstrates that all of the following criteria have been met:

1. The development activity cannot be located outside the SFHA.

2. An exceptional hardship would result if the variance were not granted.

3. The relief requested is the minimum necessary.

4. There will be no additional threat to public health, safety or welfare.

5. There will be no additional threat to beneficial stream uses and functions, including aquatic habitat.

6. There will be no nuisance created.

7. There will be no additional public expense for flood protection, rescue or relief operations, policing, or repairs to roads, utilities, or other public facilities.

8. The activity is not in a regulatory floodway.

9. The applicant's circumstances are unique and do not represent a general problem.

10. The provisions of Sections 15.68.050(E) and 15.68.070(D) are met.

B. The Director shall notify an applicant in writing that a variance of the requirements of Section 15.68.080 of this chapter that would lessen the degree of protection to a building will do any of the following:

1. Result in increased premium rates for flood insurance up to amounts as high as twenty-five dollars ($25.00) for one hundred dollars ($100.00) of insurance coverage.

2. Increase the risks to life and property.

3. Require that the applicant proceed with knowledge of these risks and that he or she will acknowledge in writing that he or she assumes the risk and liability.

C. Variances requested in connection with restoration of a site or building listed on the National Register of Historical Places or documented as worthy of preservation by the Illinois Historic Preservation Agency may be granted using criteria more permissive than the requirements of subsections (A) and (B) of this section.

(Prior code § 28.10)

SECTION 24: This Ordinance is passed by the Council of the Village of Winnetka in the exercise of its home rule powers pursuant to Section 6 of Article VII of the Illinois Constitution of 1970.

SECTION 25: This Ordinance shall take effect immediately upon its passage, approval and publication as provided by law.

PASSED this ___ day of _____, 2014, pursuant to the following roll call vote:

AYES: _____

NAYS: _____

ABSENT: _____

APPROVED this ___ day of _____, 2014.

Signed:

_____
Village President

Countersigned:

_____
Village Clerk

Published by authority of the President and Board of Trustees of the Village of Winnetka, Illinois, this _____ day of _____ 2014.

Introduced:

Passed and Approved:

Agenda Item Executive Summary

Title: Resolution R-10-2014: Intergovernmental Agreement with Metropolitan Water Reclamation District

Presenter: Steven M. Saunders, Director of Public Works/Village Engineer

Agenda Date: 04/17/2014

Consent: ☐ YES ☑ NO

☐ Ordinance
☑ Resolution
☐ Bid Authorization/Award
☐ Policy Direction
☐ Informational Only

Item History:

November 14, 2013 Study Session
April 8, 2014 Study Session

Executive Summary:

The Metropolitan Water Reclamation District of Greater Chicago (MWRDGC) has County-wide stormwater authority and adopted a Watershed Management Ordinance (WMO) on October 3, 2013. The WMO becomes effective on May 1, 2014. The WMO allows for municipalities to become authorized municipalities, which allows those municipalities to issue Watershed Management Permits within their corporate boundaries. The benefits of being an authorized municipality include control over the timing of permit issuance and offering applicants a permit process that involves coordination with fewer government agencies.

At the April 8, 2014 Study Session, the Village Council directed staff to prepare a resolution authorizing the Village to enter an intergovernmental agreement with the MWRDGC for the purpose of becoming an authorized municipality under the WMO. Resolution R-10-2014 authorizes execution of said intergovernmental agreement.

Recommendation / Suggested Action:

Consider adoption of Resolution R-10-2014 authorizing execution of an intergovernmental agreement with the MWRDGC to become an authorized municipality under the countywide Watershed Management Ordinance

Attachments:

1) Resolution R-10-2014
2) Exhibit A: Intergovernmental Agreement with MWRDGC

RESOLUTION NO. R-10-2014

A RESOLUTION AUTHORIZING AN INTERGOVERNMENTAL AGREEMENT REGARDING THE ADMINISTRATION OF THE WATERSHED MANAGEMENT ORDINANCE OF THE METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

WHEREAS, the Village of Winnetka ("Village") is a home rule municipality in accordance with the Constitution of the State of Illinois of 1970 and, except as limited by Section 6 of Article VII of the Constitution of the State of Illinois of 1970, is authorized to exercise any power and perform any function pertaining to its government and affairs; and

WHEREAS, on November 17, 2004, the Illinois General Assembly passed Public Act 093-1049 (hereinafter the "Act"), which declares that stormwater management in Cook County shall be under the general supervision of the Metropolitan Water Reclamation District of Greater Chicago ("District"); and

WHEREAS, the Act specifically authorizes the District to prescribe by ordinance reasonable rules and regulations for floodplain and stormwater management and for governing the location, width, course, and release rate of all stormwater runoff channels, streams, and basins in Cook County; and

WHEREAS, on October 3, 2013, Board of Commissioners of the District adopted a Watershed Management Ordinance (hereinafter the "WMO"), effective on May 1, 2014; and

WHEREAS, the Village is located entirely within the boundaries of Cook County and is therefore subject to the requirements of the WMO; and

WHEREAS, pursuant to Article 14 of the WMO, the District may authorize municipalities to locally administer certain provisions of the WMO; and

WHEREAS, cooperation between and among governmental agencies and entities through intergovernmental agreements is authorized and encouraged by Article VII, Section 10 of the Illinois Constitution of 1970 and by the Intergovernmental Cooperation Act, 5 ILCS 220/1 *et seq.*; and

WHEREAS, the District has prepared an intergovernmental agreement, titled "Intergovernmental Agreement by and between the Village of Winnetka and the Metropolitan Water Reclamation District of Greater Chicago for Authorization to Administer the Watershed Management Ordinance" ("Intergovernmental Agreement"), which defines the duties and obligations of authorized municipalities; and

WHEREAS, a copy of the Intergovernmental Agreement is attached to this Resolution as Exhibit A, and is incorporated by reference, as if fully set forth herein; and

WHEREAS, the Council of the Village of Winnetka ("Village Council") finds and determines that entering into an intergovernmental agreement with the District, substantially in the form attached as Exhibit A, will allow the WMO to be administered more effectively and efficiently within the Village; and

WHEREAS, the Village Council further finds and determines that entering into the Intergovernmental Agreement with the District is in the best interests of the health, safety and general welfare of the Village and its residents; and

WHEREAS, the Village Council further finds that providing for the local administration of watershed management within the Village is a matter pertaining to the Village's government and affairs.

NOW, THEREFORE, be it resolved by the Council of the Village of Winnetka as follows:

SECTION 1: The foregoing recitals are hereby adopted as the findings of the Council of the Village of Winnetka, and are incorporated by reference as if fully set forth herein.

SECTION 2: The agreement titled "Intergovernmental Agreement by and between the Village of Winnetka and the Metropolitan Water Reclamation District of Greater Chicago for Authorization to Administer the Watershed Management Ordinance" ("Intergovernmental Agreement") is hereby approved, substantially in the form attached hereto as Exhibit A.

SECTION 3: The Village President and Village Clerk are hereby authorized and directed to execute and seal, on behalf of the Village, said Intergovernmental Agreement substantially in the form attached hereto as Exhibit A, and to take such other and further steps as may be necessary to effectuate said Intergovernmental Agreement.

SECTION 4: The Village Manager is hereby authorized and directed to submit a letter of intent to the Metropolitan Water Reclamation District of Greater Chicago ("District"), informing the District of the Village's intent to become an authorized municipality under the Watershed Management Ordinance, and to provide such other and further documentation as the District may require for the Village to become an authorized municipality under said Ordinance.

SECTION 5: This Resolution is adopted by the Council of the Village of Winnetka in the exercise of its home rule powers pursuant to Section 6 of Article VII of the Illinois Constitution of 1970.

SECTION 6: This Resolution shall take effect immediately upon its adoption.

ADOPTED this 17th day of April, 2014, pursuant to the following roll call vote:

AYES: _____

NAYS: _____

ABSENT: _____

Signed:

_____
Village President

Countersigned:

_____
Village Clerk

INTERGOVERNMENTAL AGREEMENT
BY AND BETWEEN THE VILLAGE OF WINNETKA AND THE
METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO
FOR AUTHORIZATION
TO ADMINISTER THE WATERSHED MANAGEMENT ORDINANCE

THIS INTERGOVERNMENTAL AGREEMENT (hereinafter the "Agreement") is entered into this ___ day of _____, 2014, by and between the Metropolitan Water Reclamation District of Greater Chicago, a municipal corporation, organized and existing under the laws of the State of Illinois (hereinafter the "District") and the Village of Winnetka, a municipal corporation and home rule unit of government organized and existing under Article VII, Section 6 of the 1970 Constitution of the State of Illinois (hereinafter the "Municipality").

WITNESSETH:

WHEREAS, on November 17, 2004, the Illinois General Assembly passed Public Act 093-1049 (hereinafter the "Act"); and

WHEREAS, the Act declares that stormwater management in Cook County shall be under the general supervision of the District; and

WHEREAS, the Act specifically authorizes the District to prescribe by ordinance reasonable rules and regulations for floodplain and stormwater management and for governing the location, width, course, and release rate of all stormwater runoff channels, streams, and basins in Cook County; and

WHEREAS, the Watershed Management Ordinance (hereinafter the "WMO"), attached hereto as Exhibit 1, was adopted by the District's Board of Commissioners on October 3, 2013 and became effective on May 1, 2014; and

WHEREAS, the Municipality is located in its entirety or partially within the boundaries of Cook County; and

WHEREAS, pursuant to Article 14 of the WMO, the District may authorize municipalities to locally administer certain provisions of the WMO; and

WHEREAS, on April 18, 2014, the Municipality submitted a letter of intent to the District in which the Municipality expressed its desire to administer the WMO within the Municipality's corporate limits as an authorized municipality in conformance with the provisions of the WMO; and

WHEREAS, pursuant to the Illinois Municipal Code, 65 ILCS 5/1 *et seq.*, the Municipality has the authority to adopt the WMO by reference; and

WHEREAS, on April 17, 2014, the Municipality's Village Council passed Ordinance MC-5-2014, which adopted the WMO by reference; and

WHEREAS, the WMO may be administered more effectively with the Municipality and District cooperating and using their joint efforts and resources most efficiently; and

WHEREAS, the Intergovernmental Cooperation Act, 5 ILCS 220/1 *et seq.*, and Section 10 of Article VII of the Illinois Constitution, allow and encourage intergovernmental cooperation; and

WHEREAS, on _____, the District's Board of Commissioners authorized the District to enter into an intergovernmental agreement with the Municipality; and

WHEREAS, on April 17, 2014, the Municipality adopted resolution R-10-2014, titled **"**A Resolution Authorizing an Intergovernmental Agreement Regarding the Administration of the Watershed Management Ordinance of the Metropolitan Water Reclamation District of Greater Chicago," which authorized the Municipality to enter into an intergovernmental agreement with the District; and

NOW THEREFORE, in consideration of the matters set forth, the mutual covenants and agreements contained in this agreement and other good and valuable consideration, the Municipality and District hereby agree as follows:

Article 1. Incorporation of Recitals. The recitals set forth above are incorporated herein by reference and made a part hereof.

Article 2. General Responsibilities.

1. The Municipality shall administer the WMO within its corporate limits in conformance with the provisions of the WMO.
2. The District shall provide oversight of the Municipality's administration of the WMO.
3. Both the Municipality and the District shall comply with the provisions of the WMO.
4. The Municipality shall participate actively in the regular phase of the National Flood Insurance Program. The Municipality shall notify the District promptly if the Municipality is not in full compliance with the National Flood Insurance Program.
5. The Municipality shall appoint an Enforcement Officer (hereinafter "Enforcement Officer") and provide the District with the name, address, telephone number, and email address of the appointed Enforcement Officer. The Municipality shall promptly notify the District of any change of Enforcement Officer by the manner provided in Article 25 below.
6. The Municipality shall either employ or retain adequate staff for all of the following positions:
    a. An Enforcement Officer;

b. Professional Engineer(s) licensed by the State of Illinois (hereinafter "Professional Engineer"); and

c. Wetland Specialist(s).

7. The District shall promptly notify the Municipality of any amendments to the WMO by the manner provided in Article 25 below. The Municipality shall adopt all amendments to the WMO by reference.

Article 3. Watershed Management Permits.

1. The Municipality shall review watershed management permit applications for development activities enumerated in Section 201.1 of the WMO, which are proposed within the Municipality's corporate limits. The Municipality shall use the watershed management permit applications, forms, numbering conventions, and schedules supplied by the District. The Municipality shall contact the District's Permit Unit to obtain a permit number for all new permits.

2. The Municipality shall not review a watershed management permit application for any development activity enumerated in Section 201.2 of the WMO. The Municipality shall forward any watershed management permit applications containing a proposed development activity enumerated in Section 201.2 to the District for the District's review and approval.

3. The Municipality shall not issue a watershed management permit for development activities within a combined sewer area as delineated on Exhibit 2.

4. The Municipality shall not issue a watershed management permit to itself. The Municipality shall obtain a watershed management permit from the District for any of the Municipality's own projects that involve development activities enumerated in Sections 201.1 and 201.2 of the WMO.

5. The Municipality may establish a schedule of permit fees for watershed management permits in accordance with the provisions of the WMO, which may be amended from time to time. The Municipality shall notify the District promptly by letter of any change in established permit fees.

6. The Municipality shall timely review all watershed management permit applications and respond within:

   a. Fifteen working days of an initial submittal for developments not involving flood protection areas;

   b. Thirty working days of an initial submittal for developments involving flood protection areas; and

   c. Ten working days of a resubmittal.

7. The Municipality shall issue watershed management permits for development activities enumerated in Section 201.1 of the WMO proposed within the District's corporate limits, which are in conformance with the terms and conditions of the WMO.
8. The Municipality shall have a Professional Engineer review all engineering information and plans prepared for the development by a Professional Engineer.
9. The Municipality shall conduct a pre-application meeting at the request of an applicant for a watershed management permit. For any unresolved questions from the pre-application meeting, the District shall make its best efforts to be available for an additional joint meeting to resolve such questions.
10. The Municipality shall not issue watershed management permits for proposed developments that do not comply with the provisions of the WMO.
11. The Municipality shall not issue any variance to the WMO. All petitions for variance shall be submitted to the District in accordance with the requirements of the WMO.
12. The Municipality shall not hear any appeals. All petitions for appeal shall be submitted to the District in accordance with the requirements of the WMO.
13. Upon request, the Municipality shall reasonably cooperate with the District on administrative proceedings related to variances, appeals, and violations of the WMO. The Municipality's reasonable cooperation shall include assistance in the form of supporting documents, information, and, if necessary, testimony.

Article 4. Records.

1. The Municipality shall maintain all of the following records electronically for developments within the Municipality's corporate limits:
   a. Watershed management permits issued within the Municipality;
   b. Record drawings;
   c. Structure improvement data;
   d. Wetland mitigation bank credits;
   e. Elevation certificates;
   f. Floodproofing certificates;
   g. Base flood data and base flood maps; and
   h. Letters of Map Changes, including but not limited to, Conditional Letters of Map Revision, Letters of Map Revision, and Letters of Map Amendment.

2. The Municipality shall transmit a copy of all records specified in Article 4, Section 1 of this Agreement to the Permit Unit of the District within ten business days of receipt by the Municipality.

3. The District may conduct inspections to verify that the Municipality is properly maintaining records as required by this Article.

Article 5. Inspections.

1. The Municipality shall inspect construction related to any development activity within the Municipality that requires a watershed management permit. The Municipality shall ensure that any development within its corporate limits is constructed in conformance with the requirements of both the WMO and any issued watershed management permit.

2. The District may inspect any development subject to a watershed management permit within the Municipality to ensure compliance with both the watershed management permit and the WMO.

3. Any inspections performed pursuant to this Agreement shall be conducted in accordance with the WMO and all other applicable local, state, and federal laws.

Article 6. Training. The Municipality shall participate in training as conducted by the District or its designee.

Article 7. Stop-Work Orders.

1. The Municipality is authorized to issue an order requiring the suspension of construction of a development that is subject to the WMO.

2. A stop-work order shall:

   a. Be in writing;

   b. Indicate the reason for its issuance; and

   c. Order the action, if any, necessary to resolve the circumstances requiring the stop-work order.

3. One copy of the stop-work order shall be posted on the property in a conspicuous location and one copy shall be delivered by Certified or Registered Mail, Return Receipt Requested, or by personal delivery to the permittee/co-permittee, and/or to the property owner or his/her agent. Additionally, one copy of the stop-work order shall be provided to the District within 24 hours of its issuance pursuant to the notice procedures set forth in Article 26 below.

4. The stop-work order shall state the conditions under which the construction of the subject development may be resumed.

5. The Municipality shall issue a stop-work order if:

   a. A development is proceeding in a manner which creates imminent hazard of severe harm to persons, property, or the environment on or off the site;

   b. A development is occurring in violation of a requirement of the WMO, or of a watershed management permit, and the Municipality has determined it is necessary to halt ongoing development activity to avoid continuing or additional violations and where significant costs and effort would be incurred should the offending development activity be allowed to continue; or

   c. A development for which a watershed management permit is required is proceeding without issuance of a watershed management permit. In such instance, the stop-work order shall state that the order terminates when the required watershed management permit is properly obtained.

6. The Municipality shall not hear any appeals of its stop-work orders. Such appeals may only be heard by the District in accordance with the provisions of the WMO.

Article 8. Violations.

1. The Municipality shall investigate complaints of violation of either the WMO or a watershed management permit.

2. The Municipality shall notify the District within 72 hours of any suspected violation of either the WMO or a watershed management permit within the Municipality.

3. The District shall solely conduct all administrative proceedings to remedy violations.

Article 9. Audits; Deficiencies and Cure.

1. The District may audit the Municipality periodically to ensure proper administration of the WMO. During an audit, the District may:

   a. Inspect and copy records kept by the Municipality related to the Municipality's administration of the WMO;

   b. Inspect and copy watershed management permits issued by the Municipality;

   c. Meet with staff of the Municipality, which may include the Enforcement Officer, Professional Engineer, and Wetland Specialist;

   d. Conduct field inspections of developments permitted by the Municipality;

   e. Request and copy financial records of the Municipality related to the Municipality's administration of the WMO;

f. Verify that the Municipality complies with all requirements listed in Article 14, Section 1402.2 of the WMO;

g. Verify that the Municipality does not violate any provision listed in Article 14, Section 1402.3 of the WMO; and

h. Verify compliance with this Agreement.

2. The District shall promptly notify the Municipality in writing of any deficiency with respect to any provision of this Agreement or the WMO, which the Municipality must remedy within thirty (30) calendar days. In cases where a deficiency cannot be remedied within thirty (30) calendar days, the District may grant a time extension to the Municipality.

3. If the Municipality does not remedy the deficiency as required by Article 9, Section 2 of this Agreement, the District may either terminate or suspend this Agreement in accordance with Article 11 of this Agreement.

Article 10. Termination by the Municipality. The Municipality may, at its option, and upon giving a sixty (60) day written notice to the District in the manner provided in Article 26 below, terminate this Agreement.

Article 11. Suspension or Termination by the District.

1. The District may terminate this agreement, after providing written notice of any deficiency and a thirty (30) calendar day opportunity to cure in accordance with Article 9, Section 2 of this Agreement, for any of the following reasons:

   a. Failure to comply with any provision of Section 1402.2 of the WMO;

   b. Violation of any provision of Section 1402.3 of the WMO; or

   c. Breach of this Agreement;

2. The District may also terminate this Agreement if the District's legal authority to delegate the administration of the WMO is revoked by statute, ordinance, or court order;

3. The District shall provide written notice to the Municipality if the Municipality does not meet all requirements of either this Agreement or the WMO, to enable the Municipality to correct such deficiencies within thirty (30) calendar days. The District may terminate this Agreement and the Municipality's status as an Authorized Municipality if the Municipality does not cure such deficiencies within thirty (30) calendar days.

4. If the Municipality does not meet all requirements of either this Agreement or the WMO, then, at the discretion of the District, the District may at any time suspend the

Municipality's status as an Authorized Municipality, including its authority to issue watershed management permits. Such suspension shall specify all deficiencies necessary to be remedied.

5. If the Municipality's status as an Authorized Municipality is either suspended or terminated, the Municipality may petition the District's Director of Engineering in the manner prescribed by the WMO for reauthorization after all deficiencies are remedied.

6. Except as provided in Article 15, suspension or termination of the Municipality's status as an Authorized Municipality is the District's sole remedy against the Municipality if the Municipality does not meet all of the requirements of this Agreement or the WMO.

Article 12. Duration. This Agreement becomes effective on the date that the last signature is affixed hereto, which shall be the date inserted on the first page hereof. Subject to the terms and conditions of Articles 10 and 11 above, this Agreement shall remain in full force and effect for perpetuity.

Article 13. Non-Assignment. Neither party may assign its rights hereunder without the written consent of the other party.

Article 14. Waiver of Personal Liability. No official, employee, or agent of either party to this Agreement shall be charged personally by the other party with any liability or expenses of defense incurred as a result of the exercise of any rights, privileges, or authority granted herein, nor shall he or she be held personally liable under any term or provision of this Agreement, or because of a party's execution or attempted execution of this Agreement, or because of any breach of this Agreement.

Article 15. Indemnification. The Municipality shall defend, indemnify, and hold harmless the District, its commissioners, officers, employees, and other agents ("District Party") from liabilities of every kind, including losses, damages and reasonable costs, payments and expenses (such as, but not limited to, court costs and reasonable attorneys' fees and disbursements), claims, demands, actions, suits, proceedings, judgments or settlements, any or all of which are asserted by any individual, private entity, or public entity against the District Party and arise out of, or are in any way related to any authority, duty, or obligation bestowed on the Municipality pursuant to this Agreement and/or the WMO; provided, however, that this indemnity is not, and will not be construed to be, a waiver by the Municipality of any immunity from tort liability to which the Municipality is entitled by law.

Article 16. Covenants, Representations, and Warranties of the Municipality. The Municipality covenants, represents, and warrants as follows:

(1) The Municipality participates in the regular phase of the National Flood Insurance Program and is in full compliance with the program;

(2) The Municipality has legal authority to perform all responsibilities of an authorized municipality required by the WMO and this Agreement;

(3) The Municipality has legal authority to adopt the WMO and has adopted the WMO, including all amendments, by reference;

(4) The Municipality has full authority to execute, deliver, and perform or cause to be performed this Agreement;

(5) The individuals signing this Agreement and all other documents executed on behalf of the Municipality are duly authorized to sign same on behalf of and to bind the Municipality;

(6) No conflict of interest exists for any engineer employed or retained by the Municipality to perform work or provide services related to, or arising out of, the Municipality's administration of the WMO.

(7) The execution and delivery of this Agreement, consummation of the transactions provided for herein, and the fulfillment of the terms hereof will not result in any breach of any of the terms or provisions of or constitute a default under any agreement of the Municipality or any instrument to which the Municipality is bound or any judgment, decree, or order of any court or governmental body or any applicable law, rule, or regulation.

Article 17. Covenants, Representations, and Warranties of the District. The District covenants, represents, and warrants as follows:

(1) The District has full authority to execute, deliver, and perform or cause to be performed this Agreement;

(2) The individuals signing this Agreement and all other documents executed on behalf of the District are duly authorized to sign same on behalf of and to bind the District;

(3) The execution and delivery of this Agreement, consummation of the transactions provided for herein, and the fulfillment of the terms hereof will not result in any breach of any of the terms or provisions of or constitute a default under any agreement of the District or any instrument to which the District is bound or any judgment, decree, or order of any court or governmental body or any applicable law, rule, or regulation.

Article 18. Disclaimers. This Agreement is not intended, nor shall it be construed, to confer any rights, privileges, or authority not permitted by Illinois law. This Agreement is solely for the benefit of the District and the Municipality. Nothing in this Agreement shall be construed to establish a contractual relationship between either the District or the Municipality and any other party. No claim as a third party beneficiary under this Agreement by any person, firm, or corporation shall be made or be valid against the District or the Municipality.

Article 19. Waivers. Whenever a party to this Agreement by proper authority waives the other party's performance in any respect or waives a requirement or condition to performance, the waiver so granted, whether express or implied, shall only apply to the particular instance and shall not be deemed a waiver for subsequent instances of the performance, requirement, or condition. No such waiver shall be construed as a modification of this Agreement regardless of the number of times the performance, requirement, or condition may have been waived.

Article 20. Severability. If any provision of this Agreement is held to be invalid, illegal, or unenforceable, such invalidity, illegality, or unenforceability will not affect any other provisions of this Agreement, and this Agreement will be construed as if such invalid, illegal, or unenforceable provision has never been contained herein. The remaining provisions will remain in full force and will not be affected by the invalid, illegal, or unenforceable provision or by its severance. In lieu of such illegal, invalid, or unenforceable provision, there will be added automatically as part of this Agreement a provision as similar in its terms to such illegal, invalid, or unenforceable provision as may be possible and be legal, valid, and enforceable.

Article 21. Deemed Inclusion. Provisions required (as of the effective date) by law, ordinances, rules, regulations, or executive orders to be inserted in this Agreement are deemed inserted in this Agreement whether or not they appear in this Agreement or, upon application by either party, this Agreement will be amended to make the insertions. However, in no event will the failure to insert such provisions before or after this Agreement is signed prevent its enforcement.

Article 22. Entire Agreement. This Agreement, and any exhibits or riders attached hereto, shall constitute the entire agreement between the parties. No other warranties, inducements, considerations, promises, or interpretations shall be implied or impressed upon this Agreement that are not expressly set forth herein.

Article 23. Amendments. This Agreement shall not be amended unless it is done so in writing and signed by the authorized representatives of both parties.

Article 24. References to Documents. All references in this Agreement to any exhibit or document shall be deemed to include all supplements and/or authorized amendments to any such exhibits or documents to which both parties hereto are privy.

Article 25. Judicial and Administrative Remedies. The parties agree that this Agreement and any subsequent Amendment shall be governed by, and construed and enforced in accordance with, the laws of the State of Illinois in all respects, including matters of construction, validity, and performance. The parties further agree that the proper venue to resolve any dispute which may arise out of this Agreement is the appropriate Court of competent jurisdiction located in Cook County, Illinois.

This Agreement shall not be construed against a party by reason of who prepared it. Each party agrees to provide a certified copy of the ordinance, by-law, or other authority to evidence the reasonable satisfaction of the other party that the person signing this Agreement for such party is authorized to do so and that this Agreement is a valid and binding obligation of such party.

The rights and remedies of the District or the Municipality shall be cumulative, and election by the District or the Municipality of any single remedy shall not constitute a waiver of any other remedy that such party may pursue under this Agreement.

Article 26. Notices. Unless otherwise stated in this Agreement, any and all notices given in connection with this Agreement shall be deemed adequately given only if in writing and addressed to the party for whom such notices are intended at the address set forth below. All notices shall be sent by personal delivery, UPS, Fed Ex or other overnight messenger service, first class registered or certified mail, postage prepaid, return receipt requested, or by facsimile. A written notice shall be deemed to have been given to the recipient party on the earlier of (a) the date it is hand-delivered to the address required by this Agreement; (b) with respect to notices sent by mail, two days (excluding Sundays and federal holidays) following the date it is properly addressed and placed in the U.S. Mail, with proper postage prepaid; or (c) with respect to notices sent by facsimile, on the date sent, if sent to the facsimile number(s) set forth below and upon proof of delivery as evidenced by the sending fax machine. The name of this Agreement i.e., "INTERGOVERNMENTAL AGREEMENT BY AND BETWEEN THE VILLAGE OF WINNETKA AND THE METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO FOR AUTHORIZATION TO ADMINISTER THE WATERSHED MANAGEMENT ORDINANCE" must be prominently featured in the heading of all notices sent hereunder.

Any and all notices referred to in this Agreement, or that either party desires to give to the other, shall be addressed as set forth in Article 27, unless otherwise specified and agreed to by the parties:

Article 27. Representatives. Immediately upon execution of this Agreement, the following individuals will represent the parties as a primary contact and receive notice in all matters under this Agreement.

For the District:

Director of Engineering
Metropolitan Water Reclamation District
of Greater Chicago
100 East Erie Street
Chicago, Illinois 60611
Phone: (312) 751-3169
FAX: (312) 751-5681

For the Municipality:

Steven M. Saunders
Enforcement Officer
Village of Winnetka
1390 Willow Road
Winnetka, Illinois 60093
Phone: (847) 716-3534
FAX: (847) 716-3599

Each party agrees to promptly notify the other party of any change in its designated representative, which notice shall include the name, address, telephone number and fax number of the representative for such party for the purpose hereof.

[Remainder of this page intentionally left blank.]

IN WITNESS WHEREOF, the Metropolitan Water Reclamation District of Greater Chicago and the Village of Winnetka, the parties hereto, have each caused this Agreement to be executed as of the date first above written by their duly authorized officers, duly attested and their seals hereunto affixed.

IN WITNESS WHEREOF, the Municipality has executed this Agreement on the 17th day of April, 2014.

