

**AGENDA  
PUBLIC WORKS & UTILITIES COMMITTEE  
Village of Hoffman Estates**

**October 28, 2019**

*Immediately following Finance Committee*

Members:	Anna Newell, Chairperson	Gary G. Stanton, Trustee
	Michael Gaeta, Vice Chairperson	Karen J. Arnet, Trustee
	Gary Pilafas, Trustee	William McLeod, Mayor
	Karen V. Mills, Trustee	

- I. Roll Call
- II. Approval of Minutes – September 23, 2019

**NEW BUSINESS**

1. Discussion regarding 2019-2020 Snow/Ice Control Policy and Procedure Manual.
2. Request approval of a Resolution adopting the 2019 update of the Cook County Multi-Jurisdictional Hazard Mitigation Plan.
3. Request authorization to reject all bids for the purchase and installation of grinder and related improvements at Moonlake Lift Station.
4. Request authorization to award contract for 2019–2020 Front End Loader rental to United Rentals, Elk Grove Village, IL, in an amount not to exceed \$15,264.
5. Request authorization to award contract for 2019-2020 Sanitary Sewer Rehabilitation for compliance with the Metropolitan Water Reclamation District (MWRD) Infiltration/Inflow Control Program (IICP) to Michels Pipe Services, Brownsville, WI, in an amount not to exceed \$160,000.
6. Request authorization to:
  - a. Purchase 1,500 tons of winter road salt in 2019 at \$82.71 per ton from Morton, Inc., Chicago, IL, at a cost of \$124,065.
  - b. Award contract for State of Illinois joint purchase of 2019-2020 winter road salt to Cargill, Inc., North Olmstead, OH, based on the purchase of 2,000 tons in 2019 at \$89.33 per ton from Cargill, Inc. at a cost of \$178,660.
  - c. Purchase a minimum of 2,400 tons (80%) of winter road salt from Cargill, Inc., North Olmstead, OH, in 2020 at \$89.33 per ton at a cost not to exceed \$214,000.
7. Request authorization to award contract for the Almond Lane and Audubon Street Culvert Replacement Project to A Lamp Concrete Contractors, Inc., of Schaumburg, IL (low bid), in an amount not to exceed \$359,366.

**REPORTS (INFORMATION ONLY)**

1. Department of Public Works Monthly Report.
2. Department of Development Services Monthly Engineering Report of the Transportation and Engineering Division.

**III. President's Report**

**IV. Other**

**V. Items in Review**

**VI. Adjournment**

*(Further details and information can be found in the agenda packet attached hereto and incorporated herein and can also be viewed online at [www.hoffmanestates.org](http://www.hoffmanestates.org) and/or in person in the Village Clerk's office).*

*The Village of Hoffman Estates complies with the Americans with Disabilities Act (ADA). For accessibility assistance call the ADA Coordinator at 847.882-9100.*

**PUBLIC WORKS & UTILITIES COMMITTEE  
MEETING MINUTES**

September 23, 2019

**I. Roll call**

**Members in Attendance:** Trustee Anna Newell, Chairperson  
Trustee Michael Gaeta, Vice Chairperson  
Trustee Karen Mills  
Trustee Gary Stanton  
Trustee Karen Arnet  
Mayor William McLeod

**Via Telephonic Attendance:** Trustee Gary Pilafas

**Management Team Members  
in Attendance:** Jim Norris, Village Manager  
Dan O'Malley, Deputy Village Manager  
Art Janura, Corporation Counsel  
Mark Koplin, Asst. Village Mgr.-Dev. Svs.  
Alan Wenderski, Village Engineer  
Ted Bos, Police Chief  
Pat Fortunato, Fire Chief  
Bev Romanoff, Village Clerk  
Rachel Musiala, Finance Director  
Fred Besenhoffer, Director of IS  
Monica Saavedra, Director of HHS  
Joe Nebel, Director of Public Works  
Patti Cross, Asst. Corporation Counsel  
Doug LaSota, Assoc. Corporation Counsel  
Suzanne Ostrovsky, Asst. to Village Mgr.  
Aaron Howe, Mgmt. Asst., Public Works  
Matt Galloway, Administrative Intern  
Kasia Cawley, Asst. Police Chief

The Public Works & Utilities Committee meeting was called to order at 7:00 p.m.

**II. Approval of Minutes**

Motion by Trustee Gaeta, seconded by Trustee Arnet, to approve the minutes of the Public Works & Utilities Committee meeting of August 19, 2019. Roll call vote taken. All ayes. Motion carried.

Motion by Trustee Arnet, seconded by Mayor McLeod, to approve the minutes of the Special Public Works & Utilities Committee meeting of September 9, 2019. Roll call vote taken. All ayes. Motion carried.

**NEW BUSINESS**

1. **Request authorization to award contract for the 2019 Drainage Improvements Project to DeVinci Construction, Inc., Naperville, IL (low bid), in an amount not to exceed \$31,790.**

An item summary sheet from Alan Wenderski was presented to Committee.

Motion by Trustee Gaeta, seconded by Trustee Arnet, to award contract for the 2019 Drainage Improvements Project to DeVinci Construction, Inc., Naperville, IL (low bid), in an amount not to exceed \$31,790. Roll call vote taken. All ayes. Motion carried.

2. **Request authorization to:**
  - a) **enter into a performance contract with Siemens Industry, Inc. for the replacement of residential and commercial water meters, conversion to LED street lights, and the installation of an advanced metering infrastructure system; and**
  - b) **pursue financing with a direct placement bond issue, to be bid out by the Village's municipal advisors, Speer Financial, Inc.**

An item summary sheet from Jim Norris, Dan O'Malley, Joe Nebel, Rachel Musiala, and Aaron Howe was presented to Committee.

Representatives with Siemens Industry, Inc. addressed the Committee and provided information on performance contracted projects to include residential and commercial water meter replacement, LED street light conversion and installation of an advanced metering infrastructure system. A performance contract is designed to ensure that projects are funded by a combination of revenue recovered, decreased maintenance costs and improvements in operational efficiencies. It is projected that the three projects will provide a return on investment within 12 years. The water meter is guaranteed for 98.5% accuracy. Currently, the Village's water meters average 92.82% accuracy. The LED style street light fixtures offer increased longevity and more efficient lighting, using much less energy to produce an equivalent light source.

The Village's municipal advisor, Speer Financial, did research to see if a bond issue would be a better option for financing and it would be much less risky for the Village to pursue. Staff recommends financing of this project with a direct placement bond issue.

Motion by Trustee Gaeta, seconded by Trustee Arnet, to enter into a performance contract with Siemens Industry, Inc. for the replacement of residential and commercial water meters, conversion to LED street lights, and the installation of an advanced metering instruction system; and pursue financing with a direct placement bond issue, to be bid out by the Village's municipal advisors, Speer Financial, Inc. Roll call vote taken. All ayes. Motion carried.

3. **Request authorization to waive bidding and purchase one (1) diesel exhaust fluid (DEF) bulk containment unit using Sourcewell contract 040215-PGE discount from Blue Energy Equipment, in an amount not to exceed \$30,868.**

An item summary sheet from Joe Nebel, Kelly Kerr and Joe Capiga was presented to Committee.

Motion by Trustee Gaeta, seconded by Trustee Stanton, to waive bidding and purchase one (1) diesel exhaust fluid (DEF) bulk containment unit using Sourcewell contract 040215-PGE discount from Blue Energy Equipment, in an amount not to exceed \$30,868. Roll call vote taken. All ayes. Motion carried.

### **REPORTS (INFORMATION ONLY)**

1. **Department of Public Works Monthly Report.**

The Public Works Monthly Report was received and filed.

2. **Department of Development Services Monthly Engineering Report of the Transportation and Engineering Division.**

The Department of Development Services Monthly Engineering Report of the Transportation & Engineering Division was received and filed.

### **III. President's Report**

Mayor McLeod reminded everyone of Wine Wednesday at Kyoto this week; the Fire Department Open House on Saturday, September 28 from 1-4pm; Local Historian presentation on "How we Got Here" from 1-3pm at Village Hall; the Commission for Disabled Citizens First Friday event at Village Hall on October 4, at 6:30pm; and Celtic Fest at the Sears Centre on October 5 from 11am-4pm.

Mayor McLeod reported that today, September 23, is the Village's 60<sup>th</sup> anniversary. He attended the Village Green Ad-Hoc Committee meeting on September 17; the Senior Citizens Commission Fall Lunch on September 18, as well as the Business After Hours event at the Hideaway Brew Garden. On September 19, Mayor McLeod attended the Children's Advocacy Center's open house and the Chamber golf outing reception in the evening. On September 21, Mayor McLeod attended the Village's 60<sup>th</sup> Anniversary party at the Sears Centre and thanked everyone for all their hard work. He attended the community pride awards this evening at Village Hall.

- IV. Other**
- V. Items in Review**
- VI. Adjournment**

Motion by Trustee Gaeta, seconded by Trustee Arnet, to adjourn the meeting at 7:37 p.m.  
Roll call vote taken. All ayes. Motion carried.

Minutes submitted by:

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Debbie Schoop, Executive Assistant

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Date

**COMMITTEE AGENDA ITEM  
VILLAGE OF HOFFMAN ESTATES**

**SUBJECT:** Discussion regarding 2019-2020 Snow/Ice Control Policy and Procedure Manual.

**MEETING DATE:** October 28, 2019

**COMMITTEE:** Public Works & Utilities

**FROM:** Joseph Nebel, Director of Public Works  
Kelly Kerr, Assistant Director of Public Works

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**PURPOSE:** Discussion regarding 2019-2020 Snow/Ice Control Policy and Procedure Manual.

**BACKGROUND:** Each year, the Public Works Management Team meets with a group of employee representatives to review, modify and update the Snow/Ice Control Policy and Procedure Manual. Improvements and changes are discussed with questions and concerns addressed resulting in a final plan that is recommended to the Public Works Committee. The plan provides for the most effective range of services to residents and businesses within the scope of the annual budget.

**DISCUSSION:** This year's review of the policy and procedure manual has been completed. Although there are no major procedural changes from last year's program, the following are highlights of this year's program:

- A continued focus on the storage, loading and unloading of salt at our west site as well as the proper process for washing down of vehicles and equipment to ensure containment and the prevention of rinsate material from entering the storm water system.
- Completion of the redesign of the route status display boards in the Public Works EOC will occur this fall. This will permit easier monitoring and tracking of joint operations when large truck route plowing and cul-de-sac route plowing occurs simultaneously.
- All snow control vehicles continue to be equipped with GPS tracking devices which provide various efficiencies and tracking of each truck throughout an event.

**DISCUSSION, continued**

- The 2019/2020 season will be the second year for providing snow and ice control maintenance for the various paths, walkways, pedestrian crossings, etc. associated with the PACE Bus Kiss & Ride and the Park & Ride facilities.
- A contracted weather advisory warning service will continue to be utilized to assist us to prepare for weather related events and notify off-duty supervisory personnel of weather conditions and pending weather events.
- Auxiliary drivers shall again be recruited and hired to augment Public Works staff during heavy or long duration snow storms. These drivers are primarily used for cul-de-sac and parking lot snow plowing.

**NOTE:** Personnel training and review of the 2019-2020 Snow/Ice Control Policy and Procedure Manual is scheduled to occur in November 2019. This training is for all Public Works personnel involved in snow removal operations and includes the “drive thru” inspection of the routes by the normal assigned drivers.

**FINANCIAL IMPACT:**

None

**RECOMMENDATION:**

For discussion purposes and acceptance.



**VILLAGE OF HOFFMAN ESTATES  
DEPARTMENT OF PUBLIC WORKS**

**SNOW AND ICE CONTROL  
POLICY AND PROCEDURE MANUAL**

*2019-2020 SEASON*

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**Recommended by Kelly Kerr  
Assistant Director of Public Works**

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**Approved by Joseph Nebel  
Director of Public Works**

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**Date Approved by Village Board**

NOTES:      1) CHANGES FROM 2019-2020 ARE ILLUSTRATED BY USE OF  
*ITALICIZED TYPE*

## ADVANCE PREPARATION AND PLANNING

All personnel who perform snow removal will attend an intensive training session on the basic mission and operating procedures to be used.

Training is to cover, but not be limited to, the following:

1. Route assignments (drive through)
2. Equipment checks
3. Specific operating needs of equipment assigned
4. Call in and response procedures
5. Shift assignments
6. Driving and operating safe and tips

Each truck is to be examined thoroughly by Fleet Services mechanics. Wiring and hydraulic hoses that are even remotely suspected of being deficient are to be replaced. All plow frames and plow components will be examined and those parts appearing weak or damaged will be reinforced or replaced. These inspections and repairs will begin in September and be completed by the end of October.

Area route assignments and associated route maps are updated every October to insure new subdivisions and other recent additional responsibilities are incorporated into the Village's plan.

## ADVANCE PREPARATION SNOW FENCE

In November, snow fence will be erected in the following locations where drifting typically occurs. Whenever possible all snow fence will be kept at least 60 feet from the curb line.

SOUTH	NORTH
Atlantic & Pacific	Whispering Trails (Lincoln Park)
Gannon (Chestnut Park)	Whispering Trails (Meadow Park)
Kingsdale (Victoria Park)	Winding Trail (Lincoln Park)
N. Dovington (Victoria Park)	Freeman Road (South Ridge Park)
N. Dexter (Victoria Park)	Huntington & Charlemagne
Randi Lane (north of 630 Randi Lane)	Beverly (south of Higgins)
Evanston & Illinois (Chino Park)	Other areas as necessary

## **I. SALT/SNOW WEATHER ALERT SERVICE**

A weather alert service is in effect on a year round basis to give advance warnings of threatening weather conditions.

- A. A service alert is to be received by one of the following individuals in the following order:
  - 1. Assistant Director of Public Works
  - 2. First call Supervisor
  - 3. Second call Supervisor
  - 4. Director of Public Works
  
- B. When an alert is received, The Assistant Director will contact the First call Supervisor regarding an alert that may/will require any salt/plowing operations. The First call Supervisor will notify both the Police Radio Desk and the Assistant Director as to the time such operations start. He will again notify both the Police Radio Desk and the Assistant Director when operations are completed.
  
- C. All snow/ice control related communications with the Weather Service and the Police Department will be conducted by a Supervisor, and not the call duty personnel.

## **II. EMERGENCY PROCEDURES**

It is the goal to clear all Village streets, cul-de-sacs, and dead-ends within 14 hours after a given snow fall stops. As operations continue and monitoring of progress continues against the 14 hour deadline, outside contractors will be called in to assist when we anticipate that our time goal will not be closely met. Varying conditions such as blowing/drifted snow, excessively heavy snow, etc., may necessitate outside assistance as well.

The agreement with the contractors specifies that they will report within two (2) hours of call. After the first storm, they will be encouraged to store their equipment within the Village.

Contractor equipment will be used primarily to clear cul-de-sacs. As the areas are cleared, contractor and available Village equipment will be shifted as needed, and contractors released as quickly as possible.

In the event that outside contractors are needed for emergency assistance, authorization must be obtained from the Director of Public Works, or his designee.

In the event of a forecasted snow fall that will exceed six (6) inches of snow and have a forecasted duration of more than twelve (12) hour time of accumulation, the following measures will take place. Cul-de-sac drivers will be instructed to "open only" all cul-de-sacs/dead-ends/eye brows, designated on their route sheets. "Open only" will involve two or three passes through each cul-de-sac/dead-end/eye brow, but will not include curbing or clean-up of areas until all cul-de-sacs have been opened up to traffic.

