



## **United City of Yorkville**

800 Game Farm Road

Yorkville, Illinois 60560

Telephone: 630-553-4350

[www.yorkville.il.us](http://www.yorkville.il.us)

### **AGENDA PUBLIC WORKS COMMITTEE MEETING**

**Tuesday, June 16, 2020**

**6:00 p.m.**

City Hall Conference Room  
800 Game Farm Road, Yorkville, IL

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#### **Citizen Comments:**

**Minutes for Correction/Approval:** May 19, 2020

#### **New Business:**

1. PW 2020-35 Lift Station SCADA Upgrades
2. PW 2020-36 Raintree Village Unit 1, Lot 4 – Grant of Easement
3. PW 2020-37 Well No. 8 and 9 Water Treatment Plant Cation Exchange Vessels – Interior Coating Repairs
4. PW 2020-38 Risk and Resilience Assessment and Emergency Response Planning – Water Utilities – Professional Services Engineering Agreement
5. PW 2020-39 NPDES Annual Report

#### **Old Business:**

#### **Additional Business:**

<b>2019/2020 City Council Goals – Public Works Committee</b>		
<b>Goal</b>	<b>Priority</b>	<b>Staff</b>
“Municipal Building Needs & Planning”	2	Bart Olson, Rob Fredrickson, Eric Dhuse, James Jensen, Tim Evans & Erin Willrett
“Road to Better Roads Funding”	3	Bart Olson, Rob Fredrickson & Eric Dhuse
“Water Planning”	6	Eric Dhuse & Brad Sanderson
“School Safety (Exterior & Traffic)”	8 (tie)	Eric Dhuse & James Jensen
“Quiet Zones”	14 (tie)	Eric Dhuse, Erin Willrett & Brad Sanderson
“Route 47 Crossings”	19	Eric Dhuse & Brad Sanderson

UNITED CITY OF YORKVILLE  
WORKSHEET  
**PUBLIC WORKS COMMITTEE**  
**Tuesday, June 16, 2020**  
**6:00 PM**  
CITY HALL CONFERENCE ROOM

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**CITIZEN COMMENTS:**

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**MINUTES FOR CORRECTION/APPROVAL:**

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1. May 19, 2020

- ☐ Approved \_\_\_\_\_
- ☐ As presented
- ☐ With corrections

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**NEW BUSINESS:**

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1. PW 2020-35 Lift Station SCADA Upgrades

- ☐ Moved forward to CC \_\_\_\_\_
  - ☐ Approved by Committee \_\_\_\_\_
  - ☐ Bring back to Committee \_\_\_\_\_
  - ☐ Informational Item
  - ☐ Notes \_\_\_\_\_
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2. PW 2020-36 Raintree Village Unit 1, Lot 4 – Grant of Easement

☐ Moved forward to CC \_\_\_\_\_

☐ Approved by Committee \_\_\_\_\_

☐ Bring back to Committee \_\_\_\_\_

☐ Informational Item

☐ Notes \_\_\_\_\_

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3. PW 2020-37 Well No. 8 and 9 Water Treatment Plant Cation Exchange Vessels – Interior Coating Repairs

☐ Moved forward to CC \_\_\_\_\_

☐ Approved by Committee \_\_\_\_\_

☐ Bring back to Committee \_\_\_\_\_

☐ Informational Item

☐ Notes \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

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4. PW 2020-38 Risk and Resilience Assessment and Emergency Response Planning – Water Utilities – Professional Services Engineering Agreement

☐ Moved forward to CC \_\_\_\_\_

☐ Approved by Committee \_\_\_\_\_

☐ Bring back to Committee \_\_\_\_\_

☐ Informational Item

☐ Notes \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

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5. PW 2020-39 NPDES Annual Report

☐ Moved forward to CC \_\_\_\_\_

☐ Approved by Committee \_\_\_\_\_

☐ Bring back to Committee \_\_\_\_\_

☐ Informational Item

☐ Notes \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

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**ADDITIONAL BUSINESS:**

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Reviewed By:	
Legal	<input type="checkbox"/>
Finance	<input type="checkbox"/>
Engineer	<input type="checkbox"/>
City Administrator	<input type="checkbox"/>
Human Resources	<input type="checkbox"/>
Community Development	<input type="checkbox"/>
Police	<input type="checkbox"/>
Public Works	<input type="checkbox"/>
Parks and Recreation	<input type="checkbox"/>

Agenda Item Number

Minutes

Tracking Number

### Agenda Item Summary Memo

**Title:** Minutes of the Public Works Committee – May 19, 2020

**Meeting and Date:** Public Works Committee – June 16, 2020

**Synopsis:** \_\_\_\_\_  
\_\_\_\_\_

#### Council Action Previously Taken:

Date of Action: \_\_\_\_\_ Action Taken: \_\_\_\_\_

Item Number: \_\_\_\_\_

**Type of Vote Required:** Majority

**Council Action Requested:** Committee Approval

**Submitted by:** Minute Taker

Name

Department

#### Agenda Item Notes:

\_\_\_\_\_

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\_\_\_\_\_

\_\_\_\_\_

# DRAFT

**UNITED CITY OF YORKVILLE  
PUBLIC WORKS COMMITTEE  
Tuesday, May 19, 2020, 6:00pm  
Yorkville City Hall, Conference Room  
800 Game Farm Road**

Note: Due to the Covid-19 pandemic, this meeting was held in accordance with Governor Pritzker's Executive Order 2020-07, extended by Executive Order 2020-33. This Order encourages social distancing by allowing remote attendance.

**IN ATTENDANCE:**

**Committee Members**

Chairman Joe Plocher-remote  
Alderman Ken Koch-remote

Alderman Chris Funkhouser-remote  
Alderman Seaver Tarulis-remote

**Other City Officials**

City Administrator Bart Olson, in-person  
Public Works Director Eric Dhuse-remote  
City Clerk Lisa Pickering-remote

Assistant City Administrator Erin Willrett-remote  
Engineer Brad Sanderson, EEI-remote

**Other Guests:** None

The meeting was called to order at 6:01pm by Chairman Joe Plocher.

**Citizen Comments:** None

**Previous Meeting Minutes:** February 18, 2020

The minutes were approved as presented on a motion by Mr. Tarulis, second by Mr. Frieders and approved by unanimous voice vote

**New Business:**

***1. PW 2020-30 Water Department Reports for January, February and March 2020***

Public Works Director Dhuse said these are the usual reports and that average use dipped to 70 gallon per person in January. Reports were approved by unanimous voice vote and will move forward to City Council for approval and submittal to IEPA.

***2. PW 2020-31 Supplemental MFT Resolution for Bulk Rock Salt***

Mr. Dhuse said this is the yearly bid and the city is now part of this program and must take 80% of the bid. He bid on 1,600 ton and the city must take 1,280 ton as the minimum. At \$100 per ton, the total would be \$122,800 which was approved by unanimous voice vote.

**3. PW 2020-32 IDOT – Right-of-Way Conveyance - .095 Acres of Lane at 1975 N. Bridge Street**

Mr. Dhuse said this pertains to the Countryside lift station parcel and IDOT needs a small strip of land for the expansion project. The amount to be paid to the city is about \$8,600. Approved unanimously on a voice vote.

**4. PW 2020-33 Mill Road Project – Agreements with BNSF**

Engineer Sanderson said all three agreements have now been obtained from the railroad. The first is the physical crossing agreement, 2) ICC stipulated agreement including safety improvements needed, ICC will fund approximately 95% of the cost and 3) the easement agreement for Mill Road as it crosses the BNSF property. The cost to the city will be about \$33,000, much less than anticipated. The developer of Grande Reserve, Avanti, will be paying for most of the project costs. The city attorney has reviewed the agreements and an updated memo regarding the easement has been received. The committee unanimously agreed to move this matter forward to City Council.

**5. PW 2020-34 Rebuild Illinois Grants Program Potential Applications**

An additional grant program has been announced in relation to the current pandemic. This is a fast-track attempt to provide jobs for regional economic development. Two local projects under consideration are for extended utilities to Eldamain and updated sewer connections. Another potential project is painting of the water towers. Mr. Olson commented that the city hopes to lighten the burden on the general fund. Applications will be submitted for the projects before the June 30th due date. There is no risk to the city and no match is required, though Mr. Olson commented the state would probably prefer a 50/50 match. This proposal will move forward.

**Old Business:** None

**Additional Business:** None

There was no further business and the meeting was adjourned at 6:14pm.

Minutes respectfully transcribed by  
Marlys Young, Minute Taker, remote attendance



Reviewed By:	
Legal	<input type="checkbox"/>
Finance	<input type="checkbox"/>
Engineer	<input type="checkbox"/>
City Administrator	<input checked="" type="checkbox"/>
Human Resources	<input type="checkbox"/>
Community Development	<input type="checkbox"/>
Police	<input type="checkbox"/>
Public Works	<input checked="" type="checkbox"/>
Parks and Recreation	<input type="checkbox"/>

Agenda Item Number

New Business #1

Tracking Number

PW 2020-35

### Agenda Item Summary Memo

**Title:** Lift Station SCADA Upgrades

**Meeting and Date:** Public Works Committee – June 16, 2020

**Synopsis:** Upgrading all lift stations to a cloud based SCADA system that can be accessed remotely.

#### Council Action Previously Taken:

Date of Action: \_\_\_\_\_ Action Taken: \_\_\_\_\_

Item Number: \_\_\_\_\_

**Type of Vote Required:** Positive

**Council Action Requested:** Super Majority approval due to sole source quote

**Submitted by:** Eric Dhuse Public Works  
Name Department

#### Agenda Item Notes:

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# Memorandum

To: Public Works Committee  
From: Eric Dhuse, Director of Public Works  
CC: Bart Olson, Administrator  
Date: June 3, 2020  
Subject: Lift station SCADA upgrades

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## **Summary**

A proposed upgrade to five (5) lift stations SCADA (supervisory control and data acquisition) controls that move us from land line phone-based messages to real time remote access to our lift stations and their controls.

## **Background**

Currently, all our 7 lift stations use what is called a dialer to let us know when there is a problem. A dialer is a simple piece of old technology that calls us when something has already gone wrong. For example, one of the most common calls is “pump fail” this alerts us to the fact that one pump failed to start when it was called for. However, it does not tell us if the other pump started to be able to pump down the wet well. This means that we need to send an employee in very quickly to make sure the other pump is running and diagnose the problem to come up with a solution. If we move to the cloud based, real time monitoring system, we will be able to have alert points built in to let us know when things are out of the normal parameters before it becomes a true problem. We will then be able to diagnose and possibly make adjustments to certain parameters to avoid any problems later.

To put it simply, we will move from a reactionary system to a proactive one. Realtime monitoring capabilities will improve efficiency, cut down on call ins, and allow us much more peace of mind knowing that we will have all potential problems alerted to us before its too late.

In addition, the cloud-based system will allow us to collect and store data that we have not been able to collect before. For instance, at this time, we can see how many hours each pump runs per day, but we don’t know when. With the upgraded system, we will be able to track when each pump runs, when the peak times of day are at, and record any spikes in inflow due to rain events.

The City Council approved the upgrades to the Blackberry Creek North lift station in March of 2020 which included the upgrades to the SCADA system. This lift station also included new pumps, cabinets, and wiring to bring it up to today’s standards. The proposal before you now will upgrade 5 of our remaining 6 lift stations and equip them with the same SCADA system as was approved previously. These lift stations are new enough that they do not need any other upgrades for the new SCADA system to function properly. They will simply need the new control panel and transducer along with the installation/programming of the system. A detailed quote from Metropolitan Pump Co. is attached for your review, but a quick cost breakdown is as follows:

1. Bruell St. Lift Station -	\$12,969
2. Raintree Lift Station -	\$12,969
3. Prestwick Lift Station* -	\$14,561
4. Fox Hill Lift Station -	\$12,969
5. River's Edge Lift Station -	<u>\$12,969</u>

**Total                      \$66,437**

*\*Prestwick lift station is more expensive due to the added labor of rewiring the variable frequency drive motors. This is the only lift station with these types of motors.*

Our last remaining lift station that we will need to upgrade will be the Countryside lift station located on Rt. 47 across from Rosati's. This lift station was not included in this year's plan in order to space out the expenditures over a 3-year period. Last year was Blackberry Creek North, this year is the bulk of the other lift stations, and the final year will be Countryside. Our cost estimate for this work at Countryside Lift Station is \$25,000.

Separate from the cost of the upgrade, we will have a reoccurring charge of \$45/month per lift station for the cellular service. Those funds will come from the lift station services line item within the sanitary sewer operations fund. All other expenses will come from the SCADA system line item in the sanitary sewer operations budget. The approved budgeted amount in this line item is \$67,000.