VILLAGE OF WINNETKA

BY:_____
E. Gene Greable, Village President

ATTEST:

_____
Robert M. Bahan, Village Clerk

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

_____
Chairman of the Committee on Stormwater Management

_____
Executive Director

ATTEST:

_____
Clerk

_____
Date

APPROVED AS TO ENGINEERING, OPERATIONS, AND TECHNICAL MATTERS:

_____ _____
Engineer of Stormwater Management Date

_____ _____
Assistant Director of Engineering Date

_____ _____
Director of Engineering Date

_____ _____
Director of Maintenance and Operations Date

_____ _____
Director of Monitoring and Research Date

APPROVED AS TO FORM AND LEGALITY:

_____ _____
Head Assistant Attorney Date

_____ _____
General Counsel Date

Agenda Item Executive Summary

Title: R-14-2014 - Approving and Adopting the Stormwater Master Plan (Adopt)

Presenter: Steven M. Saunders, Village Engineer

Agenda Date: 04/17/2014

Consent: ☐ YES ☑ NO

☐ Ordinance
☑ Resolution
☐ Bid Authorization/Award
☐ Policy Direction
☐ Informational Only

Item History:

June 12, 2012	Award of professional services contract to Baxter & Woodman Consulting Engineers (B&W) to develop a stormwater master plan
July 9, 2013	Council review of preliminary draft of plan: Study Session, Agenda pp. 2 - 46
December 10, 2013	Council review of pre-final draft of plan: Study Session, Agenda pp. 2 - 80

Executive Summary:

In recent years, a series of rain storms caused overland and basement flooding throughout the Village. In response, the Village undertook several studies, including Flood Risk Assessments, a Sanitary Sewer Flow Monitoring Study, Sanitary Sewer Evaluation Surveys and the Stormwater Utility Feasibility Study, developed plans for extensive improvements to the stormwater management system, and began implementation of some of the plans.

The Village Council has determined that a long-term Stormwater Master Plan is necessary to provide a comprehensive statement of the Village's current stormwater management policies and activities, in order to facilitate the implementation of planned improvements, and to provide a guide for policy and decision-making over the next five to 10 years on matters related to managing the volume and quality of stormwater runoff and sanitary sewer discharges in an environmentally sensitive and sustainable way.

Working with Village staff, B&W has drafted a Stormwater Master Plan that builds on the previous studies and plans. After the Council considered and provided comment and policy direction on earlier drafts, B&W prepared a final draft, which has been made available for public review and comment since February. The Village has also provided additional information of the Village's stormwater management program in a series of special stormwater management newsletters.

Resolution R-14-2014 adopts the final draft of the Stormwater Master Plan prepared by B&W.

Recommendation / Suggested Action:

Consider amending the draft Stormwater Master Plan to incorporate public comments.

Consider adopting Resolution R-14-2014, titled "A Resolution Approving and Adopting the Village of Winnetka, Illinois, Stormwater Master Plan."

Attachments:

Agenda Report

1) July 9, 2013 Village Council minutes
2) November 14, 2013 Village Council Minutes
3) December 10, 2013 Village Council minutes
4) Public comments
5) Draft Stormwater Master Plan
6) Resolution R-14-2014 - "A Resolution Approving and Adopting the Village of Winnetka, Illinois, Stormwater Master Plan"

Agenda Report

Subject: **Resolution R-14-2014: Stormwater Master Plan Adoption**

Prepared By: Steven M. Saunders, Director of Public Works/Village Engineer

Date: April 9, 2014

On June 12, 2012, the Village Council awarded a contract to Baxter & Woodman (B&W) for professional services to develop a Stormwater Master Plan for the Village of Winnetka. The Village Council determined that a Stormwater Master Plan process would facilitate concurrent stormwater management activities being undertaken or proposed, to unify all of these activities in a single framework. The overall objective of this project is to develop a clear, comprehensive, and forward-looking framework that encompasses the Village's existing stormwater management program, presents a detailed investigation into key components of stormwater as it is related to the Village, establishes stormwater management goals for the future, presents tools to meet or exceed established goals and provides a foundation for future policy decisions. The final product is a document which helps the Village guide the stormwater program for the next five to 10 years and beyond.

The Stormwater Master Plan builds on the previously completed Flood Risk Reduction Assessments, Sanitary Sewer Flow Monitoring Study (and subsequent Sanitary Sewer Evaluation Surveys) and the Stormwater Utility Feasibility Study. Each Section of the Plan focuses on a different aspect of the Village's stormwater management program and sets forth the following goals:

- Reduce the risk of flooding throughout the Village with improvements to stormwater infrastructure;
- Reduce basement back-ups and sanitary sewer overflows by reducing the amount of inflow and infiltration into the sanitary sewer system;
- Maintain participation and good standing in the National Flood Insurance Program and improve floodplain management practices to minimize flood damages and reduce flood insurance premiums for property owners;
- Protect the quality of water in Lake Michigan and the Skokie River;
- Encourage the use of stormwater best management practices throughout the Village to reduce runoff volumes and improve the quality of stormwater runoff;
- Establish development regulations for the Village which are state of the art with regard to stormwater management;

- Effectively maintain the storm and sanitary sewer systems to promote optimum performance; and

- Fund stormwater management initiatives through a sustainable and equitable source of revenue.

July 9, 2013 Study Session
The Village Council first reviewed a preliminary draft of the Stormwater Master Plan at the July 9, 2013 Study Session. Two sections were not fully developed, due to the required feedback from other government agencies. First, the chapter on flood plain management was awaiting comments on the Village's application for the Federal Emergency Management Agency's (FEMA) Community Rating System. Second, the section on stormwater management regulations was awaiting passage of the Metropolitan Water Reclamation District's (MWRD) countywide Watershed Management Ordinance (WMO). The Council provided policy direction on a number of outstanding issues. Minutes of this meeting are attached as **Attachment #1**.

November 14, 2013 Study Session
The Village Council met to review the Village's stormwater management regulations in light of the MWRD's October, 2013 adoption of the countywide WMO (see preceding paragraph). The WMO sets for minimum, consistent countywide stormwater management regulations, but these standards are generally applicable for larger-scale development projects, whereas the Village's standards are focused on a much smaller-scale development such as single-family homes. B&W first reviewed the development regulations where the Village has regulations in place that are more restrictive than the new WMO, recommending that in these cases Village maintain its regulations rather than adopt those of the WMO. B&W next reviewed regulations in the WMO that are more restrictive than current Village regulations, recommending that in these instances, the Village change its regulations to match the WMO. The Council noted its consensus on the following recommendations from Staff and B&W: 1) The Village should petition to become an authorized municipality under the MWRD's WMO and 2) The Village should review and re-write necessary stormwater management regulations to fit together with the WMO. Minutes of this meeting are attached as **Attachment #2**.

December 10, 2014 Study Session
The Village Council reviewed a final draft of the Stormwater Master Plan prior to publishing for public comment. B&W and the Council reviewed the draft Stormwater Master Plan section by section, making comments and suggestions. Several members of the public commented on sections of the plan as well. Minutes of this meeting are attached as **Attachment #3**.

Public comments received
After the December 10 Study Session, the Council's recommended changes were incorporated and the draft Stormwater Master Plan was posted for public comment at the Village's stormwater management program website (www.winnetkastormwaterplan.com) for a month-long public comment period. Notification to the community about this

posting was provided via several standard Village communication channels, including: the Village website, the weekly E-Winnetka electronic newsletter, Winnetka government cable channel, and in summaries of Council actions. One set of written comments was received, and is shown as **Attachment #4.** The comments focus on four areas:

1. *Further clarification of the scope of the project.* The comment refers to clarifying the Village's definition of "structural flooding" on page 17 of the Master Plan. Staff believes that the definitions of structural and overland flooding are clear.
2. *Elimination of cross connections (Inflow/Infiltration control).* The comments suggest that Village should be more aggressive in identifying sources of inflow and infiltration, particularly downspouts, than is currently anticipated in the Master Plan. MWRD is currently developing regulations that would govern how local sewer systems address the issue of inflow and infiltration. The current text of this plan is left somewhat open-ended in anticipation that MWRD's requirements will inform activities and schedules. Staff anticipates that the MWRD's regulations will be adopted in mid-2014, and that this section of the Master Plan should be amended to reflect those requirements when they are adopted.
3. *Immediate steps on water quality/best management practices.* The comments provide a recommendation that the Village move expeditiously to implement a number of bans including pesticides, certain fertilizers, plastic bags, etc. The Village Council has recently delegated research on the issue of addressing coal tar sealers to the Environmental & Forestry Commission. The Council could consider modifying the text to encourage these measures, with the idea of asking the Environmental & Forestry Commission to evaluate these issues as well.
4. *Implementation of sustainable infrastructure and adoption of a "Green Area Ratio".* The newly adopted WMO is structured so that BMP's are permitted as means of providing required stormwater management, and the Village's Engineering Design Guidelines will follow suit. The Master Plan also includes an action item that the Village develop a process to implement Best Management Practices (BMP's) into public improvements. If the Council is inclined to strengthen this action item, the Council could direct staff to identify potential projects and costs, and include them in the proposed FY 2015 budget when it is presented to the Council.

The Village Council should consider whether to incorporate these comments into the Stormwater Master Plan. If the Council does not wish to amend the Plan to address comments, the Stormwater Master Plan shown as **Attachment #5** is a final draft for Village Council review and possible adoption. Resolution R-14-2014 (**Attachment #6**) adopts the Stormwater Master Plan. If the Plan is adopted, the Village Council should consider scheduling an annual review and update of the plan at a study session early each year.

Recommendation:

1. Consider revising the draft plan to address public comments.
2. Consider adopting Resolution R-14-2014.

Attachments:

1. July 9, 2013 Council Minutes
2. November 14, 2013 Council Minutes
3. December 10, 2013 Council Minutes
4. Public comments
5. Stormwater Master Plan
6. Resolution R-14-2014

ATTACHMENT #1
July 9, 2013 Council Minutes

MINUTES
WINNETKA VILLAGE COUNCIL STUDY SESSION

July 9, 2013

(Approved: August 6, 2013)

A record of a legally convened meeting of the Council of the Village of Winnetka, which was held in the Village Hall Council Chambers on Tuesday, July 9, 2013 at 7:00 p.m.

1. Call to Order. President Greable called the meeting to order at 7:03 p.m. Present: Trustees Joe Adams, Arthur Braun, Jack Buck, Patrick Corrigan, Richard Kates and Stuart McCrary. Absent: None. Also in attendance: Village Manager Robert Bahan, Assistant to the Village Manager Megan Pierce, Village Attorney Katherine Janega, Public Works Director Steven Saunders, Finance Director Ed McKee, and approximately 11 persons in the audience.

2. Draft Stormwater Master Plan. Public Works Director and Village Engineer Steve Saunders explained that the Stormwater Master Plan is a framework to guide the Village moving forward, not only with the proposed capital improvement projects, but for other aspects that go into making a full stormwater program; for example, water quality, building regulations, inflow and infiltration (I/I) and green infrastructure. The end goal is a comprehensive plan that relates to stormwater control, similar to the way that the *Winnetka 2020* Comprehensive Plan relates to land use.

   Mr. Saunders said the draft Stormwater Master Plan still has a number of policy questions to be answered, and that Council input is needed to flesh out the document before public engagement begins. Two sections were not fully developed, due to the required feedback from other government agencies. First, the chapter on flood plain management will be completed once the Village's in-process application for the Federal Emergency Management Agency's (FEMA) Community Rating System is finished. Second, the section on stormwater management regulations is subject to change once the Metropolitan Water Reclamation District (MWRD) passes its stormwater management ordinance, which has been published in draft form and is subject public comment before adoption.

   Mr. Saunders introduced Mark Phipps, of Baxter & Woodman, to present the draft Master Plan and review policy questions with the Council.

   Mr. Phipps explained that the look of the Master Plan document will be very different once it has been completed and graphics and photographs are inserted; and that the focus of tonight's discussion was technical content such as goals, objectives and recommendations. He said the Master Plan is a multi-faceted, comprehensive guide that is intended to function as a roadmap for the Council to use when making stormwater-related decisions.

   Mr. Phipps said seven major goals were identified for the Village's Stormwater Master Plan:

   1. **Reduce the risk of flooding.**
      Focus: Stormwater infrastructure improvements such as the proposed projects currently under consideration by the Council.

   2. **Reduce basement backups and sanitary sewer overflows.**
      Focus: Reduce I/I into the storm sewer system, including door-to-door visits with residents to check for cross-connections.

3. **Participate in and remain in good standing with the National Flood Insurance Program.**
   Focus: Improve floodplain management practices and set strict development standards; continue with application for FEMA's Community Ratings Program.

4. **Protect and enhance the quality of water in Lake Michigan and the Skokie River.**
   Focus: Educate residents, reduce illegal sanitary sewer connections, and implement control measures on construction sites. Consider water quality sampling at five suggested locations where Baxter & Woodman's water sampling revealed elevated levels of fecal coliform, nitrogen and phosphorus.

5. **Encourage the use of stormwater Best Management Practices (BMPs) to reduce runoff volumes and improve the quality of runoff.**
   Focus: Green infrastructure such as permeable pavements and rain barrels, to reduce runoff and improve stormwater quality. Consider incentive or recognition program for green infrastructure projects, develop ordinance requirements for new development – public and private.

6. **Establish development regulations which are cutting-edge in the area of stormwater management.**

7. **Effectively maintain the storm and sanitary sewer systems for optimum performance.**
   Focus: Clean and maintain 1/7 of the sanitary and storm sewers annually.

Mr. Phipps reviewed the proposed next steps in the Stormwater Master Plan process, which include: (i) refine the goals, objectives and recommendations; (ii) hold open houses for residents to learn about floodplain management, water quality issues and I/I; and (iii) discuss development regulations to reduce stormwater runoff and improve water quality. He requested Council direction on the questions of: (i) moving forward with house-to-house canvassing to uncover illegal storm sewer connections; (ii) whether the Village should pursue plans for a cost-sharing program to disconnect sump pumps and foundation drains from the sanitary sewer; and (iii) scheduling public open houses.

Answering a question from President Greable about a financing component to the Master Plan, Mr. Phipps explained that although the financing has been thoroughly discussed in conjunction with the Municipal Financial Services Group Stormwater Utility Study, a financing chapter could be added to the Master Plan.

There was a lengthy discussion about aspects of the Master Plan, including: public open houses, BMPs, illegal connections to the sanitary sewer, house-to-house canvassing, and water sampling.

Mr. Saunders, responding to questions from Trustees Buck and Corrigan, explained that a Master Plan is needed because it will look ahead five to ten years and provide a vision to guide future Councils, in the same way the Comprehensive Plan guides the Village on land use issues.

Terry Lowinger, 950 Hill Road: Ms. Lowinger said BMPs could be used in other areas besides water quality and runoff, and she suggested adopting green infrastructure practices as soon as possible.

Ted Wynnychenko, 1086 Oak Street: Mr. Wynnychenko made the following points: (i) the Council should seriously consider the question of credits when implementing the stormwater utility fee; (ii) it is important to re-evaluate the code with respect to drainage; (iii) the Village's Engineering Guidelines are not Best Practices; and (iv) the tunnel boring machines vibrate and may crack the foundations and walls of surrounding homes.

Chuck Dowding, 968 Elm Street: Mr. Dowding said a Master Plan is extremely important, the community needs to know that the Council thought deeply about the direction it wants to go in, and the regulatory agencies require it as part of their permit processes.

The Council provided the following direction on the outstanding issues: (i) implement a recognition program for projects that utilize BMPs, similar to the Historic Preservation Awards; (ii) participate in the MWRD's rain barrel distribution program; (iii) do not implement a stormwater fee credit program, unless there is a legal reason to do so; (iv) do not implement a cost-sharing program to help residents remediate illegal connections to the sanitary sewer; (v) proceed with a long-term water quality monitoring program, but provide more specifics to the Council; (vi) reduce the number of recommended public open houses; and (vii) schedule a special Study Session to discuss development regulation.

3. Willow Road Stormwater Tunnel – Engineering Procurement and Construction Contracting Methods. Mr. Saunders explained that a two-phase process, starting with a Request for Qualifications (RFQ) and then proceeding to a Request for Proposals (RFP), is recommended because the complexity of the project will require a significant cost for bidders to provide a detailed proposal. Staff would like to narrow down the pool of respondents to a reasonable number of firms that are qualified and suited for this type of project. He also reviewed two types of construction contracting methods:

   - General Contracting Bidding. A traditional approach which is most successful for linear projects such as roadway, sewer, stormwater and water main improvements. This method provides the lowest cost for a given set of documents; however, any changes in the scope of work or ambiguities in the construction documents are open to interpretation/negotiation and subject to change orders for time, dollars, or both. This method can lead to an adversarial relationship between the Village, Design Engineer and Contractor.

   - Construction Management. This technique brings the contractor to the design team, where s/he assists the Village in making schedule and scope decisions early in the process. This approach provides more frequent and accurate cost estimates, which are used throughout the design process, and affords early identification of cost and scheduling issues. In addition, the risk of cost overruns (not associated with the project scope) is transferred to the Construction Manager.

   After reviewing the proposed contract structure, Mr. Saunders recommended a Construction Manager at-risk for the first phase of the Tunnel Project, with the remainder of the proposed projects being awarded in a traditional General Contractor bidding arrangement. He said the goal is to get the RFQ published later in July; review responses by early September; issue an RFP in October and possibly award a contract in December.

   After a brief discussion, the Council agreed with Mr. Saunders' recommendations for the contracting methods for the Tunnel Project.

4. Legislative Update – HB 183 "Concealed Carry." Attorney Janega reported that the State legislature overrode the Governor's veto and passed a concealed carry law that pre-empts home rule, but does provide a 10-day window for municipalities to pass legislation banning assault weapons. She explained that for all practical purposes, the Council can assume there is no restriction on carrying firearms other than what is in place in the new Act.

   Trustees Adams, Kates, McCrary and Braun said they would like Attorney Janega to draft an assault ban ordinance for discussion and public comment at the July 16 Council Meeting.

5. Public Comment. None.

6. Adjournment. Trustee Braun, seconded by Trustee Adams, moved to adjourn the meeting. By voice vote, the motion carried. The meeting adjourned at 10:13 p.m.

_____

Recording Secretary

ATTACHMENT #2
November 14, 2013 Council Minutes

MINUTES
WINNETKA VILLAGE COUNCIL RESCHEDULED STUDY SESSION

November 14, 2013

(Approved: December 3, 2013)

A record of a legally convened meeting of the Council of the Village of Winnetka, which was held in the Village Hall Council Chambers on Thursday, November 14, 2013 at 7:00 p.m.

1) Call to Order. President Greable called the meeting to order at 7:02 p.m. Present: Trustees Joe Adams, Jack Buck, Patrick Corrigan, Richard Kates and Stuart McCrary. Absent: Trustee Arthur Braun. Also in attendance: Village Manager Robert Bahan, Assistant to the Village Manager Megan Pierce, Village Attorney Katherine Janega, Director of Public Works/Village Engineer Steve Saunders, Finance Director Edward McKee, and approximately four persons in the audience.

2) Stormwater Master Plan: Review of Development Regulations. Director of Public Works and Village Engineer Steve Saunders explained the ongoing development of the Village's Stormwater Master Plan and the need for strategies to update the Village's stormwater management regulations. The Metropolitan Water Reclamation District of Greater Chicago (MWRD), the County-wide stormwater authority, adopted a Watershed Management Ordinance (WMO) in October that will become effective May 1, 2014. Since the WMO allows authorized municipalities to issue local Watershed Management Permits, Mr. Saunders said Staff recommends becoming an authorized municipality to maintain a simplified review process for its permit applicants. The Stormwater Master Plan development also brought about a review of Winnetka's Engineering Guidelines so that the Village can decide which best practices to include from its existing ordinance and which to include from the MWRD. Lastly, Mr. Saunders said Winnetka's Zoning Ordinance was reviewed to identify sections that have significant stormwater management implications.

   Mark Phipps, the Village's Master Plan consultant from Baxter & Woodman (B&W), described the difference in focus between the Village's existing regulations and those contained in the countywide WMO. Generally, the Village's standards are focused on a much smaller, neighborhood-scale development. Mr. Phipps first reviewed the development regulations where the Village has regulations in place that are more restrictive than the new WMO. In these cases, it was recommended the Village maintain its regulations rather than adopt those of the WMO. Trustee McCrary asked if these rules impose any requirements on existing developments. Mr. Phipps said adoption of the new standards would not impact prior development. It was noted that developments already in the works would also be regulated under existing standards.

   Mr. Phipps next reviewed regulations in the WMO that are more restrictive than current Village regulations. In these instances, B&W recommended the Village change its regulations to match the WMO.

   Trustee McCrary and President Greable asked for clarification about the ability of new developments to construct basements within the floodplain. Mr. Saunders explained there is a process by which residents can apply through FEMA to have the floodplain revised and allow for basement construction. President Greable asked how many new homes have been

constructed in the floodplain; Mr. Saunders estimated it is on average about two to three per year.

Mr. Phipps then presented standards where it was recommended the Village match the new WMO for regulated projects and then determine whether the same requirements be extended to other projects. Mr. Saunders said Staff is seeking policy direction from the Council so that the Village can create a hybrid of development regulations that best suit Winnetka, given what has been put forth in the WMO. Trustee Adams asked about the Village's authority to grant variations for projects regulated by the WMO. It was noted that the MWRD has maintained its authority to issue variances for projects regulated under the WMO, but that this is not likely to apply where the Village adopts a more restrictive standard.

A final area of standards reviewed by Mr. Phipps included regulations where the Village should match the WMO for required projects, but not extend those regulations to others. Mr. Saunders noted these additional requirements would just become part of the existing review process, except for things that must be submitted to the MWRD. He said it is not a choice of whether or not to follow the WMO. Certain development will be regulated by it, but the Village can take direction on additional best practices to manage stormwater.

Mr. Saunders summarized the four areas from the current Village Zoning Ordinance that were identified as having stormwater implications and said Staff can further evaluate whether change is desirable in these areas to integrate zoning and stormwater management. The areas identified and reviewed included: encouragement of detached garages in the rear quarter of a lot; maximum impermeable surface coverage; treatment of semi-permeable surfaces; and construction of deep basements.

Staff recommended that the Village become an authorized municipality to allow administration and enforcement of the countywide WMO. Trustee Corrigan said the Village should absolutely be authorized to simplify the permit process and make it less time consuming. Trustee McCrary clarified that the Village would be authorized to issue the permit itself rather than requiring both a permit from the Village and the MWRD.

Staff also recommended that the Village adopt the countywide WMO and then update the Village's current regulations to match. Mr. Saunders said Staff would bring back a new subsection of the Village Code containing the necessary changes and additional regulations sometime in 2014. Trustee Adams expressed support for adopting the countywide WMO, so as not to start from scratch with an existing extensive document.

The Council and Mr. Saunders then discussed the recommendation to further evaluate the four areas of zoning requirements with stormwater runoff implications. Trustee Kates asked for more specificity about how the zoning requirements might be changed. Mr. Saunders said they each need to be further investigated and then brought back to the Council for direction. Mr. Kates also expressed concern about encouraging semi-permeable surfaces and the true positive impact of the materials on properties. Trustee Kates inquired about the monitoring and regulation of sump pumps and what is done to ensure one property is not just pumping water onto a neighbor.

Trustee Adams said the Council often hears resident concerns about new development and was supportive of studying these areas further. Trustee Kates also supported studying these

four areas as well as any other areas identified along the way. President Greable estimated that there might be more than four areas that could be addressed at the same time.

Ann Wilder, 1096 Spruce Street. Ms. Wilder said she understands the goal of the discussion to be to control stormwater runoff to reduce or control flooding. Even though a letter of map revision can be obtained, Ms. Wilder said FEMA does not recommend constructing a basement on floodplain land. She thinks the Village should disallow the building of basements on lots that have obtained a letter of map revision for fill. She stated federal flood insurance has very limited coverage for basements, so if they exist, they are a risk. If these basements flood, it will likely add to uninsured losses. In cases of new construction, the Village should be stricter than FEMA and at least not allow construction of deep basements.

The Council then noted its consensus on the following recommendations from Staff and B&W: 1) The Village should petition to become an authorized municipality under the MWRD's WMO and 2) The Village should review and re-write necessary stormwater management regulations to fit together with the WMO.

3) Fiscal Year 2014 Budget Follow-up Items. Finance Director Ed McKee noted that during the budget process, issues were raised that required additional information. The budget follow-up items were reviewed, noting timelines and action steps, including: Westlaw/legal reference resources; independent civil engineering review; building, business, and liquor license fee comparison; street program; floral program; revised stormwater fund cash-flow; evaluation of refuse funding; and updated pension information. Trustee Kates asked if the road program would be brought back to the Council since the road condition assessment will not be completed before the budget is adopted. Mr. McKee confirmed that the Council will authorize the items individually even if they are included in the budget. Trustee Kates clarified that this also applied to items previously discussed, such as the recycling containers recommended by the EFC.

   Trustee Kates inquired if anything additional was being contributed for the pension funding this year. Mr. McKee explained that the current year budget includes an additional amount to make-up for the short, nine-month fiscal year. The Village is making supplemental transactions in the current fiscal year.

   The Council concurred with the recommendations outlined in the budget follow-up schedule.

4) Public Safety Pension Funding. Mr. McKee presented draft actuarial reports for the Village's Firefighter and Police Pension Funds. Because the Village's actuary made a change in the mortality table employed, the life expectancy of the people in the fund has been increased, and thus an additional $94,364 would be required in the Village's tax levy. He said the changes in computations for both Fire and Police will be reflected in the proposed tax levy and would put additional funds in both pensions next year.

   Trustee Kates asked if Mr. McKee thought is the allocations are sufficient, given the Village's rating in the most recent bond issuance. Mr. McKee said the Village's assumptions are very conservative, but that the Council could make a policy decision to allocate more to pension contributions. He advised once the surplus for the current year is known it may make more sense to consider an additional, supplemental contribution. Trustee Corrigan noted that the only negative on our bond rating was a slight underfunding of the pension

funds. He said the Village should be using reserves rather than raising taxes and that the problem is not going away.

The Council discussed whether there would be any adverse impacts of using reserves to allocate additional funds for pensions. Mr. McKee noted there is not a direct negative impact on the reserves, but it does reduce the Village's flexibility to use those reserves for other items that may arise. President Greable asked what the actuary is recommending. Mr. McKee said based on the assumptions and the 20-yearamortization, the numbers from the draft report are what the actuary would recommend. President Greable advocated sufficiently funding the pensions but felt a five-year plan would be helpful to determine the best approach. Trustee McCrary described the changes in legislation that changed the calculation that determines pension funding levels.

Responding to a question from Manager Bahan, Mr. McKee said the Village would have an initial impression of the closing fiscal year 2013 numbers in March, 2014. He said there would be more information at that time to understand what is available for additional contributions to pensions. Trustee Buck said he believes it is more than evaluating pension funding—also looking at the elimination of other taxes and fees that would also affect the levy and the reserves. He advocated getting rid of the natural gas tax, the vehicle stickers, and the animal registration.

The Council agreed to accept the recommendation to increase the portion of the levy related Public Safety Pension Funds $96,000 to reflect the change in the actuary's mortality table, with a corresponding reduction in the Village's General Fund Corporate Levy.

Ann Wilder, 1096 Spruce Street: Ms. Wilder asked if the mortality tables from the actuary were broad or based only on the people in Village's pension funds. Mr. McKee responded that the actuary uses national tables that are not specific to the Village.

5) Public Comment.

Ann Wilder, 1096 Spruce Street: Ms. Wilder asked about the status of a report requested by Trustee Braun related to stormwater impact on the Lake. She inquired as to if and when a report would be done. Manager Bahan responded that the environmental impact on the Lake would come from the design engineering for the Willow Road Tunnel project and that a report will not be possible until the engineering has progressed.

6) Executive Session: None

7) Adjournment. Trustee Adams, seconded by Trustee Buck, moved to adjourn the meeting. By voice vote, the motion carried. The meeting adjourned at 8:45 p.m.

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Recording Secretary

ATTACHMENT #3
December 10, 2013 Council Minutes

MINUTES
WINNETKA VILLAGE COUNCIL STUDY SESSION

December 10, 2013

(Approved: January 7, 2014)

A record of a legally convened meeting of the Council of the Village of Winnetka, which was held in the Village Hall Council Chambers on Tuesday, December 10, 2013 at 7:00 p.m.

1) Call to Order. President Pro Tem Kates called the meeting to order at 7:00 p.m. Present: Trustees Arthur Braun, Jack Buck, Patrick Corrigan, Richard Kates and Stuart McCrary. Absent: President E. Gene Greable and Trustee Joe Adams. Also in attendance: Village Manager Robert Bahan, Assistant to the Village Manager Megan Pierce, Village Attorney Katherine Janega, Public Works Director Steve Saunders, and approximately 13 persons in the audience.

2) Stormwater Master Plan Final Draft. Village Engineer/Public Works Director Steve Saunders explained that the purpose of the Stormwater Master Plan (the Plan) is to combine goals and objectives into a single, comprehensive document which incorporates other consultant studies, a financial plan, and action items, etc. for the purpose of providing a planning resource to achieve the Village's stormwater goals. He said all of the action items have previously been approved by the Council, with the exception of Section 5 (Floodplain Management).

   Mr. Saunders explained that Staff is looking for final Council guidance on the Plan prior to publishing it for the public. Final adoption of the Plan will take place in early 2014, after public comment has been received. The document consists of the Stormwater Master Plan, followed by a series of appendices; the final form of the Plan will be split into two documents: the Plan and the appendices, for ease of use.

   President Pro Tem Kates suggested some changes to the wording in Section 2 – Our Vision. After a brief discussion, there was Council agreement to take out the last sentence on page 11 and modify the wording of the fourth bullet point on page 12.

   Debbie Ross, 921 Tower Road. Ms. Ross disagreed with removing the last sentence on page 11, as it is important to note that studies show runoff contains carcinogens, fecal matter, synthetic chemicals and detergents, which cannot be filtered. She posited that the Tunnel project will negatively affect property values in the region.

   Stacy Meyers, Policy Coordinator for Open Lands. Ms. Meyers said the language on page 11 should remain in the Plan, as it is timely and there is a movement to press for runoff protection. She presented the Council with a letter from Chicago Wilderness, an alliance of environmental groups.