### III. CONTROL OF OPERATIONS

#### Under the Direction and General Supervision of the Department Director;

- A. The Assistant Director, or designated Supervisory Staff will be in command of salt/snow operations at all times.
- B. Only the Assistant Director or designated Supervisory Staff will advise the Police Department of the Village two (2) inch snow ordinance being placed into effect.
- C. The Assistant Director or designated Supervisory Staff will keep the Police Department advised of street operations and when such operations are complete.
- D. When required, two (2) Supervisors will be the staffing level for any given Snow/Ice Control operation.
- E. The Assistant Director, or designated Supervisory Staff will assign push back operations, if practical, the same day or next day, time and conditions permitting.
- F. Supervisors will be assigned for each operation. Supervisory personnel to be utilized include the following:

Jeff Allen  
Roger Golbach  
*John Kovaka*  
Kevin McGraw

*Joe Capiga*  
Jeremy Jahnke  
Nick Lackowski

Kelly Kerr  
Joseph Nebel

Support help to handle phone and radio traffic control include:

*Kathy Hnilica*  
Jennifer Taylor  
Aaron Howe

Rose Dyer  
Leslie Gaeth

- G. When required during plowing operations, a Department Administrative staff person may be called in to handle incoming calls and radio traffic from personnel. The Assistant Director or his designee will authorize.

### III. CONTROL OF OPERATIONS, continued

- H. Only authorized personnel are to answer the snow phone. All information and/or requests are to be logged and submitted to the shift supervisor on the date received.

All salt/plow complaint calls are to be logged and responded to in a courteous manner. The caller's name, address, time received, and problem encountered are to be logged. The complaints received are to be responded to by the supervisors as soon as possible depending upon weather conditions.

All complaints are to be answered and action taken as necessary (depending upon circumstances) within 24 hours.

- I. Both during and after normal work hours, all snow/ice related concerns or problems shall be forwarded to a program Supervisor. The Police Department has been advised to call a Supervisor (not the call duty person) for all snow/ice related matters. The Supervisor then is responsible for taking the appropriate action.

### IV. GENERAL RULES (for drivers/operators)

- A. Carry gloves and jacket in the truck at all times in case of breakdowns.
- B. Stay in assigned area only, unless otherwise instructed by the designated supervisor on duty.
- C. Use radios only in the line of duty. Refer all questions snow and ice related to the base station as "snow control" from "unit number". All other unrelated radio traffic should refer to "PWC" base.
- D. Always use 10-7 location and 10-8 to supervisors.
- E. Obey all traffic rules at all times.
- F. Be courteous to the public; refrain from giving out any information to the public; refer all questions to our Public Works phone at (847) 490-6800.
- G. When coming into the garage for service, while mechanical repairs are being made to your vehicles, check your vehicle completely yourself.
- H. Always keep your vehicle cab compartment clean during and after each use.
- I. Salt/plow drivers are to have their mars and strobe lights on both A.M., and P.M., during salt/plow operations, or, when transporting any large (11 ft. or greater) plow. Exceptions are to be authorized by a supervisor.
- J. When completing associated time sheets, military time is to be used.

#### IV. GENERAL RULES, continued

- K. All accidents and/or injuries no matter how minor, are to be reported to the on duty supervisor immediately, via two-way radio or any means necessary.
- L. Any vehicle problems requiring service must be reported via vehicle service request form and attached to the driver's/operator's time sheet prior to the shift's end.
- M. After shift supervisor has authorized an employee to leave a completed area, the driver/operator is responsible for the preparation, re-fueling, and insuring that vehicle used is ready for next shift, unless otherwise advised by a Supervisor.
- N. Employees using the wash bay are to keep the area clean and free of debris.

#### V. PLOWING AND SALTING PROCEDURES (drivers/operators)

Each driver/operator is responsible for his/her individual assigned area or route. The area should be free of ice and snow as soon as possible and all roadways are to be in safe condition. The job is not complete until all streets are free of ice and snow and snow is plowed to the curb lines where required. Under no circumstances is a driver/operator to leave an assigned area or route at any time unless a Supervisor has authorized it. The Supervisor must be notified immediately upon return to service. In the event of any equipment problems, a Supervisor is to be notified for instructions. The driver/operator should always be working on one of the streets in his/her assigned area or route unless authorization to leave is obtained from a Supervisor.

- A. The operation required will depend on the weather conditions. Specific instructions will be given by the shift Supervisor. The Supervisor may provide other specific instructions for you to follow.
- B. The operational procedure and goal for the application of salt on primary, main, and secondary streets shall be bare pavement. Salt should be applied near the center line of the street. Salt bounce when dropped from spinner should never exceed curb lines.
- C. Vehicle speed when salting shall not exceed 20 MPH. Under no circumstances shall plowing be done at speeds in excess of 20 MPH. Lower speeds shall be used in every instance where 20 MPH results in throwing snow onto sidewalks. Cul-de-sacs and courts shall be plowed with assigned vehicles.
- D. Snow is to be plowed to the curb line if curb exists, or, completely off the shoulder. An effort shall be made to plow all snow to the curb on the initial pass.
- E. Breaks must be scheduled through a Supervisor prior to leaving an assigned area.

## V. PLOWING AND SALTING PROCEDURES, continued

- F. It is important that the Supervisor know the driver's/operator's progress and what part of the assigned area or route has been completed. The on duty Supervisor will request the status of an area and the driver/operator is to report his/her location and what has been accomplished thus far.
- G. Cul-de-sac drivers are to check off the cul-de-sacs as they are completed, and indicate the time of day/night completed. The route map is to be signed and turned into the shift supervisor when the shift is over. Unfinished areas are to be brought to the Supervisors attention and passed on to the next shift's personnel.
- H. Upon the completion of an assigned route, the driver/operator is to contact the Supervisor. The driver/operator is not permitted to leave an assigned area or route until obtaining authorization from a Supervisor.
- I. After your assigned area has been completed, and the Supervisor has given authorization to return to the garage, each driver/operator is to refuel, hose off, clean, and ready his/her particular vehicle. Route drivers are to check with the Supervisor for possible re-loading directions.
- J. Upon return to the Public Works Center, a time ticket and area route sheets are to be submitted to the office Supervisor. After the Supervisor's inspection of all submitted documents, he will authorize the driver's/operator's shift end. The driver/operator may not go off duty unless authorized by a Supervisor.
- K. The Facilities Division will assume responsibility for salting and/or shoveling Village building sidewalks during their normal work shift hours or in the event that such services are required outside of street plowing/salting operations.
- L. Depending on weather conditions, temperature, and precipitation forecasts, discretion is given to the Department as to whether or not cul-de-sac salting is to be performed on all 368 cul-de-sacs. (Examples are during accumulation of freezing rain with falling temperatures, and 1" or less of accumulative snow when plowing would be effective, and conditions have rendered the pavement surface unsafe.)

## VI. WORK RULES AND PROCEDURES

Note: From time to time requests are initiated by department personnel to review this section of the policy. Modifications that are considered to be housekeeping issues are referred to the Assistant Director for final disposition. All other proposed modifications must be brought to the attention of the SNOW/ICE TASK FORCE, and approved by the Department Director. The deadline for this process is November 1<sup>st</sup> each year. Any new trial modifications are subject to termination at any time at the discretion of the Department Director.

## VI. WORK RULES AND PROCEDURES, continued

All department personnel are expected to be available for snow and ice control for overtime call-outs. During threatening weather, all department personnel are required to leave a phone number where they can be reached at all times. If/when the number changes, or the individual is not at the number on file with the department, the individual must call the PWC employee snow phone (847) 781-2730 to speak to a Supervisor or to leave a message.

During the snow season<sup>1</sup>, all Department personnel that are not on authorized leave of absence<sup>2</sup>, must be available to be contacted by the Supervisor on duty. Personnel that cannot be contacted and/or do not have verbal communications with a Supervisor, and/or do not report for snow and ice control operation, and/or do not report for snow and ice control operations within the prescribed one and one-quarter (1 ¼) hours or 1 ½ hour from 4:00 p.m. to 7:00 p.m., Monday through Friday, and/or are not on an authorized leave of absence may be issued a refusal occurrence<sup>3</sup> subject to the following refusal occurrence disciplinary actions:

- 1<sup>st</sup> refusal occurrence - verbal notification (pending review)<sup>4</sup>
- 2<sup>nd</sup> refusal occurrence - written reprimand (pending review)<sup>5</sup>
- 3<sup>rd</sup> refusal occurrence - three (3) day suspension (pending review)<sup>6</sup>
- 4<sup>th</sup> refusal occurrence - additional disciplinary action as warranted (pending review)

- (1) A snow season is defined as the period December 1<sup>st</sup> thru April 1<sup>st</sup>
- (2) "Leave of absence" refers to all absences as described in Section 4, "Benefits" of the Village's Personnel Policy Manual".
- (3) A refusal occurrence is defined to mean any circumstance in which the action/inaction taken by an employee results in the individual not reporting for duty in the manner prescribed within the Snow and Ice Control Policy and Procedure Manual.
- (4) A 1<sup>st</sup> refusal occurrence will remain in the Active Snow/Ice Refusal File for a period of one (1) year from the date of occurrence.
- (5) A 2<sup>nd</sup> refusal occurrence will remain in the Active Snow/Ice Refusal File for a period of three (3) consecutive snow seasons.
- (6) A 3<sup>rd</sup> refusal occurrence will remain in the Active Snow/Ice Refusal File for a period of four (4) consecutive snow seasons.

*\*As has always been Village policy, although an expired refusal occurrence, that falls under the Snow and Ice Control Policy and Procedure Manual, may not be referred to in any subsequent Snow and Ice Control refusal matters, it still remains a permanent record in the employee's Personnel File. As such, it may be referred to in conjunction with other disciplinary matters, a progressive disciplinary process and or an individual's performance review.*

When a call out for snow and ice operations is necessary, the primary snow & ice supervisor will contact employees by way of the Everbridge communication system. Employees shall provide the department with up to (2) phone numbers to be used for contact of the employee. Individual cell phones may be utilized by individuals as a primary phone contact although missed or failed calls shall not be a pretext for the inability to be contacted. Each individual is responsible to ensure that Village or personal communication equipment is operating properly. Written notification on telephone numbers must be provided to the Supervisor before its use by December 1<sup>st</sup> of the snow season and must immediately be updated of changes throughout the course of the snow season. The Everbridge system will attempt contact of individuals multiple times on each of the numbers provided. The employee is required to confirm contact from the Everbridge system by way of following the instructions on the voice recording when called. It is the responsibility of each individual to call in for instructions whenever there is doubt about whether or not he/she should be in or should have been called.

When contacting, or when being contacted by a Supervisor, a determination of the individual's duty requirements will be made. When the Supervisor requires the individual to report to work, he/she will be given one (1) hour from the time of the initial contact to report for duty, and "punch in with a time stamp".



## VI. WORK RULES AND PROCEDURES, continued

Individuals reporting within this one (1) hour show up time will be paid for one hour prior to punch in time stamped, on the time card. Employees not reporting within the one (1) hour show up time will not be paid for show up time, and then will have one and one-quarter (1 ¼) hours or 1 ½ hours from 4:00 p.m. to 7:00 p.m., Monday through Friday from the time of the initial contact to report for duty, or be subject to the refusal occurrence disciplinary action process described under this section.

Personnel not reporting for call out due to illness inside or outside of their normal work shift will be subject to review and may be issued a refusal occurrence pending the outcome of the review process.

Calls when services are not needed:

If an individual is called, or if an individual calls in during snow and ice control for assignment, and his/her services are not or appear not to be needed, the individual shall be given at least 4 hours (or whatever period of time in excess of the minimum 4 hours is given at the time of the initial call by the supervisor) before an additional call will be placed to the individual. If the Supervisor is not certain that services are needed due to an individual's unavailability, the Supervisor will make every effort to respond back to the individual within 10-15 minutes with an answer. Only in extreme emergency should this procedure be suspended. If the individual, for example, is not available after the 4 hour period (or whatever period of time in excess of the minimum 4 hours is given at the time of the initial call by the Supervisor), then a refusal occurrence may be issued.

Vacation/Floating Holiday - Winter Months (December 1<sup>st</sup> thru April 1<sup>st</sup>)

- A. During winter months no more than *eight (8) personnel, (3 Street, 3 Water, 1 Facilities & 1 Fleet Services)* are allowed off free and clear each day. If the 48 hour deadline passes and either Street or Water side doesn't have 3, a fourth from the opposite side will be allowed to be free and clear. *This option does not apply to Facilities or Fleet Services due to the small number of employees in these divisions.* All divisions MUST also maintain the minimum staffing level of 60% in each division.
- B. Snow & ice control operations are a large part of winter Public Works operations which requires participation and cooperation from all employees. Given the large labor requirements for snow & ice operations, there unfortunately has to be a limit on the number of employees allowed off at any given time during the season. Given this limit and to help assure that all employees have an opportunity for a "free & clear" weekend, there will be a set maximum of 5 "Free & Clear" weekends allowed per employee over a given snow & ice season (Dec 1<sup>st</sup> -- April 1<sup>st</sup>). Requests that exceed this number will be denied or benefit time may be permitted but without being "free & clear" outside of regular working hours.
- C. Depending on work schedules, additional approved leave may be scheduled but must be approved subject to being available for call-in if snow removal, salting, or related work as necessary on that day. In those cases, vacation, floating holidays, compensation time, call duty, or time due, will be re-scheduled at a later date.

## **VI. WORK RULES AND PROCEDURES, continued**

- D. Personnel on scheduled leave may be contacted if their services are needed. Those individuals who were 4<sup>th</sup> or more to request leave within their division shall report to work and their leave is to be re-scheduled. Personnel who were 1<sup>st</sup>, 2<sup>nd</sup>, or 3<sup>rd</sup> to request leave for that day may be contacted, but have the option of reporting to work. If a choice to report to work is made, the leave for that day is to be re-scheduled.
- E. All benefit time (vacation, floating holiday, call duty day, and compensation time) is treated equally with regards to scheduled approved leave.
- E. Requested benefit time use for Fridays and Mondays must be used in eight (8) hour increments to be approved for weekend absence from snow/ice control.
- F. All benefit time use must be requested within forty-eight (48) hours prior to actual use.
- G. Seventy-two (72) hour notification is necessary to cancel approved use of benefit time, unless authorized by the Department Director.
- H. The use of an emergency vacation day shall be allowed in either 4 or 8 hour increments depending on the normal work day schedule, provided that a valid reason exists and is explained in writing to the satisfaction of the Department Director on the following work day. It is understood that this benefit is permitted only for normal work days, and normal work shift hours.
- I. Authorized use of benefit time for "approved leave" will begin at the end of a normal shift stop time and end on the next scheduled normal shift start time.
- J. Drivers on the salting roster may substitute their roster position with a "Buddy Switch" without limitation on the number of times used. Buddy Switches are for the purpose of covering a Driver's inability to respond to a salting operation as otherwise required by the posted roster. Buddy Switches may be implemented by the following, although no time extensions from the normal 15 minute contact period is permitted.
  - 1.) Messages of a Buddy Switch may be left at (847) 781-2730 by the initial roster listed individual identifying, his buddy and the switch. The buddy also must leave a message at (847) 781-2730 stating he is covering the route of the initial roster listed individual.
  - 2.) A Buddy Switch desired at the time of a salting call out will require the initial roster listed employee to contact his buddy and have him call the supervisor to confirm his responsibility to report.

## **VI. WORK RULES AND PROCEDURES, continued**

Personnel who work from midnight to their regular starting time during snow removal operations may request to leave work prior to the end of their regular work shift when work schedules allow by discretion of the supervisor.

1. The Salting Personnel Call-In Roster will be posted each day (Monday-Friday) from December 1<sup>st</sup> – April 1<sup>st</sup>.

Two (2), twelve 12-hour Salting Rosters (A.M. and P.M.), filled on a seniority basis, are maintained throughout the season. For each hour, outside an individual's regularly scheduled workday, on either A.M. or P.M. Salting Roster, that individual will receive a stipend, as outlined, within the CBA.

Snow and Ice route assignments will be made based on department seniority for the initial call-out of employees on a Salting Roster. An inverse order of qualified senior personnel will be used to fill any empty slots on the Rosters. It is understood that during continuing snow and ice operations, originally selected route assignments will not be in effect.

An individual may request to switch with someone else.

2. With regards to the restrictions outlined within the Drug & Alcohol Policy for Commercial Driver's License holders, the following shall hold true during snow/ice call-outs:
  - a) Personnel listed on the salting call-in roster are responsible to respond to a salting call-out or be subject to provisions as outlined within Article VI Work Rules and Procedures.
  - b) During snow plowing call-outs, an individual will be provided up to two (2) occasions per season to extend their show-up time provided he/she states that alcohol was consumed during the preceding four (4) hours from the time called out. The amount of extended time granted will be determined between the individual and the supervisor during initial contact.
  - c) There is no show-up time for any delayed or extended start.