### **Recommendation**

I recommend the super-majority approval of the quotation from Metropolitan Pump Company of Romeoville, IL in the amount of \$66,437 for the Control panel and SCADA system upgrade as outlined in the quotations. I would ask that this be placed on the June 16, 2020 Public Works Committee meeting for discussion and direction.

# METROPOLITAN



## PUMP COMPANY

A Division of METROPOLITAN INDUSTRIES, INC.

37 FORESTWOOD DRIVE • ROMEOVILLE, IL • 60446-1343

(815) 886-9200 • FAX (815) 886-4573

[www.metropolitanind.com](http://www.metropolitanind.com)

TO: Mr. Tom Soelke  
610 Tower Lane  
City of Yorkville  
Cell: 630-886-2374  
Office: 630-553-4349  
[Tsoelke@yorkville.il.us](mailto:Tsoelke@yorkville.il.us)

## QUOTATION

Page 1 of 1

PROJECT: Bruell Lift Station  
Yorkville, Illinois  
BIDS DUE: ASAP  
ENGINEER: N/A

We are pleased to provide a QUOTE on the following equipment for the subject project

\$66,437<sup>00</sup>

### Control Panel Upgrade (LMS II Level Controller and Cloud SCADA)

Furnish Qty (1) New LMS II Level Controller Upgrade including, Allen Bradley 1400 PLC w/ Operator Interface with 7" screen, misc. parts all mounted into existing cabinet.

Existing LMS 400 will be removed and remain the property of the City of Yorkville and replaced with the New LMS II Level controller.

Includes new submersible transducer and floats with 100ft. Of cable.

Labor included for removal and replacement of new controller

Total Amount For LMS II Controller Upgrade is:

\$12,969.00  
(Taxes Not Included)

Total Monthly Cost For Verizon Cellular Service based on 250 Tags  
at 5 minute polling is:

\$45.00/Mo.  
(Taxes Not Included)

Note: Taxes, permits, fees are not included.

Our proposal is based on the site visit

Quote assumes all existing and necessary conduits are available and re-usable.

Quote assumes all existing power/pump control components are operational for re-use as needed.

**TERMS:** Net 30 days from date of invoice. All invoices are payable in full when due, with no retainage allowed.

THIS QUOTATION, SUBJECT TO THE CONDITIONS ON THE REVERSE SIDE HEREOF, MAY BE ACCEPTED ONLY BY SIGNING ONE COPY OF THIS QUOTATION AND RETURNING IT TO METROPOLITAN PUMP CO. NOT LATER THAN THE DATE INDICATED ON THE FACE HEREOF AFTER WHICH THIS QUOTATIONS IS VOID. THIS QUOTATION AFTER ACCEPTANCE BY BUYER MAY BE CANCELLED BY EITHER PARTY WITH NO PENALTY ONLY IF ENGINEER FAILS TO APPROVE SELLERS APPROVAL BROCHURE.

Accepted:	_____	Quotation No:	<u>KT22719MN</u>
Firm:	_____	Submitted:	<u>5/11/2020</u>
By:	_____	Void after:	<u>30 days</u>
Title:	_____	Prepared By:	<u>Ken Turnquist</u>

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## QUOTATION

Page 1 of 1

PROJECT: Raintree Lift Station  
Yorkville, Illinois  
BIDS DUE: ASAP  
ENGINEER: N/A

We are pleased to provide a QUOTE on the following equipment for the subject project.

### Control Panel Upgrade (LMS II Level Controller and Cloud SCADA)

Furnish Qty (1) New LMS II Level Controller Upgrade including, Allen Bradley 1400 PLC w/ Operator Interface with 7" screen, misc. parts all mounted into existing cabinet.

Existing LMS 400 will be removed and remain the property of the City of Yorkville and replaced with the New LMS II Level controller.

Includes new submersible transducer and floats with 100ft. Of cable.

Labor included for removal and replacement of new controller

Total Amount For LMS II Controller Upgrade is:

\$12,969.00  
(Taxes Not Included)

Total Monthly Cost For Verizon Cellular Service based on 250 Tags  
at 5 minute polling is:

\$45.00/Mo.  
(Taxes Not Included)

Note: Taxes, permits, fees are not included.

Our proposal is based on the site visit

Quote assumes all existing and necessary conduits are available and re-usable.

Quote assumes all existing power/pump control components are operational for re-use as needed.

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Accepted:	_____	Quotation No:	KT22719MN
Firm:	_____	Submitted:	5/11/2020
By:	_____	Void after:	30 days
Title:	_____	Prepared By:	Ken Turnquist

# METROPOLITAN



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[Tsoelke@yorkville.il.us](mailto:Tsoelke@yorkville.il.us)

## QUOTATION

Page 1 of 1

PROJECT: Preswick Lift Station  
Yorkville, Illinois  
BIDS DUE: ASAP  
ENGINEER: N/A

We are pleased to provide a QUOTE on the following equipment for the subject project.

### Control Panel Upgrade (LMS II Level Controller and Cloud SCADA)

Furnish Qty (1) New LMS II Level Controller Upgrade including, Allen Bradley 1400 PLC w/ Operator Interface with 7" screen, misc. parts all mounted into existing cabinet.

Existing SCADA Pack will be removed and remain the property of the City of Yorkville and replaced with the New LMS II Level controller.

Variable Frequency Drives will be rewired to the new controller.

Includes new submersible transducer and floats with 100ft. Of cable.

Labor included for removal and replacement of new controller

Total Amount For LMS II Controller Upgrade is:

**\$14,561.00**

**(Taxes Not Included)**

Total Monthly Cost For Verizon Cellular Service based on 250 Tags  
at 5 minute polling is:

**\$45.00/Mo.**

**(Taxes Not Included)**

Note: Taxes, permits, fees are not included.

Our proposal is based on the site visit

Quote assumes all existing and necessary conduits are available and re-usable.

Quote assumes all existing power/pump control components are operational for re-use as needed.

TERMS: Net 30 days from date of invoice. All invoices are payable in full when due, with no retainage allowed.

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Accepted:	_____	Quotation No:	<u>KT22719MN</u>
Firm:	_____	Submitted:	<u>5/11/2020</u>
By:	_____	Void after:	<u>30 days</u>
Title:	_____	Prepared By:	<u>Ken Turnquist</u>

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## QUOTATION

Page 1 of 1

PROJECT: Fox Hill Lift Station

Yorkville, Illinois

BIDS DUE: ASAP

ENGINEER: N/A

We are pleased to provide a QUOTE on the following equipment for the subject project.

### Control Panel Upgrade (LMS II Level Controller and Cloud SCADA)

Furnish Qty (1) New LMS II Level Controller Upgrade including, Allen Bradley 1400 PLC w/ Operator Interface with 7" screen, misc. parts all mounted into existing cabinet.

Existing LMS 400 will be removed and remain the property of the City of Yorkville and replaced with the New LMS II Level controller.

Includes new submersible transducer and floats with 100ft. Of cable.

Labor included for removal and replacement of new controller

Total Amount For LMS II Controller Upgrade is:

**\$12,969.00**

**(Taxes Not Included)**

Total Monthly Cost For Verizon Cellular Service based on 250 Tags  
at 5 minute polling is:

**\$45.00/Mo.**

**(Taxes Not Included)**

Note: Taxes, permits, fees are not included.

Our proposal is based on the site visit

Quote assumes all existing and necessary conduits are available and re-usable.

Quote assumes all existing power/pump control components are operational for re-use as needed.

TERMS: Net 30 days from date of invoice. All invoices are payable in full when due, with no retainage allowed.

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Accepted:	_____	Quotation No:	KT22719MN
Firm:	_____	Submitted:	5/11/2020
By:	_____	Void after:	30 days
Title:	_____	Prepared By:	Ken Turnquist

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## QUOTATION

Page 1 of 1

PROJECT: Rivers Edge Lift Station  
Yorkville, Illinois  
BIDS DUE: ASAP  
ENGINEER: N/A

We are pleased to provide a QUOTE on the following equipment for the subject project.

### Control Panel Upgrade (LMS II Level Controller and Cloud SCADA)

Furnish Qty (1) New LMS II Level Controller Upgrade including, Allen Bradley 1400 PLC w/ Operator Interface with 7" screen, misc. parts all mounted into existing cabinet.

Existing LMS 400 will be removed and remain the property of the City of Yorkville and replaced with the New LMS II Level controller.

Includes new submersible transducer and floats with 100ft. Of cable.

Labor included for removal and replacement of new controller

Total Amount For LMS II Controller Upgrade is:

**\$12,969.00**

**(Taxes Not Included)**

Total Monthly Cost For Verizon Cellular Service based on 250 Tags  
at 5 minute polling is:

**\$45.00/Mo.**

**(Taxes Not Included)**

Note: Taxes, permits, fees are not included.

Our proposal is based on the site visit

Quote assumes all existing and necessary conduits are available and re-usable.

Quote assumes all existing power/pump control components are operational for re-use as needed.

TERMS: Net 30 days from date of invoice. All invoices are payable in full when due, with no retainage allowed.

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Accepted:	_____	Quotation No:	KT22719MN
Firm:	_____	Submitted:	5/11/2020
By:	_____	Void after:	30 days
Title:	_____	Prepared By:	Ken Turnquist



Reviewed By:	
Legal	<input type="checkbox"/>
Finance	<input type="checkbox"/>
Engineer	<input checked="" type="checkbox"/>
City Administrator	<input checked="" type="checkbox"/>
Human Resources	<input type="checkbox"/>
Community Development	<input type="checkbox"/>
Police	<input type="checkbox"/>
Public Works	<input type="checkbox"/>

Agenda Item Number

New Business #2

Tracking Number

PW 2020-36

### Agenda Item Summary Memo

**Title:** Raintree Village Unit 1, Lot 4 – Grant of Easement

**Meeting and Date:** Public Works Committee – June 16, 2020

**Synopsis:** Consideration of Easement Acceptance

#### Council Action Previously Taken:

Date of Action: \_\_\_\_\_ Action Taken: \_\_\_\_\_

Item Number: \_\_\_\_\_

**Type of Vote Required:** Majority

**Council Action Requested:** Consideration of Acceptance

**Submitted by:** Brad Sanderson Engineering  
Name Department

#### Agenda Item Notes:

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# Memorandum

To: Bart Olson, City Administrator  
From: Brad Sanderson, EEI  
CC: Eric Dhuse, Director of Public Works  
Kathy Field-Orr, City Attorney  
Lisa Pickering, Deputy City Clerk  
Date: June 9, 2020  
Subject: Raintree Village, Unit 1, Lot 4 – Grant of Easement

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Lennar has requested an easement based on a discovery from an ALTA survey that was performed. The survey revealed that an existing sidewalk exceeded the current easement. To fully contain the existing sidewalk, an additional easement needs to be granted.

The attached Grant of Easement document has been reviewed and found acceptable. Staff is in support of acceptance of the easement document.







Reviewed By:	
Legal	<input type="checkbox"/>
Finance	<input type="checkbox"/>
Engineer	<input checked="" type="checkbox"/>
City Administrator	<input checked="" type="checkbox"/>
Human Resources	<input type="checkbox"/>
Community Development	<input type="checkbox"/>
Police	<input type="checkbox"/>
Public Works	<input type="checkbox"/>

Agenda Item Number

New Business #3

Tracking Number

PW 2020-37

### Agenda Item Summary Memo

**Title:** Well No. 8 and 9 Water Treatment Plant Cation Exchange Vessels – Interior Coating Repairs

**Meeting and Date:** Public Works Committee – June 16, 2020

**Synopsis:** Consideration of Bid Award

#### Council Action Previously Taken:

Date of Action: \_\_\_\_\_ Action Taken: \_\_\_\_\_

Item Number: \_\_\_\_\_

**Type of Vote Required:** Majority

**Council Action Requested:** Consideration of Approval

**Submitted by:** Brad Sanderson Engineering  
Name Department

#### Agenda Item Notes:

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*Have a question or comment about this agenda item?*

*Call us Monday-Friday, 8:00am to 4:30pm at 630-553-4350, email us at [agendas@yorkville.il.us](mailto:agendas@yorkville.il.us), post at [www.facebook.com/CityofYorkville](https://www.facebook.com/CityofYorkville), tweet us at @CityofYorkville, and/or contact any of your elected officials at [http://www.yorkville.il.us/gov\\_officials.php](http://www.yorkville.il.us/gov_officials.php)*



# Memorandum

To: Bart Olson, City Administrator  
From: Brad Sanderson, EEI  
CC: Eric Dhuse, Director of Public Works  
Krysti Barksdale-Noble, Community Dev. Dir.  
Lisa Pickering, Deputy City Clerk

Date: June 10, 2020  
Subject: Well No. 8 and 9 Water Treatment Plant Cation Exchange Vessel – Interior Coating Repairs (Vessels 3 & 4)

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The City recently contracted with Global Water Services (GWS) to replace the media in the four (4) cation exchange vessels at the Wells 8 & 9 Water Treatment Plant (WTP). After GWS removed the existing media in two of the vessels (Vessels 3 & 4), inspection of the interior coating in each vessel indicated that sections of the coating had been compromised. Photos of the damaged coating are enclosed. In order to prevent corrosion of the metal vessels, it is recommended to repair the coating system while the vessels are empty.