   Laurie Morse, 271 Hawthorne Street, Glencoe. Ms. Morse said the language on page 11 refers to water quality data that was collected by the Village, and the effort to improve and enhance water quality should at least bring the Village's samples to a better level.

   Mr. Saunders said he would devise language to replace "enhance and protect" on page 12 of the Plan.

Mark Phipps, Baxter & Woodman (W&E), reviewed Sections Three – Stormwater Capital Improvements and Four – Infiltration & Inflow, which the Council had previously commented on. The Council suggested that a reference be inserted that the Stormwater Improvement Plan is designed for a 100-year flood, and also requested that the word "recommendation" be changed to "action items" throughout the Plan.

Ms. Morse commented that she did not see any green infrastructure included in the Capital Improvements, and Mr. Phipps said Section 7 specifically incorporates green infrastructure.

Trustee Buck requested that public comment be deferred until the Council has reviewed the entire Plan, to which the Council agreed. Trustee McCrary noted that citizens can also contact Council members or staff to discuss their issues further.

Mr. Phipps turned to Section Five – Floodplain Management, which the Council had not previously reviewed. He said the goal of floodplain management is to maintain good standing in the National Flood Insurance Program (NFIP), which is run by the Federal Emergency Management Agency (FEMA) in cooperation with local government units. Local governments agree to regulate development in the floodplain in exchange for FEMA underwriting flood insurance policies in the community.

Three critical aspects of the NFIP are: i) floodplain mapping which designates areas of significant flood hazard and specifies the level of hazard; ii) flood insurance availability; and iii) enactment of local building permit regulations in the floodplain that keep structures reasonably safe from flooding. Winnetka has been in the NFIP since 1973 and recently applied to become a member of the Community Rating System (CRS), a voluntary program which reduces flood insurance premiums for residents in communities that exceed the NFIP minimum requirements to reduce flood damages. Mr. Phipps reviewed several ways the Village could increase its score in the CRS, including examining repetitive loss areas to determine if steps can be taken to reduce flood loss in these areas.

Mr. Phipps mentioned that Cook County has just begun developing its Hazard Mitigation Plan, a multi-jurisdictional plan to ensure local governments are prepared for disaster. Winnetka could benefit from participation, and Mr. Saunders said the Village is enrolled to participate in the planning.

Mr. Phipps next reviewed Section 6 – Water Quality. He said these action items are requirements under the Village's National Pollutant Discharge Elimination System (NPDES) permit, which is granted to municipalities with separate storm and sanitary sewers. He said the Illinois Environmental Protection Agency (IEPA) has established a Total Maximum Daily Load (TMDL) for E. coli in Lake Michigan and is developing limits for the Skokie River watershed.

Mr. Saunders explained that the TMDL for E. coli will be a concern for the permitting agencies of the Tunnel Project, and that the Village should begin sampling for E. coli at Winnetka beaches. He noted that water quality is important in its own right, not just for permitting purposes; and Section 6 contains a number of water quality initiatives not tied to the Tunnel Project, which are the right practices for the Village. Water quality testing also ensures that stormwater projects are having the intended effect. For example, Elder beach had many fewer beach closings in 2012 and 2013 after the Village worked to correct cross connections that were affecting water quality at that beach.

Responding to a question about prohibiting the use of coal tar, Mr. Phipps said there are several towns in the Chicago area, as well as some states, that have banned the coal tar, which studies show is a carcinogen. He added that some towns ban phosphorus, which is found in lawn fertilizer, but that fertilizer is hard to ban because enforcement is difficult.

Mr. Phipps moved to Section 7 – Stormwater Best Management Practices (BMPs). There are two ways to encourage BMPs: i) urge individual property owners to take steps; and ii) implement BMPs in capital projects on public property, where it is cost effective and feasible to do so.

After Mr. Phipps reviewed the remaining sections in the draft Plan, President Pro Tem Kates called for public comment.

Ann Wilder, 1096 Spruce Street. Ms. Wilder, reading from her written comments, proposed alternate solutions with grey and green components and requested that the Tunnel Project be delayed until such solutions are investigated.

Debbie Ross, 921 Tower Road. Ms. Ross said she thinks the Village's lack of commitment to BMPs is appalling and suggested permeable pavers, utilization of the Villages IKE grant, changes in the Zoning Ordinance to reduce lot coverage and allow deep basements, and the use of Crow Island Park for stormwater detention.

Mr. Saunders explained that permeable pavers do not provide the volumes of stormwater detention for a 100-year storm, but that they are useful for filtering pollutants from stormwater runoff. Regarding the grant, he noted it was originally a group effort with Glenview, Niles, Winnetka and several Chicago neighborhoods. Chicago has dropped out of the process, and an initial Request for Proposals (RFP) came back with an expanded scope beyond what the grant initially offered. The grant is for planning purposes and not construction of stormwater projects. The Village has been working on a second RFP better suited to the vision and focusing on retrofitting neighborhoods and including green infrastructure. He noted that the grant funding is still available and the State has been very cooperative so that the municipalities can establish repeatable planning processes that benefit other localities.

Dan Wade, Alliance of Great Lakes. Mr. Wade expressed concerns about additional stormwater discharges to the Lake, and he asked if there are proposals to treat contaminated water at the existing outfalls, specifically, proposals in green infrastructure on private and public property.

Trustee Corrigan asked if a significant component of the pollution at Elder Beach is from the dog beach.

Mr. Saunders said testing to identify whether bacterial components are from human or non-human sources has not been done; however, there are many contributors of bacteria at beaches, and it would be unfair to say the dog beach is the main culprit. He noted that eliminating some sources of sanitary sewer infiltration into the storm sewer did improve the situation at Elder Beach, but he cautioned that finding cross-connections is difficult and repairing them is expensive.

Bill Krucks, 920 Sunset Lane. Mr. Krucks asked if anything can be done to provide relief for Area L and the "tree streets" until the Tunnel Project is completed.

Mr. Saunders explained that the Winnetka Avenue pump station improvement will help Area L, and the Ash Street pump station modernization will also help the "tree streets."

Rick McQuet, 528 Maple Street. Mr. McQuet asked for information that would quantify the effect of permeable pavers, and he asked how water coming through the Tunnel would be treated.

President Pro Tem Kates explained that the "first flush" of each rainstorm would be diverted to the river. Since the first flush picks up most of the pollutants, contaminants going through the Tunnel would be highly diluted, and engineering will be done to ensure the water is filtered before going into the Lake.

Mr. McQuet asked how much of the pollutant load would be carried away in the first flush, and Mr. Saunders responded that there are studies that estimate 70-80% or more of pollutants are contained in that first amount of runoff.

Jen McQuet, 528 Maple Street. Ms. McQuet said even if the first flush removes a majority of pollutants, there will still be more contaminants going into Lake Michigan as a result of the Tunnel Project, and she asked how the report could state that the Village will endeavor to improve the water quality of the Lake.

Mr. Saunders and Trustee McCrary explained that the wording had been discussed earlier in the meeting and was still being worked on, and the Council feels it is important to set a goal of cleaning the water for the future.

Laurie Morse, 271 Hawthorne Street, Glencoe. Ms. Morse said the beaches are essential to the property values of lakefront communities and suggested a combination of green infrastructure and other things might remove the need for a tunnel. The existing problem of pollution at Winnetka's beaches makes the Tunnel Project a worrisome prospect for many in the community.

Ted Wynnychenco, 1086 Oak Street. Mr. Wynnychenco said he was disappointed that the stormwater utility will not have credits or incentives for residents who take real steps to reduce their stormwater runoff and that a legal challenge to the utility could ensue.

Trustee Braun said the Council will examine the credits and incentives in more detail when the time comes to approve the stormwater utility fee, adding that the Stormwater Master Plan is not yet adopted and will be published for public comment.

Bob Zabors, 321 Willow Road. Mr. Zabors said the first concern of the Stormwater Master Plan is alleviating flooding, and he cautioned that pollutants added to the Lake through the Tunnel outfall will remain there for a long time. He suggested that money could be better spent on immediate projects, and he added that residents have heard a lot of details on funding of the Stormwater Improvement Plan, but not much about other options.

3) Public Comment. None.

4) Adjournment. Trustee Braun, seconded by Trustee Buck, moved to adjourn the meeting. By voice vote, the motion carried. The meeting adjourned at 9:19 p.m.

_____

Recording Secretary

ATTACHMENT #4
Public comments

Steve Saunders

From: Steve Saunders
Sent: Tuesday, March 11, 2014 8:57 PM
To: Christopher Blum (blumcd@gmail.com)
Cc: Stormwatercomments; Robert Bahan; Megan Pierce; Steve Saunders
Subject: RE: Comments on Stormwater Master Plan

Dear Mr. Blum,

Thank you for your comments on the Stormwater Master Plan. These will be forwarded to Baxter & Woodman, the Village's consultant for this project, and to the Village Council, for consideration before the plan is adopted. Adoption is tentatively scheduled for April. I would encourage you to continue to stay informed of the Village's stormwater plans via the Village's stormwater website at www.winnetkastormwaterplan.com

Sincerely,

Steven M. Saunders
Director of Public Works/Village Engineer Village of Winnetka
1390 Willow Road
Winnetka, IL 60093
(847) 716-3534
(847) 716-3599 (facsimile)
ssaunders@winnetka.org

-----Original Message-----
From: Stormwatercomments
Sent: Tuesday, March 11, 2014 9:17 AM
To: Robert Bahan; Megan Pierce; Steve Saunders
Subject: FW: Comments on Stormwater Master Plan

-----Original Message-----
From: Chris Blum [mailto:blumcd@gmail.com]
Sent: Friday, March 07, 2014 4:20 PM
To: Stormwatercomments
Subject: Comments on Stormwater Master Plan

From: Chris Blum <blumcd@gmail.com>
Subject: Comments on Stormwater Master Plan

Message Body:
Please consider the following comments to the Draft Stormwater Master Plan (SMP) for the Village of Winnetka.

- Further Clarification Regarding Scope of Project re: Structural vs. Overland Flooding

It is good to see that the SMP acknowledges that the current proposed projects are geared at structural flooding in limited areas of the Village. (SMP at 17) This has been less than clear in the past. However, its is disappointed to see the overland flooding that impacts larger sections of the village described as merely "nuisance flooding." (SMP at 17) Additionally, it would be helpful for the residents of the Village to understand how the Village has defined structural

flooding as opposed to overland flooding. I understand the Village's flooding problems to be related to rainfall and low lying areas, not to water bodies (i.e., the Skokie Lagoons / Chicago River) rising above the banks. Therefore, all of the "structural flooding" appears to be flooding by rain water traveling over land. If the village is limiting its definition of structural flooding to waters entering structures (regardless of the cause) then the SMP should make that clear, so residents can make an informed evaluation of the SMP and the proposed improvements.

- Elimination of Cross Connections

The Village should take a more aggressive approach to cross connections into the sanitary sewer. The SMP suggest that the Village "commit" to doing so, but limits the proposed canvassing to areas adjacent to the improvement projects, rather than the entire Village. As made clear in the Village's rationale for the Village-wide Utility Fee, everyone contributes to flooding. One relatively quick method of dealing with the cross connection survey would be as follows: (1) survey (foot or vehicle) homes along each street in the Village for downspouts that go into the ground and do not discharge at grade. (2) If the downspouts go into the ground, then the Village could note the property address and search its records for a permit or other document showing that the gutters are connected the storm sewer. (3) If there is no documentation, then the Village should inspect that property.

- Immediate Steps On Water Quality / BMP

The Village should pass regulations and adopt policies improve water quality and follow through on its commitment to water quality. Implementation of such regulations and policies, would likely go a long way to showing the permitting agencies that the Village has the ability and the willpower to honor its commitment to water quality. Importantly, the following can be accomplished without waiting for approval for permits and should be done immediately.

- The Village should ban the use of pesticides (to the extent not preempted by the Illinois Pesticide Act)
- The Village should ban the use of phosphorus containing lawn treatments, including fertilizers and pesticide containing weed and feed products. (Similar bans have been implemented in other Illinois communities and the regulation for Dane County, Wisconsin was upheld by the US Court of Appeals).
- The Village should announce that it is abandoning the use pesticides / fertilizers on Village property or projects.
- The Village should ban the use of plastic bags at stores / restaurants.
- The Village should explore abandoning its use of road salt in favor of other alternatives such as sand and CMA.
- The Village should begin to convert public right of ways (i.e. parkways) into rain gardens, tree box filters, or other modern and sustainable infrastructure. This could be done in areas of the Village that will not be directly impacted by the planned projects without fear of having to redo these projects should the tunnel program be approved or that they will not be effective if the tunnel is not approved.

In addition, the Village should explore policies and programs being implemented across the country. Cities on both coasts are adopting Green Area Ratio, minimum impervious area, or increased maximum impervious surface area regulations and the Village should consider adopting the same so that its regulations can truly be "state of the art." (SMP 12)

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This mail is sent via contact form on Winnetka Stormwater Master Plan http://winnetkastormwaterplan.com

ATTACHMENT #5
Stormwater Master Plan

VILLAGE OF WINNETKA

STORMWATER MASTER PLAN




Prepared by

BAXTER & WOODMAN Consulting Engineers

VILLAGE OF WINNETKA, ILLINOIS
STORMWATER MASTER PLAN

ACKNOWLEDGMENTS

Special acknowledgements go to all those who contributed much time and effort towards the development of the Stormwater Master Plan.

Village Council 2012-2013

Arthur Braun, Trustee

Jack Buck, Trustee

Patrick Corrigan, Trustee

Richard Kates, Trustee

Stuart McCrary, Trustee

Jennifer Spinney, Trustee

Jessica Tucker, President

Village Council 2013-2014

Joe Adams, Trustee

Arthur Braun, Trustee

Jack Buck, Trustee

Patrick Corrigan, Trustee

Gene Greable, President

Richard Kates, Trustee

Stuart McCrary, Trustee

Stormwater Work Group

Robert Bahan, Village Manager

Jim Johnson, Stormwater Program Manager

Megan Pierce, Assistant to the Village Manager

Steven M. Saunders, Director of Public Works/ Village Engineer

Consultants

Baxter & Woodman, Inc.

Christopher B. Burke Engineering, Ltd.

MGP, Inc.

Municipal & Financial Services Group

Strand Associates, Inc.

Thanks to the many property owners and other interested parties who offered input at public meetings as this Stormwater Master Plan was being developed.

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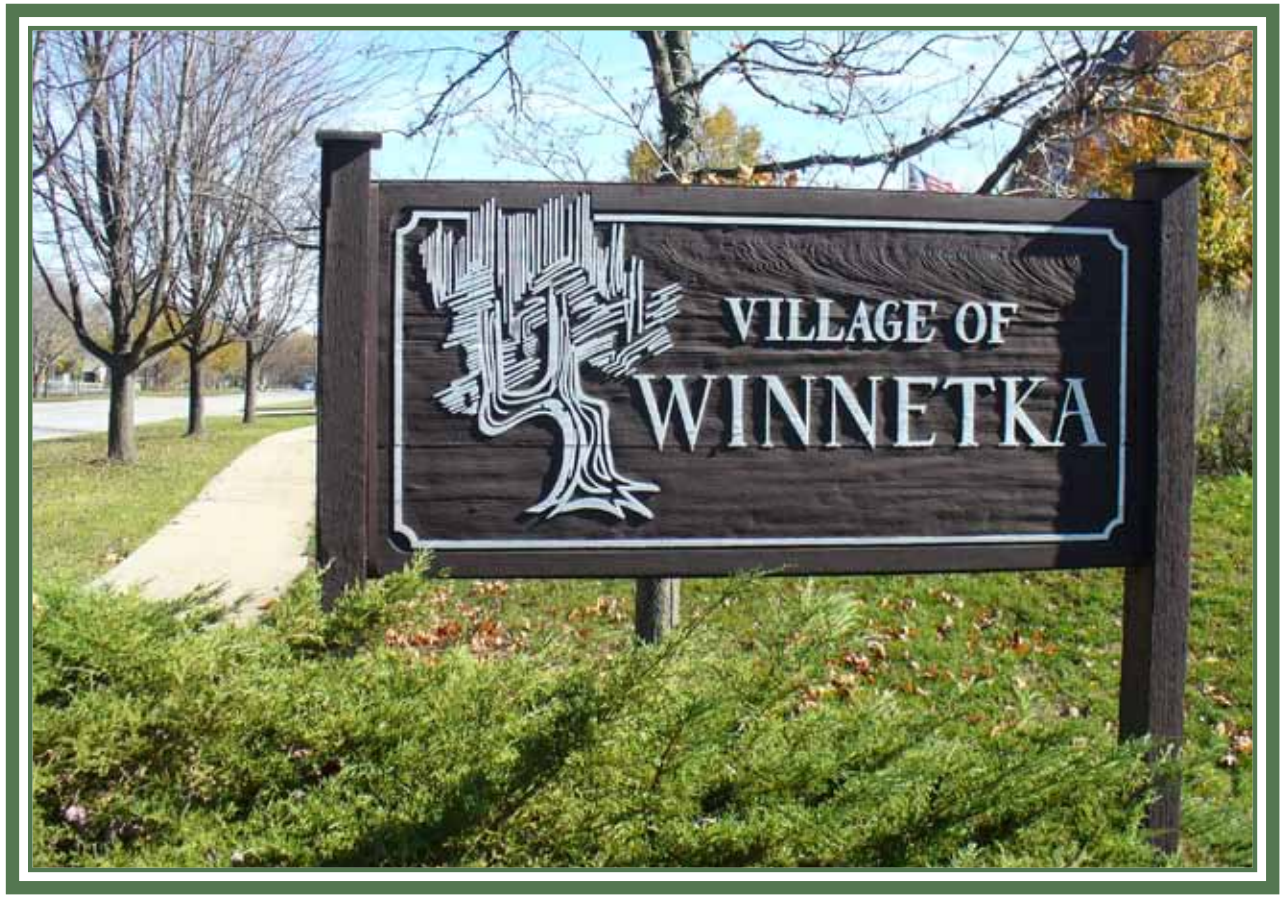
SECTION 1

INTRODUCTION



"...a village in a natural setting committed to its tradition
of residential neighborhoods, citizen involvement, local shops and educational excellence..."

A 2020 Vision for Winnetka

1. INTRODUCTION

Figure 1. Village Hall

The Village has an ambitious goal to develop a comprehensive, multi-faceted plan to manage stormwater runoff quantity and quality, and sanitary sewer discharges, in a manner that protects and enhances property values and promotes a thriving and sustainable community. This Master Plan is central to achieving that goal.

The Stormwater Master Plan establishes a vision for the Village's stormwater program with actionable goals and objectives that serve as a roadmap to realizing that vision. It incorporates multiple goals and objectives into a single comprehensive plan for stormwater management, which will guide investment and policy decisions in order to improve the quality of life in Winnetka.

This document is the result of planning efforts and research undertaken by the Village Council, Village staff and residents, along with a team of consultants. These efforts began in earnest after a devastating flood in September 2008 and continued steadily through the fall of 2013. The building blocks include several Flood Risk Reduction Assessments, a Sanitary Sewer Flow Monitoring Study with subsequent Sanitary Sewer Evaluation Surveys, and a Stormwater Utility Feasibility Study. Property owners and other interested parties offered input at numerous public meetings providing direction at each step.

The Stormwater Master Plan is intended to serve as a guide to Village policy and decision making over the next five to ten years. The Plan should be updated periodically as objectives are accomplished and goals are met.

Figure 2. Winnetka Public Works

SECTION 2

OUR VISION

"An effective plan helps Village leaders make informed decisions by providing an inventory of values shared by residents as well as an inventory of the community's physical attributes."

A 2020 Vision for Winnetka

2. OUR VISION

Figure 3. Downtown Winnetka

Winnetka is a unique, established Village located on the shore of Lake Michigan, just 16 miles north of the City of Chicago. Residents enjoy a wealth of recreational and environmental benefits by living so close to Lake Michigan and Skokie River. But, the Village was mostly developed before the advent of floodplain maps and modern stormwater management techniques and several recent extreme storm events have resulted in extensive flood damages.

The Village intends to improve its stormwater management system and the quality of its stormwater runoff. To make sure that it remains a very desirable place to live for generations to come, the Village of Winnetka will…

- Reduce the risk of flooding throughout the Village with improvements to stormwater infrastructure.
- Reduce basement back-ups and sanitary sewer overflows by reducing the amount of inflow and infiltration into the sanitary sewer system.
- Maintain participation and good standing in the National Flood Insurance Program and improve floodplain management practices to minimize flood damages and reduce flood insurance premiums for property owners.
- Protect ~~and enhance~~ the quality of water in Lake Michigan and the Skokie River through management of stormwater runoff quality at the local level.
- Encourage the use of stormwater best management practices throughout the Village to reduce runoff volumes and improve the quality of stormwater runoff.
- Establish development regulations for the Village which are state of the art with regard to stormwater management.
- Effectively maintain the storm and sanitary sewer systems to promote optimum performance.
- Fund stormwater management initiatives through a sustainable and equitable source of revenue.

Figure 4. Playing Fields at Country Day School

SECTION 3

STORMWATER CAPITAL IMPROVEMENTS

"...maintain and upgrade the Village's infrastructure
in keeping with Village character and high community standards."

A 2020 Vision for Winnetka

3. STORMWATER CAPITAL IMPROVEMENTS

GOAL

Reduce the risk of flooding throughout the Village with improvements to stormwater infrastructure.

OBJECTIVE

Design and construct stormwater infrastructure improvements recommended by the Village's Flood Risk Reduction Assessments. Plan the improvements to be implemented first in areas with the most severe and repetitive flooding. Infrastructure improvements that address structural flooding will be prioritized.

FLOOD RISK REDUCTION ASSESSMENTS

In response to the flood damage resulting from severe storm events in September 2008 and July 2011, the Village initiated Flood Risk Reduction Assessments prepared by Christopher B. Burke Engineering, Ltd., dated September 2009, June 2011, and October 2011(see Appendix 1) to determine what improvements could be made to mitigate flood damage from future storm events in the areas that have proven to be the most susceptible to flooding. Then, as a first step in the development of this Stormwater Master Plan, the Village conducted a Flood Risk Reduction Assessment of the areas within the Village that had not yet been assessed, known as the "Additional Study Areas" prepared by Baxter & Woodman, dated December 2012 (see Appendix 2). Exhibit 1 shows the boundaries of each study area in the Flood Risk Reduction Assessments.

PROGRAMMED IMPROVEMENTS

Final engineering began in 2012 for several of the improvements recommended in the Flood Risk Reduction Assessment: 25-, 50-, and 100-year Protection prepared by Christopher B. Burke Engineering, Ltd., October 2011 (see Appendix 1). These projects include: the Winnetka Avenue Pump Station Improvements, Spruce Street Outlet Area Improvements, and Northwest Winnetka Improvements. Final engineering for the Willow Road Tunnel is scheduled to begin in early 2014. These five projects are the highest priority projects because they would alleviate flooding in areas of the Village susceptible to widespread structural flooding caused by overland flow. The proposed improvements would provide protection from the 100-year storm for the drainage areas they serve. Table 1 shows the estimated cost of the programmed Improvements. The projects are briefly described below.

Figure 5. Winnetka Avenue Pump Station

Winnetka Avenue Pump Station Improvements

Area J and Area L

The Winnetka Avenue Pump Station is an existing, key piece of infrastructure constructed in 1995. The station provides stormwater drainage for a large area on Winnetka's west side. The pump station is located at a point where a ditch on the Cook County Forest Preserve District's property enters the Skokie River. This ditch is the main point of discharge for western Winnetka's storm sewers, and in times of heavy rain, the level of the River rises above the ditch and water must be evacuated through pumping.

The planned improvements include the replacement of four existing pumps at the station to increase capacity from 40,000 gallons/minute to 60,000 gallons/minute. These improvements are expected to improve flow in upstream storm sewers in south and west Winnetka and increase the discharge capacity of the Forest Preserve ditch.

Spruce Street Outlet Area Improvements

Area D and Area I

This is a large drainage area east of the railroad grade separation bounded on the north side by Tower Road, and on the south by approximately Spruce Street. This drainage area experiences significant flooding along Sheridan Road from Maple Street south, along Spruce Street east to the lake, and along Tower Road east of Old Green Bay Road. Engineering work for northeast Winnetka projects is complete.

The planned improvements include a new outlet from Sheridan Road at Lloyd Park, and a relief sewer along Old Green Bay Road and Tower Road. These improvements are expected to alleviate

structural and surface flooding along Sheridan Road south of Maple Street and along Tower Road east of Old Green Bay Road for up to 100-year events.

Northwest Winnetka Improvements

Area B

The improvements in northwest Winnetka focus on a large watershed area, where significant elevation changes cause flooding during moderate and heavy rains.

The planned improvements include an additional trunk sewer along Tower Road; multiple lateral sewers to drain Forest Glen, Vernon, Edgewood, Greenwood, and Grove areas; and a larger outlet pipe to the pond on the south side of Tower Road.

These improvements are expected to alleviate structure and surface flooding along Forest Glen, Tower, Greenwood, Edgewood, and Grove streets for up to 100-year events.

Willow Road Tunnel

Areas F, H, J, K, L and M

The recommended alternative consists of a large storm sewer under Willow Road (the "Tunnel Project") extending from Glendale Avenue to Lake Michigan, with multiple storm sewers extending into each of the benefitted study areas (South of Willow Road Study Area, Cherry Street Outlet Study Area, and the Underpass Study Area).

Project	Estimate of Project Cost
Winnetka Avenue Pump Station Improvements	$ 1,188,562
Spruce Street Outlet Area Improvements	
Lloyd Park Outlet	$ 398,786
Tower Road/Foxdale Area	$ 1,162,853
Northwest Winnetka Improvements	
Tower Road/Greenwood Area	$ 3,581,924
Forest Glen Extension	$ 685,000
Willow Road Tunnel	
North Willow, South Willow, & Provident	$ 27,969,048
Cherry Street Outlet Area	$ 2,000,000
Winnetka Underpass Area	$ 4,400,000
Area F (west of Hibbard Road)*	$ 100,000
Total =	$ 41,486,173

* Cost estimate not yet finalized, but expected to be less than $100,000

Table 1. Stormwater Capital Improvements Plan

NON-PROGRAMMED IMPROVEMENTS

Flooding in the Additional Study Areas primarily consists of standing water and overland flow in streets and yards. This nuisance flooding most commonly results in sewer back-ups, basement seepage, and sump pump failures. A few cases of overland flow into structures have also been reported, but the projects recommended in the Flood Risk Reduction Assessment for the Additional Study Areas are still being considered for future funding. Design and construction of these improvements may be programmed at a later date.

ACTION ITEMS

1. Complete design and construction of the Winnetka Avenue Pump Station Improvements, Spruce Street Outlet Area Improvements, Northwest Winnetka Improvements, and the Willow Road Tunnel.

2. Since an adverse tailwater condition limits the effectiveness of the modeled storm sewer improvements in Area N, a detailed topographic survey of Area N should be performed to determine how residences can be protected against overland flooding by making improvements to the overland flow paths.

3. Evaluate the feasibility of constructing the improvements that are currently not programmed once the planned capital projects have been constructed.

SECTION 4

INFILTRATION & INFLOW

"The capacity of municipal utilities is a critical element in land use planning for the community."

A 2020 Vision for Winnetka

4. INFLOW & INFILTRATION

GOAL

Reduce basement back-ups and sanitary sewer overflows by reducing the amount of inflow and infiltration (I/I) into the sanitary sewer system.

OBJECTIVE

Investigate and eliminate sources of I/I on public and private property.

BACKGROUND

I/I is an important problem in the community. Excessive I/I causes basement backups and sanitary sewer overflows to occur. Both incidents are health hazards that must be taken seriously.

Public sanitary sewers and private sanitary services both contribute to the problem. On the public side, leaky sewers and manholes take in groundwater infiltration. In some cases, illicit connections between the public storm sewer system and sanitary sewer systems cause clear-water inflow.

On the private side, downspout connections and leaky service pipes play a role, but the largest sources of I/I are typically sump pump and foundation drain connections to the sanitary service.

In early 2014, the Metropolitan Water Reclamation District of Greater Chicago (MWRD) is expected to impose new requirements related to I/I. These requirements will apply to the Village since the Village's sanitary sewers connect to sewers owned by the MWRD. In order to meet these requirements, the Village will likely have to assess and rehabilitate 50% of its sanitary sewer system within 5 years, develop a long-term operation and maintenance program for its sanitary sewers, and investigate sources of I/I from private property as part of its long-term operation and maintenance program.

Figure 6. Sanitary Sewer Manhole

ELIMINATING SOURCES OF I/I ON PUBLIC PROPERTY

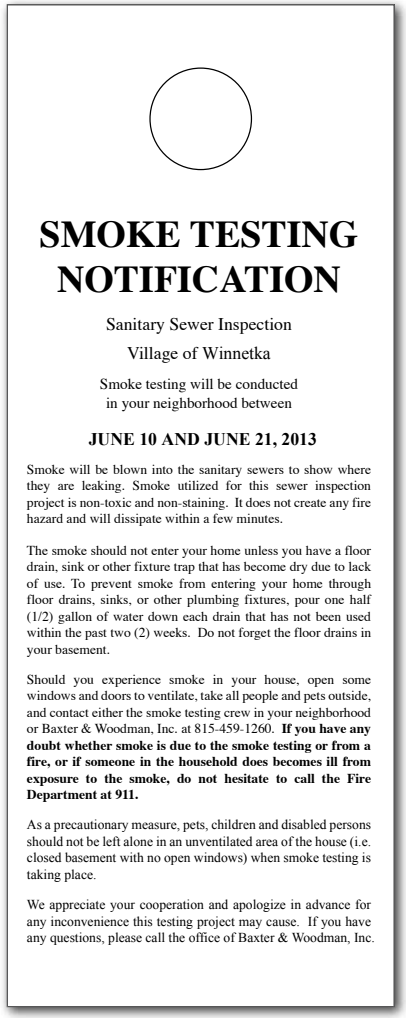
The Village completed a study prepared by Strand Associates, Inc., dated August 2012 (see Appendix 3) in which sanitary sewer flows were monitored over a period of time to identify areas of the sanitary sewer system most affected by I/I. The flow monitoring results were used to prioritize areas of the Village for a thorough investigation of the sources of I/I. Common sources include: defects in manholes and pipe joints that allow groundwater infiltration; and direct connection of sump pumps, foundation drains, and downspouts to the sanitary sewer system. These sources can be detected using methods ranging from manhole inspections to smoke testing, televising, and dye testing the sewer system.