## **VII. SALT STORAGE, LOADING/UNLOADING (drivers/operators)**

All road salt is to be stored under roof at the Village Salt Dome, located at 2405 Pembroke Avenue. The storing of salt "under roof" eliminates the possibility of contamination of streams, wells or groundwater, eliminates the loss of product due to runoff and dissolving by precipitation and prevents formation of clumps which are difficult to handle, load and run thru vehicle spreaders.

### **Practices & Procedures**

- Salt deliveries shall be placed under roof as soon as possible after they have been received. The most common method for loading salt into the storage dome is by way of the conveyor system that must be operated by individuals trained with its' operation.

## **VII. SALT STORAGE, LOADING/UNLOADING (drivers/operators)**

- The area inside the salt dome as well as area/tarmac surrounding the salt dome shall be kept free of debris and trash. Equipment not being used or related to snow & ice control operations shall not be stored around the tarmac, including in and around the liquid deicer storage tanks.
- The dumping of salt loads from delivery trucks directly into the salt dome is discouraged and may only occur if the dome is significantly empty, a Village employee is on site to serve as a spotter, the task can be easily accomplished in a safe & proper manner and a valid reason exists for not using the conveyor system for storing the salt.
- Salt is NOT permitted to be left on the tarmac around the salt dome utilized for temporary storage if precipitation is imminent.
- Salt spilled in the process of loading truck beds, shifting of loads, and/or dumping of remaining loads shall be cleaned up and placed back into the salt dome prior to end of operation.
- Extreme care should be taken by the FEL operator responsible for performing loading/unloading operations to ensure damage to the paved tarmac area is avoided when scraping the area during cleanup operations of salt material. The tarmac should be walked and inspected once a month by the assigned Snow & Ice Supervisor for the purpose of ensuring the integrity of the area.
- Salt shall NOT be mixed with other aggregate material, such as sand, unless instructed to do so by the Director or Assistant Director.

## **VIII. VEHICLE MAINTENANCE & UPKEEP (drivers/operators)**

All drivers and operators are responsible for maintaining their assigned vehicles and/or equipment in a proper working order. Unless instructed to the contrary, by a supervisor, vehicles should be refueled at the end of each shift and debris removed from the cab upon returning to the Public Works Center. In most cases vehicle/equipment wash downs and check outs will occur the next regular workday during regular hours.

### **Vehicle Wash Downs & Wash bay Procedures**

- All vehicles & equipment involved in a Snow & Ice Control Operation shall be washed down and hosed off inside the wash bay. The rinsate from washing shall be collected in the floor drains which filters & empties into the triple trap system. This prevents soap and water, contaminated with deicing products from entering the storm sewer system and polluting ponds, streams & detention areas.
- Occasionally, a supervisor may approve washing and hosing of vehicles and equipment on the floor of the Public Works Center. The rinsate from washing is collected at this location in floor drains which filter & empty into a triple trap system much like the one located at the west site wash bay.

## VIII. VEHICLE MAINTENANCE & UPKEEP (drivers/operators)

- Overhead doors at both sites utilized for washing shall remain in a closed position while the task is being performed to prevent the potential for freezing of water pipes. **AT NO TIME SHALL EMPLOYEES LEAVE THE SITE TO TRAVEL ELSEWHERE WITHOUT CLOSING ALL OVERHEAD DOORS.**
- Utilization of the power washer in the west site wash bay is common for this task BUT requires reading of the Department JSA for the equipment prior to use!!! Unless another individual is present and will be immediately utilizing the equipment, it is to be shut down, the spray wand placed back in the holder, the hose stored out of the way and area cleaned up prior to leaving.

The West Site Wash Bay as well as the area utilized for washing at the Public Works Center shall be kept free of debris and trash and the area policed when washing is complete.

## IX. OVERTIME/OVERTIME PAY

This section is in accordance with Article XVII of the current CBA.

To ensure a uniform policy for overtime, the following procedures will be enacted for all Public Works personnel during plowing operations.

- A. All paid time will start when an individual punches in and stops when that person punches out. A maximum of one hour show up time will be paid upon call-in and punch in confirmation as identified in Section VI.
- B. The normal workweek shall consist of forty (40) hours per departmental calendar week. Individuals who work the hours between 4:30 p.m., and the normal starting time shall be compensated at one and one-half (1 ½) times their regular straight time hourly rate of pay. On any day this occurs, the individual will not be guaranteed eight hours of straight time pay, or permitted to extend any portion of the day with other benefit compensation. Furthermore, it is understood that after an employee has worked a combination of forty (40) hours of straight time and/or over-time in a single work week, there will be no guarantee of additional working hours in that same work week.
- C. Inclusive of holiday pay at the individual's regular hourly rate of pay, shall be two and one-half (2.5) times the regular straight time hourly rate for all hours worked on any of the seven (7) designated holidays.
- D. Any call duty person will receive a minimum of two (2) hours pay on call-outs unless the time extends into his regular work shift or unless he is called back to correct his own error.

## **X. FLEET SERVICES SNOW AND ICE CONTROL SHIFT ASSIGNMENTS**

### **A. Regular Division Snow and Ice Control Equipment Maintenance/Repair Manpower Levels.**

Two Fleet Services staff members shall be contacted each time that a complete municipal vehicle operator work shift is called out for any weather related emergency situation.

The first Fleet Services staff member to be notified shall be the regularly assigned weekly call duty person. Subsequent to the notification of this individual, a second mechanical/technical maintenance person shall be notified.

The second staff member to be contacted will have pre-knowledge of his being next scheduled for this assignment via seniority. The inverse process will start with the least senior mechanic to be the next in line to be called in, if all senior mechanics have declined.

This primary plan will be in effect for weather emergency situations of up to and including twelve hours duration.

### **B. Maximum Effort Snow and Ice Control Equipment Maintenance/Repair Manpower Levels.**

During periods of continuous storm fighting activity which last in excess of twelve hours duration, two (2) twelve hour work shifts shall be implemented. These shifts shall be rotated for each new storm to ensure the fair treatment of all staff members.

Variable start of shift times will be encountered by the two shift members who are notified as a result of the initial call out procedures. As a result, there will be occasions when these individuals may be required to work a shift in excess, or, possibly less than the standard twelve hour period.

Fleet Services staff assignments during twelve-hour shift periods will include the following:

*Joe Capiga*  
Howard DeLord  
Pat Chlopek

Scott Lasken  
Mike Backstrom

## **XI. SHIFT SUPERVISOR RESPONSIBILITIES DURING SNOW AND ICE CONTROL OPERATIONS**

- A. It shall be the primary responsibility of the Shift Supervisor to oversee that all Village owned streets and properties be clean of all snow and ice, in accordance with prescribed policies.
- B. It shall be the responsibility of the Shift Supervisor to ensure that all personnel under his direction are properly trained in the use of Village equipment, plowing and salting techniques, and be knowledgeable of snow removal policies of the Village.
- C. It shall be the responsibility of the Shift Supervisor to check all time sheets, equipment mileage, hours, and amount of salt used by each driver/operator under his direction at the end of each operation

## **XII. OPERATOR CHECK LIST**

Prior to using any snow removal vehicle, an inspection is to be completed by the assigned operator. The operator is responsible for completing a "Vehicle Inspection Sheet" on the unit assigned and is to submit this sheet to the on-duty supervisor after his shift. Any needed repairs or replacements shall be brought to the immediate attention of the Fleet Services Supervisor. Often, said vehicle inspections are completed in advance of a snow/ice control operation to expedite response time.

Pre-Trip Inspected By: \_\_\_\_\_  
 Pre-Trip Inspection Date: \_\_\_\_\_  
 Miles: \_\_\_\_\_

**VILLAGE OF HOFFMAN ESTATES**  
**Vehicle and Equipment**  
**Pre-Trip Inspection & Condition Report**

Unit #: \_\_\_\_\_ Driver/Operator: \_\_\_\_\_ Date: \_\_\_\_\_

**INSPECT ALL ITEMS THAT APPLY**

ITEM	OK	REPAIR	ITEM	OK	REPAIR
Headlights			Brakes		
Marker Lights			Wipers/Washers		
Tail Lights			Heater/Defrost		
Brake Lights			Seat Belts		
Emergency Warning Light			Back Up Alarm		
Reflectors			Radios		
Mirrors			Air Leaks		
Tires			Horn		
Cab/Body Dents			Fire Extinguisher		
Exhaust System			First Aid Kit		
Mars Light			Two-Way Radios		
Strobe Lights			Gauges/Instruments		
Oil Fluid Leaks			Mud Flaps		
Springs & Suspension			Triangle Kit		
Cab Clean					
FLUIDS	OK	ADDED	WINTER	OK	REPAIR
Trans Fluid			Plow Blade/Curb Guard		
Hydraulic Fluid			Plow Wands		
Coolant			Spreader/Spinner		
P/S Fluid			Hydraulic Hoses		
Washer Fluid			Spreader Light		
Engine Oil			Plow Light		
Fuel			Plow Frame		
			Tow Chain		
			Flashlight		
			Plow Chain		
			CACL Tank Fill/Flush		
			Shovel		

Service Request: \_\_\_\_\_

Remarks: \_\_\_\_\_



### **HE-11-1305 PARKING LIMITED DURING SNOW REMOVAL**

It shall be unlawful for any person, firm, or corporation to park or cause to be parked any vehicle on any public street within the corporate limits of the Village at any time within eight (8) hours after a snow fall or two (2) inches or more has occurred, unless within said time said public street has been cleared of snow, provided that said eight hour parking restriction shall continue during snow removal operations until completed.

The Police Department and all members thereof are hereby authorized to remove and tow away or have removed and towed away by commercial towing service or by Village operated vehicles any car or other vehicle illegally parked which prevents and obstructs snow removal from public streets.

Cars or vehicles so towed away illegal parking shall be stored in a safe place and shall be restored to the owner or operator of such vehicle upon the payment of the towing and storage fees.

### **HE-11-1309 SNOW REMOVAL**

- A. It shall be unlawful to deposit on public sidewalks or public streets any snow which accumulated upon and is removed from an adjacent private property or from the area between adjacent road line and curb line of the street.
- B. It shall be unlawful to deposit on or against any fire hydrant which accumulated upon and was removed from a property.

**SALTING PERSONNEL ROSTER  
CHANGE REQUEST**

**I would like to give/switch my roster position:**

**Employee Requesting:** (Print and Initial) \_\_\_\_\_

**Employee Accepting:** (Print and Initial) \_\_\_\_\_

**Date:** \_\_\_\_\_ **Weekday**     **Switch from AM/PM to AM/PM.**     **Give AM/PM**

**Date:** \_\_\_\_\_ **Fri**     **Switch from AM/PM to AM/PM.**     **Give AM/PM**

**Date:** \_\_\_\_\_ **Sat**     **Switch from AM/PM to AM/PM.**     **Give AM/PM**

**Date:** \_\_\_\_\_ **Sun**     **Switch from AM/PM to AM/PM.**     **Give AM/PM**

**Snow and Ice Supervisor Approved:** \_\_\_\_\_

**Date:** \_\_\_\_\_    **Time:** \_\_\_\_\_

**Note:** Gives for weekend must **not** be turned in before the Thursday of the requested weekend.  
All transactions must be completed and handed to the Primary or AM On-Call Snow & Ice Supervisor by Noon

**COMMITTEE AGENDA ITEM  
VILLAGE OF HOFFMAN ESTATES**

**SUBJECT:** Request approval of a Resolution adopting the 2019 update of the Cook County Multi-Jurisdictional Hazard Mitigation Plan.

**MEETING DATE:** October 28, 2019

**COMMITTEE:** Public Works & Utilities

**FROM:** Joseph Nebel, Director of Public Works  
Al Wenderski, Village Engineer

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**PURPOSE:** To approve a resolution authorizing the adoption of 2019 updates to the Cook County Multi-Jurisdictional Hazard Mitigation Plan.

**BACKGROUND:** The Cook County Multi-Jurisdictional Hazard Mitigation Plan (“the Plan”) was developed under a grant from the Illinois Emergency Management Agency (IEMA) by a planning team of Cook County Department of Homeland Security and Emergency Management staff. The purpose of this plan is to identify risks and sustainable, cost-effective actions to mitigate the impact of natural disasters in order to protect life, health, safety, welfare, and economy of the communities in Cook County and to encourage preventative measures that can reduce or eliminate these impacts.

The Plan is authorized and administered by the Federal Emergency Management Agency (FEMA). As a participating member of a FEMA-approved Hazard Mitigation Plan, the Village is eligible for Federal grant funding allocated to assist with response and recovery in case of a disaster. This includes flooding, tornadoes, sever weather, pandemics, and hazardous material incidents, among other potential disasters. These funds are only available to jurisdictions that have formally adopted such a plan.

**DISCUSSION:** The Plan is designed to pool resources and create a uniform hazard mitigation strategy among communities in Cook

County. There are 121 participants covered by the Plan as of 2019. The Plan is to be evaluated and revised on a continual 5 year time frame. The 2019 update is the first revision from the document approved in 2014.

Updates for the 2019 Plan include documented records of hazard incidents reported by participating communities from 2014-2019, updated jurisdictional profiles with demographic and contact information, and the inclusion of newly created mitigation action items for participating communities. New mitigation action items for the Village include water main interconnects with neighboring communities, creation of a south-area storm water master plan, and installation of back-up power sources at all Village lift stations. Formal adoption of the 2019 Plan update is required to remain eligible should Federal grant funding become available to complete these projects.

**FINANCIAL IMPACT:**

None.

**RECOMMENDATION:**

Request approval of a Resolution adopting the 2019 update of the Cook County Multi-Jurisdictional Hazard Mitigation Plan.

VILLAGE OF HOFFMAN ESTATES

**A RESOLUTION ADOPTING THE UPDATE OF THE  
COOK COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN**

WHEREAS, the Village of Hoffman Estates recognizes the threat that natural hazards pose to people and property within our community; and

WHEREAS, the Village of Hoffman Estates recognizes the importance of reducing or eliminating vulnerability to disasters caused by natural hazards for the overall good and welfare of the community, and

WHEREAS, on October 10, 2000, the U.S. Congress passed the Disaster Mitigation Act of 2000 (“Act”) which provides the legal framework for the Federal Emergency Management Agency (FEMA) mitigation, planning requirements for state, local, and tribal governments as a condition of mitigation grant assistance emphasizing the need for pre-disaster mitigation of potential hazards; and

WHEREAS, as a condition of future funding for mitigation projects, the Act requires jurisdictions to prepare and adopt a hazard mitigation plan to identify and address certain vulnerabilities that exist prior to and during a disaster; and

WHEREAS, FEMA supports post-disaster grant funding through the Hazard Mitigation Plan Grant program, which has as a condition of funding eligibility, a requirement for jurisdictions to prepare and adopt a hazard mitigation plan; and

WHEREAS, to maintain continued eligibility for FEMA mitigation grant assistance programs the Act requires a hazard mitigation plan be updated every five years; and

WHEREAS, in accordance with the Act’s requirements, 121 Cook County jurisdictions engaged in the FEMA-prescribed mitigation planning process to prepare the 2019 Plan and its associated local hazard mitigation plan annexes; and

WHEREAS, the 2019 Plan has been approved pending Cook County adoption, by the Illinois Emergency Management Agency and Federal Emergency Management Agency, Region V; and

NOW, THEREFORE, BE IT RESOLVED by the President and Board of Trustees of the Village of Hoffman Estates, Cook and Kane Counties, Illinois, as follows:

Section 1: The Village of Hoffman Estates hereby accepts, approves and adopts in its entirety, Volume 1, the Countywide Mitigation Actions in Volume 2; and the Village of Hoffman Estates Jurisdictional Annex of Volume 2 of the 2019 Cook County Multi-Jurisdictional Hazard Mitigation Plan.