This work was not anticipated or included in the scope of the contract with GWS. EEI requested a proposal from GP Maintenance (GP) for the coating repairs in Vessels 3 & 4. On May 4<sup>th</sup>, GP submitted the lowest cost proposal for the coating repairs in Vessels 1 & 2 (Previously packet materials are attached for reference). GP completed the coating repairs on time and at the amount specified in their proposal. A copy of the GP's latest proposal for Vessels 3 & 4 is attached for your information and record.

We recommend proceeding with GP Maintenance Services, Inc. (10512 South Michael Drive, Palos Hills, IL 60465) for this work in the amount of **\$28,000**.

A project budget summary is noted below:

<b>Construction Budget</b>	<b>\$165,000</b>
Awarded Contract	\$115,100
Vessel Repairs – Units 1 and 2	\$28,000
Vessel Repairs – Units 3 and 4	\$28,000
<b>Total</b>	<b>\$171,100</b>

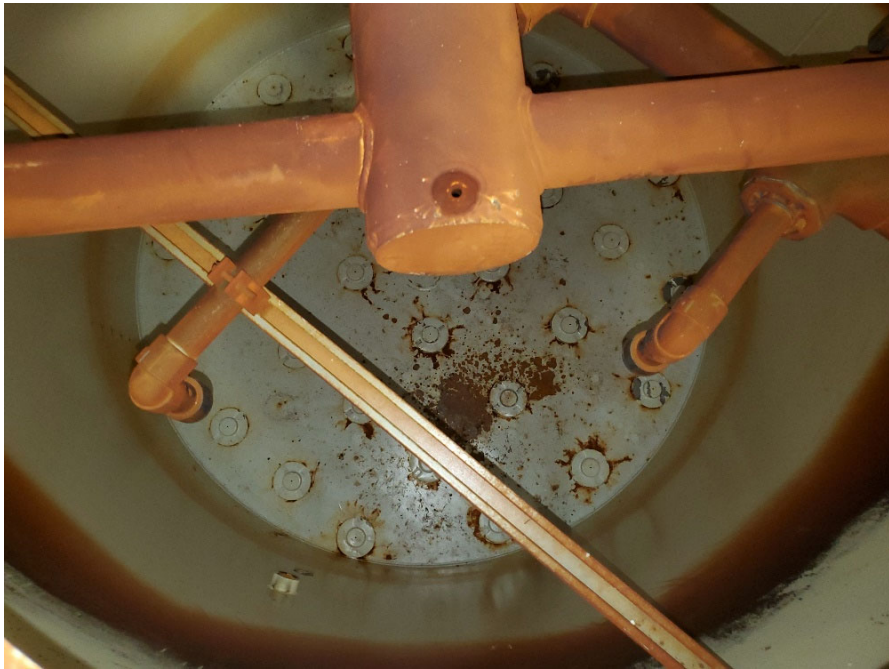
The WTP is still functional but presents operational challenges to staff. Therefore, it is important to complete this recoating work ASAP and allow for GWS to complete the remaining work at the facility.

If you have any questions or require additional information, please let us know.

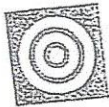




**VESSEL 3**



**VESSEL 4**



## G.P. MAINTENANCE SERVICES, INC.

June 9, 2020

Eric Dhuse  
Director of Public Works  
United City of Yorkville  
800 Game Farm Road  
Yorkville, IL 60560

Re: Coating of Vessels

### PROPOSAL

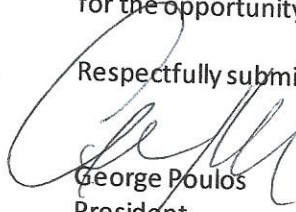
Dear Mr. Dhuse:

We propose to furnish all labor, materials, and equipment necessary to the repair & coating of vessels 3 & 4 at the Lehrman Crossing plant per on site review.

BASE BID \$14,000.00 X 2 vessels=TOTAL BID-TWENTY-EIGHT THOUSAND and no/100 (\$28,000.00)

All work to be performed during hours specified and in a good workmanship type manner. Thank you for the opportunity to bid on this project.

Respectfully submitted,

  
George Poulos  
President

10512 South Michael Drive  
Palos Hills, IL 60465  
gpmaintsvcs@att.net  
708 430 0469  
708 430 5546-fax



# Memorandum

To: Bart Olson, City Administrator  
From: Brad Sanderson, EEI  
CC: Eric Dhuse, Director of Public Works  
Lisa Pickering, Deputy City Clerk

Date: May 7, 2020  
Subject: Well No. 8 and 9 Water Treatment Plant Cation Exchange Vessel – Interior Coating Repairs

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The City recently contracted with Global Water Services (GWS) to replace the media in the four (4) cation exchange vessels at the Wells 8 & 9 Water Treatment Plant (WTP). After GWS removed the existing media in two of the vessels, inspection of the interior coating in each vessel indicated that sections of the coating had been compromised. Photos of the damaged coating are enclosed. In order to prevent corrosion of the metal vessels, it is recommended to repair the coating system while the vessels are empty.

This work was not anticipated or included in the scope of the contract with GWS. EEI coordinated with Tnemec to develop two (2) options for repairing the interior coating systems in each vessel. Option 1 consists of repairing only the failed areas. Option 2 consists of repairing the failed areas and overcoating all interior surfaces. EEI assisted in soliciting proposals from multiple qualified contractors for the recoating work. Two proposals were received. A tabulation of the costs and proposals are attached for your information and record. After reviewing both proposals EEI determined that Option 1 is the most cost-effective approach and required the least amount of downtime for each vessel. Therefore, we recommend proceeding with this work with the contractor that submitted the lowest cost for Option 1, GP Maintenance Services, Inc. (GP) (10512 South Michael Drive, Palos Hills, IL 60465) in the amount of **\$28,000**.

The WTP is still functional but presents operational challenges to staff. Therefore, it is important to complete this recoating work ASAP and allow for GWS to complete the remaining work at the facility. GP can start work the week of May 11<sup>th</sup>, if given approval ASAP.

If you have any questions or require additional information, please let us know.











BID TABULATION									
WELL 8 AND 9 WTP CATION EXCHANGE VESSELS - INTERIOR COATING REPAIRS									
UNITED CITY OF YORKVILLE									
						GP Maintaince 10512 South Michael Drive Palos Hills, IL 60465		LeCuyer Painting & Decorating 313 Davis St Sandwich, IL 60548	
ITEM NO.	DESCRIPTION			UNIT	QUANTITY	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT
BASE BID ITEMS									
1	OPTION 1 – SPOT REPAIR OF ALL FAILED AREAS WITH TNE MEC SPOT FINISH COAT: ONE COAT OF TNE MEC SERIES FC22 EPOXOLINE APPLIED TO ALL BARE METAL SURFACES AT 14+ MILS			EA	2	\$ 14,000.00	\$ 28,000.00	\$ 20,000.00	\$ 40,000.00
2	OPTION 2 – REPAIR OF FAILED AREAS, OVERCOAT ALL SURFACE WITH TNE MEC SPOT PRIME COAT: ONE COAT OF TNE MEC N140F POTA-POX PLUS TO ALL OTHER BARE METAL SURFACES AT A DRY FILM THICKNESS OF 4.0 TO 6.0 MILS FINISH COAT: ONE COMPLETE COAT OF TNE MEC SERIES N140F POTA-POX PLUS TO ALL SURFACES AT A DRY FILM THICKNESS OF 4.0 TO 6.0 MILS			EA	2	\$ 20,000.00	\$ 40,000.00	\$ 29,000.00	\$ 58,000.00



Reviewed By:	
Legal	<input type="checkbox"/>
Finance	<input type="checkbox"/>
Engineer	<input type="checkbox"/>
City Administrator	<input checked="" type="checkbox"/>
Human Resources	<input type="checkbox"/>
Community Development	<input type="checkbox"/>
Police	<input type="checkbox"/>
Public Works	<input checked="" type="checkbox"/>
Parks and Recreation	<input type="checkbox"/>

Agenda Item Number

New Business #4

Tracking Number

PW 2020-38

### Agenda Item Summary Memo

**Title:** Risk and Resilience Assessment and Emergency Response Planning – Water Utilities

**Meeting and Date:** Public Works Committee – June 16, 2020

**Synopsis:** See attached.

### Council Action Previously Taken:

Date of Action: \_\_\_\_\_ Action Taken: \_\_\_\_\_

Item Number: \_\_\_\_\_

**Type of Vote Required:** Majority

**Council Action Requested:** Approval

**Submitted by:** Bart Olson Administration  
Name Department

### Agenda Item Notes:

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# Memorandum

To: City Council  
From: Bart Olson, City Administrator  
CC:  
Date: June 11, 2020  
Subject: Contract with EEI for RRA/ERP

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## **Summary**

Consideration of a contract with Engineering Enterprises, Inc. for a risk resilience assessment and emergency response planning of the City's water system, as required by the US EPA and the American Water Infrastructure Act (AWIA) of 2018.

## **Background**

The American Water Infrastructure Act of 2018 requires communities with a water system to complete a risk resilience assessment and emergency response planning study by certain dates depending on community size. For Yorkville, some components of the study must be complete by June 2021 and other components by December 2021.

In general, the study will look at threats to the City's water system from things like natural disasters, sabotage, theft, and operational deficiencies in both the physical and virtual space. A more detailed summary of study components is included in the attached materials from EEI and from the US EPA.

The attached contract with EEI will cover creation of the study and submittal of the materials to the US EPA by the deadlines required under the AWIA for a total price of \$59,400. This contract cost is budgeted and this work is not recommended to be completed by staff due to expertise and workload demands.

## **Recommendation**

Staff recommends approval of the contract with EEI.



## **RISK AND RESILIENCE ASSESSMENTS AND EMERGENCY RESPONSE PLANS:**

The America's Water Infrastructure Act of 2018 (AWIA) requires community water systems that serve more than 3,300 people to complete a risk and resilience assessment and develop an emergency response plan.

### **RISK AND RESILIENCE ASSESSMENT**

Your utility must conduct a risk and resilience assessment and submit certification of its completion to the U.S. EPA by the following dates:

- March 31, 2020 if serving  $\geq 100,000$  people.
- December 31, 2020 if serving 50,000 to 99,999 people.
- June 30, 2021 if serving 3,301 to 49,999 people.

Every five years, your utility must review the risk and resilience assessment and submit a recertification to the U.S. EPA that the assessment has been reviewed and, if necessary, revised.

Risk and resilience assessments evaluate the vulnerabilities, threats and consequences from potential hazards. The RRA must include:

- Natural hazards and malevolent acts (i.e., all hazards).
- Resilience of water facility infrastructure (including pipes, physical barriers, water sources and collection, treatment, storage and distribution, and electronic, computer and other automated systems).
- Monitoring practices.
- Financial systems (e.g., billing systems).
- Chemical storage and handling.
- Operation and maintenance.

### **EMERGENCY RESPONSE PLAN**

Your utility must develop or update an emergency response plan and certify completion to the U.S. EPA no later than six months after risk and resilience assessment certification. Each utility deadline is unique; however, the dates below are the due dates for utilities who submit a risk and resilience assessment certification by the final due date according to the population served.

- September 30, 2020 if serving  $\geq 100,000$  people.
- June 30, 2021 if serving 50,000 to 99,999 people.
- December 30, 2021 if serving 3,301 to 49,999 people.

Within six months of submitting the recertification for the risk and resilience assessment, your utility must certify it has reviewed and, if necessary, revised, its emergency response plan.

The Emergency Response Plan must include:

- Strategies and resources to improve resilience, including physical security and cybersecurity.
- Plans and procedures for responding to a natural hazard or malevolent act that threatens safe drinking water.
- Actions and equipment to lessen the impact of a malevolent act or natural hazard, including alternative water sources, relocating intakes and flood protection barriers.
- Strategies to detect malevolent acts or natural hazards that threaten the system.



# RISK AND RESILIENCE ASSESSMENTS AND EMERGENCY RESPONSE PLANS:



## NEW REQUIREMENTS FOR DRINKING WATER UTILITIES

Section 2013 of America's Water Infrastructure Act of 2018 (AWIA) requires community water systems<sup>1</sup> that serve more than 3,300 people to complete a risk and resilience assessment and develop an emergency response plan.

### RISK AND RESILIENCE ASSESSMENT

Your utility must conduct a risk and resilience assessment and submit certification of its completion to the U.S. EPA by the following dates:

Important  
Dates

- March 31, 2020 if serving  $\geq 100,000$  people.
- December 31, 2020 if serving 50,000 to 99,999 people.
- June 30, 2021 if serving 3,301 to 49,999 people.