The first phase of the Sanitary Sewer Field Investigation and Pilot Rehabilitation Project was completed in 2013. This phase included investigation of nine priority areas, development of a rehabilitation program for identified sources of I/I, and construction of improvements to eliminate I/I. Exhibit 3 shows the nine priority areas investigated in this project. The results of the Pilot Rehabilitation Project will be used to estimate the cost of improvements in the second and third phases of the Sanitary Sewer Evaluation Survey, which are expected to be completed in 2014 and 2015, respectively.

ELIMINATING SOURCES OF I/I ON PRIVATE PROPERTY

The largest sources of I/I from private property are sump pump and foundation drain connections to the sanitary sewer system. These sources are not typically found while investigating sources of I/I on public property using the aforementioned methods. Finding sump pump and foundation drain connections usually requires building-to-building canvassing.

Canvassing consists of entering private property to identify the discharge points for all building downspouts outside the home and the discharge location of any sump pumps inside the house. This is a labor intensive process and usually includes scheduling appointments on evenings and weekends if contact with 100% of the businesses and residents in the project area is required. A strong policy is required to eliminate illegally connected sump pumps since this type of program is often viewed as intrusive.



SMOKE TESTING NOTIFICATION

Sanitary Sewer Inspection

Village of Winnetka

Smoke testing will be conducted in your neighborhood between

JUNE 10 AND JUNE 21, 2013

Smoke will be blown into the sanitary sewers to show where they are leaking. Smoke utilized for this sewer inspection project is non-toxic and non-staining. It does not create any fire hazard and will dissipate within a few minutes.

The smoke should not enter your home unless you have a floor drain, sink or other fixture trap that has become dry due to lack of use. To prevent smoke from entering your home through floor drains, sinks, or other plumbing fixtures, pour one half (1/2) gallon of water down each drain that has not been used within the past two (2) weeks. Do not forget the floor drains in your basement.

Should you experience smoke in your house, open some windows and doors to ventilate, take all people and pets outside, and contact either the smoke testing crew in your neighborhood or Baxter & Woodman, Inc. at 815-459-1260. **If you have any doubt whether smoke is due to the smoke testing or from a fire, or if someone in the household does becomes ill from exposure to the smoke, do not hesitate to call the Fire Department at 911.**

As a precautionary measure, pets, children and disabled persons should not be left alone in an unventilated area of the house (i.e. closed basement with no open windows) when smoke testing is taking place.

We appreciate your cooperation and apologize in advance for any inconvenience this testing project may cause. If you have any questions, please call the office of Baxter & Woodman, Inc.

Figure 7. Smoke Testing Door Hanger

The investment of resources in canvassing and removal of sump pump and foundation drain connections does have its rewards, though. These illegal connections to the sanitary sewer can increase the domestic flow rate by 30 times during storm events. That means that a typical 8-inch sanitary sewer, which can serve over 300 residences without overflows or basement back-ups if only sewage is connected to the pipe, can serve only 10 residences without overflows or basement back-ups if sewage is combined with 10 sump pumps or foundation drains.

Even though these disconnections would be made on private property, a strong case can be made for investing public funds to remove sump pump and foundation drain connections to the sanitary sewer system. This is because the Village can dramatically increase its available sewer capacity with a relatively small investment. Consider that the removal of 30 private sump pumps (approximately $150,000) could have the same system-wide benefit as rehabilitating 40,000 feet of sanitary sewer (approximately $2,000,000).

ACTION ITEMS

1. Continue with the three phases of the Sanitary Sewer Evaluation Survey in order to find and eliminate sources of I/I on public property.

2. Commit to eliminating illegal connections to the sanitary sewer system. Include building-to-building canvassing of all businesses and residences adjacent to future storm sewer capital improvement projects. Any sump pumps or foundation drains that are connected to the sanitary sewer system can be disconnected and connected to the new storm sewer.

3. Smoke test sanitary sewers along all streets that have future storm sewer, water main, or roadway capital improvement projects planned.

SECTION 5

FLOODPLAIN MANAGEMENT

"Geography and landscape affect the appropriateness or intensity of specific land uses."

A 2020 Vision for Winnetka

5. FLOODPLAIN MANAGEMENT

GOALS

Maintain participation and good standing in the National Flood Insurance Program (NFIP) and improve floodplain management practices to minimize flood damages and reduce flood insurance premiums for property owners.

OBJECTIVES

- Advise property owners about flood hazards, flood insurance, and flood protection measures.
- Adopt and enforce regulations that exceed the NFIP's minimum standards for new development and re-development.
- Reduce future flood damage to existing buildings by helping property owners retrofit or relocate existing flood prone buildings.
- Improve flood warning systems and flood response procedures.

NATIONAL FLOOD INSURANCE PROGRAM

The National Flood Insurance Program (NFIP) is based on a cooperative agreement between the Federal Emergency Management Agency (FEMA) and local units of government. FEMA agrees to underwrite flood insurance policies within a community and the community agrees to regulate development in the floodplain. Participation in the NFIP is voluntary, but communities have incentive to join because Federally-backed flood insurance is only available in participating communities and a non-participating community will not receive Federal aid for damage to insurable buildings in the floodplain.

The three basic components of the NFIP are floodplain mapping, flood insurance, and floodplain management regulations. Floodplain mapping is provided by FEMA on a series of maps called Flood Insurance Rate Maps, which designate areas of a community according to various levels of flood risk. Regardless of its risk level, any building in an NFIP participating community can be covered by a flood insurance policy, even buildings not located in a mapped floodplain. A flood insurance policy is only mandated for Federally-backed mortgages on buildings in the floodplain. Any new buildings constructed within the floodplain, and any improvements or repair of existing buildings is subject to the Flood Hazard Protection Regulations (Chapter 15.68) of the Village Code.

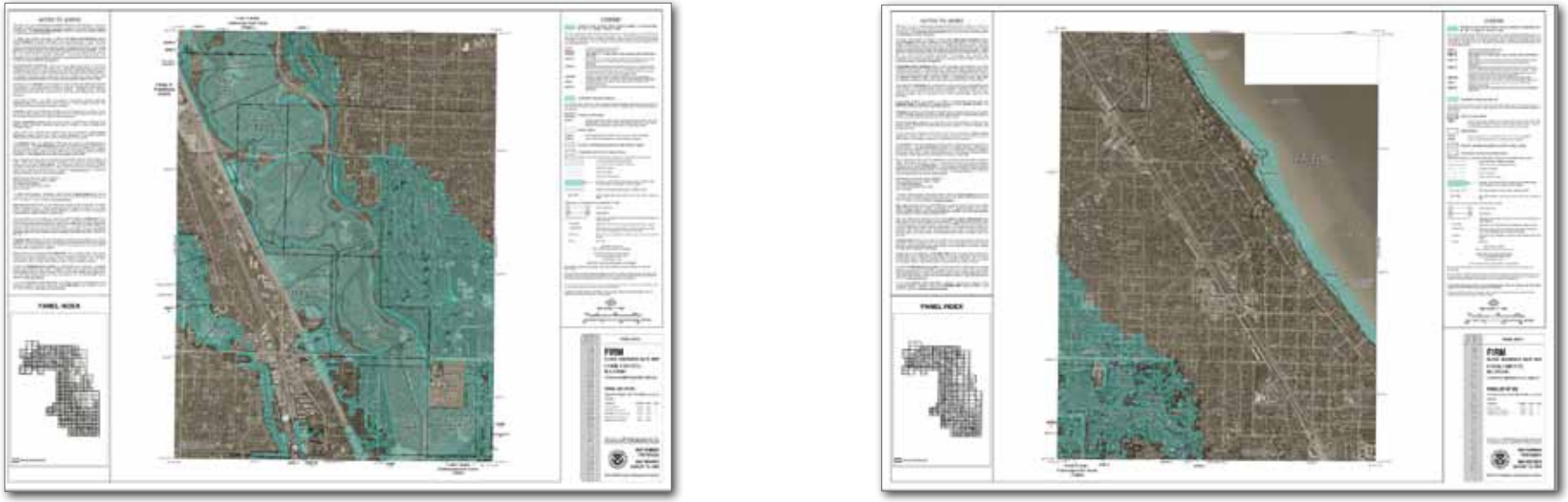


Figure 8. Flood Insurance Rate Maps of Winnetka

The Village of Winnetka joined the NFIP on November 9, 1973 and has remained in good standing with the program ever since.

COMMUNITY RATING SYSTEM

The Community Rating System (CRS) is a voluntary program designed to reward a community for doing more than meeting the NFIP minimum requirements to reduce flood damages. Communities can be rewarded for activities such as: reducing flood damage to existing buildings, managing development in in areas not shown in the floodplain on the Flood Insurance Rate Maps, protecting new buildings from floods greater than the 100-year flood, helping insurance agents obtain flood data, and helping people obtain flood insurance. The reward for these activities comes in the form of reduced premiums for flood insurance policy holders.

Before a community can apply for the CRS, the community must first be audited by FEMA and the Illinois Department of Natural Resources (IDNR) and be found in full compliance with the NFIP. An application to the CRS must then be submitted within one year of the audit.

Once a community has been accepted into the CRS, the community's floodplain management activities are rated according to the scoring system described in the CRS Coordinator's Manual. CRS communities are rated on a scale of 1-10. A Class 10 community receives no reduction in flood insurance premiums, but every class above 10 receives an additional 5% premium reduction. Class 1 requires the most credit points and provides a 45% premium reduction.

How much discount property owners in your community can get

Rate Class	Discount SFHA*	Discount Non-SFHA**	Credit Points Required
1	45%	10%	4,500 +
2	40%	10%	4,000 - 4,499
3	35%	10%	3,500 - 3,999
4	30%	10%	3,000 - 3,499
5	25%	10%	2,500 - 2,999
6	20%	10%	2,000 - 2,499
7	15%	5%	1,500 - 1,999
8	10%	5%	1,000 - 1,499
9	5%	5%	500 - 999
10	0%	0%	0 - 499

Figure 9. From FEMA's publication, *National Flood Insurance Program Community Rating System – A Local Official's Guide to Saving Lives, Preventing Property Damage, and Reducing the Cost of Flood Insurance*

In 2013, there are 54 Illinois communities in the CRS program, all of which are rated between 8 and 5.

Figure 10. CRS Rating of Illinois Communities in 2013

The Village of Winnetka was audited by FEMA and IDNR on May 8, 2013 and was accepted into the CRS program on July 9, 2013. On October 2, 2013, the Village received a preliminary indication that it would be rated either at either 8 or 7. The final determination is subject to the Village submitting documentation regarding its floodplain management activities by April 30, 2014. The effective date of the Village's entry into the CRS program is expected to be October 1, 2014.

REPETITIVE LOSS AREA ANALYSIS

The NFIP considers a property a Repetitive Loss Property if two or more flood insurance claims of more than $1,000 have been paid within any 10-year period since 1978. According to FEMA's records, there are 18 Repetitive Loss Properties within the Village. Many more properties in Winnetka may have reached the damage threshold for Repetitive Loss Properties, but not all properties are

covered by flood insurance and flood insurance claims are not submitted for all flood damage sustained.

FEMA maintains a list of Repetitive Loss properties that includes the property address, dates of claims, the current insured's name, and/or the previous owner's name. Communities in the CRS program are required to update the list periodically by reviewing the list for current information and noting whether the insured buildings have been removed, retrofitted, or otherwise protected from the cause of the repetitive flooding.

The CRS program has two special conditions for communities with 10 or more Repetitive Loss Properties. One condition requires the Village to implement an annual outreach project to the properties in the Repetitive Loss Areas that have insurable buildings. The outreach project must advise the recipient that:

- the property is in or near an area subject to flooding;
- certain property protection measures are appropriate for the flood situation;
- sources of financial assistance may be available for property protection measures; and
- flood insurance is available.

The other condition requires the Village to adopt either a Floodplain Management Plan or a Repetitive Loss Area Analysis prior to its entry into the CRS program.

Adopting a Floodplain Management Plan requires adherence to a rigorous 10-step planning process that involves public participation, an assessment of the flood hazard, goal setting, and formal adoption by the Village Council. These plans are typically developed at a Countywide scale and Cook County is currently developing an All Hazards Mitigation Plan. That Plan would meet the CRS requirement for a Floodplain Management Plan, but the Plan is not expected to be ready for the Village Council to adopt until after April 30, 2014, when the Village is required to submit documentation of its floodplain management activities for entry into the CRS program.

Figure 11. Cook County is in the process of developing an All Hazards Mitigation Plan. Information about the Plan is available at: http://www.cookcountyhomelandsecurity.org/hazard-mitigation-plan/

As an alternative to adopting a Floodplain Management Plan, the Village could adopt a Repetitive Loss Area Analysis by adhering to these five steps.

- Step 1 – Advise all the properties in each repetitive loss area that an analysis of the area will be conducted and request their input on the hazard and recommended actions.
- Step 2 – Contact agencies or organizations that may have plans or studies that could affect the cause or impacts of the flooding.
- Step 3 – Visit each building in the repetitive loss areas and collect basic data. Building entry is not necessary for this step since adequate information can be collected by observing the building from the street.
- Step 4 – Review alternative approaches and determine whether any property protection measures or drainage improvements are feasible. The review must consider the full range of property protection measures for the types of buildings affected, including: preventative activities, property protection activities, natural resource protection activities, emergency services measures, structural projects, and public information activities.
- Step 5 – Document the findings in a report. The report should include: a summary of the process that was followed and how property owners were involved in the process; a problem statement with a map of the affected area; a list or table showing basic information for each building in the affected area; the alternative approaches that were reviewed; and a list of action items identifying the responsible party, when the action should be completed, and how it will be funded.

Unless the repetitive loss areas have similar building and flooding characteristics and similar mitigation measures are appropriate, a separate report should be prepared for each of the Village's four repetitive loss areas.

RELOCATION AND RETROFITTING OF EXISTING BUILDINGS

Removing buildings from the floodplain and other flood prone areas is the most effective way to reduce flood damages because it is a permanent form of mitigation. These activities can be partly funded through FEMA's Pre-Disaster Mitigation (PDM) and Hazard Mitigation Grant Programs (HMGP) when the Cost Benefit Ratio exceeds 1.0. The Village will become eligible to apply for PDM and HMGP funding once Cook County completes development of the All Hazards Mitigation Plan and the Village Council adopts the Plan.

When it is not feasible to remove a flood prone building, one or more of the retrofitting projects listed below can be an effective way to protect buildings, particularly when the flood waters are shallow or slow-moving:

- Elevating buildings above predicted flood levels.
- Dry floodproofing buildings (implementing measures designed to keep water from entering a building).
- Wet floodproofing buildings (implementing measures designed to minimize damage to a structure and its contents from water that is allowed into a building.

- Protecting basements from sewer back-ups.
- Constructing barriers, including levees, berms, and floodwalls.

FLOOD WARNING AND RESPONSE PLAN

Advance identification of an impending storm is only the first part of an effective Flood Warning and Response Plan. To truly realize the benefit of an early flood warning system, the warning must be then be disseminated quickly to floodplain occupants and critical facilities. Finally, appropriate response activities must be implemented, such as: directing evacuation, sandbagging, and moving building contents above flood levels.

The development of a Flood Warning and Response Plan requires an assessment of the nature of the flood hazard and the expected impacts of flooding, the preparation of flood inundation maps, as well as a description of the warning devices used and the specific flood response actions taken at different flood levels. Fortunately, Cook County is currently developing an All Hazards Mitigation Plan, which should address flood warning and response at a Countywide scale. Participation in the development of the Plan will raise the Village's awareness of resources that can be used to improve: threat recognition, warning notification, critical facilities protection, and recovery and mitigation.

ACTION ITEMS

1. Conduct an annual Repetitive Loss Outreach project to each of the Village Repetitive Loss Areas to educate property owners about flood hazards, flood insurance, and flood protection measures (see Appendix 4).

2. Develop and adopt a Repetitive Loss Area Analysis to help property owners retrofit or relocate existing flood prone buildings.

3. Participate in the development of the Cook County All Hazards Mitigation Plan and adopt the Plan. This will make the Village eligible for grants from FEMA and help the Village make improvements to its flood warning systems and flood response procedures.

4. Adopt floodplain management regulations from the Cook County Watershed Management Ordinance that exceed the Village's current regulations (see Section 8).

SECTION 6

WATER QUALITY

"...a mature, built-out community needs a plan that identifies community assets worthy of protection and areas in need of improvement."

A 2020 Vision for Winnetka

6. WATER QUALITY

GOALS

Protect ~~and enhance~~ the quality of water in Lake Michigan and the Skokie River through managing stormwater runoff quality at the local level. In doing so, maintain compliance with the conditions of the Village's National Pollutant Discharge Elimination System (NPDES) Phase II permit.

OBJECTIVES

- Conduct public education and outreach on stormwater quality.
- Involve the public in Village efforts to protect and enhance stormwater quality.
- Eliminate illicit discharges to the storm sewer system.
- Prevent stormwater pollution from active construction sites.
- Require new development and re-development projects to minimize stormwater runoff volume and provide water quality treatment for stormwater runoff after construction.
- Prevent stormwater pollution resulting from municipal operations.
- Monitor the quality of water discharging from the storm sewer system.

EXISTING NPDES PHASE II PROGRAM

The Village has a General NPDES Permit from the Illinois Environmental Protection Agency (IEPA) for discharges from its municipal separate storm sewer system (General Permit). The General Permit requires the Village to develop, implement, and enforce a stormwater management program designed to reduce the discharge of pollutants from the municipal separate storm sewer system to the maximum extent practicable. The program

Figure 12. Spruce Street Outfall

must include the following six Minimum Control Measures and must include at least annual water quality monitoring to evaluate the effectiveness of the program.

- Public education and outreach on stormwater impacts
- Public involvement/participation
- Illicit discharge detection and elimination
- Construction site stormwater runoff control
- Post-construction stormwater management in new development and re-development
- Pollution prevention/good housekeeping for municipal operations

The Village submitted a Notice of Intent (NOI) to the IEPA describing the practices which would be implemented in order to comply with the conditions of the permit. These practices include:

- Publishing educational articles for the general public on topics related to stormwater pollution prevention in Village and Park District newsletters.
- Providing residents obtaining a pet license with information on proper pet waste management.
- Providing residents purchasing yard waste bags and tags with information on responsible lawn and garden care.
- Providing all residents with information on swimming pool cleaning and maintenance, residential stormwater management, and safe disposal procedures for prescription drugs and sharps.
- Posting signage at storm sewer outfall locations notifying residents to report suspected non-stormwater discharges.
- Inspecting storm sewer outfalls for illicit discharge indicators.
- Enforcing the Engineering Design Guidelines for new development and redevelopment, including review of site plans prior to construction, as well as site inspections during and at the conclusion of construction.
- Cleaning the storm sewer system regularly.
- Maintaining the Public Works fleet inside the Public Works facility where wash water and vehicle fluids drain to the sanitary sewer system.

The Village submits a report to the IEPA annually on the status of its NPDES Phase II Program. The IEPA has audited the Village's NPDES Phase II program on one occasion and did not suggest any substantive changes to the program, but the Village should begin a long-term water quality monitoring program since IEPA inspectors are increasingly enforcing the water quality monitoring requirement.

Figure 13. Pollution Reporting Sign

EXISTING WATER QUALITY DATA

Between September 2012 and March 2013, the Village collected end-of-pipe samples at four outfalls to monitor a wide range of water quality parameters during both wet- and dry-weather conditions. Samples were collected on five different days – three wet-weather days and two dry-weather days. Three of the four monitored outfalls discharge to Lake Michigan (at Spruce Street, Cherry Street, and Elder Lane) and the fourth outfall discharges to a tributary of Skokie River (at Hibbard Road south of Willow Road). Exhibit 4 shows the locations where water quality samples were collected. Samples were tested for: temperature, dissolved oxygen, pH, total dissolved solids, total suspended solids, total phosphorus, nitrate, nitrite, ammonia, total Kjeldahl nitrogen, oils/fats/grease, fecal coliform, conductivity, chloride, total metals, and dissolved metals. All tests were performed at an independent laboratory, with the exception of fecal coliform, which was tested at the Village's water plant.

The results of the water quality testing summarized in Exhibit 5 indicate levels of fecal coliform in storm sewer discharges that are elevated. Levels of nitrogen, phosphorus, total dissolved solids, and total suspended solids appear to be elevated, as well (full Laboratory Reports are included in Appendix 5). These findings are typical for urban runoff, but they suggest that the Village will have to take action to protect and enhance the quality of water in Lake Michigan and the Skokie River. Logical action steps would include investigation for illicit connections to the storm sewer system, public education about sources of nutrients in runoff, increased street sweeping, and increased erosion control at construction sites in the Village.

- Fecal coliform is used as an indicator of fecal contamination. Sources of fecal contamination in urban settings can include wildlife (e.g., geese), pets, leaking sanitary sewers, dumpster leaks, grease trap leaks, pavement wash water and catch basin debris.

- Nutrients, such as phosphorus and nitrogen, are a common concern in runoff from urban watersheds. There are a variety of sources of nutrients, including fertilizer, yard waste, eroded soils and sediments, organic loadings (e.g. manure), and detergents.

- Dissolved solids refer to any minerals, salts, metals, cations or anions dissolved in water. They are not typically associated with health effects, but total dissolved solids is used as an aggregate indicator of the presence of a broad array of chemical constituents.

- Suspended solids generally represent sediment in stormwater runoff. The greater the amount of total suspended solids in water, the murkier it appears.

Exhibit 6 demonstrates how the water quality varies by sampling location and over time. For reference, recent ambient water quality data for Lake Michigan and Skokie River is included, where the data was available.

ACTION ITEMS

1. Continue to implement existing practices related to the Village's NPDES Phase II Program.

2. Incorporate development of a stormwater pollution prevention webpage into the ongoing redesign of the Village's website. An outline for this webpage is included as Appendix 6. This webpage should include links to pertinent information, including public education materials (see Appendix 7), the Village's Notice of Intent to comply with the NPDES Phase II permit, and the Village's most recent NPDES Phase II Annual Report.

3. Develop a Stormwater Pollution Prevention Plan for the Public Works Facility and the Village's parks.

4. Incorporate periodic stormwater pollution prevention training into the training program for Public Works employees. A training video is included as Appendix 6.

5. Implement a long-term water quality monitoring program to monitor the effectiveness of Village initiatives on the quality of water discharging from the storm sewer system (see Table 2). For example, the Village can track fecal coliform readings over time as illicit connections to the drainage system are found and removed. Or, if elevated nutrient levels persist, the Village may initiate a public education campaign about the use of phosphorus-free fertilizer. A long-term water quality monitoring program may also be a condition of the permit the Village plans to obtain for a new storm sewer outfall to Lake Michigan.

Water Quality Parameters for Annual Sampling at Location 2	Cost of Lab Test
Flow	N/A*
Temperature	N/A*
Dissolved Oxygen	N/A*
pH	N/A*
Total Dissolved Solids	$ 10.00
Total Suspended Solids	$ 10.00
Nitrite	$ 10.00
Nitrate	$ 10.00
Ammonia	$ 22.50
Total Kjeldahl Nitrogen	$ 22.50
Total Phosphorus	$ 22.50
Chloride	$ 11.25
Fecal Coliform	N/A**
Total Annual Cost =	$ 118.75

* Field measurement
** Test performed at Village water plant

Table 2. Long-Term Water Quality Monitoring Plan

6. A study was completed by the IEPA in July 2013 that established a Total Maximum Daily Load (TMDL) limit for *E. coli* at Lake Michigan beaches, and another study is underway by the IEPA to establish TMDL limits for pollutants of concern in the Skokie River watershed. Once

completed, these studies will include recommended actions to reduce pollutant loadings which are likely to affect Winnetka. Therefore, the Village should participate in the ongoing TMDL process and update the Village's NPDES Phase II program to implement the recommendations of the TMDL studies.

7. Implement a strategy to incorporate stormwater Best Management Practices (BMPs) into public and private improvements (see Section 7).

8. Update the stormwater quality standards in the Village Code and the Engineering Standards Manual (see Section 8).

9. Evaluate where the Village Code can be updated to prohibit activities that can negatively impact runoff water quality. For example, prohibiting the use of phosphorus-containing fertilizer and coal tar-based driveway sealers.

SECTION 7

STORMWATER BEST MANAGEMENT PRACTICES

"...maintaining the natural features of the Village
for the enjoyment of future generations remains a high priority."

A 2020 Vision for Winnetka

7. STORMWATER BEST MANAGEMENT PRACTICES

GOAL

Encourage the use of stormwater Best Management Practices (BMPs) throughout the Village to reduce runoff volumes and improve the quality of stormwater runoff.

OBJECTIVE

Encourage the use of stormwater BMPs in private and public improvements.

Stormwater BMPs

Simply put, a stormwater BMP is a practice used to manage the impacts of stormwater runoff. Some stormwater BMPs occur naturally, such as wetlands, woods and other natural vegetation. Other stormwater BMPs are man-made structures, such as detention ponds, swales, rain gardens, or permeable pavement.

Source - American Society of Landscape Architects

Figure 14. Parkway Rain Garden

When land is developed, impervious surfaces such as rooftops, roads, parking lots, and driveways are created. These impervious surfaces generate stormwater runoff because they do not allow rain to soak into the ground. Impervious surfaces also accumulate pollutants deposited from the atmosphere, leaked from a vehicle, or wind-blown in from adjacent areas. During storm events, pollutants quickly wash off impervious surfaces and are rapidly delivered to downstream waters. Some common pollutants found in urban stormwater runoff include sediment, nutrients (nitrogen and phosphorus), heavy metals, oil and grease. Stormwater BMPs are inserted into the landscape to improve water quality and reduce the flooding associated with increased impervious cover and surface runoff.

Stormwater BMPs in Private Improvements

Potential strategies to encourage the use of stormwater BMPs in private improvements can be classified into five different categories: financial incentive programs, awards and recognition programs, distribution programs, stormwater utility fee discounts, and ordinance requirements. Local examples of each category are provided below. Note that the following examples are presented for reference only and not all are recommended; however, creating some incentive for private property owners to install BMPs may be a condition of the permit the Village plans to obtain for a new storm sewer outfall to Lake Michigan.

Source - Lincoln Way Supply

Figure 15. Permeable Paver Driveway

Financial Incentive Programs (Grants, Rebates, Cost-Sharing)

- *Water Quality Improvement Program (DuPage County)* – Grants are awarded annually (up to 20% of project cost) for projects providing a regional water quality benefit.
- *Sustainable Backyard Program (City of Chicago)* – Residents can receive rebates on purchases of trees (up to $100), native plants (up to $60), compost bins (up to $50), and rain barrels (up to $40). Workshops provide basic information on the installation and maintenance of rain barrels, compost bins, native plants, and trees.
- *Rain Garden Cost-Share (Village of Glenview)* – Residents can apply for a grant of 50% of the project costs (up to $1,000) for a rain garden installed according to the Village's rain garden guidelines and which provides a drainage benefit.

Source - The Conservation Foundation

Figure 16. Rainwater Harvesting Concept

- *Local Drainage Inspection Program (Village of Glenview)* – Residents voluntarily participate in a cost-sharing program with the Village in which individual lots are reviewed for drainage problems and recommendations are provided to solve the drainage problems on private property. A green

infrastructure alternative is often considered among the potential solutions. Residents receive a site visit by a registered professional engineer with stormwater expertise, a written report with recommended improvements, cost estimates for the potential improvements, a list of recommended local contractors, and a voucher to cover permitting fees (up to $200). The cost of the program ($800 per property) is split evenly between the Village and the property owner.

Distribution Programs

- *Rain Barrel Program (Metropolitan Water Reclamation District of Greater Chicago)* – Rain barrels are sold to residents ($58 plus tax) within the MWRD service area. An installation kit and delivery are included. Rain barrels may be purchased directly from the MWRD or from participating municipalities.
- *Rain Garden Program (City of Woodstock)* – The City installed demonstration rain gardens in highly visible areas and developed installation guidelines for residents to install their own rain gardens. The guidelines are available on the City's website and at brochure racks at City facilities.

Awards and Recognition Programs

- *Conservation at Home (The Conservation Foundation)* – Residents receive a free site visit for site specific advice on the use of native landscaping, rain barrels, organic fertilizers, and the removal of invasive plants. Reference materials are provided for purchasing plants. Participants that follow-through can have their landscape certified. Donations are suggested ($25 for current members or $50 for non-members) for yard signs signifying participation in the program.

Source - The Conservation Foundation

Figure 17. Conservation Award Sign

Stormwater Utility Fee Discounts

- *Incentives and Credits (Village of Downers Grove)* – An incentive is a one-time reduction in the stormwater utility fee applied to the resident's account balance. It is offered to assist property owners with the cost of materials, construction and installation of rain barrels ($25), rain gardens ($250), permeable pavers ($300), and other qualifying practices (30% up to $300 per property). A credit is an ongoing reduction in the amount of stormwater fees assessed to a parcel (up to 100%) in recognition of site practices that reduce the impact of stormwater runoff.