Section 2: The Village of Hoffman Estates will continue to participate in the updating and revision of the 2019 Plan with another plan review and revision to occur within a five year cycle, and designated staff will provide annual progress reports on the status of implementation of the 2019 Plan to the president of the City council.

Section 3: This Resolution shall be in full force and effect immediately from and after its passage and approval.

PASSED THIS \_\_\_\_\_ day of \_\_\_\_\_, 2019

VOTE	AYE	NAY	ABSENT	ABSTAIN
Trustee Karen V. Mills	_____	_____	_____	_____
Trustee Anna Newell	_____	_____	_____	_____
Trustee Gary J. Pilafas	_____	_____	_____	_____
Trustee Gary G. Stanton	_____	_____	_____	_____
Trustee Michael Gaeta	_____	_____	_____	_____
Trustee Karen Arnet	_____	_____	_____	_____
President William D. McLeod	_____	_____	_____	_____

APPROVED THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 2019

\_\_\_\_\_  
Village President

ATTEST:

\_\_\_\_\_  
Village Clerk

# Cook County Multi-Jurisdictional Hazard Mitigation Plan Update

## Executive Summary - July 2019

Hazard mitigation is the use of long-term and short-term policies, programs, projects, and other activities to alleviate the death, injury, and property damage that can result from a disaster. Cook County and a coalition of 121 municipal planning partners prepared and updated the **2019 Cook County Multi-Jurisdictional Hazard Mitigation Plan** in order to identify the risks posed by hazards and find ways to reduce their impacts. The plan reduces risks for those who live in, work in, and visit the County.

### 1. Cook County Profile

Cook County is located in northeast Illinois on the western shore of Lake Michigan. It is the most populous of the 102 counties in Illinois, with a 2018 estimated population of 5.18 million. In terms of area, it is the sixth largest county, covering approximately 945 square miles. Cook County makes up roughly 41 percent of the population of Illinois. The surrounding counties are Lake and McHenry to the north, Kane, and DuPage to the west, and Will to the southwest. Lake Michigan is the county's eastern border along with the State of Indiana.

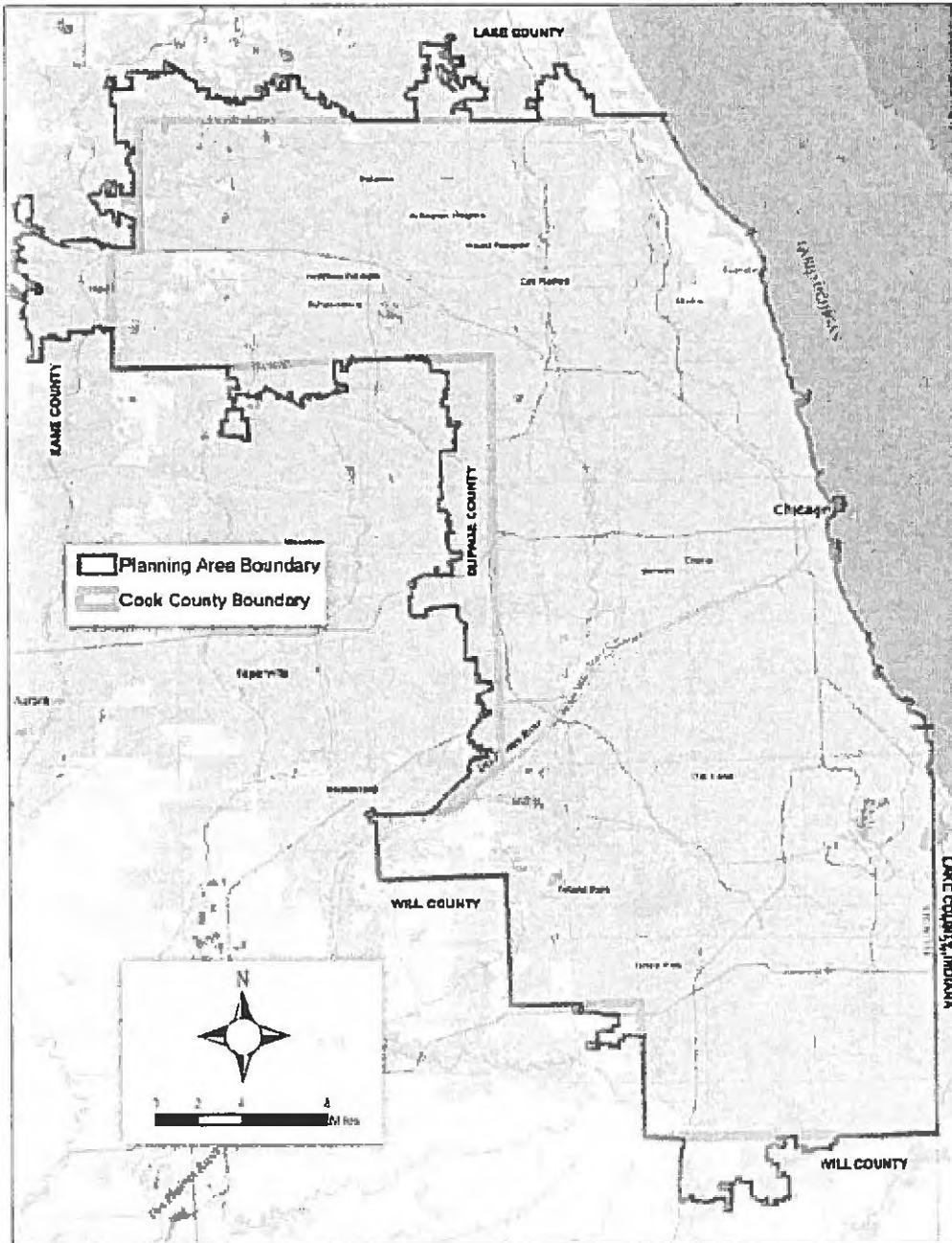
Cook County is the second most populous county in the United States, after Los Angeles County. The county contains 135 municipalities, covering about 85 percent of the area of the county. The remaining unincorporated areas are under the jurisdiction of the Cook County Board of Commissioners, a 17-member board elected by district.

The planning area's economy is strongly based in the educational services, health care, and social assistance industry, followed by the professional, scientific, management, administrative, and waste management industries. Major businesses include, but are not limited to, the U.S. Government, Advocate Health System, JPMorgan Chase, Jewel-Osco, United Airlines, Abbott Laboratories, American Airlines, and Walgreens. Major educational and research institutions in the county include Northwestern University, Loyola University, DePaul University, the University of Chicago, and the University of Illinois at Chicago.

Cook County has experienced 19 hazard events since 1967 for which federal disaster declarations were issued. The Spatial Hazard Events and Losses Database for the United States (SHELDUS), maintained by the University of South Carolina, includes many more hazard events. For Cook County, SHELDUS lists 851 instances of direct property, crop, monetary, or human loss due to a hazard event from 1960 through 2017 - an average of approximately 15 various direct loss events per year.

## 2. Participating Partners and the Planning Area

The responsibility for hazard mitigation lies with many, including private property owners; business and industry; and local, state, and the federal government. Through multi-jurisdictional partnerships, local jurisdictions within an area that has uniform risk exposure can pool resources and eliminate redundant planning activities. Cook County opened this planning effort to all municipalities within the County. The table, *Planning Partners*, lists the planning partners that participated in the planning process and are covered under this plan. The planning area was defined as all incorporated and unincorporated areas of Cook County as well as the incorporated areas of cities that cross county boundaries. The planning area boundary is shown in the figure below (*Figure: Planning Area*).





Municipalities that are partially in Cook County and are participating in the mitigation planning efforts of adjacent counties are also included in the table below. Future efforts are already underway to include these jurisdictions in future updates of the plan. Six jurisdictions that had not previously participated in the 2014 Cook County MJ-HMP are now part of the 2019 Cook County MJ-HMP.

<b>TABLE: PLANNING PARTNERS PLANNING PARTNERS COVERED BY THIS HAZARD MITIGATION PLAN</b>		
<b>North</b>	<b>Central</b>	<b>South</b>
Arlington Heights	Bellwood	Alsip
Barrington	Berkeley	Bedford Park
Bartlett	Berwyn	Blue Island
Des Plaines	Broadview	Bridgeview
Elk Grove Village	Brookfield	Burbank
Evanston	City of Chicago	Burnham
Glencoe	Cicero	Calumet City
Glenview	Countryside	Calumet Park
Golf	Elmwood Park	Chicago Heights
Hanover Park	Forest Park	Chicago Ridge
Hoffman Estates	Forest View	Country Club Hills
Inverness	Franklin Park	Crestwood
Kenilworth	Harwood Heights	Dixmoor
Lincolnwood	Hillside	Dolton
Morton Grove	Hodgkins	East Hazel Crest
Mount Prospect	Indian Head Park	Evergreen Park
Niles	LaGrange	Flossmoor
Northbrook	LaGrange Park	Ford Heights
Northfield	Lyons	Glenwood
Palatine	Maywood	Harvey
Park Ridge	McCook	Hazel Crest
Prospect Heights	Melrose Park	Hickory Hills
Rolling Meadows	Norridge	Hometown
Schaumburg	Northlake	Homewood
Skokie	North Riverside	Justice
South Barrington	Oak Park	Lansing
Streamwood	River Forest	Lemont
Wheeling	River Grove	Lynwood
Wilmette	Riverside	Markham
Winnetka	Rosemont	Matteson
	Schiller Park	Merrionette Park

	Stickney	Midlothian
	Stone Park	Oak Forest
	Summit	Oak Lawn
	Westchester	Olympia Fields
	Western Springs	Orland Hills
		Orland Park
		Palos Heights
		Palos Hills
		Palos Park
		Park Forest
		Phoenix
		Posen
		Richton Park
		Riverdale
		Robbins
		Sauk Village
		South Chicago Heights
		South Holland
		Steger
		Thornton
		Tinley Park
		University Park
		Willow Springs
		Worth
<b><i>Not Participating in 2019 Cook County MJ-HMP</i></b>	<b><i>Not Participating in 2019 Cook County MJ-HMP</i></b>	<b><i>Not Participating in 2019 Cook County MJ-HMP</i></b>
Barrington Hills	Bensenville	Frankfort
Buffalo Grove	Burr Ridge	Woodridge
Deerfield	Elmhurst	
Deer Park	Hinsdale	
East Dundee	Oak Brook	
Elgin		
Roselle		

### 3. Plan Development and Organization

The 2019 Cook County MJ-HMP was updated by a planning team of Cook County Department of Homeland Security and Emergency Management staff and expert consultants, with guidance from a steering committee representing the planning partners and other local stakeholders. The key steps in updating the plan were as follows:

1. Determine the Planning Area and Resources
2. Build and Reconvene the Planning Team
3. Outreach Strategy
4. Review and Update Community Capabilities
5. Update and Conduct the Risk Assessment
6. Update the Mitigation Strategy
7. Keep the Plan Current
8. Review and Adopt the Plan
9. Create a Safe and Resilient Community

### 4. Mission Goals and Objectives

The defined mission for the 2019 Cook County MJ-HMP is to “Identify risks and sustainable, cost-effective actions to mitigate the impact of natural hazards to protect the life, health, safety, welfare, and economy of the communities of Cook County.” Mitigation goals were established as follows:

1. Develop and implement sustainable, cost-effective, and environmentally sound risk-reduction (mitigation) projects.
2. Protect the lives, health, safety, and property of the citizens of Cook County from the impacts of natural hazards.
3. Protect public services and critical facilities, including infrastructure, from loss of use during natural hazard events and potential damage from such activities.
4. Involve stakeholders to enhance the local capacity to mitigate, prepare for, and respond to the impacts of natural hazards.
5. Develop, promote, and integrate mitigation action plans.
6. Promote public understanding of and support for hazard mitigation.

Thirteen objectives were established for the plan that meets multiple goals, serving as stand-alone measurements of the effectiveness of the mitigation action. Proposed mitigation actions were evaluated in part based on how many goals and objectives they would help to fulfill.

1. Eliminate or minimize disruption of local government operations caused by natural hazards through all phases of emergency management.
2. Increase the resilience of (or protect and maintain) infrastructure and critical facilities.
3. Consider the impacts of natural hazards on future land uses in the planning area, including possible impacts from climate change.
4. Integrate hazard mitigation policies into land use plans in the planning area.
5. Develop, improve, and protect systems that provide early warnings, emergency response communications, and evacuation procedures.
6. Use the best available data, science and technologies to educate the public and to improve understanding of the location and potential impacts of natural hazards, the vulnerability of building types and community development patterns, and the measures needed to protect life safety.
7. Retrofit, purchase, or relocate structures in high hazard areas, including those known to be repetitively damaged.
8. Establish partnerships among all levels of local government, the private sector, and/or nongovernmental organizations to improve and implement methods to protect people and property.
9. Provide or improve flood protection on a watershed basis with flood control structures and drainage maintenance plans.
10. Strengthen codes and land use planning and their enforcement, so that new construction or redevelopment can avoid or withstand the impacts of natural hazards.
11. Encourage mitigation through incentive-based programs, such as the Community Rating System, Firewise, and StormReady programs.
12. Reduce natural hazard-related risks and vulnerability to potentially isolated populations within the planning area.
13. Encourage hazard mitigation measures that result in the least adverse effect on the natural environment and that use natural processes.

## 5. Hazards Addressed

The steering committee considered the full range of natural hazards that could impact the planning area and identified the following hazards as presenting the most significant concern:

- Dam or levee failure
- Drought
- Earthquake
- Flood
- Severe weather
- Severe winter weather

- Tornado

Detailed risk assessments were performed for each of these hazards of concern. Also, a brief qualitative review was conducted of technological and human-caused hazards of interest, which included the following: epidemic or pandemic, nuclear power plant incident, secondary impacts from incoming evacuees, widespread power outage, hazardous material incident, and coastal erosion. Climate Change was addressed for each hazard, as applicable.

## 6. Risk Assessment Methodology

The risk assessments of the identified hazards of concern describe the risks associated with each hazard. The following steps were used to define the risk of each hazard:

- Profile and update each hazard, describing the geographic area it affects, its frequency and severity, and the warning time provided before a hazard event occurs.
- Use maps of hazard impact areas, as appropriate, to determine and update how many structures, facilities, and systems are exposed to each hazard.
- Assess the vulnerability of exposed structures and infrastructure based on exposure and the probability of occurrence of a hazard event. Tools such as the Federal Emergency Management Agency's (FEMA's) hazard modeling program called Hazus-MH were used to perform this assessment for flood, dam failure, earthquake hazards, and tornado. Outputs similar to those from Hazus-MH were generated for other hazards, using maps generated by the Hazus-MH program.

A detailed inventory of critical facilities and infrastructure were reevaluated for this plan using GIS applications. Over 6,000 facilities were inventoried and uploaded into the Hazus-MH model to support the risk assessment.

## 7. Profiles of Cook County Hazards of Concern

The following hazards are addressed in the 2019 Cook County MJ-HMP. A brief description of each hazard is included in this section of the Executive Summary.

### 7.1 Dam and Levee Failure

There are 40 dams in Cook County, all regulated by the Water Resources Division of the Illinois Department of Natural Resources (IDNR). Importantly, 24 of these dams are classified as "high" (10) or "significant" (14) hazard, which means they have significant downstream populations at risk if the dam should fail. Flooding as a result of a dam and levee failure would significantly impact properties and communities in the inundation zones. No records of dam failures in the planning area are available, however.

There are also nine levee systems in Cook County. Although there is no history of levee failures in the planning area, it should be noted that the State of Illinois experienced levee failures in 1993 and 2008. In 1993, 17 levee systems breached along the Mississippi River and the Illinois River just north of where it meets the Mississippi River. Over 237,000 acres along the rivers were flooded.

Warning time for dam or levee failure varies depending on the cause of the failure. In events of extreme precipitation or massive snowmelt, evacuations can be planned with sufficient time. In the event of a

structural failure due to an earthquake, there may be no warning time. Cook County and its planning partners have established protocols for flood warning and response for dam failure in the flood warning portion of its adopted emergency operations plan. These protocols are tied to the emergency action plans created by the dam owners.