### EMERGENCY RESPONSE PLAN

Your utility must develop or update an emergency response plan and certify completion to the U.S. EPA **no later than six months** after risk and resilience assessment certification. Each utility deadline is unique; however, the dates below are the due dates for utilities who submit a risk and resilience assessment certification by the final due date according to the population served.

- September 30, 2020 if serving  $\geq 100,000$  people.
- June 30, 2021 if serving 50,000 to 99,999 people.
- December 30, 2021 if serving 3,301 to 49,999 people.

Recertification

**Every five years**, your utility must review the risk and resilience assessment and submit a recertification to the U.S. EPA that the assessment has been reviewed and, if necessary, revised.

**Within six months** of submitting the recertification for the risk and resilience assessment, your utility must certify it has reviewed and, if necessary, revised, its emergency response plan.

Visit the U.S. EPA website to find more information on guidance for developing a risk and resilience assessment at <https://www.epa.gov/waterriskassessment/conduct-drinking-water-or-wastewater-utility-risk-assessment>.

Visit the U.S. EPA website for guidance on developing an Emergency Response Plan at <https://www.epa.gov/waterutilityresponse/develop-or-update-drinking-water-or-wastewater-utility-emergency-response-plan>.

### TOOLS OR METHODS

AWIA does not require the use of any standards, methods or tools for the risk and resilience assessment or emergency response plan. Your utility is responsible for ensuring that the risk and resilience assessment and emergency response plan address all the criteria in AWIA Section 2013(a) and (b), respectively. The U.S. EPA recommends the use of standards, including AWWA J100-10 Risk and Resilience Management of Water and Wastewater Systems, along with tools from the U.S. EPA and other organizations, to facilitate sound risk and resilience assessments and emergency response plans.

<sup>1</sup> Section 2013 of AWIA applies to community water systems. Community water systems are drinking water utilities that consistently serve at least 25 people or 15 service connections year-round.

Still have questions about the new AWIA requirements?  
Contact the U.S. Environmental Protection Agency (U.S. EPA) at [dwresilience@epa.gov](mailto:dwresilience@epa.gov).

Office of Water (4608T)  
EPA-817-F-19-004  
May 2019





## FREQUENTLY ASKED QUESTIONS

### I need more information about risk and resilience assessments and emergency response plans:

Risk and resilience assessments evaluate the vulnerabilities, threats and consequences from potential hazards.

#### What does a risk and resilience assessment include?

- Natural hazards and malevolent acts (i.e., all hazards).
- Resilience of water facility infrastructure (including pipes, physical barriers, water sources and collection, treatment, storage and distribution, and electronic, computer and other automated systems).
- Monitoring practices.
- Financial systems (e.g., billing systems).
- Chemical storage and handling.
- Operation and maintenance.

#### Who should I work with when creating my emergency response plan?

- Utilities must coordinate the risk and resilience assessments, as well as the emergency response plans with local emergency planning committees.

For more information, see [www.congress.gov/bill/115th-congress/senate-bill](http://www.congress.gov/bill/115th-congress/senate-bill).

### I need more information on the certification process:

#### What do I need to submit to the U.S. EPA?

- Each utility must submit a certification of your risk and resilience assessment and emergency response plan. Each submission must include: utility name, date and a statement that the utility has completed, reviewed or revised the assessment. The U.S. EPA has developed an optional certification template that can be used for email or mail certification. The optional certification form will be available in August 2019.

#### Who can certify my risk and resilience assessment and emergency response plan?

- Risk and resilience assessments and emergency response plans can be self-certified by the utility.

#### How do I submit my certification?

- Three options will be provided for submittal: regular mail, email and a user-friendly secure online portal. The online submission portal will provide drinking water systems with a receipt of submittal. The U.S. EPA recommends using this method. The certification system will be available in August 2019.

#### What does an emergency response plan include?

- Strategies and resources to improve resilience, including physical security and cybersecurity.
- Plans and procedures for responding to a natural hazard or malevolent act that threatens safe drinking water.
- Actions and equipment to lessen the impact of a malevolent act or natural hazard, including alternative water sources, relocating intakes and flood protection barriers.
- Strategies to detect malevolent acts or natural hazards that threaten the system.

#### When can I submit the initial certification?

- Utilities should wait to submit the initial certification to the U.S. EPA until the U.S. EPA publishes *Baseline Information on Malevolent Acts Relevant to Community Water Systems*, which is required under AWIA by August 2019.

#### Do I need to submit my certification to my state or local government?

- No. Section 2013 of AWIA does not require utilities to submit the certification to state or local governments.

#### How long do I need to keep a copy of my risk and resilience assessment and emergency response plan?

- Utilities need to keep a copy of both documents for five years after certification.

#### What if I do not have a copy of my most recent risk and resilience assessment?

- The U.S. EPA intends to destroy vulnerability assessments (VAs) submitted in response to the Bioterrorism Act of 2002, but if utilities would like to have their VA and certification documents mailed to them, contact [WSD-Outreach@epa.gov](mailto:WSD-Outreach@epa.gov), and on utility letterhead, include the utility name, PWSID, address and point of contact as an attachment to the email.

## RESOURCES & TOOLS

#### Conducting a Risk and Resilience Assessment

- The U.S. EPA's Risk and Resilience Baseline Threat Document (available August 2019).
- The U.S. EPA's [Vulnerability Self-Assessment](#).

#### The U.S. EPA Website

- <https://www.epa.gov/waterresilience/americas-water-infrastructure-act-2018-risk-assessments-and-emergency-response-plans>.

#### Developing an Emergency Response Plan

- [Emergency Response Plan Guidance](#).
- The U.S. EPA's [Emergency Response Webpage](#).
- [Local Emergency Planning Committees](#).

Still have questions about the new AWIA requirements?  
Contact the U.S. Environmental Protection Agency (U.S. EPA) at [dwresilience@epa.gov](mailto:dwresilience@epa.gov).

Office of Water (4608T)  
EPA-817-F-19-004  
May 2019

**Agreement for Professional Services  
Consulting Engineering for  
Risk and Resilience Assessment and Emergency Response Planning – Water Utility**

THIS AGREEMENT, by and between the United City of Yorkville, hereinafter referred to as the "City" or "OWNER" and Engineering Enterprises, Inc. hereinafter referred to as the "Contractor" or "ENGINEER" agrees as follows:

**A. Services:**

The Engineer shall furnish the necessary personnel, materials, equipment and expertise to make the necessary investigations, analysis and calculations along with exhibits, cost estimates and narrative, to complete all necessary engineering services to the City as indicated on the included Attachment A.

**B. Term:**

Services will be provided beginning on the date of execution of this agreement and continuing, until terminated by either party upon 7 days written notice to the non-terminating party or upon completion of the Services. Upon termination the Contractor shall be compensated for all work performed for the City prior to termination.

**C. Compensation and maximum amounts due to Contractor:**

Contractor shall receive as compensation for all work and services to be performed herein an amount based on the Estimate of Level of Effort and Associated Cost included in Attachment C. Consulting Engineering will be paid for as a Lump Sum in the amount of \$59,400.00. All payments will be made accordingly to the Illinois State Prompt Payment Act and not less than once every thirty days.

**D. Changes in Rates of Compensation:**

In the event that this contract is designated in Section B hereof as an Ongoing Contract, Contractor, on or before February 1st of any given year, shall provide written notice of any change in the rates specified in Section C hereof (or on any attachments hereto) and said changes shall only be effective on and after May 1st of that same year.

**E. Ownership of Records and Documents:**

Contractor agrees that all books and records and other recorded information developed specifically in connection with this agreement shall remain the property of the City. Contractor agrees to keep such information confidential and not to disclose or disseminate the information to third parties without the consent of the City. This confidentiality shall not apply to material or information, which would otherwise be subject to public disclosure through the freedom of information act or if already previously disclosed by a third party. Upon termination of this agreement, Contractor

agrees to return all such materials to the City. The City agrees not to modify any original documents produced by Contractor without contractors' consent. Modifications of any signed duplicate original document not authorized by ENGINEER will be at OWNER's sole risk and without legal liability to the ENGINEER. Use of any incomplete, unsigned document will, likewise, be at the OWNER's sole risk and without legal liability to the ENGINEER.

#### **F. Governing Law:**

This contract shall be governed and construed in accordance with the laws of the State of Illinois. Venue shall be in Kane County, Illinois.

#### **G. Independent Contractor:**

Contractor shall have sole control over the manner and means of providing the work and services performed under this agreement. The City's relationship to the Contractor under this agreement shall be that of an independent contractor. Contractor will not be considered an employee to the City for any purpose.

#### **H. Certifications:**

Employment Status: The Contractor certifies that if any of its personnel are an employee of the State of Illinois, they have permission from their employer to perform the service.

Anti-Bribery: The Contractor certifies it is not barred under 30 Illinois Compiled Statutes 500/50-5(a) - (d) from contracting as a result of a conviction for or admission of bribery or attempted bribery of an officer or employee of the State of Illinois or any other state.

Loan Default: If the Contractor is an individual, the Contractor certifies that he/she is not in default for a period of six months or more in an amount of \$600 or more on the repayment of any educational loan guaranteed by the Illinois State Scholarship Commission made by an Illinois institution of higher education or any other loan made from public funds for the purpose of financing higher education (5 ILCS 385/3).

Felony Certification: The Contractor certifies that it is not barred pursuant to 30 Illinois Compiled Statutes 500/50-10 from conducting business with the State of Illinois or any agency as a result of being convicted of a felony.

Barred from Contracting: The Contractor certifies that it has not been barred from contracting as a result of a conviction for bid-rigging or bid rotating under 720 Illinois Compiled Statutes 5/33E or similar law of another state.

Drug Free Workplace: The Contractor certifies that it is in compliance with the Drug Free Workplace Act (30 Illinois Compiled Statutes 580) as of the effective date of this contract. The Drug Free Workplace Act requires, in part, that Contractors, with 25 or more employees certify and agree to take steps to ensure a drug free workplace by

informing employees of the dangers of drug abuse, of the availability of any treatment or assistance program, of prohibited activities and of sanctions that will be imposed for violations; and that individuals with contracts certify that they will not engage in the manufacture, distribution, dispensation, possession, or use of a controlled substance in the performance of the contract.

**Non-Discrimination, Certification, and Equal Employment Opportunity:** The Contractor agrees to comply with applicable provisions of the Illinois Human Rights Act (775 Illinois Compiled Statutes 5), the U.S. Civil Rights Act, the Americans with Disabilities Act, Section 504 of the U.S. Rehabilitation Act and the rules applicable to each. The equal opportunity clause of Section 750.10 of the Illinois Department of Human Rights Rules is specifically incorporated herein. The Contractor shall comply with Executive Order 11246, entitled Equal Employment Opportunity, as amended by Executive Order 11375, and as supplemented by U.S. Department of Labor regulations (41 C.F.R. Chapter 60). The Contractor agrees to incorporate this clause into all subcontracts under this Contract.

**International Boycott:** The Contractor certifies that neither it nor any substantially owned affiliated company is participating or shall participate in an international boycott in violation of the provisions of the U.S. Export Administration Act of 1979 or the regulations of the U.S. Department of Commerce promulgated under that Act (30 ILCS 582).

**Record Retention and Audits:** If 30 Illinois Compiled Statutes 500/20-65 requires the Contractor (and any subcontractors) to maintain, for a period of 3 years after the later of the date of completion of this Contract or the date of final payment under the Contract, all books and records relating to the performance of the Contract and necessary to support amounts charged to the City under the Contract. The Contract and all books and records related to the Contract shall be available for review and audit by the City and the Illinois Auditor General. If this Contract is funded from contract/grant funds provided by the U.S. Government, the Contract, books, and records shall be available for review and audit by the Comptroller General of the U.S. and/or the Inspector General of the federal sponsoring agency. The Contractor agrees to cooperate fully with any audit and to provide full access to all relevant materials.

**United States Resident Certification:** (This certification must be included in all contracts involving personal services by non-resident aliens and foreign entities in accordance with requirements imposed by the Internal Revenue Services for withholding and reporting federal income taxes.) The Contractor certifies that he/she is a:   x   United States Citizen        Resident Alien        Non-Resident Alien The Internal Revenue Service requires that taxes be withheld on payments made to non resident aliens for the performance of personal services at the rate of 30%.

**Tax Payer Certification :** Under penalties of perjury, the Contractor certifies that its Federal Tax Payer Identification Number or Social Security Number is (provided separately) and is doing business as a (check one):        Individual        Real Estate

Agent ☐ Sole Proprietorship ☐ Government Entity ☐ Partnership ☐ Tax Exempt Organization (IRC 501(a) only) ☒ Corporation ☐ Not for Profit Corporation ☐ Trust or Estate ☐ Medical and Health Care Services Provider Corp.