Ordinance Requirements

- *BMP Ordinance (Village of Lakewood*) - This ordinance requires the installation of BMPs for any development in the R-2 Zoning District that exceeds 500 square feet of new impervious area or that adds impervious area past the side or rear yard building setback lines. Appropriate BMPs are selected by the resident according to the Village's BMP hierarchy. The Village provides an applicant with a FAQ sheet, BMP profile sheets, and standard maintenance agreements to streamline the permitting and design processes.

- *Watershed Development Ordinance - Water Quality Treatment Requirements (Lake County)* – All development resulting in at least 0.5 acre of new impervious area is required to retain 0.01 inch of runoff for every 1% of impervious surface. Hydrocarbon (e.g. oil and grease) removal technology with a minimum 70% removal rate is required for 0.5 inch of runoff from new impervious surfaces resulting from the following types of development: vehicle fueling and service facilities; and parking lots with more than 25 new stalls.

Figure 18. Rain Garden at Baxter & Woodman's Corporate Headquarters

Stormwater BMPs in Public Improvements

In order to encourage the use of stormwater BMPs in public improvements, the Village can begin evaluating the feasibility of incorporating stormwater BMPs into each capital improvement and facility improvement project. Stormwater BMPs that could potentially be incorporated into capital improvements include: permeable pavement, planter boxes, and hydrodynamic separators. Installing catch basins, where inlets would otherwise be installed, is another possible BMP. Stormwater BMPs that could potentially

be incorporated into facility improvement projects include: rain gardens, rain barrels, permeable pavements, bio-swales, infiltration strips, and green roofs. Incorporating BMPs into public projects may be another condition of the permit the Village plans to obtain for a new storm sewer outfall to Lake Michigan.

Source - Filterra

Figure 19. Tree Box Filter

ACTION ITEMS

1. Implement an Award or Recognition Program for BMPs installed on private property. This program should be similar to The Conservation Foundation's Conservation at Home Program (see Appendix 9). Although the Village is outside of The Conservation Foundation's typical service area, the Foundation would be willing to mentor Village staff or a local conservation group, such as Openlands, to administer the program.

2. Participate with the MWRD to distribute rain barrels to interested residents (see Appendix 9). Village participation may simply be advertising that rain barrels are available from the MWRD, or the Village could maintain a supply of rain barrels from the MWRD and distribute them.

3. The Village should implement a formal process to incorporate stormwater BMPs in public improvements. The required scope of services within Requests for Proposals issued by the Village should specifically include an evaluation of the feasibility of incorporating green infrastructure elements into the project. Preference should be given to BMPs that require less maintenance and to designs that maximize the durability of the BMP. For example, turning movements by heavy vehicles can be damaging to permeable pavements, but a new public parking area could be designed with conventional pavement driving aisles and permeable pavement parking stalls.

SECTION 8

DEVELOPMENT POLICIES & REGULATIONS

"The physical character of a community is determined by the interrelationship of factors that affect how land is used."

A 2020 Vision for Winnetka

8. DEVELOPMENT POLICIES & REGULATIONS

GOAL

Establish development regulations for the Village which are state of the art with regard to stormwater management.

OBJECTIVE

Update the Village's development regulations in light of current and pending regional, state, and Federal regulations, as well as current practices in stormwater management.

EXISTING DEVELOPMENT REGULATIONS

The Village regulates residential and commercial development primarily through Titles 12, 15, and 16 of the Village Code, along with the Public Works and Engineering Design Guidelines. Depending on the size and scope of the project, a development project within the Village may also fall under the jurisdiction of the Metropolitan Water Reclamation District of Greater Chicago (MWRD), the Cook County Department of Transportation and Highways, the Illinois Environmental Protection Agency (IEPA), Illinois Department of Natural Resources, the Illinois Department of Transportation, and/or the U.S. Army Corps of Engineers. Regional, state, and Federal regulations are updated from time to time and the Village's regulations should also be updated to maintain compatibility with overlapping jurisdictions.

The MWRD has been granted the authority to adopt a stormwater management ordinance with Countywide authority. As a first step toward establishing the MWRD's stormwater management program, the District adopted the Cook County Stormwater Management Plan on February 15, 2007. After a first draft of the ordinance, an economic impact study, and then a second draft of the ordinance, the MWRD finally adopted the Cook County Watershed Management Ordinance (WMO) on October 3, 2013 with an effective date of May 1, 2014.

Figure 20. Redevelopment Project

COMPARISON OF STORMWATER MANAGEMENT REQUIREMENTS

Exhibit 7 is a side-by-side comparison of the Village's current stormwater regulations, the Countywide WMO and other area stormwater regulations. Each set of regulations represented in the comparison includes the following common elements:

- Runoff requirements;
- Floodplain requirements;
- Natural area requirements; and
- Construction site requirements.

Generally speaking, runoff requirements and construction site requirements apply to development sites without regard to location. Examples include prohibiting the obstruction of runoff from an adjacent site and requiring a contractor to control erosion during construction. Sometimes these requirements depend on the size of the development. For instance, stormwater detention is typically only required when a certain amount of new impervious area is created. Floodplain requirements and natural area requirements, on the other hand, apply only to development in certain areas.

Local governments have complete authority over runoff requirements and they each attempt to set reasonable standards for protecting adjacent or downstream properties, although the actual requirements vary widely. Floodplain requirements, natural area requirements and construction site requirements all must meet minimum federal and/or state standards.

Countywide ordinances tend to regulate stormwater management from a "big picture" perspective. They typically regulate development that might impact a neighborhood or larger region and do not regulate development at a smaller scale. Meanwhile, municipal ordinances tend to regulate stormwater management down to the discharge point of a downspout.

AUTHORIZATION TO ENFORCE THE WATERSHED MANAGEMENT ORDINANCE

The WMO allows authorized municipalities to issue Watershed Management Permits within their corporate boundaries, so the Village has the opportunity to petition the MWRD for this authorization. The benefits of being an authorized municipality include control over the timing of permit issuance and offering applicants a permit process that involves coordination with fewer government agencies.

To become an authorized municipality, the Village would have to adopt the Countywide WMO. This can be done in one of the following ways.

- The Village could adopt the Countywide WMO without modifying the Village's current regulations and enforce whichever regulation is more stringent. This is the simplest option, but with two sets of standards it will be difficult for permit applicants to know what the requirements are for a given project and what they need to submit to get a permit.
- The Village could adopt the Countywide WMO and repeal the Village's current regulations. This is not recommended because certain provisions of the WMO are much more permissive than the Village's current regulations.

- The Village could adopt the Countywide WMO and update the Village's current regulations so the two documents fit together seamlessly. This is the best option.

REVIEW OF VILLAGE ZONING PROVISIONS WITH STORMWATER RUNOFF IMPLICATIONS

The Village's Zoning Ordinance includes provisions related to stormwater management from new development. Examples of these provisions include:

- *Encouragement of detached garages in the rear quarter of a lot.* Section 17.30.040.E.1 of the Village Code exempts the first 400 square feet of floor area associated with a one-story detached garage (provided it is located in the rear quarter of the lot) from inclusion in the building size (i.e. FAR) calculation. This provision was enacted to discourage the construction of front-facing garages, both as a means to reduce the appearance of bulk created by such garages, and to counteract the aesthetic of front-facing garage doors. However, constructing garages in the rear quarter of the lot leads to increases in the amount of impermeable surface on a lot, due to the need to construct a lengthy driveway to access the garage.
- *Maximum impermeable surface coverage.* Section 17.30.030.B of the Village Code sets the maximum percentage of a lot that can be covered by impermeable surfaces at 50% of the area of the lot, for residential properties. This limit has an impact on stormwater runoff, because the single factor most proportional to the amount of stormwater generated by a property is the amount of impermeable surface on the lot.
- *Treatment of semi-permeable surfaces (e.g. gravel, pavers).* Section 17.04.030.I.1 of the Village Code defines "Impermeable Surfaces and provides that only 80% of an area covered with brick, stone, or concrete pavers shall be considered to be an impermeable surface.
- *Construction of deep basements.* The construction of basements significantly deeper than eight feet is becoming more common in new construction, but it is not addressed in the Village's Zoning Ordinance. These deep basements may have an impact on stormwater management when constructed in low-permeability soils. Modern basement construction relies on footing drainage and sump pumps to limit hydrostatic pressure on basement walls. Deep basements with multiple sump pumps would reduce the groundwater table immediately adjacent to the building and convert the groundwater to surface water or discharge it directly to the storm sewer system. Stormwater management facilities are sized based on surface runoff calculations, and, for standard basements, sump pumps are a negligible contribution. However the contribution of multiple sump pumps at an increasing number of homes may need to be accounted for in stormwater calculations.

ACTION ITEMS

1. The Village should petition the MWRD to become an authorized municipality.

Figure 21. New residence elevated above base flood.

2. The Village should adopt the Countywide WMO by reference and update the Village's current regulations so the two documents fit together seamlessly. In particular, the Village should:

   - Maintain existing Village regulations where the existing regulations are more restrictive than the new WMO, such as:
     - ◊ Size of regulated development
     - ◊ Types of regulated development
     - ◊ Exempted projects
     - ◊ Allowances for re-development
     - ◊ Permit term
     - ◊ Protection of off-site properties
     - ◊ Rainfall data
   - Match new WMO regulations where the WMO is more restrictive than existing Village regulations, such as:
     - ◊ Projects requiring MWRD approval
     - ◊ Flood protection elevation
     - ◊ Compensatory storage
   - Match new WMO for projects regulated by the WMO and consider applying these requirements to projects that are not regulated by the WMO. In the cases listed below, the WMO would establish new or more restrictive regulations in the Village, but these regulations might be overly burdensome for certain types of projects regulated by the Village.
     - ◊ Long-term maintenance of stormwater management infrastructure – Stormwater detention facilities require maintenance, but the Village would have to

weigh the benefits of residents routinely maintaining private infrastructure against the amount of effort necessary to enforce the required maintenance.

◊ Allowable release rate – The WMO establishes an allowable release rate that in most cases would require significantly more detention volume than currently required by the Village. In may not be practical or possible to provide the required storage volume on single-family residential lots.

◊ Protection of depressional storage areas – Preserving existing depressional storage on a parcel reduces the impact of new impervious area on surrounding properties, but the presence of a depressional storage area on a parcel may not be discovered by the Village without submittal of a topographic site plan. If a topographic survey is required for every permit application, the permit for some small projects would cost more than the construction.

◊ Water quality – Improving the quality of stormwater runoff is important, but it may not be reasonable to require the infrastructure necessary to improve water quality for some of the minor projects regulated by the Village.

◊ Runoff volume reduction – Reducing the volume of runoff from a parcel reduces the impact of development on surrounding properties, but it may not be reasonable to require the infrastructure necessary to reduce the volume of runoff for some of the minor projects regulated by the Village.

◊ Inspection frequency – The WMO requires at least three erosion control inspections for each permitted development. It may not be practical for Village staff to inspect some of the minor projects regulated by the Village on three separate occasions.

- Match new WMO for projects regulated by the WMO, but do not apply these requirements to other projects regulated by the Village, such as:

  ◊ Buffer areas – The required buffer areas will be difficult, if not impossible, to meet on residential properties platted prior to the WMO.

  ◊ Wetland mitigation – Very few isolated wetlands exist within Village limits and those that do are likely to be found on public property, where they would be protected. Therefore, the value of wetland mitigation requirements in the Village is questionable.

  ◊ Riparian areas - The required setbacks will be difficult, if not impossible, to meet on residential properties platted prior to the WMO.

- Other

  ◊ Variances - Only the MWRD will be allowed to issue a variance for projects regulated by the new WMO; however, the Village should reserve the right to issue variances for all other regulated projects.

- ◊ Development requiring detention – The Village should maintain its existing detention regulations, which require detention for more types of development than the WMO, and consider crediting the storage volume within stormwater best management practices toward the required detention volume.

- ◊ Site stabilization – The existing Village regulations require stabilization within 30 days of removal of existing vegetation, while the new WMO requires stabilization within 14 days after construction activities have ceased. The Village should adopt both requirements as a dual performance standard for all development.

3. The following provisions of the Village Code should be amended.

   - Compliance with the Public Works and Engineering Design Guidelines is required by Title 14, Chapter 04, Section 130.A.1.a of the Village Code (General Construction Standards for Utilities in Public Rights-of-Way). A requirement to comply with these Guidelines should be added in Title 15, Chapter 32, Section 10 (Construction Permits Required).

   - Downspout Connections - Title 15, Chapter 24, Section 140 of the Village Code requires a direct connection of downspouts to storm sewers, which contradicts the Public Works and Engineering Design Guidelines (Paragraph II.C.8 and Paragraph II.D.5). The Village Code should be revised to eliminate this contradiction.

   - Public Nuisances - Title 9, Chapter 16, Section 020 of the Village Code effectively prohibits non-stormwater discharges to the drainage system; however, these regulations should clearly require the spiller to pay for cleaning a spill. They should also exempt non-stormwater discharges that are non-toxic, such as fire flows. The model Illicit Discharge and Connection Ordinance in Appendix 8 includes example language for these revisions.

Figure 22. New Residence with Rain Garden

4. The Village should review its Zoning Ordinance to determine whether the provisions which are related to stormwater management reflect should be revised.

5. The Village should develop site plan review checklists and site inspection forms to standardize its policies and procedures.

6. The Village should link as-built plans, maintenance agreements, and inspection reports to GIS.

SECTION 9

OPERATIONS & MAINTENANCE

"…proper maintenance of public properties…should keep public lands and infrastructure functioning well and strive for an appearance that reflects the high standards met by private property owners."

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9. OPERATIONS & MAINTENANCE

GOAL

Effectively maintain the storm and sanitary sewer systems to promote optimum performance.

OBJECTIVE

Schedule and fund regular maintenance of the storm and sanitary sewer systems, including stormwater Best Management Practices (BMPs).

STORM SEWER SYSTEM MAINTENANCE

The Village storm sewer system consists of 66.3 miles of sewer main, 2.6 miles of streams and ditches (maintained partly by the Park District and the Forest Preserve District), approximately 1,400 drainage structures, and eight pump stations. Typical system maintenance activities include: catch basin cleaning, television inspection, point repairs, sewer jetting, root cutting, street sweeping, leaf collection, and the removal of dead or dying trees along streams.

Each year, the Village plans to maintain 1/7 of the storm sewer system so that the entire system receives routine maintenance every seven years. $410,000 is budgeted for storm sewer maintenance in fiscal year 2013.

Figure 23. Drainage Ditch maintained by Village

SANITARY SEWER SYSTEM MAINTENANCE

The Village sanitary sewer system consists of 46.8 miles of sewer main, 1,131 manholes and one pump station. Typical system maintenance activities include: I/I monitoring, television inspection, point repairs, sewer jetting, root cutting, and sewer lining.

Each year, the Village plans to maintain 1/7 of the sanitary sewer system so that the entire system receives routine maintenance every seven years. $863,500 is budgeted for sanitary sewer maintenance in fiscal year 2013.

Source - USEPA

Figure 24. Storm Sewer System Maintenance

ACTION ITEMS

1. Continue to clean and maintain 35,300 lineal feet of sewer mains and 162 manholes so that 1/7 of the entire sanitary sewer system will be maintained each year.

2. Continue to clean and maintain 50,000 lineal feet of sewer mains and 200 catch basins so that 1/7 of the entire storm sewer system will be maintained each year.

3. Inventory stormwater BMPs and develop a plan for regular maintenance of the BMPs to ensure optimal effectiveness in reducing runoff volumes and increasing water quality.

SECTION 10

FINANCIAL PLAN

"…the development and ambience of the community continues to be emphasized, as do efforts to maintain the character of the Village and the elements that distinguish it from the typical suburban appearance of many Chicago metropolitan communities."

A 2020 Vision for Winnetka

10. FINANCIAL PLAN

GOAL

Fund stormwater management initiatives through a sustainable and equitable source of revenue.

OBJECTIVE

Implement a stormwater utility to fund most of the Village's stormwater management initiatives. Utilize General Fund reserves and revenues to keep stormwater fees as low as possible.

STORMWATER UTILITY FEASIBILITY

In order to determine the feasibility of implementing a stormwater utility to fund the planned capital improvements and necessary maintenance of the storm sewer system, the Village conducted a Stormwater Utility Feasibility Study in November, 2012. The results of the Study and the recommendations of the Final Report (prepared by Municipal & Financial Services Group, dated May 7, 2013) are summarized in this Section.

The total cost of the capital improvements completed on the Village's storm sewer system in the 1990s and 2000s totaled approximately $3.5 million. The total cost of the capital improvements planned by the Village over the next five years is over $41 million. These improvements cannot be funded by cash reserves or grants alone. Increasing property taxes would not be an equitable way to fund these improvements, since the value of property has very little correlation with its need for stormwater management and since tax-exempt properties benefit from the Village's stormwater infrastructure. A stormwater utility, however, is a feasible and equitable means of funding the planned stormwater capital improvements.

Using this approach, the Village would issue debt to fund the planned capital improvements and necessary maintenance of the storm sewer system and then pay the debt service using fees paid by property owners proportional to a property's use of the stormwater infrastructure. The implementation of a stormwater utility and associated stormwater fee will provide:

- A dedicated source of revenue for stormwater expenditures allowing for funding of significant capital investments required to improve the stormwater system;
- Increased equity for all parcel owners, as costs will be allocated based on stormwater contribution rather than property value and those that do not contribute to stormwater funding now will pay their fair share;
- Fiscal accountability, due to the fact that stormwater fee revenues can only be used for stormwater expenditures and would be adjusted based on needs;

- Increased public awareness of stormwater issues and the significant investments that are required to manage stormwater in the Village.

STORMWATER FEE STRUCTURE

The fee charged to each parcel would be based on a measurement of the impervious area on the parcel, since this is the single most important factor influencing the rate and volume of stormwater runoff. Impervious area data is also readily available for each parcel using the Village's GIS data. The normalized average residential parcel within the Village has approximately 3,400 square feet of impervious area, so this amount of impervious area would be considered one Equivalent Residential Unit (ERU) and the fee charged to each parcel would be expressed in terms of ERUs, allowing for fractions rounded to the nearest tenth.

STORMWATER FUNDING

Thirty-year bonds would be used to fund the planned stormwater capital improvement projects and maintenance needs. In order to minimize the stormwater fees necessary to pay the debt service for these bonds and ease the transition to stormwater utility funding, the Village would supplement stormwater fees with General Fund reserves and revenues. As the debt associated with the stormwater projects is retired, the Village would reduce the amount of the stormwater fee commensurately.

STORMWATER FEE

Table 3 provides an estimate of the stormwater fees based on Municipal & Financial Services Group's recommended fee structure and funding approach.

	FY14	FY15	FY16	FY17	FY18
Annual Stormwater Fee per ERU	$262.00	$356.00	$358.00	$360.00	$362.00

Table 3. Recommended Stormwater Fees
(Implementation planned to begin July 2014)

ACTION ITEMS

1. *Create a stormwater database billing file.* Review the draft impervious area database, parcel by parcel, to ensure an accurate impervious area is assigned to each parcel. Assign the impervious area and the associated stormwater fee to a billing account that identifies: the parcel impervious area, number of ERUs, stormwater bill, parcel identification number, parcel owner and billing address. Once the file has been developed, test the file for accuracy and make any necessary final adjustments.

2. *Legally establish the stormwater utility.* Review the draft stormwater utility ordinance provided by MFSG and revise it as necessary for Village Council approval and adoption.

3. *Finalize the stormwater fee.* Adjust the recommended fee stated in the Stormwater Utility Feasibility Study based on updated capital project costs. The fee can either be adopted as part of the stormwater utility ordinance or it can be adopted as a separate fee schedule referenced in the ordinance.

4. *Adopt policies and procedures for the stormwater utility.* These procedures will establish the day-to-day operation of the utility, including: billing on the current utility bill or as a separate bill, handling appeals, and updating the billing database.

5. *Provide public outreach and education.* Residents, businesses, and tax-exempt entities need to understand the reason for the stormwater utility before they begin paying the stormwater fee. The Village should employ a combination of the following public outreach and education strategies: provide information on a website; identify one individual as the contact for all information related to the stormwater utility; conduct a series of public meetings and forums; provide an online stormwater utility fee estimator; and conduct one-on-one meetings with key property owners.

6. *Train Village staff responsible for customer service.* Staff should be prepared to answer questions about billing and respond to appeals. A flier listing the answers to frequently asked questions would help ensure consistent and accurate responses to the most common questions. Staff training should extend beyond the date the first stormwater bills are sent.

SECTION 11

IMPLEMENTATION PLAN

"A successful plan captures the imagination of residents,merchants and local officials, while reflecting a consensus view that allows diverse members f the community to support actions for the common good."

A 2020 Vision for Winnetka

11. IMPLEMENTATION PLAN

Village of Winnetka Stormwater Master Plan		2014				2015				2016				2017				2018				2019
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	and Beyond
Section 3: Stormwater Capital Improvements																						
1	Complete design of Winnetka PS, Spruce Street Outlet, NW Winnetka																					
1	Complete construction of Winnetka PS, Spruce Street Outlet, NW Winnetka																					
1	Complete design of Willow Road Tunnel																					
1	Complete construction of Willow Road Tunnel																					
2	Complete detailed topographic survey of Area N																					
3	Evaluate the the feasibility of additional capital improvements																					
Section 4: Inflow and Infiltration																						
1	Complete SSES - Phase 1																					
1	Complete SSES - Phase 2																					
1	Complete SSES - Phase 3																					
2	Complete building-to-building canvassing																					
3	Smoke test streets prior to capital improvements																					
Section 5: Floodplain Management																						
1	Conduct an annual Repetitive Loss Outreach project to each of the Repetitive Loss Areas																					
2	Develop and adopt a Repetitive Loss Area Analysis																					
3	Participate in the development of the Cook County All Hazards Mitigation Plan and adopt the Plan																					
Section 6: Water Quality																						
1	Continue to implement the current NPDES Phase II program																					
2	Incorporate a stormwater pollution prevention webpage into the redesign of the Village's website																					
3	Develop a Stormwater Pollution Prevention Plan for the Public Works Facility and Village parks																					
4	Incorporate stormwater pollution prevention training into Public Works employee training																					
5	Implement a water quality monitoring program																					
6	Participate in the ongoing TMDL development process and update the NPDES Ph II program																					
7	Evaluate Village Code for updates																					
Section 7: Stormwater BMPs																						
1	Implement an award or recognition program for BMPs installed on private property																					
2	Participate with the MWRD to distribute rain barrels to interested residents																					
3	Implement a formal process to incorporate stormwater BMPs in public improvements																					
Section 8: Development Policies and Regs																						
1	Petition the MWRD to become an authorized municipality																					
2	Adopt the Countywide WMO by reference and the current stormwater management regulations																					
3	Amend the Village Code																					
4	Review the Zoning Ordinance																					
5	Develop site plan review checklists and site inspection forms																					
6	Link as-built plans, maintenance agreements, and inspection reports to GIS																					
Section 9: Operations and Maintenance																						
1	Clean and maintain 1/7 of the sanitary sewer system																					
2	Clean and maintain 1/7 of the storm sewer system																					
3	Inventory stormwater BMPs and develop a plan for regular BMP maintenance																					
Section 10: Financial Plan																						
1	Create a stormwater database billing file																					
2	Legally establish the stormwater utility																					
3	Finalize the stormwater fee																					
4	Adopt policies and procedures for the stormwater utility																					
5	Provide public outreach and education																					
6	Train Village staff responsible for customer service																					

GLOSSARY

Best Management Practices (BMPs) – A practice used to improve stormwater quality and reduce the flooding associated with increased impervious cover and surface runoff. Some stormwater BMPs occur naturally, such as wetlands, woods and other natural vegetation. Other stormwater BMPs are man-made structures, such as detention ponds, swales, rain gardens, or permeable pavement.

Community Rating System (CRS) – A voluntary program designed to reward a community for doing more than meeting the NFIP minimum requirements to reduce flood damages.

Equivalent Residential Unit (ERU) – The average amount of impervious area on a single-family residential parcel.

Federal Emergency Management Agency (FEMA) – The Federal agency responsible for implementing the NFIP.

General Permit (ILR10/ILR40) – Permits written to cover a category of discharges instead of an individual facility. Application for coverage under a general permit is by submitting a Notice of Intent to comply with the conditions of the general permit and is much less rigorous than applying for an individual permit.

Illinois Department of Natural Resources (IDNR) – The State agency responsible for implementing the NFIP in Illinois.

Illinois Environmental Protection Agency (IEPA) – The State agency that issues NPDES permits.

Inflow and Infiltration (I/I) – Terms used to describe the ways that groundwater and stormwater enter into a sanitary sewer system. Inflow is stormwater that enters into a sanitary sewer system at points of direct connection to the system. Infiltration is groundwater that enters a sanitary sewer system through cracks and/or leaks in the sanitary sewer pipes.

Metropolitan Water Reclamation District of Greater Chicago (MWRD) – An independent government and taxing body that manages water supply, wastewater, and stormwater in Cook County, Illinois.

National Flood Insurance Program (NFIP) – The program enabling property owners in participating communities to purchase insurance protection from the Federal government against losses from flooding.

National Pollutant Discharge Elimination System (NPDES) – The national program for issuing, modifying, revoking, and reissuing, terminating, monitoring and enforcing permits and imposing and enforcing pretreatment requirements, under Sections 307, 402, 318 and 405 of the Clean Water Act.

Notice of Intent (NOI) – The mechanism used to register for coverage under a General NPDES Permit.

Repetitive Loss Property – A property for which two or more flood insurance claims of more than $1,000 have been paid within any 10-year period since 1978.

Total Maximum Daily Load (TMDL) – A regulatory term in the Clean Water Act describing the value of the maximum amount of a pollutant that a body of water can receive while still meeting water quality standards.

Watershed Management Ordinance (WMO) – The Ordinance adopted by the MWRD to regulate stormwater management in Cook County.

EXHIBITS

"This Plan continues a tradition of community planning that has played a critical role in the development of the Winnetka we see today."