Important issues associated with dam and levee failure include the following:

- Federally regulated dams have an adequate level of oversight and sophistication in their emergency action plans. However, the protocol for notifying downstream citizens of imminent failure needs to be tied to local emergency response planning.
- Mapping that estimates inundation depths is needed for non-federal-regulated dams to better assess the risk associated with dam failure from these facilities.
- Most dam failure mapping required at federal levels requires determination of the probable maximum flood, which is a worst-case scenario and generally the event with the lowest probability of occurrence. For non-federal-regulated dams, mapping of dam failure scenarios that are less extreme than the probable maximum flood but have a higher probability of occurrence could better illustrate areas potentially impacted by more frequent events to support emergency response and preparedness.
- The concept of residual risk associated with structural flood control projects should be considered in the design of capital projects and the application of land use regulations.
- Addressing security concerns and the need to inform the public of the risk associated with dam failure is a challenge for public officials. Not all levees are reflected in the current flood mapping, which makes complete delineation of the hazard area difficult.

## 7.2 Drought

Droughts originate from a deficiency of precipitation resulting from an unusual weather pattern. If the weather pattern lasts a short time (a few weeks or a couple of months), the drought is considered short-term. If the weather pattern becomes entrenched and the precipitation deficits last for several months or years, the drought is considered to be long-term. Drought generally affects large geographic areas, so drought descriptions in the hazard mitigation plan are usually for the entire State of Illinois rather than the immediate planning area of Cook County.

The most severe droughts in Illinois occurred in the summer of 1934, the summer of 1931 and 1954. All three of these events were categorized as extreme droughts. More recently, in September 1983, all 102 counties were declared state disaster areas because of high temperatures and insufficient precipitation. In 1988, 54 percent of the state was impacted by drought-like conditions, resulting in disaster relief payments to landowners and farmers exceeding \$382 million. Historical drought data for the planning area indicate there have been at least seven (7) significant droughts in the last 115 years, which equates to a drought every 16 years on average, or a minimum of a 6.25-percent chance of a drought in any given year.

Drought can have a widespread impact on the environment and the economy, although it typically does not result in loss of life or damage to property, as do other natural disasters. The National Drought Mitigation Center describes likely drought impacts as those affecting agriculture, water supplies, and the risk of fire.

Scientists at this time do not know how to predict drought more than a month in advance for most locations. How long a drought lasts depends on interactions between the atmosphere and the oceans, soil moisture and land surface processes, topography, internal dynamics, and the accumulated influence of weather systems on the global scale.

Crucial issues associated with drought include the following:

- Identification and development of alternative water supplies
- Use of groundwater recharge techniques to stabilize the groundwater supply
- The probability of increased drought frequencies and durations due to climate change
- The promotion of active water conservation even during non-drought periods.

### 7.3. Earthquake

An earthquake is the vibration of the earth's surface following a release of energy in the earth's crust. Earthquakes tend to occur along faults, which are zones of weakness in the crust. Earthquakes occur throughout Illinois, with most in the southern third of the state. Over 360 earthquakes have occurred in Illinois during the past 20 years, with 32 resulting in damage. Fifteen events have been recorded in Cook, DuPage, Kane, Kendall, and Will Counties since 1704. Cook County has experienced three earthquakes ranging from a magnitude of 3 (categorized as "minor") to 4.9 (categorized as "light").

The actual movement of the ground in an earthquake is seldom the direct cause of injury or death. Casualties generally result from falling objects and debris, because the shocks shake, damage or demolish buildings and other structures. Disruption of communications, electrical power supplies and gas, sewer and water lines should be expected. Earthquakes may trigger fires, dam failures, or releases of hazardous material, compounding their effects. Any seismic activity of 6.0 or greater on faults within the planning area would have significant impacts throughout the county. Earthquakes of this magnitude or higher would lead to a massive failure of structures built on loose soils. Levees and revetments constructed on such soils would likely fail, representing a loss of critical infrastructure. These events could cause secondary hazards, including mudslides, that would further damage structures.

There is currently no reliable way to predict an earthquake at any given location with any significant warning time. Research is being done with warning systems that use the low energy waves that precede major earthquakes to give approximately 40 seconds notice that a major earthquake is about to occur. The warning time is very short but it could allow for someone to get under a desk, step away from a hazardous material they are working with or shut down a computer system.

Important issues associated with earthquakes include the following:

- The public perception of the earthquake risk within the planning area is low. It can be difficult to get the public to think about earthquake mitigation with little or no perceived risk.
- Most of the planning area's building stock was built prior to 1975 when seismic provisions became uniformly applied through building code applications. A building stock analysis that looks at the potential fragility of the older building stock constructed without building code influence would be beneficial in the identification of seismic mitigation projects.
- More earthquake mapping is needed for the planning area.

- Critical facility owners/operators should be encouraged to create or enhance continuity of operations plans using the information on risk and vulnerability contained in the Cook County hazard mitigation plan.
- Geotechnical standards should be established that take into account the probable impacts of earthquakes in the design and construction of new or enhanced facilities.
- The County has over 6 miles of earthen levees and revetments on soft, unstable soil. These soils are prone to liquefaction, which would severely undermine the integrity of these facilities.
- There are a large number of earthen dams within the planning area. Dam failure warning and evacuation plans and procedures should be reviewed and updated to reflect the dams' risk potential associated with earthquake activity in the region.

## 7.4 Flood

### *Flood Types and History*

Two types of flooding are typical in Cook County: riverine flooding when water overflows the banks of a stream; and stormwater/urban drainage flooding, when storm runoff exceeds the capacity of local drainage systems in place to convey stormwater to a receiving body. 231 flooding events (including flood, flash flood, coastal flood, and heavy rains) have occurred in Cook County from 1996 to 2019. Flood events of historical significance occurred in the Cook County region in 1849, 1855, 1885, 1938, 1952, 1954, 1957, 1961, 1973, 1979, 1986, 1987, 1996, 2001, 2004, 2010, 2011, and 2013. Since 1972, 13 presidential-declared flood events in the County have caused over \$628.5 million in property damage.

In the past 20 years, stormwater/urban drainage flooding has become the principal cause of flood losses in the Cook County planning area. Urban portions of the county annually experience nuisance flooding related to drainage issues. After flooding in August 2010, FEMA provided more than

\$435 million in disaster recovery, response, and mitigation in Cook and DuPage Counties, and more than 75 percent of this went to individual homeowners, most of whom suffered sewer back-ups and basement flooding caused by stormwater/urban drainage flooding. The frequency and the magnitude of stormwater/urban drainage flooding in Cook County dictated the assignment of stormwater management within the County to a single entity—the Metropolitan Water Reclamation District of Greater Chicago (MWRD).

Cook County experiences numerous episodes of the river and urban flooding every year; massive floods that can cause significant property damage typically occur every three to seven years.

### *Flood Mapping*

Flood studies use historical records to determine the probability of occurrence for different river discharge (flow) levels. The flood frequency equals 100 divided by the discharge probability. For example, the 100-year discharge has a 1-percent chance of being equaled or exceeded in any given year. The extent of flooding associated with a 1-percent annual probability of occurrence (the base flood or 100-year flood) is used as a regulatory boundary by many agencies. This boundary is a convenient tool for assessing risk in flood-prone communities. For most communities participating in the National Flood Insurance Program (NFIP), FEMA has prepared a detailed Flood Insurance Study that presents water surface elevations for the 1-percent annual chance flood and the 0.2-percent annual chance flood (the 500-year flood). The boundaries of the 100- and 500-year floodplains are shown on Flood Insurance Rate Maps.



FEMA has mapped over 78 square miles of the 100-year floodplain and 99 square miles of 500-year floodplain along 172 watercourses in the Cook County planning area. Approximately 8 percent of the County is located within mapped 100-year floodplains. As is the case for many communities, there is a need for updated maps that better reflect the actual flood risk. MWRD has created inundation maps, which may be a good resource for some communities.

It should be noted that mapping showing areas of urban flooding is limited in the County.

### *Flood Severity*

The principal factors affecting flood damage are flood depth and velocity. The deeper and faster flood flows become, the more damage they can cause. Shallow flooding with high velocities can cause as much damage as deep flooding with slow velocity, is especially true when a channel migrates over a broad floodplain, redirecting high-velocity flows and transporting debris and sediment.

The worst-case scenario for flooding in the Cook County planning area has happened numerous times in the past. It involves intense rainstorms that stall over the planning area, dropping rainfall totals in excess 6 inches over 48 hours (this scenario is significantly exacerbated by the presence of snowpack on the ground), which leads to both riverine and stormwater/urban drainage flooding that can overwhelm flood response capabilities in the planning area. Significant roads can be blocked, preventing critical access for many residents and critical functions. High in-channel flows can cause water courses to scour, possibly washing out roads and creating more isolation problems.

### *Flood Warning*

The Cook County flood threat system consists of a network of precipitation gages throughout the watershed and stream gages at strategic locations that continuously monitor and report stream levels. All of this information is analyzed by agencies such as the Cook County Department of Homeland Security and Emergency Management (DHSEM) and Metropolitan Water Reclamation District to evaluate the flood threat and possible evacuation needs.

Floods are generally classed as either slow-rise or flash floods. Due to the sequential pattern of meteorological conditions needed to cause serious slow-rise flooding, it is unusual for a slow-rise flood to occur without warning. Slow-rise floods may be preceded by a warning time from several hours, to days, to possibly weeks. Evacuation and sandbagging for a slow-rise flood may lessen flood damage. Flash floods are more difficult to prepare for, due to the extremely short warning time given, if any. Flash flood warnings usually require evacuation within an hour. However, potential hazard areas can be warned in advance of potential flash flooding danger.

### *Participation in Federal Flood Programs*

The NFIP makes federally backed flood insurance available to homeowners, renters, and business owners in participating communities. Cook County entered the NFIP on April 15, 1981. The effective date for the current countywide Flood Insurance Rate Map is August 19, 2008. In addition to the County, most Cook County municipalities participate in the NFIP. As of October 2018, Cook County had 14,790 flood insurance policies providing \$3.092 billion in insurance coverage. According to FEMA statistics, in the State of Illinois, there were 51,246 total losses (claims) between January 1, 1978, and January 31, 2019, for a total of approximately \$545.36 million, an average of roughly \$10,642 per claim.

Twenty-four communities in the planning area also participate in the Community Rating System (CRS) a voluntary program that encourages floodplain management activities that exceed the NFIP requirements. The CRS requires participating communities to identify repetitive loss areas, where flood insurance claims have been paid multiple times for individual properties. There are 1,775 such properties in Cook County as of October 2018.

### *Issues*

Important issues associated with flooding include the following:

- The 2-D, unsteady-state modeling performed by the Metropolitan Water Reclamation District is considered to be the best available flood risk data for the planning area, but it is not the basis of FEMA's current effective Flood Insurance Rate Map. The District's flood hazard data should be formatted so that can be used to support risk assessment and thus validate best available data.
- The planning area has a large percentage of policies and losses outside a mapped hazard area. Basement flooding is a common problem.
- The stormwater/urban drainage flooding risk is not mapped, which makes it difficult to assess this hazard, other than looking at historical loss data.
- The risk associated with the flood hazard overlaps the risk associated with other hazards such as an earthquake. This provides an opportunity to seek mitigation alternatives with multiple objectives that can reduce the risk for multiple hazards.
- There is no consistency of land-use practices and regulatory floodplain management within the planning area. It is unclear how potential climate change may impact flood conditions in the planning area.
- The concept of residual risk should be considered in the design of future capital flood control projects and should be communicated with residents living in the floodplain.
- More information is needed on flood risk to support the concept of risk-based analysis of capital projects.
- There needs to be a sustained effort to gather historical damage data, such as high water marks on structures and damage reports, to measure the cost-effectiveness of future mitigation projects.
- Ongoing flood hazard mitigation will require funding from multiple sources.
- There needs to be a coordinated hazard mitigation effort between jurisdictions affected by flood hazards in the county.
- Floodplain residents need to continue to be educated about flood preparedness and the resources available during and after floods.
- The promotion of flood insurance as a means of protecting private property owners from the economic impacts of frequent flood events should continue.
- The economy affects a jurisdiction's ability to manage its floodplains. Budget cuts and personnel losses can strain the resources needed to support floodplain management.

### 7.5 Severe Weather

Severe weather refers to any dangerous meteorological phenomena with the potential to cause damage, serious social disruption, or loss of human life. It includes hail, heat, excessive heat, lightning, hail, fog, and high, strong, and thunderstorm winds. Severe-weather events can happen anywhere in the planning area. Severe local storms are probably the most common widespread hazard. They affect large numbers of people throughout Cook County and the surrounding region when they occur. The heat

wave of July 1995 was one of the worst disasters in Illinois history, with over 700 deaths statewide over five-days.

Records from the National Climatic Data Center indicate approximately 1,386 severe weather events (not including heat and excessive heat events) in the planning area between 1950 and 2018 occurring between 503 separate days. NCDC data from 1996 to 2018 also records 57 heat or excessive heat events. This means that Cook County can expect approximately 9 days every year where at least one severe weather event is occurring. More specifically, this represents an average of approximately 11 thunderstorm wind, 7 hail, 3 heat or excessive heat, 1 lightning, and 1 high or strong wind event every year. According to the 2018 Illinois Natural Hazard Mitigation Plan, the planning area is designated as severely vulnerable to severe storms, with a high vulnerability to extreme heat as well. There were no significant fog events recorded for Cook County in the NCDC - NOAA data.

The most common problems associated with severe storms are immobility and loss of utilities. Roads may become impassable due to flooding, downed trees, or a landslide. Power lines may be downed due to high winds, and services such as water or phone may not be able to operate without power. Lightning can cause severe damage and injury. A worst-case severe-weather event would involve prolonged high winds during a thunderstorm. Such an event would have both short-term and longer-term effects. Initially, schools and roads would be closed due to power outages caused by high winds and downed tree obstructions. In more rural areas, some subdivisions could experience limited ingress and egress. Prolonged rain could produce flooding and overtopped culverts with ponded water on roads. Flooding could further obstruct roads and bridges, further isolating residents.

Meteorologists can often predict the likelihood of a severe storm or other severe weather events, which can give several days of warning time. The Chicago Office of the National Weather Service issues severe storm watches and warnings when appropriate to alert government agencies and the public of possible or impending weather events. The watches and warnings are broadcast over NOAA weather radio and are forwarded to the local media for re-transmission using the Emergency Alert System.

Important issues associated with severe weather include the following:

- Redundancy of power supply throughout the planning area must be evaluated. The capacity for backup power generation is limited.
- Public education on dealing with the impacts of severe weather needs to be provided and debris management (downed trees, etc.) must be addressed.
- The effects of climate change may result in an increase in the frequency of extreme heat events.

#### 7.6 Severe Winter Weather

The severe winter weather hazard encompasses heavy snow, lake-effect snow, blizzards, ice storms, sleet, cold/windchill, extreme cold temperatures and wind chill, frost/freeze, general winter weather, and winter storms. Severe winter weather events can happen anywhere in the planning area. NOAA identifies 178 of these severe winter weather events in the planning area from 1950 - 2018, excluding snowstorms classified as less than major snowstorms. The planning area typically receives 34 inches of snow each year and can expect to experience exposure to a severe winter weather event at least annually.

178 severe winter weather events were reported between 01/01/1950 and 06/01/2019, although Cold/Windchill and Extreme Cold/Windchill were not recorded in available data sets until 1997 and

2006, respectively. There have likely been many more of these events before those dates that were not recorded by the NCDC data. All events totaled \$700,000 in property damage, 156 direct deaths and 8 indirect deaths, and 5 direct injuries and 3 indirect injuries.

Severe winter weather impacts can be significant. Roads may become impassable due to ice or snow. Power lines may be downed due to high winds or ice accumulation, and services such as water or phone may not be able to operate without power. Physical damage to homes and facilities can occur from wind damage or accumulation of snow or ice. Freezing rain can cause the most dangerous conditions. Ice buildup can bring down trees, communication towers, and wires, creating hazards for property owners, motorists, and pedestrians alike. Many severe winter weather events in the planning area have resulted in the loss of life.