**I. Indemnification:**

Contractor shall indemnify and hold harmless the City and City's agents, servants, and employees against all loss, damage, and expense which it may sustain or for which it will become liable on account of injury to or death of persons, or on account of damage to or destruction of property resulting from the performance of work under this agreement by Contractor or its Subcontractors, or due to or arising in any manner from the wrongful act or negligence of Contractor or its Subcontractors of any employee of any of them. In the event that the either party shall bring any suit, cause of action or counterclaim against the other party, the non-prevailing party shall pay to the prevailing party the cost and expenses incurred to answer and/or defend such action, including reasonable attorney fees and court costs. In no event shall the either party indemnify any other party for the consequences of that party's negligence, including failure to follow the ENGINEER's recommendations.

**J. Insurance:**

The contractor agrees that it has either attached a copy of all required insurance certificates or that said insurance is not required due to the nature and extent of the types of services rendered hereunder. (Not applicable as having been previously supplied)

**K. Additional Terms or Modification:**

The terms of this agreement shall be further modified as provided on the attached Exhibits. Except for those terms included on the Exhibits, no additional terms are included as a part of this agreement. All prior understandings and agreements between the parties are merged into this agreement, and this agreement may not be modified orally or in any manner other than by an agreement in writing signed by both parties. In the event that any provisions of this agreement shall be held to be invalid or unenforceable, the remaining provisions shall be valid and binding on the parties. The list of Attachments are as follows:

**Attachment A:** Standard Conditions

**Attachment B:** Scope of Services

**Attachment C:** Estimated Level of Effort and Associated Cost

**Attachment D:** Anticipated Project Schedule

**Attachment E:** 2019 Standard Schedule of Charges

**L. Notices:**

All notices required to be given under the terms of this agreement shall be given mail, addressed to the parties as follows:

For the City:

City Administrator and City Clerk  
United City of Yorkville  
800 Game Farm Road  
Yorkville, IL 60560

For the ENGINEER:

Engineering Enterprises, Inc.  
52 Wheeler Road  
Sugar Grove Illinois 60554

Either of the parties may designate in writing from time to time substitute addresses or persons in connection with required notices.

Agreed to this \_\_\_\_ day of \_\_\_\_\_, 2020.

United City of Yorkville:

Engineering Enterprises, Inc.:

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John Purcell  
Mayor

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Brad Sanderson, P.E.  
Chief Operating Officer/President

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Lisa Pickering  
City Clerk

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Witness

## ATTACHMENT A

### STANDARD TERMS AND CONDITIONS

**Agreement:** These Standard Terms and Conditions, together with the Professional Services Agreement, constitute the entire integrated agreement between the OWNER and Engineering Enterprises, Inc. (EEI) (hereinafter "Agreement"), and take precedence over any other provisions between the Parties. These terms may be amended, but only if both parties consent in writing.

**Standard of Care:** In providing services under this Agreement, the ENGINEER will endeavor to perform in a matter consistent with that degree of care and skill ordinarily exercised by members of the same profession currently practicing under same circumstances in the same locality. ENGINEER makes no other warranties, express or implied, written or oral under this Agreement or otherwise, in connection with ENGINEER'S service.

**Construction Engineering and Inspection:** The ENGINEER shall not supervise, direct, control, or have authority over any contractor work, nor have authority over or be responsible for the means, methods, techniques sequences, or procedures of construction selected or used by any contractor, or the safety precautions and programs incident thereto, for security or safety of the site, nor for any failure of a contractor to comply with laws and regulations applicable to such contractor's furnishing and performing of its work.

The ENGINEER neither guarantees the performance of any contractor nor assumes responsibility for contractor's failure to furnish and perform the work in accordance with the contract documents.

The ENGINEER is not responsible for the acts or omissions of any contractor, subcontractor, or supplies, or any of their agents or employees or any other person at the site or otherwise furnishing or performing any work.

Shop drawing and submittal review by the ENGINEER shall apply to only the items in the submissions and only for the purpose of assessing if upon installation or incorporation in the project work they are generally consistent with the construction documents. OWNER agrees that the contractor is solely responsible for the submissions and for compliance with the construction documents. OWNER further agrees that the ENGINEER'S review and action in relation to these submissions shall not constitute the provision of means, methods, techniques, sequencing or procedures of construction or extend or safety programs or precautions. The ENGINEER'S consideration of a component does not constitute acceptance of the assembled items.

The ENGINEER'S site observation during construction shall be at the times agreed upon in the Project Scope. Through standard, reasonable means the ENGINEER will become generally familiar with observable completed work. If the ENGINEER observes completed work that is inconsistent with the construction documents, that information shall be communicated to the contractor and OWNER for them to address.

## ATTACHMENT A

**Opinion of Probable Construction Costs:** ENGINEER'S opinion of probable construction costs represents ENGINEER'S best and reasonable judgment as a professional engineer. OWNER acknowledges that ENGINEER has no control over construction costs of contractor's methods of determining pricing, or over competitive bidding by contractors, or of market conditions or changes thereto. ENGINEER cannot and does not guarantee that proposals, bids or actual construction costs will not vary from ENGINEER'S opinion of probable construction costs.

**Copies of Documents & Electronic Compatibility:** Copies of Documents that may be relied upon by OWNER are limited to the printed copies (also known as hard copies) that are signed or sealed by the ENGINEER. Files in electronic media format of text, data, graphics, or of other types that are furnished by ENGINEER to OWNER are only for convenience of OWNER. Any conclusion or information obtained or derived from such electronic files will be at the user's sole risk. When transferring documents in electronic media format, ENGINEER makes no representations as to long term compatibility, usability, or readability of documents resulting from the use of software application packages, operating systems, or computer hardware differing from those used by ENGINEER at the beginning of the project.

**Changed Conditions:** If, during the term of this Agreement, circumstances or conditions that were not originally contemplated by or known to the ENGINEER are revealed, to the extent that they affect the scope of services, compensation, schedule, allocation of risks, or other material terms of this Agreement, the ENGINEER may call for renegotiation of appropriate portions of this Agreement. The ENGINEER shall notify the OWNER of the changed conditions necessitating renegotiation, and the ENGINEER and the OWNER shall promptly and in good faith enter into renegotiation of this Agreement to address the changed conditions. If terms cannot be agreed to, the parties agree that either party has the absolute right to terminate this Agreement, in accordance with the termination provision hereof.

**Hazardous Conditions:** OWNER represents to ENGINEER that to the best of its knowledge no Hazardous Conditions (environmental or otherwise) exist on the project site. If a Hazardous Condition is encountered or alleged, ENGINEER shall have the obligation to notify OWNER and, to the extent of applicable Laws and Regulations, appropriate governmental officials. It is acknowledged by both parties that ENGINEER's scope of services does not include any services related to a Hazardous Condition. In the event ENGINEER or any other party encounters a Hazardous Condition, ENGINEER may, at its option and without liability for consequential or any other damages, suspend performance of services on the portion of the project affected thereby until OWNER: (i) retains appropriate specialist consultant(s) or contractor(s) to identify and, as appropriate, abate, remediate, or remove the Hazardous Condition; and (ii) warrants that the project site is in full compliance with applicable Laws and Regulations.

**Consequential Damages:** Notwithstanding any other provision of this Agreement, and to the fullest extent permitted by law, neither the OWNER nor the ENGINEER, their respective officers, directors, partners, employees, contractors, or subcontractors shall be liable to the other or shall make any claim for any incidental, indirect, or consequential damages arising out of or



## ATTACHMENT A

connected in any way to the Project or to this Agreement. This mutual waiver of consequential damages shall include, but is not limited to, loss of use, loss of profit, loss of business, loss of income, loss of reputation, or any other consequential damages that either party may have incurred from any cause of action including negligence, strict liability, breach of contract, and breach of strict or implied warranty. Both the OWNER and the ENGINEER shall require similar waivers of consequential damages protecting all the entities or persons named herein in all contracts and subcontracts with others involved in this project.

**Termination:** This Agreement may be terminated for convenience, without cause, upon fourteen (14) days written notice of either party. In the event of termination, the ENGINEER shall prepare a final invoice and be due compensation as set forth in the Professional Services Agreement for all costs incurred through the date of termination.

Either party may terminate this Agreement for cause upon giving the other party not less than seven (7) calendar days' written notice for the following reasons:

- (a) Substantial failure by the other party to comply with or perform in accordance with the terms of the Agreement and through no fault of the terminating party;
- (b) Assignment of the Agreement or transfer of the project without the prior written consent of the other party;
- (c) Suspension of the project or the ENGINEER'S services by the OWNER for a period of greater than ninety (90) calendar days, consecutive or in the aggregate.
- (d) Material changes in the conditions under which this Agreement was entered into, the scope of services or the nature of the project, and the failure of the parties to reach agreement on the compensation and schedule adjustments necessitated by such changes.

**Payment of Invoices:** Invoices are due and payable within 30 days of receipt unless otherwise agreed to in writing.

**Third Party Beneficiaries:** Nothing contained in this Agreement shall create a contractual relationship with or a cause of action in favor of a third party against either the OWNER or the ENGINEER. The ENGINEER'S services under this Agreement are being performed solely and exclusively for the OWNER'S benefit, and no other party or entity shall have any claim against the ENGINEER because of this Agreement or the performance or nonperformance of services hereunder. The OWNER and ENGINEER agree to require a similar provision in all contracts with contractors, subcontractors, vendors and other entities involved in this Project to carry out the intent of this provision.

**Force Majeure:** Each Party shall be excused from the performance of its obligations under this Agreement to the extent that such performance is prevented by force majeure (defined below) and the nonperforming party promptly provides notice of such prevention to the other party. Such excuse shall be continued so long as the condition constituting force majeure continues. The party affected by such force majeure also shall notify the other party of the

## ATTACHMENT A

anticipated duration of such force majeure, any actions being taken to avoid or minimize its effect after such occurrence, and shall take reasonable efforts to remove the condition constituting such force majeure. For purposes of this Agreement, "force majeure" shall include conditions beyond the control of the parties, including an act of God, acts of terrorism, voluntary or involuntary compliance with any regulation, law or order of any government, war, acts of war (whether war be declared or not), labor strike or lock-out, civil commotion, epidemic, failure or default of public utilities or common carriers, destruction of production facilities or materials by fire, earthquake, storm or like catastrophe. The payment of invoices due and owing hereunder shall in no event be delayed by the payer because of a force majeure affecting the payer.

**Additional Terms or Modification:** All prior understandings and agreements between the parties are merged into this Agreement, and this Agreement may not be modified orally or in any manner other than by an Agreement in writing signed by both parties. In the event that any provisions of this Agreement shall be held to be invalid or unenforceable, the remaining provisions shall be valid and binding on the parties.

**Assignment:** Neither party to this Agreement shall transfer or assign any rights or duties under or interest in this Agreement without the prior written consent of the other party. Subcontracting normally contemplated by the ENGINEER shall not be considered an assignment for purposes of this Agreement.

**Waiver:** A party's waiver of, or the failure or delay in enforcing any provision of this Agreement shall not constitute a waiver of the provision, nor shall it affect the enforceability of that provision or of the remainder of this Agreement.

**Attorney's Fees:** In the event of any action or proceeding brought by either party against the other under this Agreement, the prevailing party shall be entitled to recover from the other all costs and expenses including without limitation the reasonable fees of its attorneys in such action or proceeding, including costs of appeal, if any, in such amount as the Court may adjudge reasonable.

**Headings:** The headings used in this Agreement are inserted only as a matter of convenience only, and in no way define, limit, enlarge, modify, explain or define the text thereof nor affect the construction or interpretation of this Agreement.

**ATTACHMENT B**  
**SCOPE OF SERVICES**  
**RISK AND RESILIENCE ASSESSMENT AND EMERGENCY RESPONSE PLANNING**

United City of Yorkville, IL

**BACKGROUND**

The American Water Infrastructure Act (Public Law Number 115-270, passed 10/23/2018) requires all Community Water Supplies serving populations greater than 3,300 to conduct an assessment of the risks to, and resilience of, its water system. The Risk and Resilience Assessment (RRA) must include an assessment of:

- the risk to the system from malevolent acts and natural hazards;
- the resilience of the pipes and constructed conveyances, physical barriers, source water, water collection and intake, pretreatment, treatment, storage and distribution facilities, electronic, computer, or other automated systems (including the security of such systems) which are utilized by the system;
- the monitoring practices of the system;
- the financial infrastructure of the system;
- the use, storage, or handling of various chemicals by the system; and
- the operation and maintenance of the system.

Based on the population served of approximately 18,800, the United City of Yorkville Water Utility (YWU) must submit to the US EPA Administrator a certification that the system has conducted a compliant RRA prior to June 30, 2021.

In addition, YWU must prepare or revise, where necessary, an ERP that incorporates findings of the RRA. YWU must certify to the US EPA Administrator, not later than 6 months after completion of the RRA, that the system has completed such plan.