A 2020 Vision for Winnetka

EXHIBIT 1 - DRAINAGE AREAS MAP

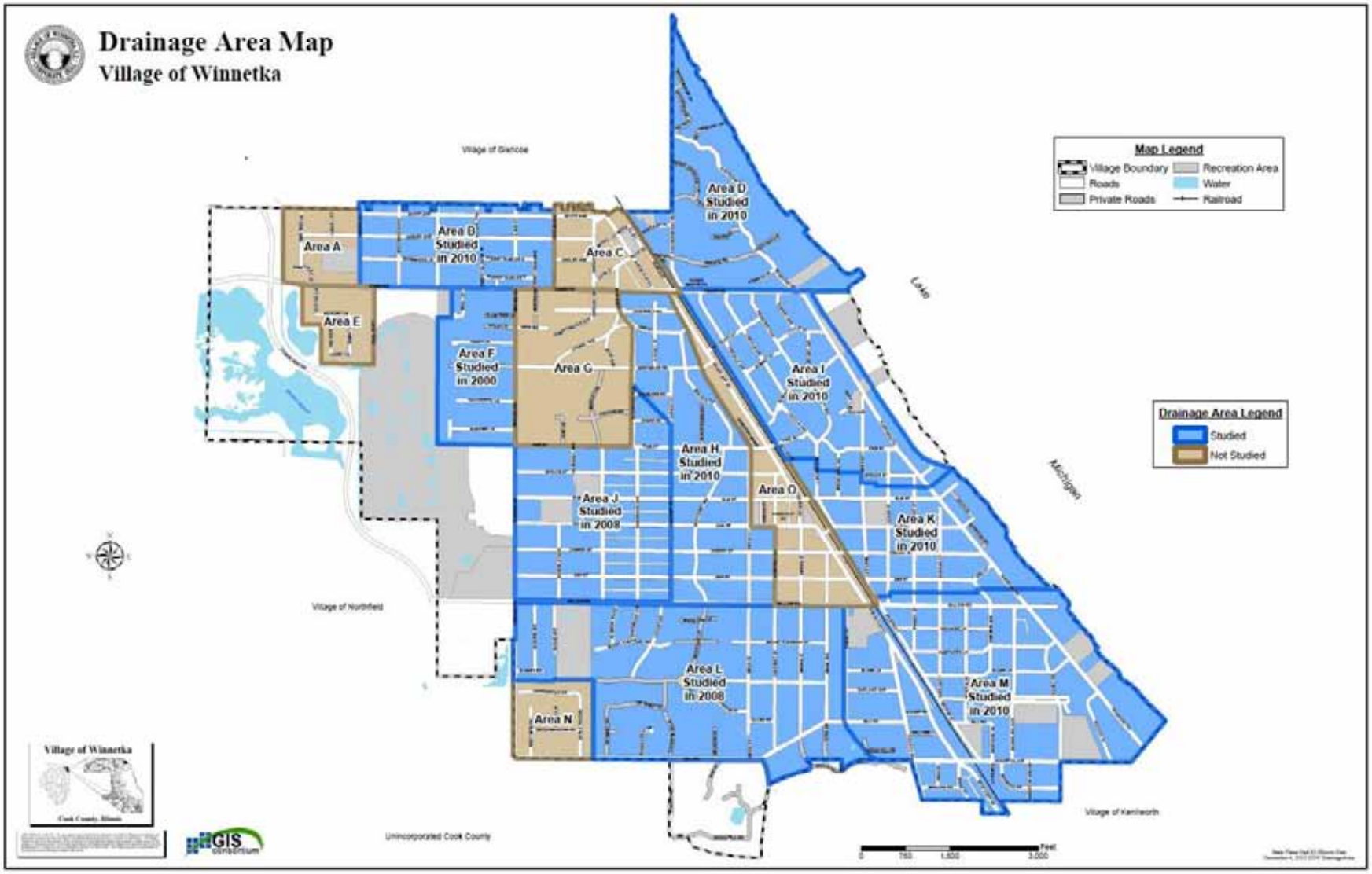


EXHIBIT 2 - STORMWATER CAPITAL IMPROVEMENTS PLAN

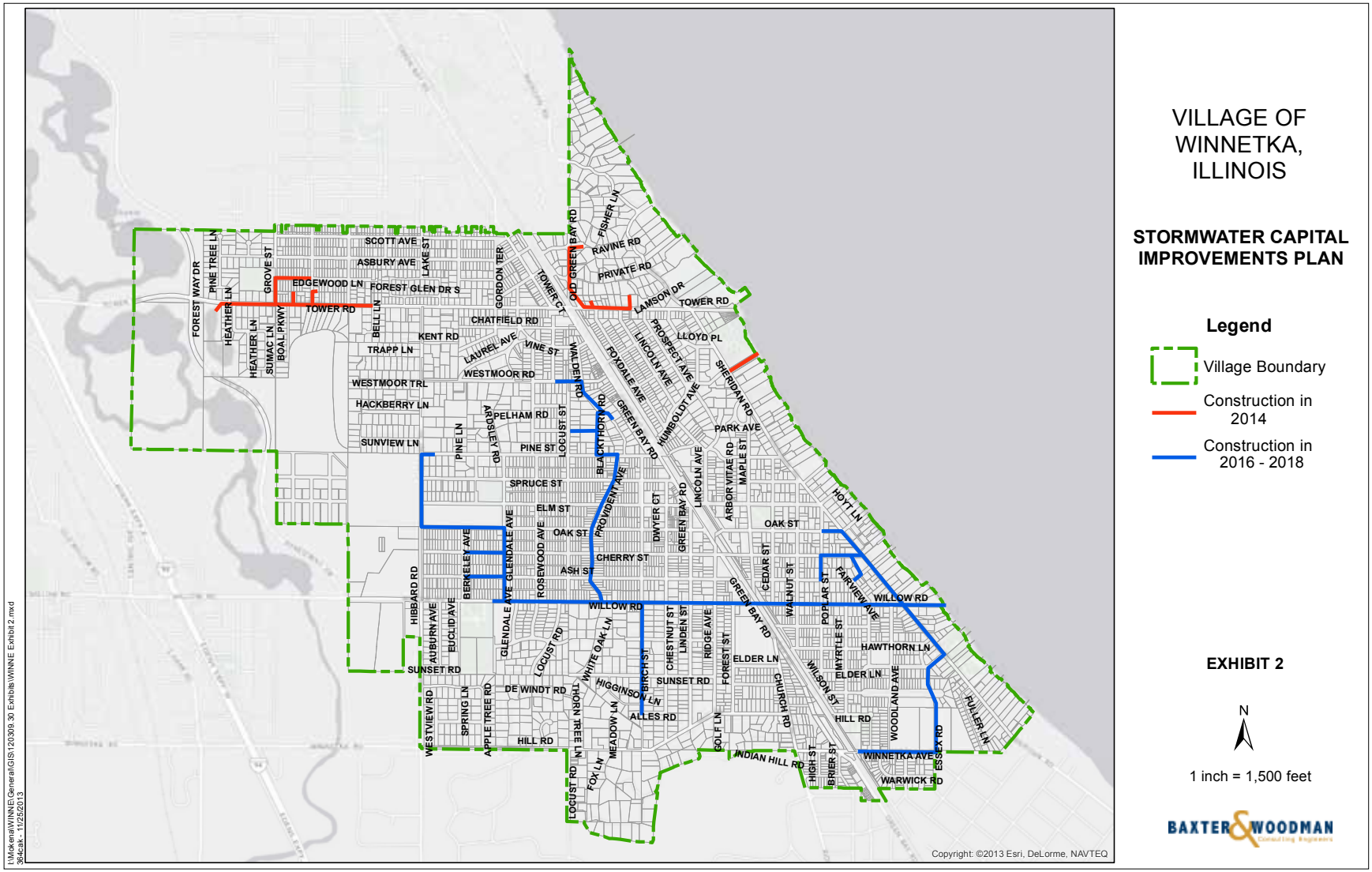


EXHIBIT 3 - SANITARY SEWER FIELD INVESTIGATION AND PILOT REHABILITATION PROJECT

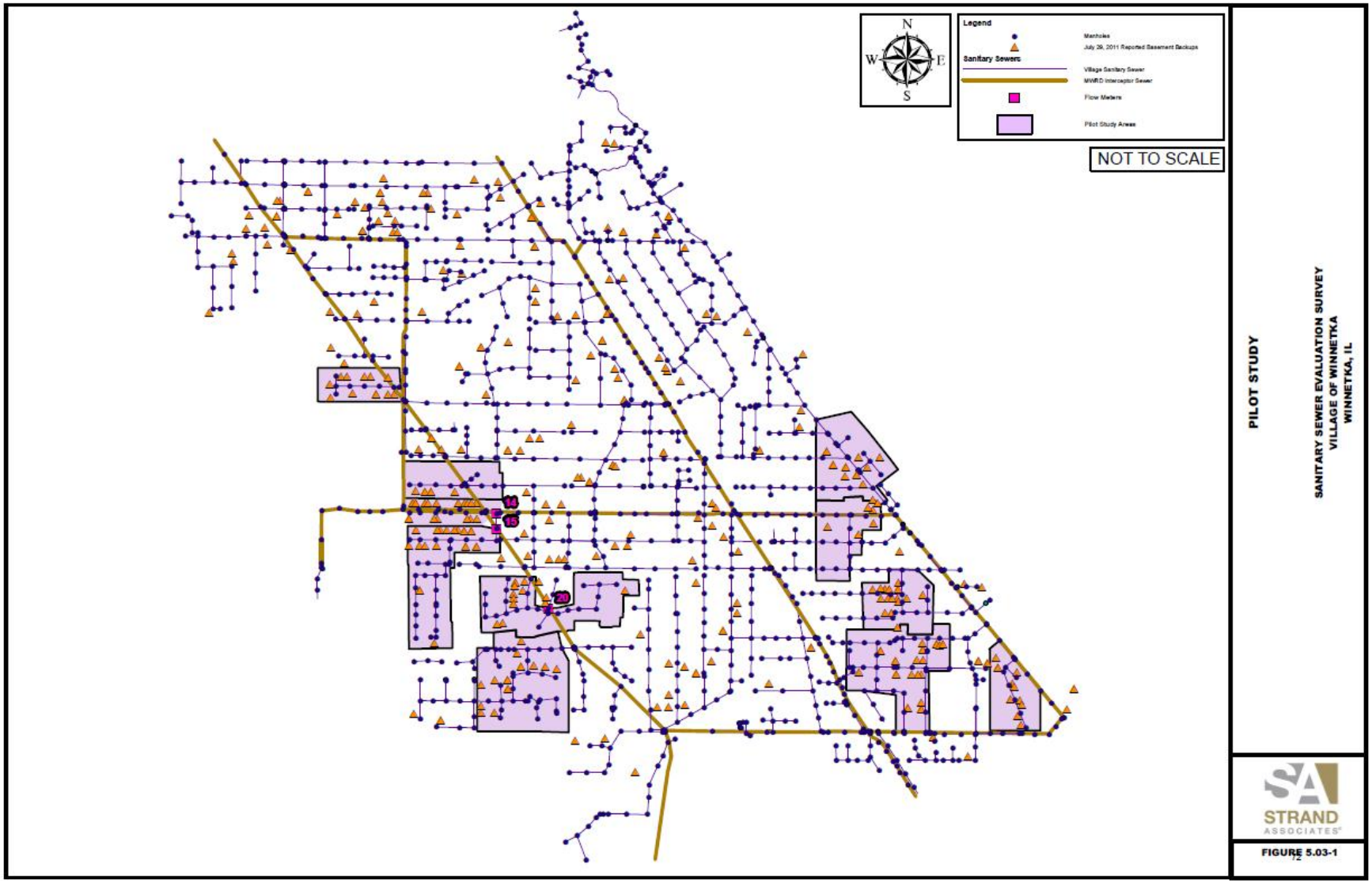


EXHIBIT 4 - WATER QUALITY SAMPLING LOCATIONS

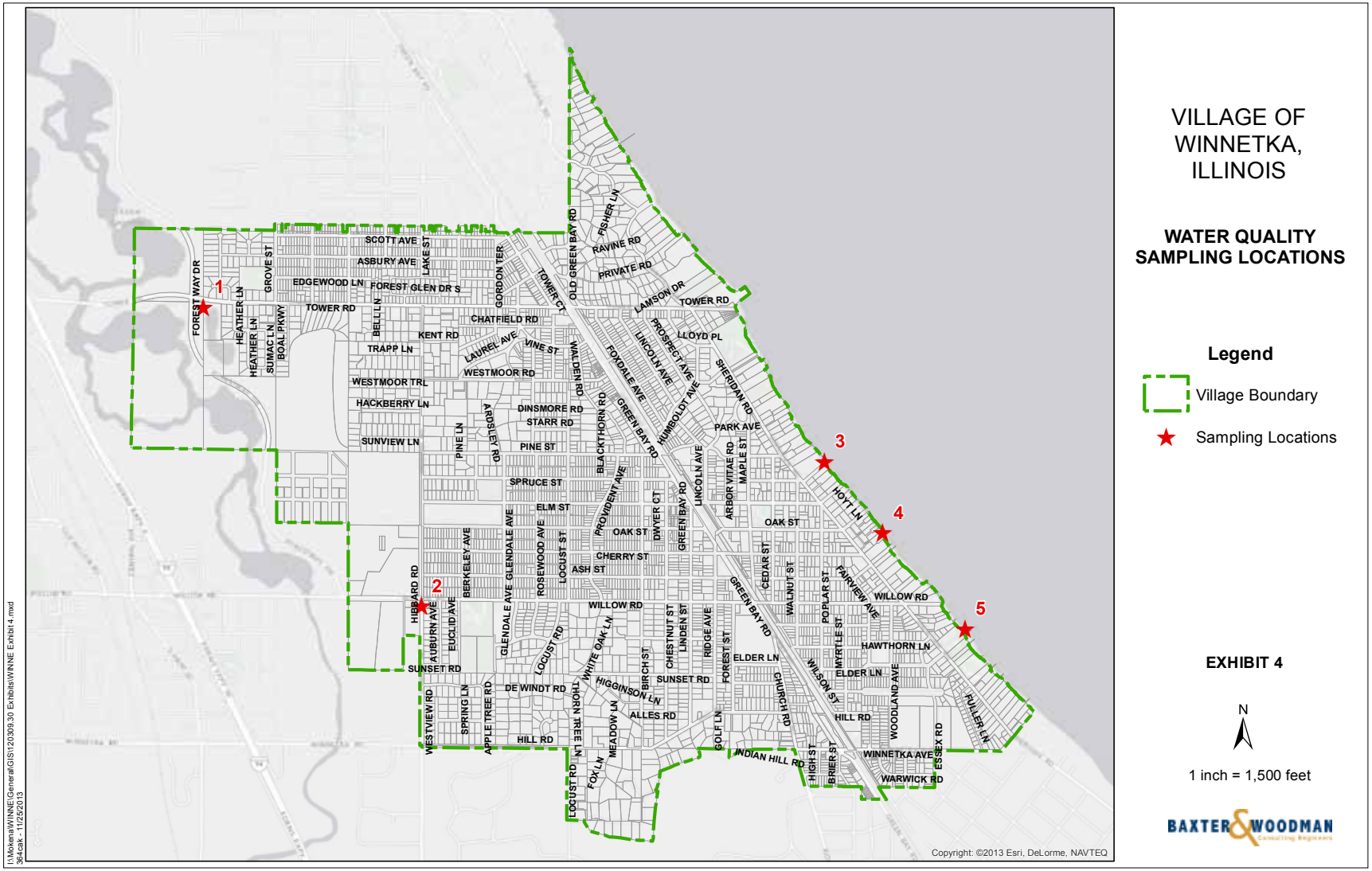


EXHIBIT 5 - SUMMARY OF WATER QUALITY MONITORING DATA

PARAMETER (units)	Water Quality Standards General Use [2]	Water Quality Standards Lake Michigan (Open Waters) [3]	SAMPLING LOCATION AND DATE														
			9/18/2012 (Wet Weather)					9/25/2012 (Dry Weather)					11/12/2012 (Wet Weather)				
			1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
Flow (cfs)			X	<.01	0.5	0.29	0.14	X	X	0.1215	0.0625	X	X	X	0.023	0.018	X
Temperature (degress F)	*	*		63	63	63	64			68	65				51	51	
Dissolved Oxygen (mg/l)	5.0	*		3.2	8.84	8.91	5.51			8.44	7.24				9.45	10.07	
pH (SU)	6.5 - 9.0	7.0 - 9.0		7.8	7.6	8	7.9			8.4	8.4				7.8	7.8	
Total Dissolved Solids (mg/l)	*	1000, 180 (OW)		244	512		422			266					400	338	
Total Suspended Solids (mg/l)	narrative - offensive conditions			12.5	U		U			105					9.5	U	
Nitrite (mg/l)				U	U		U			U					1.18	U	
Nitrate (mg/l)		10		0.523	1.83		1.45			0.48					0.961	0.79	
Ammonia (mg/l)	15	0.02		0.501	0.1		1.01			1.31					1.93	U	
Total Kjeldahl Nitrogen (mg/l)				1.27	31		1.96			3.77					4	0.725	
Phosphorus, Total (mg/l)	*	0.007		0.322	0.264		0.305			0.983					0.866	0.363	
Conductivity (umhos/cm)				370	640		671			388					744	584	
Chloride (mg/l)	500	500, 12 (OW)		36.6	139		86.4			32.5					121	57.8	
Oil, Fats, and Grease (mg/l)	narrative - offensive conditions			U	U		1.37			1.98					5.83	1.86	
Fecal Coliform (no/100 ml)	200 per 100 ml	20 per 100 ml		>2419.6	33.1	>2419.6	>2419.6			>2419.6	770.1				>2419.6	770.1	
Arsenic, Total (mg/l)		0.05		U	U		U								U	U	
Arsenic, Dissolved (mg/l)	*	*		U	U		U								U	U	
Cadmium, Total (mg/l)				U	U		U								U	U	
Cadmium, Dissolved (mg/l)	*	*		U	U		U								U	U	
Chromium, Total (mg/l)				U	U		U								U	U	
Chromium, Dissolved (mg/l)	*	*		U	U		U								U	U	
Chromium, Hexavalent, Total (mg/l)	0.016 (AS), 0.011 (CS)	0.016 (AS), 0.011 (CS)		U	0.01		U								U	U	
Copper, Total (mg/l)				0.0383	0.109		0.0128								0.0378	0.0235	
Copper, Dissolved (mg/l)	*	*		0.028	0.105		0.0097								0.0289	0.0209	
Lead, Total (mg/l)		0.05		0.012	U		U								U	U	
Lead, Dissolved (mg/l)	*	*		U	U		U								U	U	
Mercury, Total (ng/l)		1,700 (AS); 910 (CS); 3.1 (HHS); 1.3 (WS)		U	U		U								U	U	
Mercury, Dissolved (ng/l)	2,200 (AS), 1,100 (CS), 12 (HHS)			U	U		U								U	U	
Nickel, Total (mg/l)				U	U		U								U	U	
Nickel, Dissolved (mg/l)	*	*		U	U		U								U	U	
Selenium, Total (mg/l)	1.0	0.01		U	U		U								U	U	
Selenium, Dissolved (mg/l)		0.005 (CS)		U	U		U								U	U	
Silver, Total (mg/l)	0.005			U	U		U								U	U	
Silver, Dissolved (mg/l)				U	U		U								U	U	
Zinc, Total (mg/l)				0.0145	0.015		0.0121								0.0254	0.012	
Zinc, Dissolved (mg/l)	*	*		U	0.0157		0.0117								0.0183	U	

Sampling Locations
1. Tower Road (and Forestway Drive)
2. Willow Road (and Hibbard Road)
3. Spruce Street (and Sheridan Road)
4. Cherry Street (and Sheridan Road)
5. Elder Lane (and Sheridan Road)

Legend
* = See Explanation in Footnotes
U = Undetected
X = No Flow Encountered

= Water Quality Standard Not Met

PARAMETER (units)	Water Quality Standards General Use [2]	Water Quality Standards Lake Michigan (Open Waters) [3]	SAMPLING LOCATION AND DATE									
			3/11/2013 (Wet Weather)					4/29/2013 (Dry Weather)				
			1	2	3	4	5	1	2	3	4	5
Flow (cfs)			X	9	0.63	0.17	0.33	X	5.94	5.42	0.25	0.42
Temperature (degress F)	*	*		42	39	39.5	40		51.8	50	50	51.8
Dissolved Oxygen (mg/l)	5.0	*		9.9	10.34	10.66	10.52		9.6	10.4	10.14	9.79
pH (SU)	6.5 - 9.0	7.0 - 9.0		7.5	6.8	7.2	7.2		8.4	7.2	8.4	8.4
Total Dissolved Solids (mg/l)	*	1000, 180 (OW)		306	440	314			732	460		1050
Total Suspended Solids (mg/l)	narrative - offensive conditions			11	U	49			7	52.5		2
Nitrite (mg/l)				0.272	0.214	0.14			U	U		U
Nitrate (mg/l)		10		0.26	0.184	0.15			2.06	1.36		2.82
Ammonia (mg/l)	15	0.02		0.288	0.27	0.272			1.32	4.63		0.408
Total Kjeldahl Nitrogen (mg/l)				1.11	1.15	1.42			6.57	11.4		1.34
Phosphorus, Total (mg/l)	*	0.007		0.289	0.26	0.0983			0.126	0.234		0.168
Conductivity (umhos/cm)				588	841	618			1140	764		1730
Chloride (mg/l)	500	500, 12 (OW)		107	189	134			162	179		381
Oil, Fats, and Grease (mg/l)	narrative - offensive conditions			U	U	U			U	U		U
Fecal Coliform (no/100 ml)	200 per 100 ml	20 per 100 ml		1413.6	1533.1	>2419.6	-	-	387.3	>2419	1299.7	>2419
Arsenic, Total (mg/l)		0.05		U	U	U						
Arsenic, Dissolved (mg/l)	*	*		U	U	U						
Cadmium, Total (mg/l)				U	U	U						
Cadmium, Dissolved (mg/l)	*	*		U	U	U						
Chromium, Total (mg/l)				U	U	U						
Chromium, Dissolved (mg/l)	*	*		U	U	U						
Chromium, Hexavalent, Total (mg/l)	0.016 (AS), 0.011 (CS)	0.016 (AS), 0.011 (CS)		U	U	U						
Copper, Total (mg/l)				0.0204	0.0153	U						
Copper, Dissolved (mg/l)	*	*		0.0146	0.0103	U						
Lead, Total (mg/l)		0.05		0.008	U	U						
Lead, Dissolved (mg/l)	*	*		U	U	U						
Mercury, Total (ng/l)		1,700 (AS); 910 (CS); 3.1 (HHS); 1.3 (WS)		U	U	U						
Mercury, Dissolved (ng/l)	2,200 (AS), 1,100 (CS), 12 (HHS)			U	U	U						
Nickel, Total (mg/l)				U	U	0.0059						
Nickel, Dissolved (mg/l)	*	*		U	U	U						
Selenium, Total (mg/l)	1.0	0.01		U	U	U						
Selenium, Dissolved (mg/l)		0.005 (CS)		U	U	U						
Silver, Total (mg/l)	0.005			U	U	U						
Silver, Dissolved (mg/l)				U	U	U						
Zinc, Total (mg/l)				0.0217	0.0236	0.0716						
Zinc, Dissolved (mg/l)	*	*		0.0124	0.0129	0.0179						

Sampling Locations
1. Tower Road (and Forestway Drive)
2. Willow Road (and Hibbard Road)
3. Spruce Street (and Sheridan Road)
4. Cherry Street (and Sheridan Road)
5. Elder Lane (and Sheridan Road)

Legend
* = See Explanation in Footnotes
U = Undetected
X = No Flow Encountered
= Water Quality Standard Not Met

EXHIBIT 5 FOOTNOTES

1. SAMPLING NOTES

Location 1 has a flap gate which was closed on each day samples were collected
U = undetected by laboratory analysis
X - if there was no flowing water, then a sample was not collected

2. WATER QUALITY STANDARDS - GENERAL USE STREAMS

- water quality standards for waters without a specific designation
AS = acute standard; CS = chronic standard; HHS = human health standard

Temperature
Varies based by season, ecological damage, and other factors.

Dissolved Oxygen
A) During the period of March through July
  i) 5.0 mg/L at any time; and
  ii) 6.0 mg/L as a daily mean averaged over 7 days.
B) During the period of August through February,
  i) 3.5 mg/L at any time;
  ii) 4.0 mg/L as a daily minimum averaged over 7 days; and
  iii) 5.5 mg/L as a daily mean averaged over 30 days.

Total Dissolved Solids
No numeric standard for General Use Streams but 500 mg/l for Public and Food Processing Water Supply and 1,500 mg/l for Secondary Contact and Indigenous Aquatic Life waterbodies.

Total Suspended Solids/Fats, Oils and Grease
No numeric standard, however, narrative standard for waters of State to be free of sludge, oil, color, turbidity, etc. other than natural origin.

Total Ammonia Nitrogen
Acute Standards, Chronic Standards, and Sub-Chronic Standards for Total Ammonia Nitrogen vary based on temperature and pH of waterbody and not calculated as part of this study.
In no case shall total ammonia nitrogen exceed 15 mg/l.

Phosphorus
Phosphorus as P shall not exceed 0.05 mg/l in any reservoir or lake with a surface areas of 20 acres or more, or in any stream at the point where it enters any such reservoir or lake.

Fecal Coliform
A) During the months May through October, based on a minimum of five samples taken over not more than a 30 day period, fecal coliform (STORET number 31616) shall not exceed a geometric mean of 200 per 100 ml, nor shall more than 10% of the samples during any 30 day period exceed 400 per 100 ml in protected waters. Protected waters are defined as waters which, due to natural characteristics, aesthetic value or environmental significance are deserving of protection from pathogenic organisms. Protected waters will meet one or both of the following conditions:
  i) presently support or have the physical characteristics to support primary contact;
  ii) flow through or adjacent to parks or residential areas.
B) Waters unsuited to support primary contact uses because of physical, hydrologic or geographic configuration and are located in areas unlikely to be frequented by the public on a routine basis as determined by the Agency at 35 Ill. Adm. Code 309.Subpart A, are exempt from this standard.

Metals
The water quality standards for Cadmium (dissolved), Chromium (trivalent, dissolved), Copper (dissolved), Lead (dissolved), Nickel (dissolved), and Zinc (dissolved) varies based on hardness values. A hardness value of 300 mg/l was used for evaluation purposes. This number is based on field colormetric tests.
The water quality standards for Arsenic (trivalent, dissolved) are 0.36 mg/l (AS) and 0.19 mg/l (CS).

EXHIBIT 5 FOOTNOTES

3. WATER QUALITY STANDARDS - LAKE MICHIGAN (OPEN WATERS)

Temperature

Varies based by season, ecological damage, and other factors.

Dissolved Oxygen

Must not be less than 90% of saturation, except due to natural causes

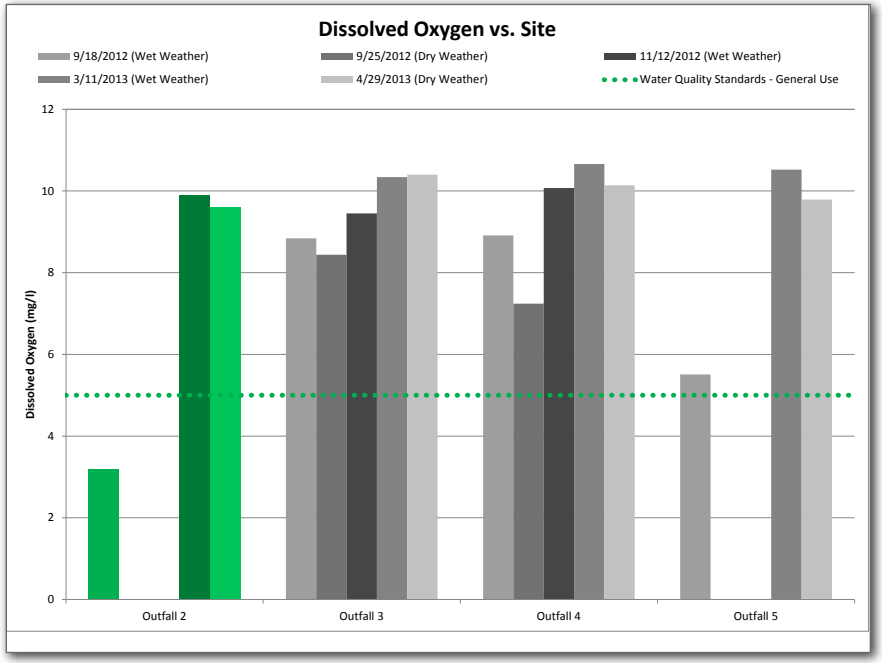
Fecal Coliform

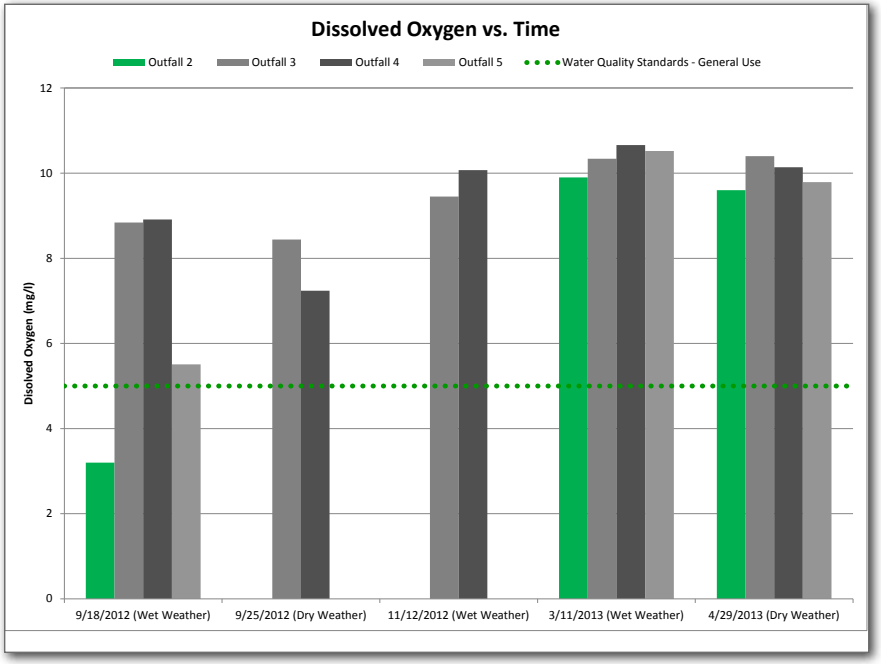
Based on a minimum of five samples taken over not more than a 30-day period, fecal coliform (STORET number 31616) must not exceed a geometric mean of 20 per 100 ml in the Open Waters of Lake Michigan as defined in Section 302.501. The remaining waters of the Lake Michigan Basin must not exceed a geometric mean of 200 per 100 ml, nor shall more than 10% of the samples during any 30 day period exceed 400 per 100 ml.
USEPA & IEPA are also using E. coli sampling to identify fecal matter concerns.

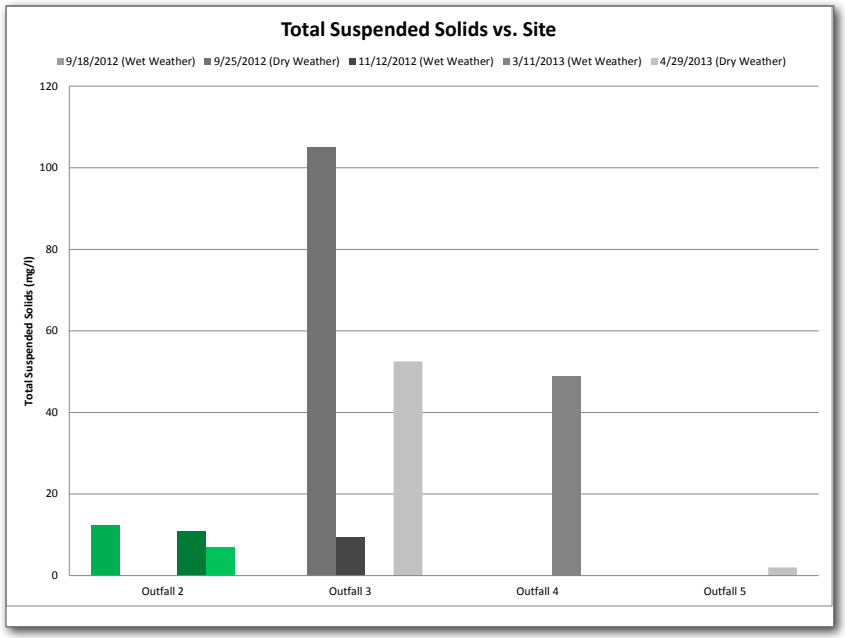
Metals

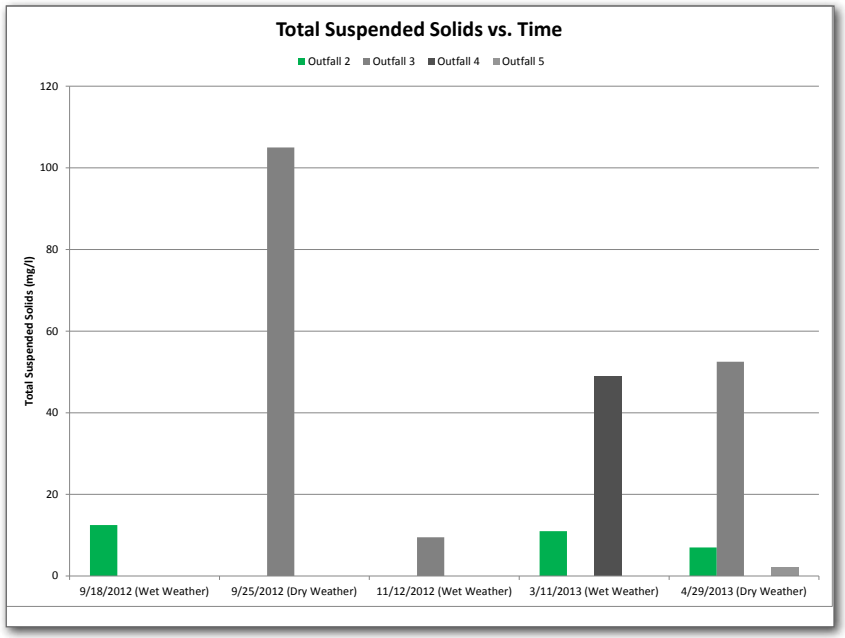
The water quality standards for Cadmium (dissolved), Chromium (trivalent, dissolved), Copper (dissolved), Lead (dissolved), Nickel (dissolved), and Zinc (dissolved) varies based on hardness values. A hardness value of 130 mg/l was used based area source water reports.
The water quality standards for Arsenic (trivalent, dissolved) are 0.34 mg/l (AS) and 0.148 mg/l (CS).