Meteorologists can often predict likely severe winter weather, giving several days of warning time. The National Weather Service provides public warnings on storm, snow and ice events as appropriate to alert government agencies and the public of possible or impending weather events. Watches and warnings are broadcast over NOAA weather radio and are forwarded to local media for re-transmission using the Emergency Alert System.

Important issues associated with severe winter weather in the planning area include the following:

- The older building stock in the planning area is built to low code standards or none at all. These structures could be highly vulnerable to severe winter weather events such as windstorms.
- Redundancy of power supply must be evaluated.
- The capacity for backup power generation is limited.
- Isolated population centers are at significant risk.

## 7.7 Tornado

Tornadoes are the most violent of all atmospheric storms, and all of Illinois is susceptible to them, including Cook County. The tornado season runs March through August, although a tornado can occur in the state at any time. Many tornadoes have struck Cook County, including several within the Chicago city limits. According to NCDC data, there were 54 tornado and three funnel cloud events from 1954 to 2018, which totaled \$118,337,750 in property damage, 39 deaths, and 770 injuries. The F4-rated Oak Lawn tornado in April 1967 was the deadliest tornado in the planning area, with 33 fatalities. The only F5 tornado to ever strike the Chicago area was on August 28, 1990, which additionally impacted Will and Kendall Counties. In total, 29 direct deaths, 350 injuries, and 250 million in property damage was recorded.

Tornadoes can cause fatalities and devastate a neighborhood in seconds. Winds can reach 300 mph, and damage paths can be more than a mile wide and 50 miles long. If a major tornado were to strike within the populated areas of Cook County, the damage could be widespread. Businesses could be forced to close for an extended period or permanently, fatalities could be high, many people could be homeless for an extended period, and routine services such as telephone or power could be disrupted. Buildings can be damaged or destroyed.

The local NWS office issues a tornado watch when tornadoes are possible in an area and a tornado warning when a tornado has been sighted or indicated by weather radar. The current average lead time for tornado warnings is 13 minutes. The National Weather Service has established a goal of 15 minutes

in its strategic plan. Occasionally, tornadoes develop so rapidly that little, if any, advance warning is possible.

Important issues associated with tornadoes in the planning area include the following:

- The older building stock in the planning area is built to low code standards or none at all. These structures could be highly vulnerable to tornadoes.
- Redundancy of power supply must be evaluated. The capacity for backup power generation is limited.
- The amount of the tornado zone that contains vacant, developable land is not known and would be valuable information for gauging the future development potential of the tornado zone.
- Declining growth rate makes it difficult for code standards to have impacts on new development. The planning area has insufficient suitable tornado shelters.
- Public awareness of tornado response protocols is a concern, given the area’s many visitors.

### 8. Planning Area Risk Ranking

Risk rankings were performed by each planning partner to compare the probable impacts of the hazards of concern. For each community, the rankings assessed the probability of each hazard’s occurrence as well as its likely impact on people, property, and the economy. The results of the countywide ranking, which were used in establishing mitigation action and priorities, are summarized below.

TABLE: HAZARD RISK RANKING		
Hazard Ranking	Hazard Event	Category
1	Severe Winter Weather	High
2	Severe Weather	High
3	Flood (including urban flooding)	High
4	Earthquake	Medium
5	Tornado	Medium
6	Drought	Low
7	Dam Failure	Low

### 9. Mitigation Strategies

The heart of the mitigation plan is the mitigation strategy, which serves as the long-term blueprint for reducing the potential losses identified in the risk assessment. The mitigation strategy describes how Cook County and the participating jurisdictions will accomplish the overall purpose, or mission, of the planning process. As part of the update process, mitigation goals and objectives were reevaluated; and mitigation actions/projects were updated/amended, identified, evaluated, and prioritized. A total of 367 new mitigation projects were identified by the County and participating jurisdictions.

## 10. Plan Maintenance Strategy

The hazard mitigation plan includes a formal process to ensure that the 2019 Cook County MJ-HMP remains an active and relevant document and that the planning partners maintain their eligibility for relevant funding sources. The plan's format allows sections to be reviewed and updated when new data become available, resulting in a plan that will remain current and relevant. The strategy for ongoing maintenance of the plan includes the following components:

**Plan Implementation**—Plan implementation and evaluation will be a shared responsibility among all planning partners and agencies identified as lead agencies in the mitigation action plans. Cook County DHSEM will assume lead responsibility for implementing the plan maintenance strategy.

**Steering Committee**—It is recommended that a steering committee remain a viable body involved in key elements of the plan maintenance strategy. The steering committee will strive to include representation from the planning partners, as well as other stakeholders in the planning area.

**Annual Progress Report**—The steering committee will convene to perform annual reviews. DHSEM will then prepare a formal annual report on the progress of the plan.

**Plan Update**—The planning partnership intends to update the hazard mitigation plan on a five-year cycle from the date of initial plan adoption.

**Continuing Public Involvement**—The public will continue to be apprised of the plan's progress through the Cook County hazard mitigation website and by copies of annual progress reports provided to the media. DHSEM has agreed to maintain the hazard mitigation plan website, and each planning partner has agreed to provide links to the website on their jurisdictional websites.

**Incorporation into Other Planning Mechanisms**—All municipal planning partners are committed to creating a linkage between the hazard mitigation plan and their comprehensive plans by identifying a mitigation action as such and giving that action a high priority. As information becomes available from other planning mechanisms that can enhance this plan, that information will be incorporated via the update process.

## 11. Plan Adoption

The 2019 Cook County MJ-HMP will be submitted for a pre-adoption review to the Illinois Emergency Management Agency and FEMA before adoption by Cook County. Once pre-adoption approval has been provided, all planning partners will formally adopt the plan.

**COOK COUNTY  
MULTI-JURISDICTIONAL  
HAZARD MITIGATION PLAN  
VOLUME 2 - Municipal Annexes**

**Hoffman Estates Annex**

**FINAL**

July 2019

Prepared for:



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- **Development Trends:** Hoffman Estates continually strives to facilitate new growth. Although the economy is still slow to recover, Hoffman Estates continues to experience improved growth. Large and small businesses choose to locate in Hoffman Estates or make improvements to existing property. Hotel occupancy and rates have increased from previous years, demonstrating an upswing in economic activity. Hoffman Estates continues to pursue and manage grant funding, receiving several grants for various projects to aid development. Recent plan design and specs for major road projects were performed in-house, significantly reserving funds for infrastructure improvements rather than contracted work. In recent years the Village has designated four TIF Districts in commercial areas of the Village to spur economic development and infrastructure improvements. The Village has also partnered with the surrounding communities to start up a business accelerator called Next Level Northwest. The accelerator is focused on helping stage two companies get to the next level by providing business help via experienced coaching and mentoring

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Habitat Conservation Plan	No	No	No	No	
Economic Development Plan	Yes	No	No	Yes	Comprehensive Plan
Shoreline Management Plan	No	No	No	No	N/A
<b>Response/Recovery Planning</b>					
Comprehensive Emergency Management Plan	Yes	No	Yes	Yes	Cook County DHSEM
Threat and Hazard Identification and Risk Assessment	No	No	Yes	No	Cook County DHSEM Preparing THIRA
Terrorism Plan	No	No	Yes	Yes	Cook County DHSEM
Post-Disaster Recovery Plan	No	No	No	No	
Continuity of Operations Plan	Yes	No	Yes	No	Cook County DHSEM
Public Health Plans	Yes	No	Yes	No	Cook County DHSEM

**TABLE: FISCAL CAPABILITY**

Financial Resources	Accessible or Eligible to Use?
Community Development Block Grants	Yes
Capital Improvements Project Funding	Yes
Authority to Levy Taxes for Specific Purposes	Yes
User Fees for Water, Sewer, Gas or Electric Service	Yes
Incur Debt through General Obligation Bonds	Yes
Incur Debt through Special Tax Bonds	Yes
Incur Debt through Private Activity Bonds	No
Withhold Public Expenditures in Hazard-Prone Areas	No
State Sponsored Grant Programs	Yes
Development Impact Fees for Homebuyers or Developers	Yes

**TABLE: ADMINISTRATIVE AND TECHNICAL CAPABILITY**

Staff/Personnel Resources	Available?	Department/Agency/Position
Planners or engineers with knowledge of land development and land management practices	Yes	Development Services
Engineers or professionals trained in building or infrastructure construction practices	Yes	Development Services
Planners or engineers with an understanding of natural hazards	Yes	Development Services
Staff with training in benefit/cost analysis	Yes	All Departments

## Jurisdiction-Specific Natural Hazard Event

The information provided below was solicited from the jurisdiction and supported by NOAA and other relevant data sources.

The *Natural Hazard Events Table* lists all past occurrences of natural hazards within the jurisdiction.

- Repetitive flood loss records are as follows: Number of FEMA-Identified Repetitive Loss Properties: 0
- Number of FEMA-Identified Severe Repetitive Loss Properties: 0
- Number of Repetitive Flood Loss/Severe Repetitive Loss Properties That Have Been Mitigated: 0

TABLE: NATURAL HAZARD EVENTS			
Type of Event	FEMA Disaster Number (if applicable)	Date	Preliminary Damage Assessment
Severe Weather	-	5/2/2018	-
Flooding	-	10/14/2017	-
Hail	-	7/23/2017	-
Hail	-	4/10/2017	-
Hail	-	7/17/2015	-
Severe Weather	-	9/5/2014	\$75,000 in property damage.
Hail	-	4/12/2014	-
Severe Storms	DR-4116	2013	-
Severe Winter Storms	DR-1960	2011	-
Severe Storms/Flooding	DR-1935	2010	-
Severe Storms/Flooding	DR-1800	2008	-
Severe Storms/Flooding	DR-1729	2007	-
Severe Winter Storm	EM-3161	2000	-
Winter Snow Storm	EM-3134	1999	-
Flooding	DR-1188	1997	-
Flooding	DR-1129	1996	-
Severe Storms/Flooding	DR-997	1993	-
Severe Storms/Flooding	DR-798	1987	-
Severe Storms/Flooding	DR-776	1986	-

### Hazard Risk Ranking

The *Hazard Risk Ranking Table* below presents the ranking of the hazards of concern. Hazard area extent and location maps are included at the end of this chapter. These maps are based on the best available data at the time of the preparation of this plan, and are considered to be adequate for planning purposes.

TABLE: HAZARD RISK RANKING		
Rank	Hazard Type	Risk Rating Score (Probability x Impact)
1	Severe Weather	54
2	Severe Winter Weather	54
3	Earthquake	32
4	Tornado	27
5	Flood	18
6	Drought	3
7	Dam Failure	0

VOLUME 2: COOK COUNTY HAZARD MITIGATION PLAN – HOFFMAN ESTATES ANNEX

<b>Action H9.7—Maintain Energy Assurance Plan to reduce risks in long and short term energy shortage.</b>						
Ongoing	All	1, 8, 13	Planning	\$89,000; Low	DOE Grant	Ongoing
<b>Action H9.8—Mitigate potential increases in run-off through development process.</b>						
Ongoing	Flood, Severe Weather	1, 2, 3, 4, 9, 10	Public Works	Low	General Revenue	Ongoing
<b>Action H9.9—Maintain a storm water management fee to finance the reduction of impacts of potential flooding.</b>						
Ongoing	Flood, Severe Weather	1, 2, 3, 8, 9, 11	Public Works	Low	General Revenue	Ongoing
<b>Action H9.10—Where appropriate, support retrofitting, purchase, or relocation of structures in hazard-prone areas to prevent future structure damage. Give priority to properties with exposure to repetitive losses.</b>						
Removed	All	7, 13	Village of Hoffman Estates	High	Removed	Long-term (depending on funding)
<b>Action H9.11—Continue to support the County wide actions identified in this plan.</b>						
Ongoing	All	All	Village of Hoffman Estates	Low	General Fund	Short- and long- term
<b>Action H9.12—Actively participate in the plan maintenance strategy identified in this plan.</b>						
Ongoing	All	3, 4, 6	DHSEM, Village of Hoffman Estates	Low	General Fund	Short-term
<b>Action H9.13—Maintain the Village's classification under the Community Rating System (CRS) program.</b>						

5	9	Medium	Low	Yes	No	Yes	High
6	4	Medium	Low	Yes	No	No	High
7	3	Low	Low	Yes	Yes	Yes	Low
8	6	Medium	Low	Yes	Yes	Yes	Medium
9	6	Low	Low	Yes	No	Yes	High
10	2	High	High	Yes	Yes	No	Medium
11	13	Medium	Low	Yes	No	Yes	High
12	3	Medium	Low	Yes	Yes	Yes	High
13	9	Medium	Low	Yes	No	Yes	Medium
14	3	Medium	Low	Yes	No	Yes	High
15	3	Medium	Medium	Yes	Yes	No	Medium
16	5	Medium	Low	Yes	No	Yes	High
17	3	Medium	Medium	Yes	Yes	Yes	Medium
18	5	Medium	Medium	Yes	Yes	Yes	Medium
19	3	Medium	High	No	Yes	Yes	Low

(a) See Chapter 1 for explanation of priorities.

Action H-9.17

<b>Mitigation Action</b>	Install a redundancy in water system through interconnection with neighboring communities.
<b>Year Initiated</b>	2019
<b>Applicable Jurisdiction</b>	Hoffman Estates
<b>Lead Agency/Organization</b>	Public Works
<b>Supporting Agencies/Organizations</b>	
<b>Applicable Goal</b>	Develop and implement sustainable, cost-effective, and environmentally sound risk-reduction (mitigation) projects. Protect the lives, health, safety, and property of the citizens of Cook County from the impacts of natural hazards. Protect public services and critical facilities, including infrastructure, from loss of use during natural hazard events. Involve stakeholders to enhance the local capacity to mitigate, prepare for, and respond to the impacts of natural hazards.
<b>Applicable Objective</b>	Establish partnerships among all levels of local government, the private sector, and/or nongovernmental organizations to improve and implement methods to protect people and property. Reduce natural hazard-related risks and vulnerability to potentially isolated populations within the planning area. Encourage hazard mitigation measures that result in the least adverse effect on the natural environment and that use natural processes.
<b>Potential Funding Source</b>	Local Funds
<b>Estimated Cost</b>	\$500,000
<b>Benefits (loss avoided)</b>	Redundancy in water supply in case of loss of service to certain zones within Hoffman Estates
<b>Projected Completion Date</b>	2023
<b>Priority and Level of Importance (Low, Medium, High)</b>	Medium Priority
<b>Benefit Analysis (Low, Medium, High)</b>	Medium—Project will have a long-term impact on the reduction of risk exposure for life and property, or project will provide an immediate reduction in the risk exposure for property.
<b>Cost Analysis (Low, Medium, High)</b>	Medium—The project could be implemented with existing funding but would require a re-apportionment of the budget or a budget amendment, or the cost of the project would have to be spread over multiple years.
<b>Actual Completion Date</b>	



Action H-9.18

<b>Mitigation Action</b>	Research, write, and finalize a south area stormwater master plan
<b>Year Initiated</b>	2019
<b>Applicable Jurisdiction</b>	Hoffman Estates
<b>Lead Agency/Organization</b>	Development Services
<b>Supporting Agencies/Organizations</b>	
<b>Applicable Goal</b>	<p>Develop and implement sustainable, cost-effective, and environmentally sound risk-reduction (mitigation) projects.</p> <p>Protect the lives, health, safety, and property of the citizens of Cook County from the impacts of natural hazards. Protect public services and critical facilities, including infrastructure, from loss of use during natural hazard events.</p> <p>Involve stakeholders to enhance the local capacity to mitigate, prepare for, and respond to the impacts of natural hazards.</p> <p>Develop, promote, and integrate mitigation action plans.</p>
<b>Applicable Objective</b>	<p>Eliminate or minimize disruption of local government operations caused by natural hazards through all phases of emergency management.</p> <p>Increase the resilience of (or protect and maintain) infrastructure and critical facilities.</p> <p>Consider the impacts of natural hazards on future land uses in the planning area, including possible impacts from climate change.</p> <p>Integrate hazard mitigation policies into land use plans in the planning area.</p> <p>Encourage hazard mitigation measures that result in the least adverse effect on the natural environment and that use natural processes.</p>
<b>Potential Funding Source</b>	Local Funds
<b>Estimated Cost</b>	\$250,000
<b>Benefits (loss avoided)</b>	Ensure that future projects are more "future-proofed" in providing flooding mitigation
<b>Projected Completion Date</b>	2021
<b>Priority and Level of Importance (Low, Medium, High)</b>	Medium Priority
<b>Benefit Analysis (Low, Medium, High)</b>	Medium—Project will have a long-term impact on the reduction of risk exposure for life and property, or project will provide an immediate reduction in the risk exposure for property.
<b>Cost Analysis (Low, Medium, High)</b>	Medium—The project could be implemented with existing funding but would require a re-apportionment of the budget or a budget amendment, or the cost of the project would have to be spread over multiple years.
<b>Actual Completion Date</b>	