Engineering Enterprises Inc. (EEI) will assist YWU in meeting the regulatory requirements of the American Water Infrastructure Act of 2018 by conducting the following Scope of Services.

Note: The Scope of Services includes using the AWWA Cyber Security Tool to perform an assessment of utility's Process Control Systems (SCADA). In the event YWU desires a higher-level assessment, EEI will incorporate such an assessment conducted by the Information Technology Department or other resources (e.g. SCADA design consultant) as directed.

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**TASK A: PROJECT ADMINISTRATION AND FACILITATION**

**Task A-1: Project Administration**

This task includes a Project Kick-off meeting, overall project planning, coordination with the City, and project management.

### **Task A-2: Stakeholder Assistance and Workshops**

Stakeholder Involvement is important to the development of the RRA and ERP. It promotes consensus on risk management priorities among stakeholders and encourages them to take ownership of the decisions made during the process. It is also required to fulfill the regulatory requirements of the program.

EEl will assist YWU in designating internal and external stakeholders that will participate in the development of the RRA and ERP. We anticipate the following stakeholder groupings:

- Program Champion – One (1) Water Utility employee responsible for overall project coordination.
- Steering Committee – Three (3) to five (5) Water Utility employees (including the Program Champion) who will review technical information and participate in key decisions regarding the Utility's priorities and preferences throughout the project.
- Stakeholder Group – Four to (4) to eight (8) members (including the Steering Committee) representing organizations inside and outside the water utility who will participate in Workshops and provide input based on the perspective of the organization they represent.

EEl will provide YWU with a description of the roles and responsibilities of the stakeholders, draft invitations to prospective stakeholders, preliminary meeting schedules and topics, and recommendations for those agencies to include.

EEl will lead up to two (2) Stakeholder Workshops during the development of the RRA and ERP. It is anticipated that one (1) workshops will be conducted for the RRA and one (1) for the ERP. For each workshop EEl will provide YWU with relevant information to be distributed participants prior to the workshop. During the Stakeholder Workshops, EEl will provide general background and technical information concerning the topics to be presented and discussed. YWU will be afforded the opportunity to make presentations during the workshops, as desired. The purpose of the Stakeholder Workshops is to receive comments and suggestions from participants on how to make the program more effective.

### **Task A-3: Steering Committee Assistance and Progress Meetings**

EEl will lead up to six (6) Steering Committee meetings during the development of the RRA and ERP. Again, it is anticipated that four (4) meetings will be conducted for the RRA and two (2) for the ERP. Some of these meeting may be teleconferences. EEl will provide the Steering Committee with relevant background information prior to each meeting. The meetings will be an opportunity for YWU to provide input on their priorities and preferences regarding key decisions during the development of the RRA and ERP.

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## **TASK B – RISK AND RESILIENCE PLAN**

### **Task B-1: Asset Characterization**

An Asset Characterization will be completed in accordance with the AWWA/ANSI J-100 Risk Analysis and Management for Critical Asset Protection (RAMCAP) Standard. The purpose of Asset Characterization is to determine the water assets that, if compromised, could impair YWU's ability to complete its mission.

For Task B-1, EEI will review relevant information from YWU and other sources, facilitate discussions, provide engineering support, and document decisions by the Steering Committee as necessary to complete the following tasks:

- a) Identify critical functions of YWU and associated assets to determine which assets are critical to the Utility's mission.
- b) Develop a list of potentially critical assets.
- c) Identify the critical internal and external infrastructures that support the potentially critical assets.
- d) Identify and document existing protective countermeasures and mitigation measures/features associated with the potentially critical assets.
- e) Estimate the worst reasonable consequences resulting from the destruction or loss of each potentially critical asset, without regard to the threat.
- f) Prioritize the potentially critical assets using the estimated consequences.
- g) Identify critical assets by screening the prioritized list using criteria relevant to the decisions to be made.

## Task B-2: Threat Characterization

A Threat Characterization will be completed in accordance with the AWWA/ANSI J-100 Risk Analysis and Management for Critical Asset Protection (RAMCAP) Standard. The threats to be considered will include man-made hazards or accidents, natural hazards, and dependency hazards (interruptions of supply chains or proximity to dangerous sites). The specific threats in each category will consider the Reference Threats defined by the RAMCAP methodology (see table on below). Other threats may be added at the utility's discretion.

**RAMCAP Reference Threats**

Hazard Type	Hazard Description			
Natural	N(H) Hurricanes	N(E) Earthquakes	N(T) Tornadoes	N(F) Floods
	N(W) Wildfire		N(I) Ice storms	
Dependency & Proximity	D(U) Loss of Utilities	D(S) Loss of Suppliers	D(E) Loss of Employees	D(C) Loss of Customers
	D(T) Loss of Transportation		D(P) Proximity to other targets	
Product Contamination	C(C) Chemical	C(R) Radionuclide	C(B) Biotxin	C(P) Pathogen
	C(W) Weaponization of water disposal system			
Sabotage	S(PI) Physical—Insider	S(PU) Physical—Outsider	S(CI) Cyber—Insider	S(CU) Cyber—Outsider
Theft or Diversion	T(PI) Physical—Insider	T(PU) Physical—Outsider	T(CI) Cyber—Insider	T(CU) Cyber—Outsider
Attack: Marine	(M1) Small Boat	(M2) Fast Boat	(M3) Barge	(M4) Ocean Ship
Attack: Aircraft	(A1) Helicopter	(A2) Small Plane	(A3) Medium, Regional Jet	(A4) Long-Flight Jet
Attack: Automotive	(V1) Car	(V2) Van	(V3) Midsize Truck	(V4) Large Truck (18 Wheeler)
Attack: Assault Team	(AT1) 1 Assailant	(AT2) 2-4 Assailants	(AT3) 5-8 Assailants	(AT4) 9-16 Assailants

For Task B-2, EEI will review relevant information from YWU and other sources, facilitate discussions, provide engineering support, and document decisions by the Steering Committee as necessary to complete the following tasks:

- a) For malevolent threats, EEI will describe the numbers and capabilities of the adversaries; capabilities include weapons types, equipment, tools, explosives, tactics, and means of delivery/transport.
- b) For natural hazards, EEI will describe all earthquakes, floods, wildfires, ice storms, and tornadoes that have occurred or could occur in the location of the facility. Define the range of the magnitudes from the smallest that would cause serious harm to the largest reasonable case. These threats should be included in the analysis.
- c) For dependency hazards, EEI will describe all interruptions of utilities, suppliers, employees, customers, and transportation, and proximity to dangerous neighboring sites.
- d) EEI will develop and apply a ranking system to evaluate threat–asset pairs and make recommendations for bottom-cutting.
- e) EEI will identify which threats apply to which assets and rank the threat–asset pairs according to the judged magnitude of the resulting consequences.
- f) EEI will assist in selecting the critical threat–asset pairs to be included in the rest of the analysis process, or choose to evaluate all threat–asset pairs. In general, these threat–asset pairs are the objects of analysis throughout the rest of the process

### **Task B-3: Consequence Analysis**

This task identifies the worst reasonable consequences that can be caused by the specific threat-asset pairs identified in Task 2-B. The consequence analysis will consider:

- Number of fatalities
- Number of serious injuries,
- Financial loss to the owners of the facility
- Economic losses to the community

The consequence analysis may be based upon reasonable estimates. Consequences relate to degradation in public confidence, environmental quality, the ability of civilian or military agencies to function, etc. using a qualitative, descriptive analyses.

For Task B-3, EEI will review relevant information from YWU and other sources, facilitate discussions, provide engineering support, and document decisions by the Steering Committee as necessary to complete the following tasks:

- a) Apply worst-reasonable-case assumptions for each threat critical threat-asset pair and document the assumptions for each case.
- b) Estimate the consequences in terms of loss of life and serious injury, financial losses to the Water Utility, duration and severity of service denial for the affected customers, and economic losses to society and the public.
- c) Evaluate additional consequences if desired.

- d) Document the specific assumptions and procedures used for performing this consequence analysis, the worst-reasonable-case assumptions, and the results of the consequence analysis.
- e) Record the consequence values for use in determining Risk and Resilience values (Task B-6).

#### **Task B-4: Vulnerability Analysis**

This task analyzes the ability of each critical asset and its protective systems to withstand each specified threat. Vulnerability analysis for malevolent events estimates the likelihood that an adversary will be successful in executing a specific attack mode on an asset, given that the attack occurs. For natural hazards, dependency hazards, and proximity hazards, the vulnerability is the likelihood that, given the hazard occurs, the estimated consequences will ensue.

For Task B-4, EEI will review relevant information from YWU and other sources, facilitate discussions, provide engineering support, and document decisions by the Steering Committee as necessary to complete the following tasks:

- a) Review pertinent details of the facility construction, systems, and layout. Evaluate existing countermeasures, mitigation measures, and other impediments to threats, such as topographic, design, and equipment features that provide deterrence, detection systems, and delay features, and local and supporting response measures. Evaluate information on interdependencies, personnel interactions, and process flows within the facility and identify vulnerabilities or weaknesses in the protection system.
- b) Analyze the vulnerability of each critical asset or system to estimate the likelihood that, given the occurrence of a threat, the consequences estimated will result.
- c) Document the method used for performing the vulnerability analysis, the worst-reasonable-case assumptions, and the results of the vulnerability analysis.
- d) Record the vulnerability estimates as point estimates. The likelihood of attack success will be expressed as a fraction representing the number of successes among attempts.

#### **Task B-5: Threat Analysis**

This task estimates the likelihood of malevolent event, dependency/proximity hazard, or natural hazard. There are three methods allowed by the J-100 RAMCAP process. EEI will use the most appropriate method given the specific threat being analyzed.

For Task B-5, EEI will review relevant information from YWU and other sources, facilitate discussions, provide engineering support, and document decisions by the Steering Committee as necessary to complete the following tasks:

- a) Malevolent Threats. Estimate the likelihood of a malevolent event is based on the adversary's objectives and capabilities and the attractiveness of the region, facility, and threat-asset pair relative to alternative targets. Any among the following three approaches to estimating malevolent threat likelihood may be used:
  - i. Proxy Measure—Proxy measures may be based on attractiveness of utility, size of metropolitan area, amount of governmental facilities in the area, or other



attributes and be provided by industry or other organizations to provide a common basis for evaluation of risk from malevolent threats.

- ii. Best Estimate—With this method, likelihood is determined based on informed experience of the organization, input from federal, state, and local law enforcement, and others. The likelihood will be either an ordinal measure, e.g., low, medium, high, very high, or can be a probability with a value between 0.0 and 1.0.
  - iii. Conditional Assignment—With this method, the likelihood of the threat is considered to be a probability of 1.0. This is a useful approach for examining the worst-case potential for a variety of malevolent threats.
- b) Natural Hazards. Estimate the probability of natural hazards by drawing on the historical record for the specific location of the asset. The frequencies for various levels of severity of natural hazards will be estimated using published records for earthquakes, tornadoes, and floods.
  - c) Dependency and Proximity Hazards. Estimate the likelihood of dependency hazards based on local historical records for the frequency, severity, and duration of service denials.
  - d) Record Estimates. Record the method used for making the estimates and the estimates themselves, as either single-valued point estimates or ranges.

#### **Task B-6: Risk and Resilience Analysis**

This task step combines the results from Tasks B-1 through B-5 into estimates of YWU's risk and resilience.

For Task B-6, EEI will review relevant information from YWU and other sources, facilitate discussions, provide engineering support, and document decisions by the Steering Committee as necessary to complete the following tasks:

- a) Calculate risk for each threat–asset pair as the product of the results from Consequence Analysis, Vulnerability Analysis, and Threat Analysis, using the following equation:
  - $\text{Risk} = \text{Consequences} \times \text{Vulnerability} \times \text{Threat Likelihood} = C \times V \times T$
  - Where: Consequences are as estimated in Task B-3, Vulnerability is as estimated in Task B-4, and Threat likelihood is as estimated in Task B-5.
- b) Calculate the current level of resilience.
  - i. The asset resilience metric is service denial due to a threat–asset pair, weighted by vulnerability and threat likelihood.
    - $\text{Asset Resilience Metric} = \text{Duration} \times \text{Severity} \times \text{Vulnerability} \times \text{Threat Likelihood}$
    - Where: Duration = the time period of service denial, in days
    - Severity = the amount of daily service denied, in gallons per day
    - Vulnerability and Threat Likelihood are as defined above.

- ii. The economic resilience metric is lost revenue to the utility owner due to the threat–asset pair. Lost revenue is asset resilience times the unit price of the service, where price is the pre-disruption price.
  - iii. The community economic resilience metric is the lost economic activity to the community served by the utility. For the community, the metric is the same as the economic loss to the community, estimated in Task B-3.
- c) Record the risk and resilience estimates for each threat–asset pair for use in Task 7.