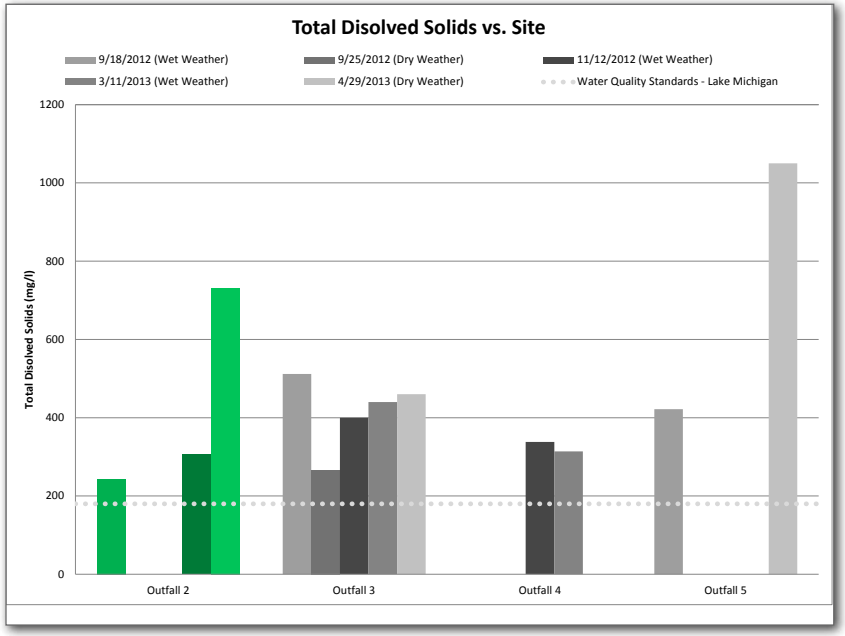
EXHIBIT 6 - WATER QUALITY MONITORING RESULTS

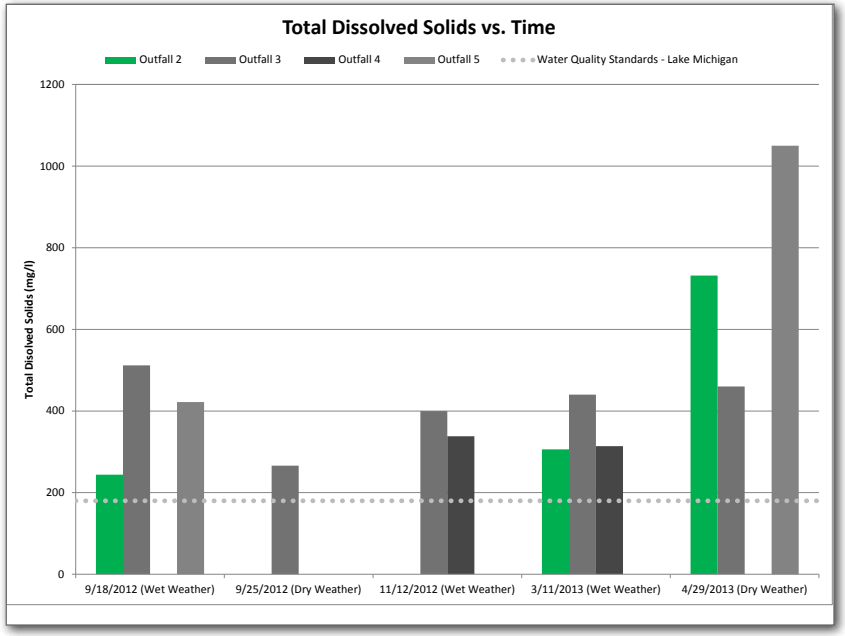


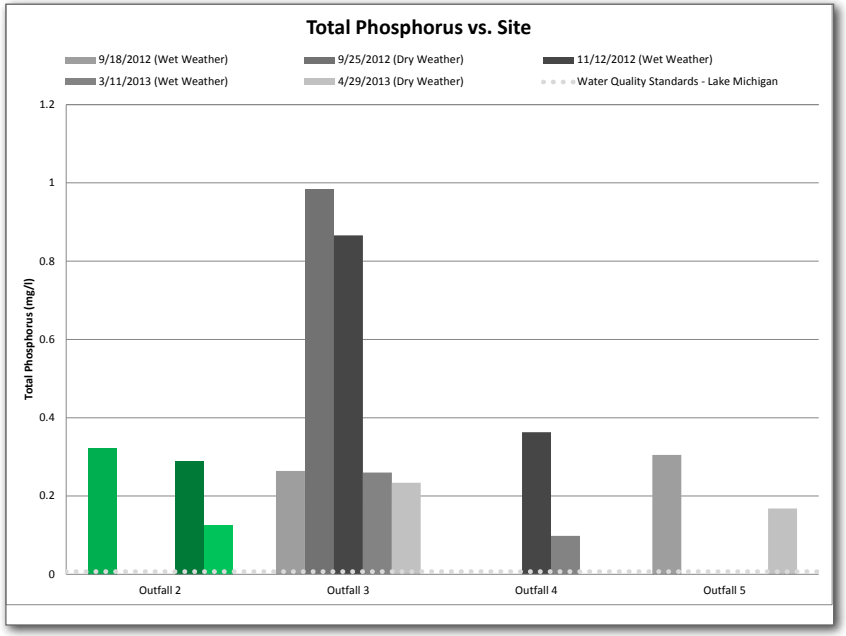


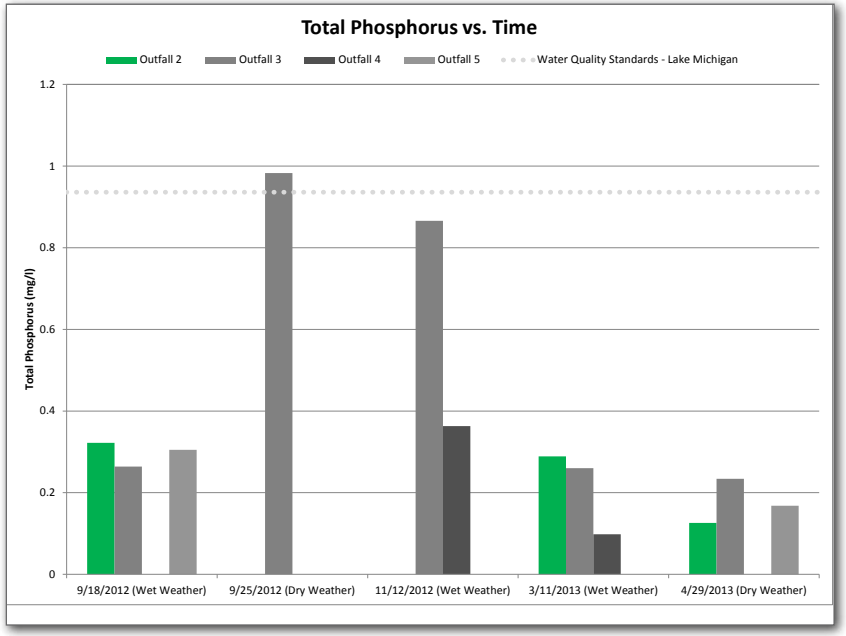

Total Suspended Solids vs. Site
9/18/2012 (Wet Weather)
9/25/2012 (Dry Weather)
11/12/2012 (Wet Weather)
3/11/2013 (Wet Weather)
4/29/2013 (Dry Weather)
Total Suspended Solids (mg/l)
120
100
80
60
40
20
0
Outfall 2
Outfall 3
Outfall 4
Outfall 5

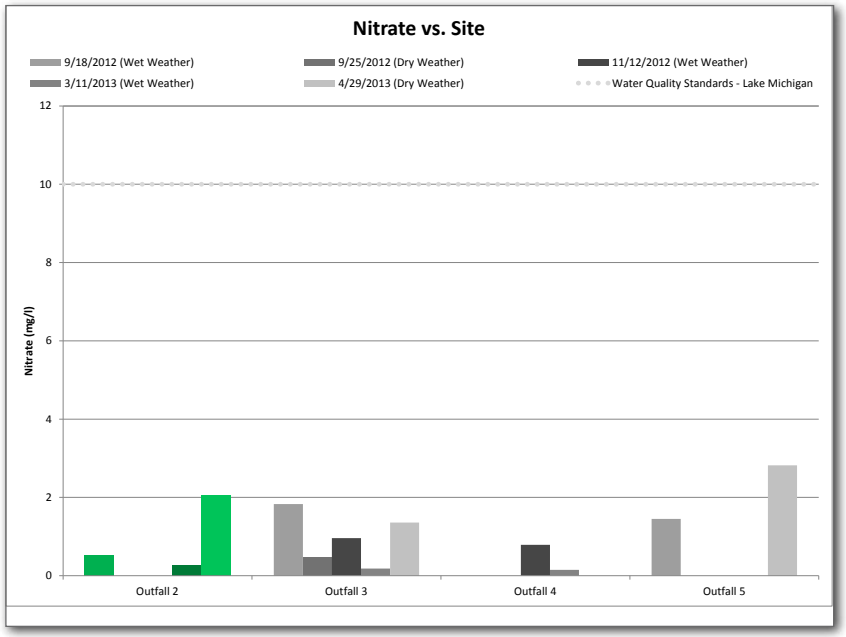

Total Suspended Solids vs. Time
Outfall 2
Outfall 3
Outfall 4
Outfall 5
Total Suspended Solids (mg/l)
120
100
80
60
40
20
0
9/18/2012 (Wet Weather)
9/25/2012 (Dry Weather)
11/12/2012 (Wet Weather)
3/11/2013 (Wet Weather)
4/29/2013 (Dry Weather)

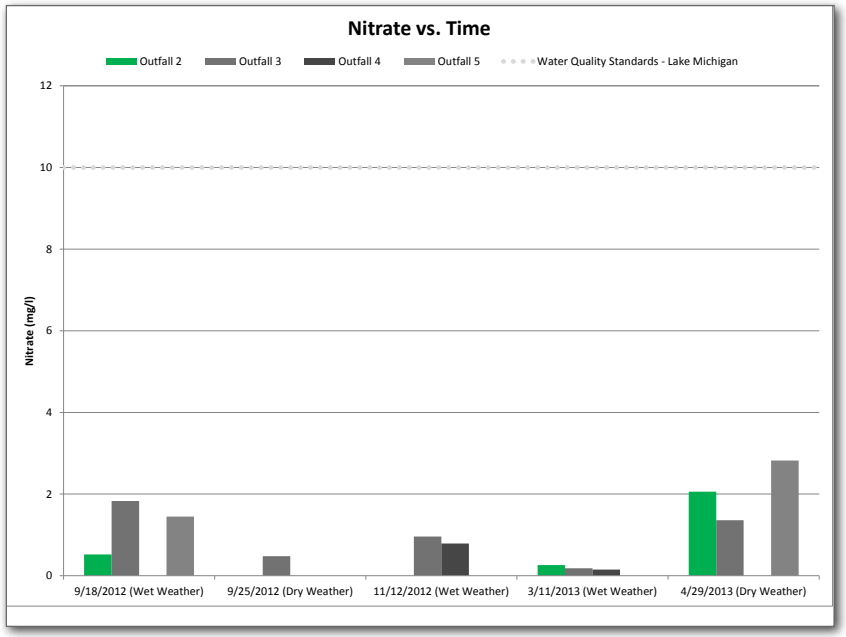

Total Disolved Solids vs. Site
9/18/2012 (Wet Weather)
9/25/2012 (Dry Weather)
11/12/2012 (Wet Weather)
3/11/2013 (Wet Weather)
4/29/2013 (Dry Weather)
Water Quality Standards - Lake Michigan
Total Disolved Solids (mg/l)
1200
1000
800
600
400
200
0
Outfall 2
Outfall 3
Outfall 4
Outfall 5

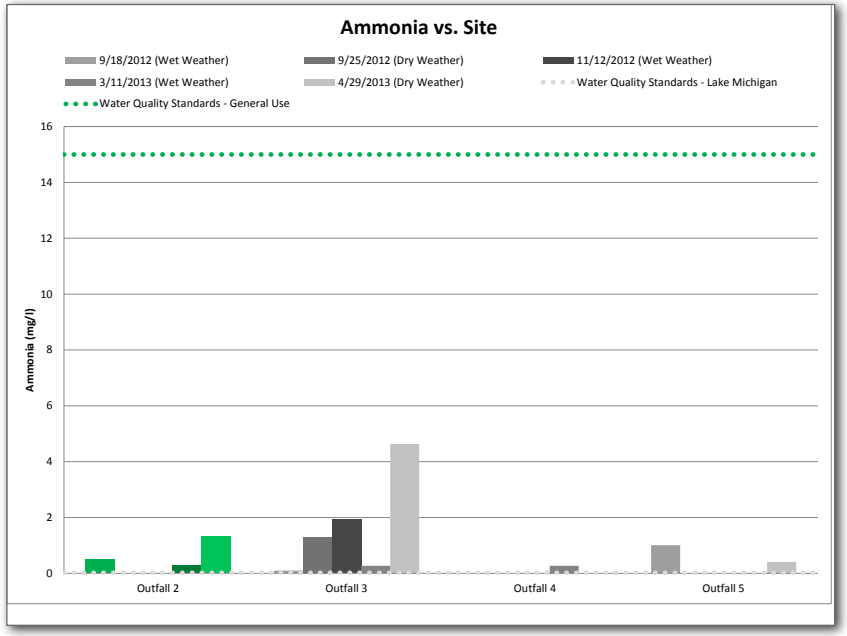

Total Dissolved Solids vs. Time
Outfall 2
Outfall 3
Outfall 4
Outfall 5
Water Quality Standards - Lake Michigan
Total Disolved Solids (mg/l)
1200
1000
800
600
400
200
0
9/18/2012 (Wet Weather)
9/25/2012 (Dry Weather)
11/12/2012 (Wet Weather)
3/11/2013 (Wet Weather)
4/29/2013 (Dry Weather)

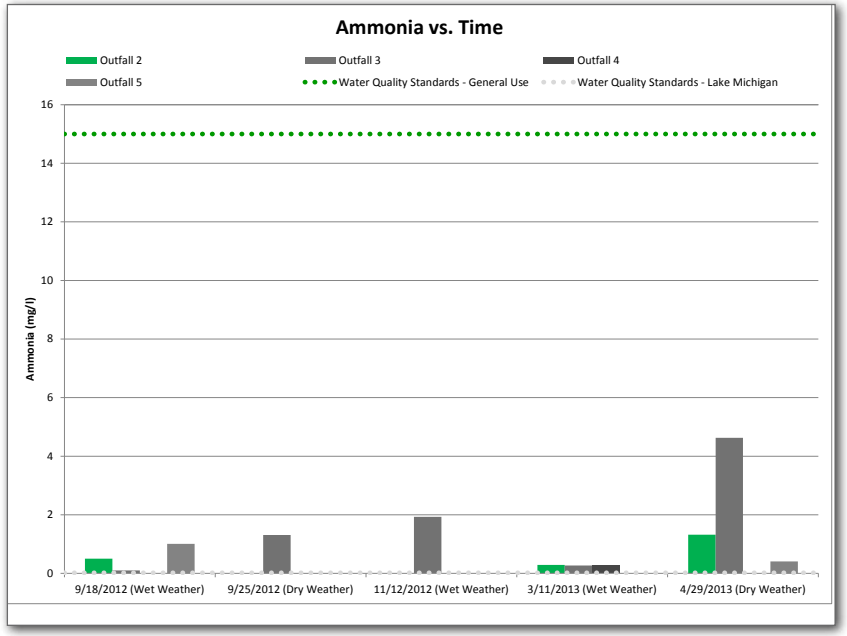

Total Phosphorus vs. Site
9/18/2012 (Wet Weather)
9/25/2012 (Dry Weather)
11/12/2012 (Wet Weather)
3/11/2013 (Wet Weather)
4/29/2013 (Dry Weather)
Water Quality Standards - Lake Michigan
Total Phosphorus (mg/l)
0
0.2
0.4
0.6
0.8
1
1.2
Outfall 2
Outfall 3
Outfall 4
Outfall 5

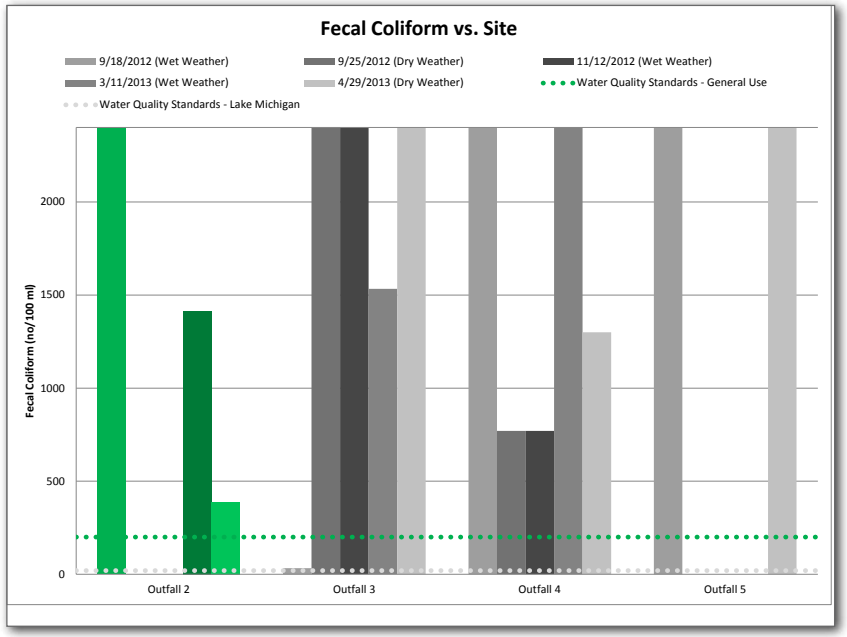

Total Phosphorus vs. Time
Outfall 2
Outfall 3
Outfall 4
Outfall 5
Water Quality Standards - Lake Michigan
Total Phosphorus (mg/l)
0
0.2
0.4
0.6
0.8
1
1.2
9/18/2012 (Wet Weather)
9/25/2012 (Dry Weather)
11/12/2012 (Wet Weather)
3/11/2013 (Wet Weather)
4/29/2013 (Dry Weather)

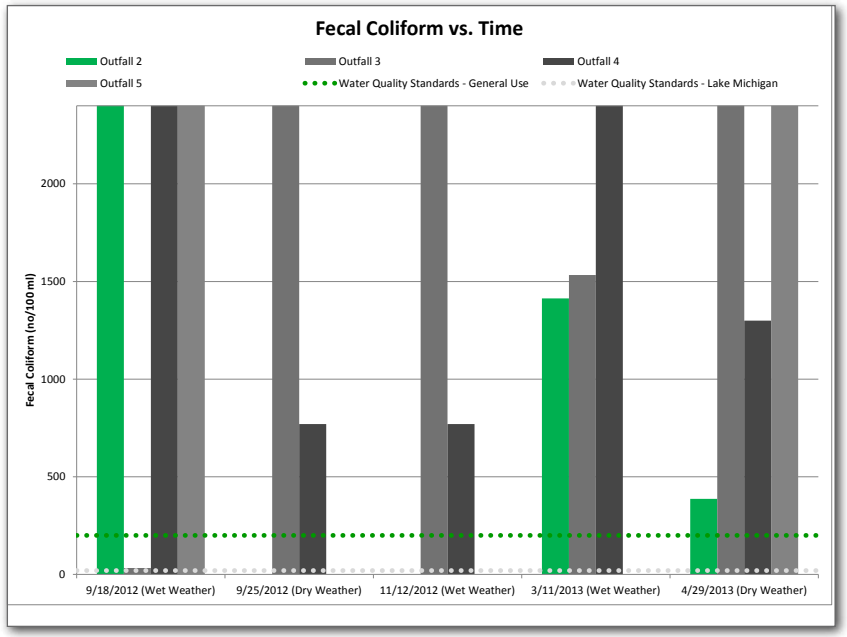

Nitrate vs. Site
9/18/2012 (Wet Weather)
9/25/2012 (Dry Weather)
11/12/2012 (Wet Weather)
3/11/2013 (Wet Weather)
4/29/2013 (Dry Weather)
Water Quality Standards - Lake Michigan
Nitrate (mg/l)
0
2
4
6
8
10
12
Outfall 2
Outfall 3
Outfall 4
Outfall 5

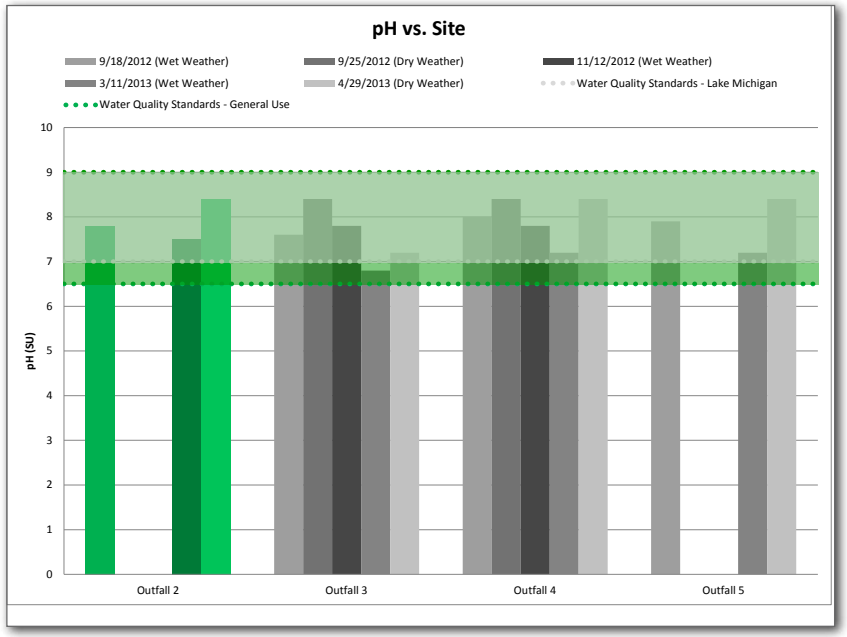

Nitrate vs. Time
Outfall 2
Outfall 3
Outfall 4
Outfall 5
Water Quality Standards - Lake Michigan
Nitrate (mg/l)
0
2
4
6
8
10
12
9/18/2012 (Wet Weather)
9/25/2012 (Dry Weather)
11/12/2012 (Wet Weather)
3/11/2013 (Wet Weather)
4/29/2013 (Dry Weather)

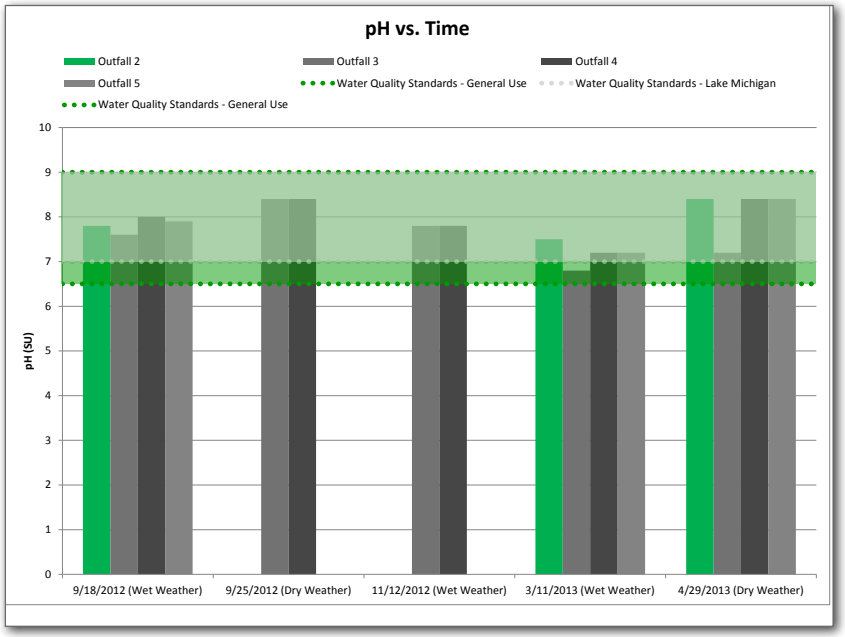

Ammonia vs. Site
9/18/2012 (Wet Weather)
9/25/2012 (Dry Weather)
11/12/2012 (Wet Weather)
3/11/2013 (Wet Weather)
4/29/2013 (Dry Weather)
Water Quality Standards - Lake Michigan
Water Quality Standards - General Use
Ammonia (mg/l)
0
2
4
6
8
10
12
14
16
Outfall 2
Outfall 3
Outfall 4
Outfall 5

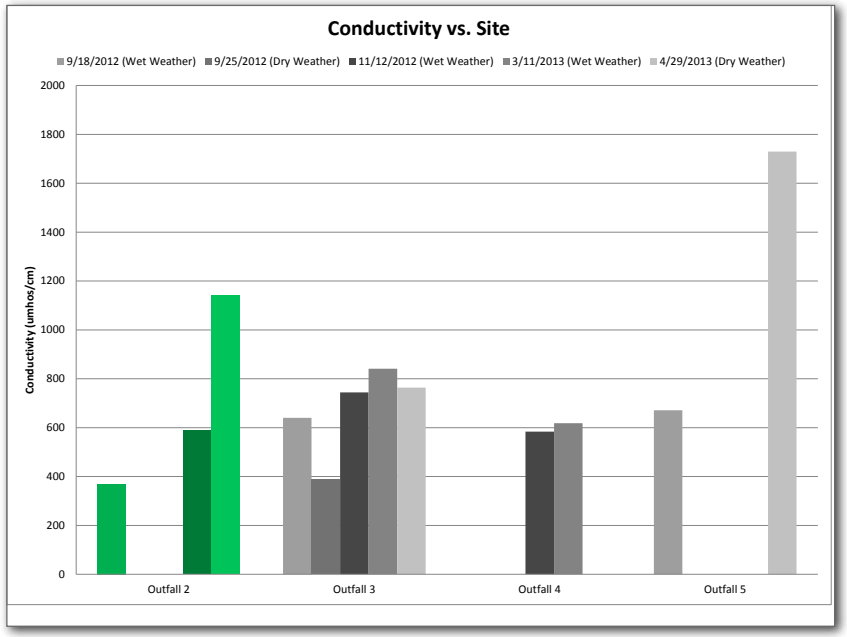

Ammonia vs. Time
Outfall 2
Outfall 3
Outfall 4
Outfall 5
Water Quality Standards - General Use
Water Quality Standards - Lake Michigan
Ammonia (mg/l)
0
2
4
6
8
10
12
14
16
9/18/2012 (Wet Weather)
9/25/2012 (Dry Weather)
11/12/2012 (Wet Weather)
3/11/2013 (Wet Weather)
4/29/2013 (Dry Weather)


Fecal Coliform vs. Site
9/18/2012 (Wet Weather)
9/25/2012 (Dry Weather)
11/12/2012 (Wet Weather)
3/11/2013 (Wet Weather)
4/29/2013 (Dry Weather)
Water Quality Standards - General Use
Water Quality Standards - Lake Michigan
Fecal Coliform (no/100 ml)
0
500
1000
1500
2000
Outfall 2
Outfall 3
Outfall 4
Outfall 5