Action H-9.19

<b>Mitigation Action</b>	Provide onsite backup power sources for all Village lift stations
<b>Year Initiated</b>	2019
<b>Applicable Jurisdiction</b>	Hoffman Estates
<b>Lead Agency/Organization</b>	Public Works
<b>Supporting Agencies/Organizations</b>	
<b>Applicable Goal</b>	Develop and implement sustainable, cost-effective, and environmentally sound risk-reduction (mitigation) projects. Protect the lives, health, safety, and property of the citizens of Cook County from the impacts of natural hazards. Protect public services and critical facilities, including infrastructure, from loss of use during natural hazard events.
<b>Applicable Objective</b>	Eliminate or minimize disruption of local government operations caused by natural hazards through all phases of emergency management. Increase the resilience of (or protect and maintain) infrastructure and critical facilities. Reduce natural hazard-related risks and vulnerability to potentially isolated populations within the planning area.
<b>Potential Funding Source</b>	Local Funds
<b>Estimated Cost</b>	\$500,000
<b>Benefits (loss avoided)</b>	Allow for continued use of sanitary sewer system through long term power outages.
<b>Projected Completion Date</b>	2025
<b>Priority and Level of Importance (Low, Medium, High)</b>	Low Priority
<b>Benefit Analysis (Low, Medium, High)</b>	Medium—Project will have a long-term impact on the reduction of risk exposure for life and property, or project will provide an immediate reduction in the risk exposure for property.
<b>Cost Analysis (Low, Medium, High)</b>	High—Existing funding will not cover the cost of the project; implementation would require new revenue through an alternative source (for example, bonds, grants, and fee increases)
<b>Actual Completion Date</b>	

**Recommended Mitigation Action/Implementation Plan and Project Description**

<b>Action/Implementation Plan and Project Description:</b>	Allow for continued use of sanitary sewer system lift stations through long term power outages without utilizing existing mobile backup power sources that may be needed to keep other Village facilities functioning.
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### Ongoing Mitigation Actions

The following are ongoing actions with no definitive end or that are still in progress. During the 2019 update, these "ongoing" mitigation actions and projects were modified and/or amended, as needed.

**Action H-9.3**

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# H-9.3	The Emergency Management Agency Coordinator will help with the development of severe weather emergency plans	
Status Description: Yes	The EMA Coordinator continues to help in the development of the severe weather emergency plans including the severe weather emergency plan conducted for the Northwest Forth fest and monitoring and notification of weather events during this reporting period.	O
<b>Completion status legend:</b> N = New      O = Action Ongoing toward Completion C = Project Completed    R = Want Removed from Annex    X = No Action Taken		

**Action H-9.4**

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# H-9.4	Special populations and facilities will be warned of severe weather by reverse 911 and EAS	
Status Description: Yes	Although no severe weather incidents occurred during this reporting period testing of the reverse 911 and EAS system occur regularly to ensure we are prepared.	O
<b>Completion status legend:</b> N = New      O = Action Ongoing toward Completion C = Project Completed    R = Want Removed from Annex    X = No Action Taken		

Action H-9.7

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# H-9.7	Maintain Energy Assurance Plan to reduce risks in long and short term energy shortage.	
Status Description: Yes	This plan is maintained continually.	O
<b>Completion status legend:</b> N = New      O = Action Ongoing toward Completion C = Project Completed   R = Want Removed from Annex X = No Action Taken		

Action H-9.8

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# H-9.8	Mitigate Potential increases in run off through development process.	
Status Description: Yes	The Village engineering Department continues mitigation through the development process including requirements to meet MWRD storm water requirements. Engineering Department further works with Public Work to mitigate identified flooding areas in the village.	O
<b>Completion status legend:</b> N = New      O = Action Ongoing toward Completion C = Project Completed   R = Want Removed from Annex X = No Action Taken		

**Action H-9.12**

<b>TABLE: ACTION PLAN MATRIX</b>		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# H-9.12	Actively participate in the plan maintenance strategy identified in this plan	
Status Description: Yes	Village departments actively participate in the maintenance of the plan.	O
<b>Completion status legend:</b> N = New      O = Action Ongoing toward Completion C = Project Completed   R = Want Removed from Annex X = No Action Taken		

**Action H-9.13**

<b>TABLE: ACTION PLAN MATRIX</b>		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# H-9.13	Maintain the Village's classification under the Community Rating System (CRS) program.	
Status Description: Yes	The Village has maintained its classification rating. Classification improved from 7 to 6 in 2018	O
<b>Completion status legend:</b> N = New      O = Action Ongoing toward Completion C = Project Completed   R = Want Removed from Annex X = No Action Taken		

Action H-9.16

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# H-9.16	Integrate the hazard mitigation plan into other plans, programs, or resources that dictate land use or redevelopment.	
Status Description: Yes	The planning zoning and engineering department integrate the hazard mitigation plan into programs that dictate land use and redevelopment before approval.	O
Completion status legend: N = New      O = Action Ongoing toward Completion C = Project Completed   R = Want Removed from Annex X = No Action Taken		

## Future Needs to Better Understand Risk/Vulnerability

No needs have been identified at this time.

### HAZUS-MH Risk Assessment Results

HOFFMAN ESTATES EXISTING CONDITIONS	
2010 Population	51,895
Total Assessed Value of Structures and Contents	\$7,574,862,846
Area in 100-Year Floodplain	822.57 acres
Area in 500-Year Floodplain	1,132.93 acres
Number of Critical Facilities	61

HAZARD EXPOSURE IN HOFFMAN ESTATES						
	Number Exposed		Value Exposed to Hazard			% of Total Assessed Value Exposed
	Population	Buildings	Structure	Contents	Total	
<b>Dam Failure</b>						
Buffalo Creek	0	0	\$0	\$0	\$0	0.00%
U. Salt Cr. #2	0	0	\$0	\$0	\$0	0.00%
Touhy	0	0	\$0	\$0	\$0	0.00%
U. Salt Cr. #3	0	0	\$0	\$0	\$0	0.00%
U. Salt Cr. #4	0	0	\$0	\$0	\$0	0.00%
<b>Flood</b>						
100-Year	104	32	\$11,294,396	\$7,551,898	\$18,846,294	0.25%
500-Year	361	111	\$40,562,862	\$22,186,131	\$62,748,993	0.83%
<b>Tornado</b>						
100-Year	—	—	\$399,622,116	\$211,325,185	\$610,947,302	8.07%
500-Year	—	—	\$763,810,149	\$393,836,613	\$1,157,646,762	15.28%

ESTIMATED PROPERTY DAMAGE VALUES IN HOFFMAN ESTATES				
	Estimated Damage Associated with Hazard			% of Total Assessed Value Damaged
	Building	Contents	Total	
<b>Dam Failure</b>				
Buffalo Creek	\$0	\$0	\$0	0.00%
U. Salt Cr. #2	\$0	\$0	\$0	0.00%
Touhy	\$0	\$0	\$0	0.00%
U. Salt Cr. #3	\$0	\$0	\$0	0.00%
U. Salt Cr. #4	\$0	\$0	\$0	0.00%
<b>Earthquake</b>				



## Hazard Mapping

**COMMITTEE AGENDA ITEM  
VILLAGE OF HOFFMAN ESTATES**

**SUBJECT:** Request authorization to reject all bids for the purchase and installation of grinder and related improvements at Moonlake Lift Station.

**MEETING DATE:** October 28, 2019

**COMMITTEE:** Public Works & Utilities

**FROM:** Joseph Nebel, Director of Public Works  
Haileng Xiao, Superintendent of Water & Sewer

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**PURPOSE:** To reject all bids for the purchase & installation of grinder and related improvements at Moonlake Lift Station.

**BACKGROUND:** Moonlake Lift Station at 1215 Moon Lake Blvd was constructed in 1973 as a dry well/wet well type underground pump station. Access to the dry well is with a vertical ladder & elevator. The station conveys sewage through a 12 inch force main connected to a 14-inch force main of almost a mile before discharging into a gravity sewer.

Due to sewage heavily loaded with improperly discharged items such as socks, rags, towels, etc., wear on the pumps has been severe. The wet well has to be cleaned regularly by specialized contractors to prevent these items from reaching the pump and causing damage. Cleaning has had only limited success and staff often is required to perform additional maintenance and repair of the pumps.

To solve the problem, staff has been looking into various methods to prevent the debris from flowing to the pumps. The installation of a grinder has been very successful in achieving that and made great improvement at Village's WDA Lift station. There has been little if any incidents of pump damage post installation. The success convinced staff that a grinder could also help reduce costly repairs on pumps as well at Moonlake Lift Station. As the Moonlake Lift Station was not originally designed with a grinder, an engineer was required to evaluate the feasibility of such equipment being installed and to prepare plans and bid documents. In January, 2019, Engineering Enterprises, Inc. (EEI) was hired to provide the necessary project engineering. EEI examined the actual flow volume of Moonlake Lift station and reviewed the original design documents and investigated the grinder technology industry.

**BACKGROUND continued,**

Village staff and the consultant also discussed with staff of municipalities that are currently using grinders and obtained valuable information. The outcome of the joint evaluation shows that an addition of a grinder is not only feasible but also highly beneficial. It is anticipated to reduce wear on the pumps by grinding the debris into small pieces before being pumped out.

**DISCUSSION:**

By early September 2019, installation design, plans and bid specifications were all completed, which also included system improvements such as a new concrete wet well lid, addition of a plug valve, safety access hatch, influent piping modifications and etc. Bids were advertised on September 11, 2019 and by the bid opening date, October 1, 2019, 4 sealed bids were received. The summary of the bids are as follows:

Company	Total Cost
John Neri Construction Co., Inc.	\$256,470
Performance Const. & Eng., Llc	\$288,400
Kovilic Construction Co., Inc.	\$294,580
Martam Construction, Inc.	\$298,592

The engineer's cost estimate is \$139,565. Staff's review indicates none of the bids is reasonable in comparison to the engineer's estimate with the lowest bid at over 80% of the engineer's estimate. One of the two major differences between the engineer's estimate and the actual bid prices is on demolition work (removal and disposal concrete wet well lid, pavement, riser pipe, debris grate, concrete, etc.). The engineer's estimate is \$9,000 and bid prices ranged from \$26,650 – \$46,000. The other major difference is on the installation of plug valve with operator and valve box. The engineer's estimate is \$11,500 and the bid costs ranged from \$45,000 - \$67,800. Both show the contractors have concerns over uncertain conditions, i.e. the existing wet well lid and the actual condition of the wet well. Some feedback obtained was that the required completion date (120 days per IDOT standards) is too short of a time frame given the lead time of some of the equipment. Staff is hopeful that the Village will receive a favorable bid price by revising the bid document to add additional days for completion. Staff concurs with the consultant engineer's recommended rejection of all bids and rebidding the project with revisions.

**FINANCIAL IMPACT:**

None.

**RECOMMENDATION:**

Request authorization to reject all bids for the purchase and installation of grinder and related improvements at Moonlake Lift Station.



Engineering Enterprises, Inc.

October 16, 2019

Mr. Haileng Xiao  
Superintendent, Water & Sewer  
Village of Hoffman Estates  
Department of Public Works  
2305 Pembroke Ave.  
Hoffman Estates, IL 60169

**Re: Recommendation to Reject Bids  
Moon Lake Lift Station Grinder Installation  
Village of Hoffman Estates, Cook and Kane Cos., Illinois**

Dear Mr. Xiao:

Bids were received, opened, and tabulated for the above referenced project at 1:30 p.m., on October 1, 2019. Representatives from the contractor bidding the project and the Village were in attendance. A copy of the Bid Tabulation is included for your reference.

There were four (4) bidders, with base bid cost ranges from \$256,470 to \$298,592. The low bidder was John Neri Construction Co., Inc., whose bid is 84% above the engineer's estimate of \$139,565. Based upon analysis of the bids, we believe the costs are high and more reasonable bids can be obtained via minor adjustments to the scope and schedule of the project. Therefore, we recommend rejecting all bids, making adjustments to the Project Manual, and rebidding the project.

If you have any questions or need any additional information, please contact me.

Respectfully submitted,

ENGINEERING ENTERPRISES, INC.

Stephen T. Dennison, P.E.  
Senior Project Manager

STD/std  
Enclosure



BID TABULATION MOON LAKE LIFT STATION MODIFICATIONS VILLAGE OF NORTHMANHASTERS													
ITEM NO.	DESCRIPTION	BID TABULATION BIDS RECD 10/1/2019		JOHN HENI CONSTRUCTION CO., INC. 170 W. Factory Road Addicks, IL 60101		PERFORMANCE CONST. & ENO., LLC 217 W. John Street Plano, IL 60545		KOVILIC CONSTRUCTION CO., INC. 3721 N. Corston Street Franklin Park, IL 60131		MAYTAM CONSTRUCTION, INC. 1300 Gasket Drive Elgin, IL 60120		ENGINEER'S ESTIMATE 52 Wheeler Rd. Plano, IL 60545	
		UNIT	QUANTITY	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT
BASE BID ITEMS													
1	MOBILIZATION AND DEMOBILIZATION INCLUDING PERFORMANCE AND PAYMENT BONDS	LS	1	\$ 20,000.00	\$ 20,000.00	\$ 20,000.00	\$ 20,000.00	\$ 11,000.00	\$ 11,000.00	\$ 17,500.00	\$ 17,500.00	\$ 7,500.00	\$ 7,500.00
2	DEMOLITION WORK INCLUDING, BUT NOT LIMITED TO, THE REMOVAL AND DISPOSAL CONCRETE WET WELL LID, PAVEMENT, RUBER PIPE, DE BRIS GRATE, CONCRETE, ELECTRICAL, CONTROLS AND APPURTENANCES.	LS	1	\$ 48,000.00	\$ 48,000.00	\$ 30,000.00	\$ 30,000.00	\$ 30,000.00	\$ 30,000.00	\$ 28,850.00	\$ 28,850.00	\$ 9,000.00	\$ 9,000.00
3	FURNISH AND INSTALL A GRINDER WITH CONTROL PANEL, INCLUDING BUT NOT LIMITED TO, GUIDE RAIL SYSTEM AND RELATED WET WELL AND INFLUENT PIPE MODIFICATIONS, BYPASS PUMPING, SUPPORTS, EXCAVATION AND BACKFILL, PAVING, SITE RESTORATION, SCADA MODIFICATIONS, ELECTRICAL, CONTROLS AND APPURTENANCES.	LS	1	\$ 86,000.00	\$ 86,000.00	\$ 140,000.00	\$ 140,000.00	\$ 150,000.00	\$ 150,000.00	\$ 185,170.00	\$ 185,170.00	\$ 80,000.00	\$ 80,000.00
4	FURNISH AND INSTALL A CONCRETE WEL WELL LID, INCLUDING BUT NOT LIMITED TO, ACCESS HATCHES, VENT PIPING AND RELATED WET WELL MODIFICATIONS, EXCAVATION AND BACKFILL, PAVING SITE RESTORATION AND APPURTENANCES.	LS	1	\$ 19,200.00	\$ 19,200.00	\$ 25,000.00	\$ 25,000.00	\$ 50,000.00	\$ 50,000.00	\$ 33,500.00	\$ 33,500.00	\$ 17,500.00	\$ 17,500.00
5	FURNISH AND INSTALL A BURIED PUG VALVE WITH OPERATOR AND VALVE BOX, INCLUDING BUT NOT LIMITED TO, RELATED INFLUENT PIPING MODIFICATIONS, BYPASS PUMPING, TRENCH BACKFILL, GROUNDWATER AND SURFACE WATER CONTROL, Dewatering, EXCAVATION AND BACKFILL, PAVING, SITE RESTORATION AND APPURTENANCES.	LS	1	\$ 87,800.00	\$ 87,800.00	\$ 85,000.00	\$ 85,000.00	\$ 45,000.00	\$ 45,000.00	\$ 47,075.00	\$ 47,075.00	\$ 11,900.00	\$ 11,900.00
6	CASH ALLOWANCE (3% OF \$1M BASE BID ITEMS 1-5)	LS	1	\$ 7,470.00	\$ 7,470.00	\$ 8,400.00	\$ 8,400.00	\$ 8,580.00	\$ 8,580.00	\$ 8,897.00	\$ 8,897.00	\$ 4,085.00	\$ 4,085.00
TOTAL FOR ALL BASE BID ITEMS 1 THROUGH 6					\$ 256,470.00	\$ 256,400.00	\$ 256,400.00	\$ 254,580.00	\$ 254,580.00	\$ 288,882.00	\$ 288,882.00	\$ 138,565.00	\$ 138,565.00