### **Task B-7 - Risk and Resilience Management**

Risk and resilience management is the deliberate process of deciding whether actions are needed to enhance security or resilience or both. It includes deciding on and implementing one or a portfolio of options to achieve an acceptable level of risk and resilience at an acceptable cost to the utility and the community.

For Task B-7, EEI will review relevant information from YWU and other sources, facilitate discussions, provide engineering support, and document decisions by the Steering Committee as necessary to complete the following tasks:

- a) Decide what risk and resilience levels are acceptable by examining the estimated results of the first six steps for each threat–asset pair. For those that are acceptable, document the decision. For those that are not acceptable, proceed to the next steps.
- b) Define countermeasure and mitigation/resilience options for those threat–asset pairs that are not acceptable.
- c) Estimate investment and operating costs of each option, being sure to include regular maintenance and periodic overhaul if expected. Adjust future costs to present value.
- d) Assess the options by analyzing the facility or asset under the assumption that the option has been implemented—revisiting all affected Tasks B-3 through B-6 to re-estimate the risk and resilience levels and calculating the estimated benefits of the option (the difference between the risk and resilience levels without the option and those with the option in place).
- e) Identify the options that have benefits that apply to multiple threat– asset pairs.
- f) Calculate the net benefits and benefit–cost ratio (and/or other criteria that are relevant in the utility’s resource decision-making) to estimate the total value and risk-reduction efficiency of each option.
- g) Review the options considering all the dimensions—fatalities, serious injuries, financial losses to the owner, economic losses to the community, and qualitative factors—and allocate resources to the selected options. Determine the resources—financial, human, and other—needed to operate the selected options.

### **Task B-8 - Risk and Resilience Assessment Documentation**

For Task B-8, EEI will document the procedures, findings, and results of the RRA process. The document will contain a description the results of Tasks B-1 through B-7, Stakeholder Workshop

meeting attendees and minutes, a plan for implementing agreed upon operational and capital plans for decreasing risk and improving resilience.

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## **TASK C: EMERGENCY RESPONSE PLAN**

### **Task C-1 – Review Existing Emergency Response Plan**

The American Water Infrastructure Act of 2018 requires all Community Water Supplies to update their ERPs to incorporate the results of the RRA (Task B). Specifically, the update must address the following:

- Strategies and resources to improve the resilience of the system, including the physical security and cybersecurity of the system;
- Plans and procedures that can be implemented, and identification of equipment that can be utilized, in the event of a malevolent act or natural hazard that threatens the ability of the community water system to deliver safe drinking water;
- Actions, procedures, and equipment which can obviate or significantly lessen the impact of a malevolent act or natural hazard on the public health and the safety and supply of drinking water provided to communities and individuals, including the development of alternative source water options, relocation of water intakes, and construction of flood protection barriers; and
- Strategies that can be used to aid in the detection of malevolent acts or natural hazards that threaten the security or resilience of the system.

For Task C-1, EEI will review YWU's existing ERP and create a detailed plan for updating it to meet the requirements of the American Water Infrastructure Act of 2018.

### **Task C-2: Draft Emergency Response Plan**

For Task C-2, EEI will update the YWU's existing ERP incorporating the results of the RRA in accordance with the requirements of the American Water Infrastructure Act of 2018. The Draft ERP will be submitted to YWU for review and comment.

EEI will use the Community Water System Emergency Response Plan template provided by the EPA Office of Water (EPA 816-B-19-003) as the guiding document in preparing the ERP. The plan will include the following sections:

UTILITY INFORMATION

- i Utility Overview
- ii Personnel Information
- iii Primary Utility Components
- iv Industry Chemical Handling and Storage Facilities
- v Safety
- vi Response Resources
- vii Key Local Services

1 RESILIENCE STRATEGIES

- 1.1 Emergency Response Roles
- 1.2 Incident Command System (ICS) Roles
- 1.3 Communication
  - 1.3.1 Internal Communication
  - 1.3.2 External Response Partner Communication
  - 1.3.3 Critical Customer Communication
  - 1.3.4 Communication Equipment Inventory
- 1.4 Media Outreach
- 1.5 Public Notification Templates

2 EMERGENCY PLANS AND PROCEDURES

- 2.1 Core Response Procedures
- 2.2 Incident-Specific Response Procedures

3 MITIGATION ACTIONS

- 3.1 Alternative Source Water Options and Interconnected Utilities
- 3.2 Other Mitigation Actions

4 DETECTION STRATEGIES

EEl will present the rationale and content of the ERP during a Stakeholder Workshop. EEl will address any issues identified during the workshop will in a second workshop, if necessary. The final resolution of these issues will be incorporated in the Final ERP.

**Task C-3: Final Emergency Response Plan**

For Task C-3, EEl will finalize the ERP ensuring that it meets all the requirements of the American Water Infrastructure Act of 2018.

**Additional Services**

The above scope summarizes the work items that will be completed for this contract. Additional work items, including additional meetings beyond the meetings defined in the above scope, shall be considered outside the scope of the agreement and will be billed in accordance with EEl's current Standard Schedule of Charges. No such additional services shall be performed unless authorized pursuant to a written amendment to this Agreement entered into and executed by the parties.



**Attachment C:**  
**LEVEL OF EFFORT and ASSOCIATED COSTS**  
**RISK AND RESILIENCE ASSESSMENT AND EMERGENCY RESPONSE PLAN**  
 UNITED CITY OF YORKVILLE, IL

DATE:	5/1/2020
ENTERED BY:	TGH

WORK ITEM NO.	WORK ITEM	ENTITY:	EEI					WORK ITEM HOUR SUMM.	COST PER ITEM
		PROJECT ROLE:	PRINCIPAL IN CHARGE	SENIOR PROJECT MANAGER	PROJECT ENGINEER	PROJECT TECHNICIAN	ADMIN.		
		HRLY RATE:	\$208	\$203	\$141	\$129	\$70		
TASK A: PROJECT ADMINISTRATION AND FACILITATION									
A-1	Project Administration and Kick-Off Meeting		1	2	2		4	9	\$1,176
A-2	Stakeholder Assistance & Workshops (2 Workshops)		1	6	6	1		14	\$2,401
A-3	Steering Committee Assist. & Progress Mtgs. (6 Mtgs.)		2	18	18	1		39	\$6,737
Project Administration and Facilitation Subtotal:			4	26	26	2	4	62	\$10,314
TASK B: RISK AND RESILIENCE PLAN									
B-1	Asset Characterization (Tasks a-e)		1	4	16	2		23	\$3,534
B-2	Threat Characterization (Tasks a-f)			2	8	1		11	\$1,663
B-3	Consequence Analysis Tasks (a-e)			8	12			20	\$3,316
B-4	Vulnerability Analysis (Tasks a-d)			8	8			16	\$2,752
B-5	Threat Analysis (Tasks a-d)			8	8			16	\$2,752
B-6	Risk and Resilience Analysis (Tasks a-c)		1	2	12	1		16	\$2,435
B-7	Risk and Resilience Management (Tasks a-g)		2	12	24			38	\$6,236
B-8	Risk and Resilience Assessment Documentation		2	20	40	4	4	70	\$10,912
Risk and Resilience Plan Subtotal:			6	64	128	8	4	210	\$33,600
TASK C: EMERGENCY RESPONSE PLAN									
C-1	Review Existing Emergency Response Plan		-	2	4	1		7	\$1,099
C-2	Draft Emergency Response Plan		2	18	24		1	45	\$7,524
C-3	Final Emergency Response Plan		2	12	24	2	2	42	\$6,634
Emergency Response Plan Subtotal:			4	32	52	3	3	94	\$15,257
PROJECT TOTAL:			14	122	206	13	11	366	\$59,171

**Notes:**

Proposal assumes any technical support for the cybersecurity risk assessment will be provided by the City's Information Systems Department or other resources provided by the City.

DIRECT EXPENSES	
Mileage =	\$0
Printing =	\$250
<b>DIRECT EXPENSES =</b>	<b>\$250</b>

LABOR EXPENSES	
Engineering Expenses =	\$56,724
Drafting Expenses =	\$1,677
Administrative Expenses =	\$770
<b>TOTAL LABOR EXPENSES =</b>	<b>\$59,171</b>

<b>TOTAL CONTRACT COSTS =</b>	<b>\$59,421</b>
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**Attachment D:  
SCHEDULE**

**RISK AND RESILIENCE ASSESSMENT AND EMERGENCY RESPONSE PLAN  
UNITED CITY OF YORKVILLE**

ITEM NO.	WORK ITEM	Month:															
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
TASK A: PROJECT ADMINISTRATION AND FACILITATION																	
A-1	Project Administration																
A-1.1	Kick -Off Meeting																
A-2	Stakeholder Assistance & Workshops (2 Workshops)																
A-3	Steering Committee Work Session/Progress Mtgs. (6 Mtgs.)																
TASK B: RISK AND RESILIENCE PLAN																	
B-1	Asset Characterization (Tasks a-e)																
B-2	Threat Characterization (Tasks a-f)																
B-3	Consequence Analysis Tasks (a-e)																
B-4	Vulnerability Analysis (Tasks a-d)																
B-5	Threat Analysis (Tasks a-d)																
B-6	Risk and Resilience Analysis (Tasks a-c)																
B-7	Risk and Resilience Management (Tasks a-g)																
B-8	Risk and Resilience Assessment Documentation																
TASK C: EMERGENCY RESPONSE PLAN																	
C-1	Review Existing Emergency Response Plan																
C-2	Draft Emergency Response Plan																
C-3	Final Emergency Response Plan																

**Legend**

	Project Administration Work Item(s)
	Stakeholder Workshops
	Steering Committee Meetings
	Risk and Resilience Assessment
	Emergency Response Plan



## Standard Schedule of Charges

January 1, 2019

EMPLOYEE DESIGNATION	CLASSIFICATION	HOURLY RATE
Senior Principal	E-4	\$208.00
Principal	E-3	\$203.00
Senior Project Manager	E-2	\$197.00
Project Manager	E-1	\$178.00
Senior Project Engineer/Planner/Surveyor II	P-6	\$165.00
Senior Project Engineer/Planner/Surveyor I	P-5	\$153.00
Project Engineer/Planner/Surveyor	P-4	\$141.00
Senior Engineer/Planner/Surveyor	P-3	\$129.00
Engineer/Planner/Surveyor	P-2	\$117.00
Associate Engineer/Planner/Surveyor	P-1	\$106.00
Senior Project Technician II	T-6	\$153.00
Senior Project Technician I	T-5	\$141.00
Project Technician	T-4	\$129.00
Senior Technician	T-3	\$117.00
Technician	T-2	\$106.00
Associate Technician	T-1	\$ 93.00
Engineering/Land Surveying Intern	I-1	\$ 84.00
GIS Technician	G-1	\$ 75.00
Administrative Assistant	A-3	\$ 70.00

### CREW RATES, VEHICLES AND REPROGRAPHICS

1 Man Field Crew with Standard Survey Equipment	\$168.00
2 Man Field Crew with Standard Survey Equipment	\$262.00
1 Man Field Crew with RTS or GPS *	\$208.00
2 Man Field Crew with RTS or GPS *	\$302.00
Vehicle for Construction Observation	\$15.00
In-House Scanning and Reproduction	\$0.25/Sq. Ft. (Black & White) \$1.00/Sq. Ft. (Color)
Reimbursable Direct Costs & Services by Others	Cost + 10%

\*RTS = Robotic Total Station / GPS = Global Positioning System





Reviewed By:	
Legal	<input type="checkbox"/>
Finance	<input type="checkbox"/>
Engineer	<input checked="" type="checkbox"/>
City Administrator	<input checked="" type="checkbox"/>
Human Resources	<input type="checkbox"/>
Community Development	<input type="checkbox"/>
Police	<input type="checkbox"/>
Public Works	<input type="checkbox"/>

Agenda Item Number

New Business #5

Tracking Number

PW 2020-39

### Agenda Item Summary Memo

**Title:** NPDES Annual Report

**Meeting and Date:** Public Works Committee – June 16, 2020

**Synopsis:** Informational Purposes

#### Council Action Previously Taken:

Date of Action: \_\_\_\_\_ Action Taken: \_\_\_\_\_

Item Number: \_\_\_\_\_

**Type of Vote Required:** \_\_\_\_\_

**Council Action Requested:** None

**Submitted by:** Brad Sanderson Engineering  
Name Department

#### Agenda Item Notes:

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*Have a question or comment about this agenda item?*  
Call us Monday-Friday, 8:00am to 4:30pm at 630-553-4350, email us at [agendas@yorkville.il.us](mailto:agendas@yorkville.il.us), post at [www.facebook.com/CityofYorkville](https://www.facebook.com/CityofYorkville),  
tweet us at @CityofYorkville, and/or contact any of your elected officials at [http://www.yorkville.il.us/gov\\_officials.php](http://www.yorkville.il.us/gov_officials.php)



# Memorandum

To: Bart Olson, City Administrator  
From: Brad Sanderson, EEI  
CC: Eric Dhuse, Director of Public Works  
Krysti Barksdale-Noble, Community Dev. Dir.  
Lisa Pickering, Deputy City Clerk

Date: June 10, 2020  
Subject: NPDES MS4 Annual Report

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The City adopted its latest Stormwater Management Plan in April 2017 which was required by the IEPA in order for the City to be compliance with the NPDES MS4 Permit. One of the requirements of the permit is to submit an Annual Report to the IEPA. The report is to detail the City's progress towards its goals that it outlined in its Plan.