Fecal Coliform vs. Time
Outfall 2
Outfall 3
Outfall 4
Outfall 5
Water Quality Standards - General Use
Water Quality Standards - Lake Michigan
Fecal Coliform (no/100 ml)
0
500
1000
1500
2000
9/18/2012 (Wet Weather)
9/25/2012 (Dry Weather)
11/12/2012 (Wet Weather)
3/11/2013 (Wet Weather)
4/29/2013 (Dry Weather)


pH vs. Site
9/18/2012 (Wet Weather)
9/25/2012 (Dry Weather)
11/12/2012 (Wet Weather)
3/11/2013 (Wet Weather)
4/29/2013 (Dry Weather)
Water Quality Standards - Lake Michigan
Water Quality Standards - General Use
pH (SU)
0
1
2
3
4
5
6
7
8
9
10
Outfall 2
Outfall 3
Outfall 4
Outfall 5


pH vs. Time
Outfall 2
Outfall 3
Outfall 4
Outfall 5
Water Quality Standards - General Use
Water Quality Standards - Lake Michigan
pH (SU)
0
1
2
3
4
5
6
7
8
9
10
9/18/2012 (Wet Weather)
9/25/2012 (Dry Weather)
11/12/2012 (Wet Weather)
3/11/2013 (Wet Weather)
4/29/2013 (Dry Weather)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9/25/2012 (Dry Weather)
11/12/2012 (Wet Weather)
3/11/2013 (Wet Weather)
4/29/2013 (Dry Weather)
Conductivity (umhos/cm)
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200
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Outfall 2
Outfall 3
Outfall 4
Outfall 5

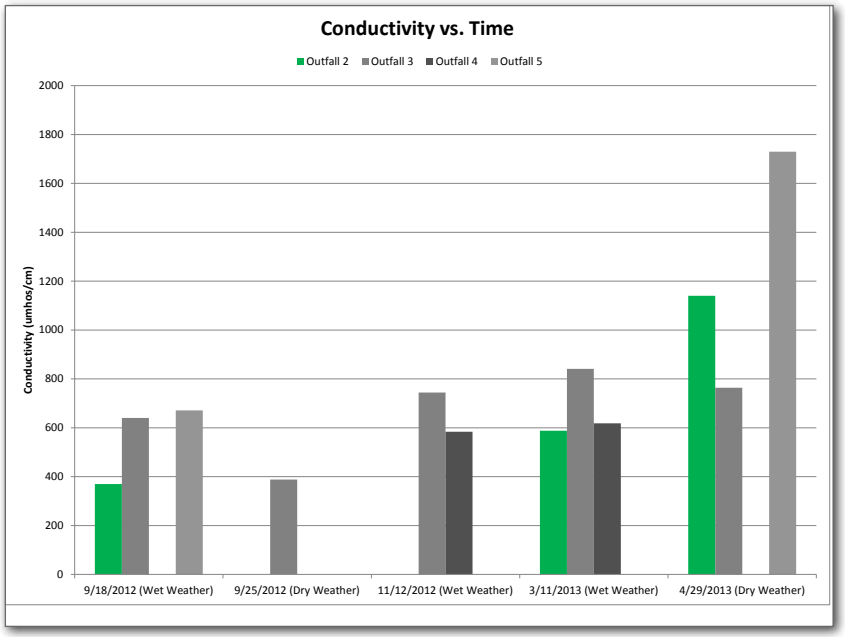
Conductivity vs. Time
Outfall 2
Outfall 3
Outfall 4
Outfall 5
Conductivity (umhos/cm)
0
200
400
600
800
1000
1200
1400
1600
1800
2000
9/18/2012 (Wet Weather)
9/25/2012 (Dry Weather)
11/12/2012 (Wet Weather)
3/11/2013 (Wet Weather)
4/29/2013 (Dry Weather)

EXHIBIT 7 - SIDE-BY-SIDE COMPARISON OF STORMWATER REGULATIONS

	Village of Winnetka	Cook County Watershed Management Ordinance	Village of Glenview	Lake County Watershed Development Ordinance	Recommendations
Administrative Requirements					
Size of regulated development	Any	Any qualified sewer construction[1], any development in a flood protection area or impacting a wetland, any substantial improvements to buildings in the floodplain, and development disturbing more than 0.5 acre	Excavation or fill, or any combination thereof, will exceed 100 cubic yards or 5,000 square feet; Fill will exceed three feet in vertical height at its highest point, measured from the natural ground surface; Excavation will exceed four feet in vertical depth at its deepest point; removal of more than 5,000 square feet of vegetative cover on sites 10 acres or larger	Any development in a floodplain or impacting a wetland, a public road development creating at least 1.5 ac and 1.5 ac/mile of new impervious area, any development disturbing 5000 square feet	Maintain existing Village regulations, but the submittal requirements should be appropriate for the size and type of development. The Village's existing submittal requirements should remain unchanged for smaller projects outside the floodplain and wetlands. The submittal requirements for projects regulated by the Cook County Watershed Management Ordinance (WMO) would have to match the WMO requirements at a minimum.
Types of regulated development	Any construction activity on any property in the Village	Any human-induced activity or change to real estate	Altering the terrain on a site and/or providing construction on a site and/or providing landscaping on a site.	Completion of a final plat, or man-made change to private or public real estate	Maintain existing Village regulations
Exempted projects	Ordinary repairs	Agriculture or gardening, installation/renovation/replacement of utilities, maintenance of lawns and impervious areas, improvements to buildings in the floodplain which are not a substantial improvement	Excavation or removal of vegetation in public utility easements by public utility companies for the purpose of installing underground utilities; tilling of the soil for fire protection purposes; engaging in certain farming, agricultural, or conservation enterprises[2]	Maintenance of buildings, facilities, and roads, gardening and agricultural practices, minor construction activity outside of floodplains and wetlands that does not affect stormwater runoff rates or volumes	Maintain existing Village regulations
Projects requiring MWRD/County approval	Construction of sewer serving a non-residential building or a residential building with 25 or more units, connection to MWRD facilities, disturbance of an area tributary to an MWRD permitted detention facility, or disturbance of an area subject to an MWRD encumbrance for detention	Development in combined sewer areas, qualified sewer construction[1], connection to MWRD facilities, development draining to waterways or Lake Michigan, development modifying an existing detention basin or the service area of an existing detention basin, new sewer connections for existing non-residential development	Development in combined sewer areas, qualified sewer construction, connection to MWRD facilities, development draining to waterways or Lake Michigan, development modifying an existing detention basin or the service area of an existing detention basin, new sewer connections for existing non-residential development	Public road development, Forest Preserve development, base flood elevation analyses of more than 100 ac. (riverine) or 20 ac. (depressional) tributary area, and local unit of government development in the floodplain	Match new Cook County Watershed Management Ordinance
Allowances for re-development	For improvements to an existing home causing an increase in impermeable lot coverage $\geq$ 25%, detention is required for only the incremental volume of runoff from the new impervious area. For new home construction on a previously developed lot, detention is required for the incremental volume of runoff from the maximum impermeable lot coverage compared to the existing condition. [3]	Reduce the retention requirements[4] and waive the requirements for additional detention[5] under certain circumstances	Additions or structural site changes to existing commercial or multi-family developments may get relief from the full detention requirements based on Village Engineering review of existing site conditions. In no case will the volume be less than 50% of required.	None	Maintain existing Village regulations
Permit term	15 months after the permit is issued	3 years after the permit is issued	1 year after the permit is issued	3 years after the permit is issued and not more than 180 days after modification of NFIP regs, FIRM or FIS	Maintain existing Village regulations

	Village of Winnetka	Cook County Watershed Management Ordinance	Village of Glenview	Lake County Watershed Development Ordinance	Recommendations
Long-term maintenance	Not required	Required for detention ponds, sewer construction, wetland mitigation, and riparian area mitigation	Not required (1-year maintenance bond required)	Required for all stormwater management system components that are part of a major development	Match new Cook County Watershed Management Ordinance (WMO) requirements for projects regulated by the WMO and consider applying these requirements (or a modified version of the requirements) to projects that are not regulated by the WMO
Variances	Village can amend or vary its standards and conditions whenever it is in the best interest of the public health, safety, and welfare	MWRD may issue a variance based on certain criteria[6]	The Village Engineer can grant a variance from the Village standards based on unique conditions and characteristics of a project, when the variance can be shown to benefit the Village.	The County or a Certified Community may issue a variance based on certain criteria[7]	Only the MWRD will be allowed to issue a variance for projects regulated by the new Cook County Watershed Management Ordinance (WMO). The Village should reserve the right to issue variances for all other regulated projects.
Runoff Requirements					
Protection of off-site properties	No new building, structure, or addition is allowed which will result in an increase in runoff onto an adjacent property without making adequate provision for the additional runoff. No grading is allowed which will cause water to be diverted, detained, or concentrated onto an abutting or nearby property.	No increase of flood elevations or decrease flood conveyance capacity upstream or downstream	No adverse impact on adjacent properties	All concentrated discharges must be conveyed into a maintainable outlet with adequate downstream capacity and must not result in an increased flood and drainage hazard	Maintain existing Village regulations
Development requiring detention	Infill development, re-development of individual lots increasing impermeable lot coverage $\geq$ 25%, single family residential subdivisions, multi-family residential development and commercial developments	Residential subdivisions on 5-acres or more, 0.5 acres or more of multi-family residential and non-residential development on 3-acres or more, and right-of-way development totaling 1-acre or more new impervious area	Single family homes in a multi-family development of three or more lots, or comprising an area greater than 1 acre with 2 or more lots, all multi-family developments and all commercial and industrial developments	More than 1 acre of new impervious surface, more than 3 acres of development[8], or an impervious surface area ratio of 50% or greater[8]	Maintain existing Village regulations and consider crediting the storage volume within stormwater best management practices toward the required detention volume
Allowable release rate	Undeveloped 3-year runoff rate	100-year = 0.30 cfs/ac until January 1, 2019 and 0.15 cfs/ac after January 1, 2019	Undeveloped 3-year runoff rate	100-year = 0.15 cfs/ac, 2-year = 0.04 cfs/ac (Squaw Creek Watershed 0.09 cfs/ac and 0.02 cfs/ac)	Match new Cook County Watershed Management Ordinance (WMO) requirements for projects regulated by the WMO and consider applying these requirements to projects that are not regulated by the WMO
Rainfall data	Bulletin 70	Bulletin 70	Bulletin 70	Bulletin 70	Maintain existing Village regulations
Protection of depressional storage	Not required	Required	Required, including for depressional storage areas identified in Village's Flood Risk Reduction Program.	Required for depressional storage greater than 0.75 acre feet	Match new Cook County Watershed Management Ordinance (WMO) requirements for projects regulated by the WMO and consider applying these requirements to projects that are not regulated by the WMO. Small projects that do not require submittal of a grading plan should be exempt from these requirements.

	Village of Winnetka	Cook County Watershed Management Ordinance	Village of Glenview	Lake County Watershed Development Ordinance	Recommendations
Water quality	Design practices required whenever possible	Incorporated into runoff volume reduction requirements	Not required	Incorporated into runoff volume reduction requirements; hydrocarbon removal technology required for parking > 25 stalls and vehicle fueling and servicing facilities	Match new Cook County Watershed Management Ordinance (WMO) requirements for projects regulated by the WMO and consider applying these requirements to projects that are not regulated by the WMO. Small projects that do not require submittal of plans prepared by a professional engineer should be exempt from these requirements.
Runoff volume reduction	Not required	Retain and infiltrate the first inch of runoff from the impervious area of development	Natural measures that reduce runoff are highly encouraged	Incorporate infiltration, evapotranspiration, reuse, or other methods to the maximum extent practicable[9]	Match new Cook County Watershed Management Ordinance (WMO) requirements for projects regulated by the WMO and consider applying these requirements to projects that are not regulated by the WMO. Small projects that do not require submittal of plans prepared by a professional engineer should be exempt from these requirements.
Floodplain Requirements					
Flood protection elevation	100-year flood elevation plus 1 foot of freeboard	100-year flood elevation plus 2 feet of freeboard	100-year flood elevation plus 1 foot of freeboard	100-year flood elevation plus 2 feet of freeboard	Match new Cook County Watershed Management Ordinance (WMO) requirements for all regulated projects
Compensatory storage	1 to 1	1.1 to 1	1 to 1	1.2 to 1 for riverine floodplain; 1.0 to 1 for non-riverine floodplain	Match new Cook County Watershed Management Ordinance (WMO) requirements for all regulated projects
National Flood Insurance Program compliance	Yes	No. The new Cook County Watershed Management Ordinance does not require a permit for every improvement to buildings in the floodplain. Instead it only requires a permit for substantial improvements to buildings in the floodplain.	Yes	Yes	Maintain existing Village regulations
Natural Area Requirements					
Buffer areas	U.S. Army Corps of Engineers requirements	U.S. Army Corps of Engineers requirements and 30- to 100-feet[10] for isolated wetlands	U.S. Army Corps of Engineers requirements	U.S. Army Corps of Engineers requirements and 30-feet to 100-feet[11]	Match new Cook County Watershed Management Ordinance (WMO) requirements for projects regulated by the WMO, but do not apply these requirements to other projects regulated by the Village
Wetland mitigation	U.S. Army Corps of Engineers requirements	U.S. Army Corps of Engineers requirements and 1.5:1 to 3:1[12] for isolated wetlands	U.S. Army Corps of Engineers requirements	U.S. Army Corps of Engineers requirements and 1.5:1 to 6:1 for isolated wetlands[13]	Match new Cook County Watershed Management Ordinance (WMO) requirements for projects regulated by the WMO, but do not apply these requirements to other projects regulated by the Village
Riparian areas	U.S. Army Corps of Engineers requirements	U.S. Army Corps of Engineers requirements and 30-feet to 100-feet[14] for isolated wetlands	U.S. Army Corps of Engineers requirements	Incorporated into buffer area requirements	Match new Cook County Watershed Management Ordinance (WMO) requirements for projects regulated by the WMO, but do not apply these requirements to other projects regulated by the Village

	Village of Winnetka	Cook County Watershed Management Ordinance	Village of Glenview	Lake County Watershed Development Ordinance	Recommendations
Construction Site Requirements					
Inspection frequency	IEPA requirements for construction sites over 1 acre and prior to backfilling a new pipe trench	IEPA requirements for construction sites over 1 acre, after mobilization and installation of initial erosion and sediment control practices, during excavation, and at the completion of the development	IEPA requirements even for construction sites less than 1 acre, at rough grading and final inspection	IEPA requirements even for construction sites less than 1 acre, upon completion of sediment and runoff control measures, after stripping and clearing, after rough grading, after final grading, after seeding and landscaping, after final stabilization, and after removal of sediment and erosion controls	Match new Cook County Watershed Management Ordinance (WMO) requirements for projects regulated by the WMO and consider applying these requirements to projects that are not regulated by the WMO
Site stabilization	Within 30 days of removal of existing vegetation	Within 14 days after construction activities have ceased	Within 14 days after construction activities have ceased	Within 14 days after construction activities have ceased	Adopt both requirements as a dual-performance standard for all regulated development.

Footnotes:

1. Qualified sewer construction includes all public and private new sewers and new sewer connections exterior to a building envelope, except: sewer services serving less than three private single-family homes, storm sewer tributary to a waterway in separate sewer areas, septic system sewers, footing drains, grey water harvesting sewers, and sewers and sewer connections outside MWRD boundaries.
2. Tilling of the soil, or construction of grassed waterways, terraces, surface water diversions, grade stabilization structures, provided that the activity is located on property zoned solely for farming or agricultural purposes.
3. These allowances are not made for redevelopment of a site with a different use (single family to multi-family or commercial)
4. For redevelopment with site constraints that prevent use of retention-based practices to retain the control volume in full, a co-applicant may reduce existing impervious area within the redevelopment area by 5% for every 25% of control volume, however, the co-applicant shall: (1) demonstrate that site limitations prevent the co-applicant from providing the entire control volume onsite; and (2) Provide the control volume onsite to the maximum extent practicable with retention-based practices.
5. Refer to Article 5, Section 505 of the Cook County Watershed Management Ordinance.
6. Refer to Article 11 of the Cook County Watershed Management Ordinance.
7. Refer to Article V, Section A of the Lake County Watershed Development Ordinance.
8. (unless the total new impervious surface area is less 0.5-acre)
9. Refer to Article IV, Section B, Paragraph 1.d of the Lake County Watershed Development Ordinance.
10. Minimum isolated buffer widths are as follows: 30-feet from the boundary of standard isolated wetlands greater than or equal to 0.10-acre and less than 0.5-acre in area; 50-feet for standard isolated wetlands greater than or equal to 0.5-acre in area; or 100-feet for high quality isolated wetlands.
11. Refer to Article IV, Section B, Paragraph 1.i of the Lake County Watershed Development Ordinance.
12. Mitigation impacting an isolated wetland must replace the lost wetland environment as follows: standard isolated wetlands less than 0.10-acre in aggregate do not require mitigation; standard isolated wetlands greater than or equal to 0.10-acre in aggregate at a minimum ratio of 1.5:1 for each acre impacted; high quality isolated wetlands at a minimum ratio of 3:1 for each acre impacted; a greater compensation ratio may be required where unique wetland functions are threatened.

13. Mitigation shall provide for the replacement of the wetland environment lost to development at the following proportional rates: for wetland impacts to areas that are not high-quality aquatic resources under Categories I, II, and III, a minimum of 1.5:1 mitigation ratio shall be required or a minimum 1:1 mitigation ratio for fully certified wetland mitigation bank credits; a minimum of 3:1 for wetland impacts that are high-quality aquatic resources; a minimum of 6:1 for wetland impacts that are high-quality forested wetlands; for wetland impacts to open waters that are not high-quality aquatic resources under Categories I, II, and III, a minimum of 1:1 mitigation ratio shall be required.

14. The boundaries of riparian environments are established as follows: for any jurisdictional Waters of the U.S. that does not qualify as wetlands, the riparian environment shall be 50-feet from the ordinary high water mark (OHWM); for any isolated waters that do not qualify as wetlands, the riparian environment shall be 30-feet from the OHWM; for any jurisdictional Waters of the U.S. or for any isolated waters that do not qualify as wetlands, and which have a Biological Stream Characterization of "A" or "B", the riparian environment shall be 100-feet from the OHWM; for any jurisdictional Waters of the U.S. or isolated waters that do not qualify as wetlands identified as a Biologically Significant Stream, the riparian environment shall be 100-feet from the OHWM.

APPENDICES

"A plan is a vision for a community as expressed by its citizens. The key to creating a vision is effective public participation throughout the plan development process."

A 2020 Vision for Winnetka

ATTACHMENT #6
Resolution R-14-2014

RESOLUTION R-14-2014

A RESOLUTION
APPROVING AND ADOPTING
THE VILLAGE OF WINNETKA, ILLINOIS, STORMWATER MASTER PLAN

WHEREAS, since 1994, the Village of Winnetka has completed a number of stormwater capacity improvements, including new and replacement storm sewers, stormwater pumping stations, and outfall improvements; and

WHEREAS, in recent years, the Village of Winnetka has been impacted by several severe rain storms that overwhelmed the Village's sewer systems and caused widespread flash flooding and basement back-ups, which have highlighted a need for additional improvements throughout the Village; and

WHEREAS, in response to widespread flooding in September 2008, the Village retained an engineering firm to conduct a Flood Risk Reduction Assessment of the western Winnetka study area, which led to the development of flood protection projects at the 10-year flood event level for eight areas that flooded significantly during heavy rains; and

WHEREAS, following significant flash flooding events in the summer of 2011, the Council of the Village of Winnetka ("Village Council") expanded the scope of work to analyze 25-, 50-, and 100-year design storm events and to recommend alternatives to reduce the risk of future flooding; and

WHEREAS, the Village has since entered into contracts to begin implementing some of the stormwater management recommendations, while continuing to work on an implementation and financing strategy, as well as working on stormwater infrastructure maintenance plans, water quality planning, the evaluation of stormwater regulations, and the identification and development of corrective remedies for sanitary sewer inflow and infiltration; and

WHEREAS, on June 12, 2012, the Village awarded a contract to Baxter & Woodman Consulting Engineers (B&W) to assist the Village in developing a stormwater master plan that will provide a comprehensive statement of the Village's existing stormwater management policies and activities, and that will provide a long-term guide for policy and decision-making on matters related to managing the volume and quality of stormwater runoff and sanitary sewer discharges in an environmentally sensitive and sustainable way, over the next five to ten years; and

WHEREAS, the draft stormwater master plan prepared by B&W incorporated the results of several Flood Risk Reduction Assessments, a Sanitary Sewer Flow Monitoring Study and subsequent Sanitary Sewer Evaluation Surveys, and a Stormwater Utility Feasibility Study; and

WHEREAS, the Village Council considered a preliminary draft of the proposed stormwater master plan at its July 9, 2013, study session, after which B&W revised the proposed plan to reflect the Village Council's comments and policy direction; and

WHEREAS, the Village Council considered and provided final comment on B&W's pre-final draft stormwater master plan at the December 10, 2013, study session; and

WHEREAS, pursuant to Village Council comments and directives, B&W has prepared a final draft of the plan, titled "Village of Winnetka, Illinois, Stormwater Master Plan" ("Stormwater Master Plan"), a copy of which is attached hereto as Exhibit A; and

WHEREAS, the Stormwater Master Plan contains more fully developed goals, objectives, and recommendations, includes illustrations, and incorporates historical documents as exhibits; and

WHEREAS, the Village has been soliciting public comment on the final draft of the Stormwater Master Plan, which has been posted on the Village of Winnetka stormwater management website since February; and

WHEREAS, the Village Council finds and determines that it is in the best interests of the health, safety and general welfare of the Village and its residents that the Village develop a clear, comprehensive, and forward-looking framework for its stormwater management program, to provide a foundation for future policy decisions and to guide the Village's stormwater management program for five to 10 years; and

WHEREAS, the Village Council further finds and determines that the attached Stormwater Master Plan provides such a unified framework for the Village's stormwater management program; and

WHEREAS, the Village of Winnetka is a home rule municipality in accordance with Article VII, Section 6 of the Constitution of the State of Illinois of 1970 and, pursuant thereto, has the authority, except as limited by said Section 6 of Article VII, to exercise any power and perform any function pertaining to the government and affairs of the Village, including the power to regulate for the protection of the public health, safety and welfare; and

WHEREAS, the Village Council finds that developing a clear, comprehensive and forward-looking framework for its stormwater management program to provide a foundation for future policy decisions and to guide the Village's stormwater management program for five to 10 years, as set out in the Village of Winnetka Stormwater Master Plan attached hereto as Exhibit A, is a matter pertaining to the affairs of the Village.

NOW THEREFORE, be it resolved by the Council of the Village of Winnetka as follows:

SECTION 1: The Council of the Village of Winnetka ("Village Council") adopts the foregoing recitals as its findings, as if fully set forth herein.

SECTION 2: Subject to the condition stated in Section 4 of this Resolution, the Village Council hereby approves and adopts the "Village of Winnetka Stormwater Master Plan," in the form attached to this resolution as Exhibit A, and incorporated by reference as if fully set forth herein.

SECTION 3: The adoption and approval of the attached "Village of Winnetka Stormwater Master Plan" ("Plan") shall not be construed as either an authorization or a directive to allocate or expend funds in implementing the projects defined in said Plan, and the Village Council expressly reserves all right, authority and discretion to determine the timing and extent to which the Plan may be implemented and the manner in which such implementation shall be financed.

SECTION 4: This Resolution is adopted by the Council of the Village of Winnetka in the exercise of its home rule powers pursuant to Section 6 of Article VII of the Illinois Constitution of 1970.

SECTION 5: This Resolution shall take effect immediately upon its adoption.

ADOPTED this ___ day of _____, 2014, pursuant to the following roll call vote:

AYES: _____

NAYS: _____

ABSENT: _____

Signed:

_____
Village President

Countersigned:

_____
Village Clerk

Agenda Item Executive Summary

Title: Proposed 2014 Pavement Rehabilitation Program

Presenter: Steven M. Saunders, Director of Public Works/Village Engineer

Agenda Date: 04/17/2014

Consent: ☐ YES ☑ NO

☐ Ordinance
☐ Resolution
☐ Bid Authorization/Award
☑ Policy Direction
☐ Informational Only

Item History:

October 30, 2013 Budget Study Session

Executive Summary:

During discussions for the FY 2014 Budget, Trustee Kates requested that prior to bidding for reconstruction projects on Village streets, staff provide the proposed projects to the Village Council for discussion. The FY 2014 budget contains $1,200,000 in account 100.30.23-650 for pavement reconstruction. Staff proposes expending those funds on the following projects:

Sunset/Auburn water main/pavement reconstruction - $250,000 (roadway portion)
Miscellaneous asphalt patching - $100,000
Miscellaneous concrete patching - $100,000
Spruce Street east of Sheridan Road - $65,000
Elm Street east of Sheridan Road - $55,000
Elder Lane from Wilson Street to Sheridan Road - $380,000
Myrtle Street from Hill Road to Willow Road - $260,000

There was further discussion during the budget meeting about future budgeting being based on the results of the Infrastructure Management Services pavement condition survey completed in fall 2011. Staff is developing this information and the capital improvements program and budget proposal presented to the Council this fall will include a detailed presentation on the Village's street network including existing condition ratings, future projected condition ratings, proposed improvement strategies, and budget scenarios to accomplish the Village's maintenance goals.

Recommendation / Suggested Action:

Consider authorizing staff to proceed with bidding for the proposed 2014 pavement rehabilitation projects.

Attachments:

1. Agenda Report
2. Existing Conditions – Spruce Street
3. Existing Conditions – Elm Street
4. Existing Conditions – Elder Lane
5. Existing Conditions – Myrtle Street

Agenda Report

Subject: **Proposed 2014 Pavement Rehabilitation Program**

Prepared By: Steven M. Saunders, Director of Public Works/Village Engineer

Date: April 11, 2014

During discussions for the FY 2014 Budget, Trustee Kates requested that prior to bidding for reconstruction projects on Village streets, staff provide the proposed projects to the Village Council for discussion. The FY 2014 budget contains $1,200,000 in account 100.30.23-650 for pavement reconstruction. Staff proposes expending those funds on the following projects:

Sunset/Auburn water main/pavement reconstruction - $250,000 (roadway portion)
This project consists of replacement of an aging section of water main beneath Auburn Road and Sunset Road, south of Willow Road. The water main has experienced a number of breaks over the last several years, and the pavement is in fair condition. Rather than simply patching the water main trench, the pavement will be reconstructed in conjunction with the water main work. During the budget discussions, the Council directed that this particular project should proceed, and the project is currently out for bidding.

Miscellaneous asphalt patching - $100,000
The severe winter was very destructive to the Village's asphalt pavements, both due to the harsh climatic conditions and the damaged cause by numerous water main breaks. In a typical year these repairs would be completed by Village staff, however due to the volume of repairs staff intends to contract for the bulk of these repairs. Staff estimates expending about $100,000 for these repairs, in addition to the typical repairs performed by staff that will arise during the year due to utility cuts and patching needs. To assure that repairs are timely in the spring, this work is currently out for bidding.

Miscellaneous concrete patching - $100,000
In a manner similar to asphalt pavements, concrete pavements suffered throughout the winter. Staff estimates the needed repairs to be performed contractually will cost about $100,000. In order to assure that repairs are made as soon as possible in the spring, this work is currently out for bidding.

Spruce Street east of Sheridan Road - $65,000
The short section of Spruce Street east of Sheridan Road is in extremely deteriorated condition and in need of pavement reconstruction. Condition photographs are shown in **Attachment #1**. The existing pavement shows significant alligator-type cracking and extreme edge deterioration. Staff proposes to excavate and replace the pavement and install curbs, to contain the pavement edge.

Elm Street east of Sheridan Road - $55,000
Elm Street east of Sheridan Road is in extremely deteriorated condition and in need of pavement reconstruction. Condition photographs are shown in **Attachment #2**. The existing pavement shows extreme alligator-type cracking, which is symptomatic of structural deficiency in the pavement base, and the edges are completely deteriorated. Staff proposes to replace the pavement and install curbs, to contain the pavement edge.

Elder Lane from Wilson Street to Sheridan Road - $380,000
The existing conditions on Elder Lane vary by location. The existing curbs are mostly deteriorated, with the exception of a one-block section adjacent to Greeley School, and the pavement edges are also deteriorated. In addition, the existing roadway is only 19.5 feet wide (except adjacent to the school) which is 2.5 feet narrower than the Village's standard residential roadway. Parking and vehicle traffic often leave the roadway, contributing to the deteriorated edge conditions. The poor edge drainage further exacerbates edge deterioration. Condition photographs are shown in **Attachment #3**. Because the deterioration is generally limited to the curbs and pavement edges, staff proposes to install new curbs to make the street slightly wider to improve edge conditions, but to leave the existing concrete roadway base, which is in good condition, in place by simply resurfacing the asphalt pavement.

Myrtle Street from Hill Road to Willow Road - $260,000
The existing conditions on Myrtle Street also vary by location. The southern two blocks, from Hill Road to Elder Lane, are completely deteriorated and in need of reconstruction. Conditions on the remainder of the street resemble Elder Lane, with buried and deteriorated curbs and relatively poor edge conditions. Condition photographs are shown in **Attachment #4**. Staff proposes to reconstruct the southern two blocks and install new curbs on the remaining portion, leaving the existing concrete roadway base, which is in good condition, in place by simply resurfacing the asphalt pavement.

There was further discussion during the budget meeting about future budgeting being based on the results of the Infrastructure Management Services pavement condition survey completed in fall 2011. Staff is developing this information and the capital improvements program and budget proposal presented to the Council this fall will include a detailed presentation on the Village's street network including existing condition ratings, future projected condition ratings, proposed improvement strategies, and budget scenarios to accomplish the Village's maintenance goals.

Recommendation:
Consider authorizing staff to proceed with bidding for the proposed pavement rehabilitation projects.

Attachments:
1. Existing Conditions – Spruce Street
2. Existing Conditions – Elm Street
3. Existing Conditions – Elder Lane
4. Existing Conditions – Myrtle Street

Attachment #1: Existing Conditions – Spruce Street

Attachment #2: Existing Conditions – Elm Street

Attachment #3: Existing Conditions – Elder Lane

Attachment #4: Existing Conditions – Myrtle Street