The report, which covers the period from March 2019 to March 2020, is provided for informational purposes and will be submitted to the IEPA by the end of the June.

If you have any questions or require additional information, please let us know.



# Illinois Environmental Protection Agency

Bureau of Water • 1021 N. Grand Avenue E. • P.O. Box 19276 • Springfield • Illinois • 62794-9276

## Division of Water Pollution Control ANNUAL FACILITY INSPECTION REPORT

### for NPDES Permit for Storm Water Discharges from Separate Storm Sewer Systems (MS4)

*This fillable form may be completed online, a copy saved locally, printed and signed before it is submitted to the Compliance Assurance Section at the above address. Complete each section of this report.*

Report Period: From March, 2019 To March, 2020

Permit No. ILR40 0554

#### MS4 OPERATOR INFORMATION: (As it appears on the current permit)

Name: United City of Yorkville Mailing Address 1: 800 Game Farm Road  
Mailing Address 2: County: Kendall  
City: Yorkville State: IL Zip: 60560 Telephone: (630) 553-4350  
Contact Person: Bart Olson, City Administrator Email Address: bolson@yorkville.il.us  
(Person responsible for Annual Report)

#### Name(s) of governmental entity(ies) in which MS4 is located: (As it appears on the current permit)

United City of Yorkville

#### THE FOLLOWING ITEMS MUST BE ADDRESSED.

A. Changes to best management practices (check appropriate BMP change(s) and attach information regarding change(s) to BMP and measurable goals.)

- |  |                          |   |                          |
|--|--------------------------|---|--------------------------|
| 1. Public Education and Outreach             | <input type="checkbox"/> | 4. Construction Site Runoff Control       | <input type="checkbox"/> |
| 2. Public Participation/Involvement          | <input type="checkbox"/> | 5. Post-Construction Runoff Control       | <input type="checkbox"/> |
| 3. Illicit Discharge Detection & Elimination | <input type="checkbox"/> | 6. Pollution Prevention/Good Housekeeping | <input type="checkbox"/> |

B. Attach the status of compliance with permit conditions, an assessment of the appropriateness of your identified best management practices and progress towards achieving the statutory goal of reducing the discharge of pollutants to the MEP, and your identified measurable goals for each of the minimum control measures.

C. Attach results of information collected and analyzed, including monitoring data, if any during the reporting period.

D. Attach a summary of the storm water activities you plan to undertake during the next reporting cycle ( including an implementation schedule.)

E. Attach notice that you are relying on another government entity to satisfy some of your permit obligations (if applicable).

F. Attach a list of construction projects that your entity has paid for during the reporting period.

**Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or subsequent offense after conviction is a Class 3 felony. (415 ILCS 5/44(h))**

Owner Signature:

Bart Olson

Printed Name:

Date:

City Administrator

Title:

EMAIL COMPLETED FORM TO: [epa.ms4annualinsp@illinois.gov](mailto:epa.ms4annualinsp@illinois.gov)

or Mail to: ILLINOIS ENVIRONMENTAL PROTECTION AGENCY  
WATER POLLUTION CONTROL  
COMPLIANCE ASSURANCE SECTION #19  
1021 NORTH GRAND AVENUE EAST  
POST OFFICE BOX 19276  
SPRINGFIELD, ILLINOIS 62794-9276

**ILLINOIS ENVIRONMENTAL PROTECTION AGENCY  
ANNUAL FACILITY INSPECTION REPORT  
NPDES PERMIT FOR STORM WATER DISCHARGES  
FROM MUNICIPAL SEPARATE STORM SEWER SYSTEMS (MS4)**

**UNITED CITY OF YORKVILLE, IL: MARCH 2019 TO MARCH 2020**

**THE FOLLOWING ITEMS MUST BE ADDRESSED.**

**A. CHANGES TO BEST MANAGEMENT PRACTICES (BMP CHANGES).**

The City did not make any changes to their Best Management Practices program or Stormwater Management Program Plan (SMPP) over the past year and does not have any planned modifications for the upcoming year. However, the City is continually investigating opportunities to enhance their program each year as budget and staff considerations allow.

**B. STATUS OF COMPLIANCE WITH PERMIT CONDITIONS AND ASSESSMENT OF THE APPROPRIATENESS OF THE IDENTIFIED BEST MANAGEMENT PRACTICES TOWARDS ACHIEVING THE STATUTORY GOAL OF REDUCING THE DISCHARGE OF POLLUTANTS TO THE MEP, AND THE IDENTIFIED MEASURABLE GOALS FOR EACH OF THE MINIMUM CONTROL MEASURES.**

The City has endeavored to meet the requirements of the permit conditions as outlined in the SMPP and in consideration of current staffing and budget constraints. The status of the permit activities for the reporting period is as follows.

*Public Education and Outreach*

The City maintains an information center at City Hall that includes informational items regarding stormwater related issues. The City staff regularly reviews current available materials in their information center at City Hall to compare with requirements and the topic list from the General Permit. This will be an ongoing effort to keep educational materials current and relevant to resident and stormwater pollution prevention needs.

The City is in compliance with minimum control measures by providing public education and outreach materials at the City Hall and on its website.

*Public Participation and Involvement*

The City maintains documentation on the number and type of calls received from the public regarding potential illicit discharges. The City received seven drainage complaint calls and no illicit discharge complaints during this reporting period. The City supports recycling and includes a recycling program and regular collection with their solid waste and recycling collection provider. The City also maintains a call-in free of charge electronics recycling program through their solid waste and recycling collection provider.

The City held a Public Meeting at their Plan Commission Meeting, on July 10, 2019, that included a presentation of drainage and stormwater management and provided an opportunity for input from the public on the stormwater program.

The above activities demonstrate the City's compliance with minimum control measures for Public Participation and Involvement.

#### *Construction Site Runoff Control*

The City tracks site development permits issued and requires compliance with Construction Runoff Controls in their ordinances where required. The City documents citizen complaints, if any, regarding construction site runoff and implements and documents follow up procedures. There were no citizen complaints regarding erosion control during the reporting period. However, the City inspects construction sites for erosion and sediment control as required by the NPDES Permit and the City's Erosion and Sediment Control provisions in their Stormwater Ordinance and takes enforcement action as necessary.

The above activities demonstrate the City's compliance with minimum control measures for Construction Site Runoff Control.

#### *Post Construction Site Runoff Control*

The City developed a database of basins and provides support and assistance for citizens regarding post construction runoff control on an as requested basis. However, no post construction runoff basin related complaints from citizens were received. The City maintains a database of Home Owners Associations (HOA) and encourages HOAs to inspect and maintain their stormwater management basins and makes information available and provides assistance on an as needed basis when requested by HOAs. The City requires new developments to enter into maintenance agreements for stormwater facilities. All new developments requiring stormwater basins during the reporting period were required to submit a maintenance plan for approval by the City.

The City continued implementation of their Basin Monitoring Program from their SMPP. 25% of the Basins in the City were inspected in the program year and maintenance recommendations were provided to Basin owners.

The City is in compliance with minimum control measures for Post Construction Runoff Control because their ordinances address post construction requirements and City staff responds to citizen complaints and HOA requests for information and assistance.

#### *Illicit Discharge Detection and Elimination*

The City maintains and updates as necessary their stormwater Outfall Inventory. In addition, the City tracks the number and types of Illicit Discharges and the steps taken to eliminate the discharge as potential discharges are brought to their attention. There were no potential illicit discharges reported during the reporting period and no citation issued for discharge of waste oil into the storm sewer system. The City staff will take action if problems with the outfalls or illicit discharges are reported to the City.

The City is in compliance with the minimum control measures for Illicit Discharge Detection and Elimination because they have ordinances and procedures in place to address and correct illicit discharge when they are discovered. The City takes action as necessary in accordance with these ordinances when illicit discharges or problems with stormwater outfalls are reported.

#### *Pollution Prevention and Good Housekeeping*

The City provided services and maintained records for the following good housekeeping activities: number of curb miles swept, amount of leaves collected, amount of road salt used, number of catch basins cleaned, and the amount of herbicides and pesticides used, and training provided for employees. Due to budget constraints, no formal NPDES training was provided to employees; however, employees are kept informed on best management practices through implementation of the SMPP. In addition, the City investigated methods for tracking BMP implementation and resultant pollutant load reduction and keeping and regularly updating the BMP inventory.

These activities place the City in compliance with the minimum control measures for Pollution Prevention and Good Housekeeping.

**C. RESULTS OF INFORMATION AND DATA COLLECTED AND ANALYZED.**

The following data was collected or information analyzed for the above permit cycle and is attached to this report.

*Public Education and Outreach*

No data was collected or information analyzed in this area during the reporting period.

*Public Participation and Involvement*

No data was collected or information analyzed in this area during the reporting period.

*Construction Site Runoff Control*

No data was collected or information analyzed in this area during the reporting period.

*Post Construction Site Runoff Control*

No data was collected or information analyzed in this area during the reporting period.

*Illicit Discharge Detection and Elimination*

No data was collected or information analyzed in this area during the reporting period.

*Pollution Prevention and Good Housekeeping*

- The City swept 250 curb miles in the reporting period.
- The City collected 1110 cubic yards of leaves during their fall collection.
- The City used 1600 tons of road salt and 15,000 gallons of 23% slat brine for ice control during the winter.
- The City cleaned 283 catch basins and checked restrictors and cleaned storm drain covers after each significant rainfall event during the reporting period.
- The City applied 75 gallons of herbicides and pesticides and contracted to have insecticide caches placed in all catch basins for mosquito control during the reporting period.

**D. SUMMARY OF STORM WATER ACTIVITIES PLANNED FOR THE NEXT REPORTING CYCLE.**

In addition to continuing City programs, the City will be continuing to implement the BMP changes to meet the requirements contained in the 2016 Permit and is continually evaluating their program to enhance the community's pollution prevention efforts.

The City is proposing to follow the plan of activities as described in their approved SMPP for the upcoming year. These activities would include the following.

*Public Education and Outreach*

The City will continue to maintain an information center at City Hall that contains stormwater and recycling related information for City residents.

*Public Participation and Involvement*

The City will continue to maintain documentation regarding the number and type of calls received from the public regarding potential illicit discharges. The City will hold a Public Meeting to received public input on their stormwater management program.

*Construction Site Runoff Control*

The City will continue to track the number of site development permits issued. The City will continue to document and follow up on citizen complaints regarding construction site runoff. The City will continue to inspect active construction sites in accordance with NPDES Permit and Erosion and Sediment Control Ordinance requirements.

*Post Construction Site Runoff Control*

The City will maintain their databases of HOAs and Stormwater Basins and update as necessary. The City will provide information and assistance to citizens and HOAs on an as requested basis. The City will continue to require new developments to enter into maintenance agreements for their stormwater basins. The City will continue implementation of their Basin Monitoring Program from their SMPP. 25% of the Basins in the City will be inspected in the upcoming year and maintenance recommendations will be provided to Basin owners.

*Illicit Discharge Detection and Elimination*

The City will continue to track the number and type of potential illicit discharges and problems with stormwater outfalls that are reported. The City will document the incidents and the corrective actions on their summary forms and in accordance with their ordinances and procedures.

*Pollution Prevention and Good Housekeeping*

The City will continue to provide services and maintain records for the following good housekeeping activities: number of curb miles swept, amount of leaves collected, amount of road salt used, number of catch basins cleaned, and the amount of herbicides and pesticides used, and training provided for employees. The City will inventory stormwater BMPs installed in new developments and track resultant estimated pollutant load reductions. The City will seek opportunities to address chloride issues with de-icing operations and participate if a watershed group is organized to implement control measures.

**E. NOTICE OF PERMIT OBLIGATIONS SATISFIED BY OTHER GOVERNMENT ENTITY.**

The City is not depending on other units of government to meet any of its' permit obligations.

**F. LIST OF CONSTRUCTION PROJECTS PAID FOR BY THE CITY OF YORKVILLE FOR THE 2019-2020 REPORTING PERIOD.**

The following City funded construction projects were underway in the 2019-2020 reporting period.

- Church Street Sanitary Sewer Improvements
- 2019 Road Program
- Orange Street Water Main Replacement