% BELOW/ABOVE ENGINEER'S ESTIMATE

63.9%

ENGINEERING ENTERPRISES, INC.  
52 WHEELER ROAD, SUGAR GROVE, ILLINOIS

**VILLAGE OF HOFFMAN ESTATES  
DEPARTMENT OF PUBLIC WORKS**

**PROPOSAL FORM**

**Moon Lake Lift Station Modifications**

**BID SCHEDULE**

ITEM NO.	ITEM	UNIT	QUANTITY	UNIT PRICE	AMOUNT
<b>BASE BID ITEMS</b>					
1	MOBILIZATION AND DEMOBILIZATION, INCLUDING PERFORMANCE AND PAYMENT BONDS	LS	1	\$ 20,000.00	\$ 20,000.00
2	DEMOLITION WORK INCLUDING, BUT NOT LIMITED TO, THE REMOVAL AND DISPOSAL, CONCRETE WET WELL LID, PAVEMENT, RISER PIPE, DEBRIS GRATE, CONCRETE, ELECTRICAL, CONTROLS AND APPURTENANCES.	LS	1	\$ 46,000.00	\$ 46,000.00
3	FURNISH AND INSTALL A GRINDER WITH CONTROL PANEL, INCLUDING BUT NOT LIMITED TO, GUIDE RAIL SYSTEM AND RELATED WET WELL AND INFLUENT PIPE MODIFICATIONS, BYPASS PUMPING, SUPPORTS, EXCAVATION AND BACKFILL, PAVING, SITE RESTORATION, SCADA MODIFICATIONS, ELECTRICAL, CONTROLS AND APPURTENANCES.	LS	1	\$ 96,000.00	\$ 96,000.00
4	FURNISH AND INSTALL A CONCRETE WET WELL LID, INCLUDING BUT NOT LIMITED TO, ACCESS HATCHES, VENT PIPING AND RELATED WET WELL MODIFICATIONS, EXCAVATION AND BACKFILL, PAVING, SITE RESTORATION AND APPURTENANCES.	LS	1	\$ 19,200.00	\$ 19,200.00
5	FURNISH AND INSTALL A BURIED PLUG VALVE WITH OPERATOR AND VALVE BOX, INCLUDING BUT NOT LIMITED TO, RELATED INFLUENT PIPING MODIFICATIONS, BYPASS PUMPING, TRENCH SHORING, GROUNDWATER AND SURFACE WATER CONTROL, DEWATERING EXCAVATION AND BACKFILL, PAVING, SITE RESTORATION AND APPURTENANCES.	LS	1	\$ 67,800.00	\$ 67,800.00
6	CASH ALLOWANCE (3% OF SUM BASE BID ITEMS 1-5)	LS	1	\$ 7,470.00	\$ 7,470.00
<b>TOTAL FOR ALL BASE BID ITEMS 1 THROUGH 6</b>					<b>\$ 256,470.00</b>

Contact information for local service representative

Nicholas Neri / nneri@johnnericonstruction.com

Company: John Neri Construction Co., Inc.

Bidder's Name (print): Nicholas Neri

Title: President

Address: 770 W. Factory Road  
Addison, IL 60101

Telephone: (630) 629-8384

Fax: (630) 629-7001

Signature: 

Date: 10/1/2019

**VILLAGE OF HOFFMAN ESTATES  
DEPARTMENT OF PUBLIC WORKS**

**PROPOSAL FORM**

**Moon Lake Lift Station Modifications**

**BID SCHEDULE**

ITEM NO.	ITEM	UNIT	QUANTITY	UNIT PRICE	AMOUNT
<b>BASE BID ITEMS</b>					
1	MOBILIZATION AND DEMOBILIZATION, INCLUDING PERFORMANCE AND PAYMENT BONDS	LS	1	\$20,000.00	\$ 20,000.00
2	DEMOLITION WORK INCLUDING, BUT NOT LIMITED TO, THE REMOVAL AND DISPOSAL CONCRETE WET WELL LID, PAVEMENT, RISER PIPE, DEBRIS GRATE, CONCRETE, ELECTRICAL, CONTROLS AND APPURTENANCES.	LS	1	\$ 30,000.00	\$ 30,000.00
3	FURNISH AND INSTALL A GRINDER WITH CONTROL PANEL, INCLUDING BUT NOT LIMITED TO, GUIDE RAIL SYSTEM AND RELATED WET WELL AND INFLUENT PIPE MODIFICATIONS, BYPASS PUMPING, SUPPORTS, EXCAVATION AND BACKFILL, PAVING, SITE RESTORATION, SCADA MODIFICATIONS, ELECTRICAL, CONTROLS AND APPURTENANCES.	LS	1	\$140,000.00	\$ 140,000.00
4	FURNISH AND INSTALL A CONCRETE WET WELL LID, INCLUDING BUT NOT LIMITED TO, ACCESS HATCHES, VENT PIPING AND RELATED WET WELL MODIFICATIONS, EXCAVATION AND BACKFILL, PAVING, SITE RESTORATION AND APPURTENANCES.	LS	1	\$ 25,000.00	\$ 25,000.00
5	FURNISH AND INSTALL A BURIED PLUG VALVE WITH OPERATOR AND VALVE BOX, INCLUDING BUT NOT LIMITED TO, RELATED INFLUENT PIPING MODIFICATIONS, BYPASS PUMPING, TRENCH SHORING, GROUNDWATER AND SURFACE WATER CONTROL, DEWATERING, EXCAVATION AND BACKFILL, PAVING, SITE RESTORATION AND APPURTENANCES.	LS	1	\$ 65,000.00	\$ 65,000.00
6	CASH ALLOWANCE (1% OF SUM BASE BID ITEMS 1-5)	LS	1	\$ 8,400.00	\$ 8,400.00
<b>TOTAL FOR ALL BASE BID ITEMS 1 THROUGH 6</b>					<b>\$288,400.00</b>

Contact information for local service representative Dale Goldsboro (815) 683-0403

Company: Performance Construction & Engineering, LLC

Bidder's Name (print): Lorrie Avery

Title: President

Address: 217 W. John Street, Plano, IL 60545

Telephone: (630) 273-2893 or (630) 918-1237 Fax: (866) 636-1301

Signature:  Date: 09/30/2019

**VILLAGE OF HOFFMAN ESTATES  
DEPARTMENT OF PUBLIC WORKS**

**PROPOSAL FORM**

**Moon Lake Lift Station Modifications**

**BID SCHEDULE**

ITEM NO.	ITEM	UNIT	QUANTITY	UNIT PRICE	AMOUNT
<b>BASE BID ITEMS</b>					
1	MOBILIZATION AND DEMOBILIZATION, INCLUDING PERFORMANCE AND PAYMENT BONDS	LS	1	\$ 11,000	\$ 11,000
2	DEMOLITION WORK INCLUDING, BUT NOT LIMITED TO, THE REMOVAL AND DISPOSAL CONCRETE WET WELL LID, PAVEMENT, RISER PIPE, DEBRIS GRATE, CONCRETE, ELECTRICAL, CONTROLS AND APPURTENANCES.	LS	1	\$ 30,000	\$ 30,000
3	FURNISH AND INSTALL A GRINDER WITH CONTROL PANEL, INCLUDING BUT NOT LIMITED TO, GUIDE RAIL SYSTEM AND RELATED WET WELL AND INFLUENT PIPE MODIFICATIONS, BYPASS PUMPING, SUPPORTS, EXCAVATION AND BACKFILL, PAVING, SITE RESTORATION, SCADA MODIFICATIONS, ELECTRICAL, CONTROLS AND APPURTENANCES.	LS	1	\$ 150,000	\$ 150,000
4	FURNISH AND INSTALL A CONCRETE WET WELL LID, INCLUDING BUT NOT LIMITED TO, ACCESS HATCHES, VENT PIPING AND RELATED WET WELL MODIFICATIONS, EXCAVATION AND BACKFILL, PAVING, SITE RESTORATION AND APPURTENANCES.	LS	1	\$ 50,000	\$ 50,000
5	FURNISH AND INSTALL A BURED PLUG VALVE WITH OPERATOR AND VALVE BOX, INCLUDING BUT NOT LIMITED TO, RELATED INFLUENT PIPING MODIFICATIONS, BYPASS PUMPING, TRENCH SHORING, GROUNDWATER AND SURFACE WATER CONTROL, DEWATERING, EXCAVATION AND BACKFILL, PAVING, SITE RESTORATION AND APPURTENANCES.	LS	1	\$ 45,000	\$ 45,000
6	CASH ALLOWANCE (3% OF SUM BASE BID ITEMS 1-5)	LS	1	\$ 8,580	\$ 8,580
<b>TOTAL FOR ALL BASE BID ITEMS 1 THROUGH 6</b>					<b>\$ 294,580</b>

Contact information for local service representative \_\_\_\_\_

Company: KOVILIC CONSTRUCTION COMPANY, INC.

Bidder's Name (print): NIKOLA KOVICIC

Title: PRESIDENT

Address: 3721 N. CARNATION STREET

FRANKLIN PARK, IL 60131

Telephone: (847) 671 - 4978

Fax: (847) 671 - 5329

Signature:  Date: 10-01-19



**VILLAGE OF HOFFMAN ESTATES  
DEPARTMENT OF PUBLIC WORKS**

**PROPOSAL FORM**

**Moon Lake Lift Station Modifications**

**BID SCHEDULE**

ITEM NO.	ITEM	UNIT	QUANTITY	UNIT PRICE	AMOUNT
<b>BASE BID ITEMS</b>					
1	MOBILIZATION AND DEMOBILIZATION, INCLUDING PERFORMANCE AND PAYMENT BONDS	LS	1	<u>\$17,500.00</u>	<u>\$17,500.00</u>
2	DEMOLITION WORK INCLUDING, BUT NOT LIMITED TO, THE REMOVAL AND DISPOSAL CONCRETE WET WELL LID, PAVEMENT, RISER PIPE, DEBRIS GRATE, CONCRETE, ELECTRICAL, CONTROLS AND APPURTENANCES.	LS	1	<u>\$26,650.00</u>	<u>\$26,650.00</u>
3	FURNISH AND INSTALL A GRINDER WITH CONTROL PANEL, INCLUDING BUT NOT LIMITED TO, GUIDE RAIL SYSTEM AND RELATED WET WELL AND INFLUENT PIPE MODIFICATIONS, BYPASS PUMPING, SUPPORTS, EXCAVATION AND BACKFILL, PAVING, SITE RESTORATION, SCADA MODIFICATIONS, ELECTRICAL, CONTROLS AND APPURTENANCES.	LS	1	<u>\$165,170.00</u>	<u>\$165,170.00</u>
4	FURNISH AND INSTALL A CONCRETE WET WELL LID, INCLUDING BUT NOT LIMITED TO, ACCESS HATCHES, VENT PIPING AND RELATED WET WELL MODIFICATIONS, EXCAVATION AND BACKFILL, PAVING, SITE RESTORATION AND APPURTENANCES.	LS	1	<u>\$33,500.00</u>	<u>\$33,500.00</u>
5	FURNISH AND INSTALL A BURIED PLUG VALVE WITH OPERATOR AND VALVE BOX, INCLUDING BUT NOT LIMITED TO, RELATED INFLUENT PIPING MODIFICATIONS, BYPASS PUMPING, TRENCH SHORING, GROUNDWATER AND SURFACE WATER CONTROL, DEWATERING, EXCAVATION AND BACKFILL, PAVING, SITE RESTORATION AND APPURTENANCES.	LS	1	<u>\$47,075.00</u>	<u>\$47,075.00</u>
8	CASH ALLOWANCE (3% OF SUM BASE BID ITEMS 1-5)	LS	1	<u>\$8,697.00</u>	<u>\$8,697.00</u>
<b>TOTAL FOR ALL BASE BID ITEMS 1 THROUGH 8</b>					<u><b>\$298,592.00</b></u>

Contact information for local service representative \_\_\_\_\_

Company: Martam Construction, Inc.

Bidder's Name (print): Edward M. Ismail

Title: Senior Project Manager

Address: 1200 Gasket Drive

Elgin, IL 60120

Telephone: (847) 608-6800 Fax: (847) 608-6804

Signature: *Edward M. Ismail* Date: 10/1/19

**COMMITTEE AGENDA ITEM  
VILLAGE OF HOFFMAN ESTATES**

**SUBJECT:** Request authorization to award contract for 2019–2020 Front End Loader rental to United Rentals, Elk Grove Village, IL, in an amount not to exceed \$15,264.

**MEETING DATE:** October 28, 2019

**COMMITTEE:** Public Works & Utilities

**FROM:** Joseph Nebel, Director of Public Works  
Kelly Kerr, Assistant Director of Public Works

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**PURPOSE:** To acquire rental front end loaders for use during snow removal operations throughout the upcoming 2019–2020 winter season.

**BACKGROUND:** Each year, the Village enters into an agreement for rental of front end loader tractors. Bid specifications were updated requesting pricing for three (3) tractors for this coming season. For the past few seasons the process of securing rental loaders has proved to be difficult at best and pricing has increased significantly. Conversations with vendors have found this to be due in large part to various snow and ice contractors acquiring this rental equipment for the purpose of their use with private property winter plowing. With the high cost for deicing material, contractors have begun to perform increased plowing of sites rather than choosing to address smaller snow fall amounts with just salting operations. Twelve (12) potential bidders were mailed bid packets.

**DISCUSSION:** On October 15, 2019, the Village Clerk opened one (1) bid proposal for a rental single front end loader. Phone calls were received from three (3) of the vendors prior to the bid opening, each indicating that their equipment was committed to contractors for the season but they requested to remain on our vendor list for future bids. Upon review of bid received, the bidder, United Rentals, Elk Grove Village, IL proposed a monthly rental cost of \$3,700 per month with \$195 each for delivery/pickup charges and \$74 environmental fee for the piece of equipment. United Rentals is known to the Village of Hoffman Estates and we have utilized them for various equipment rental in the past, especially large backhoe for the purpose of deep

**DISCUSSION continued,**

water main repairs that require equipment possessing the ability to excavate to a depth deeper than our equipment is capable of handling. For purposes of cost comparison, last winter's bid pricing for monthly rental for front end loader tractors ranged from \$2,995 to \$6,500.

As a result of only one (1) bid for one (1) front end loader, a call was made to a couple of the larger vendors to determine the possibility of another option that would allow the rental of front end loaders on a daily or possibly weekly basis but only when needed rather than for the four (4) month period. Both vendors indicated that it was a possibility but availability of equipment was on a first come/first serve basis.

**FINANCIAL IMPACT:**

The 2019 Snow & Ice Control Contractual Services Equipment Rental account balance provides funding for Front End Loader rental during December of 2019. Funding for the months of January, February, March, and December of 2020 has been requested in the department's 2020 budget request.

**RECOMMENDATION:**

Request authorization to award contract for 2019–2020 Front End Loader rental to United Rentals, Elk Grove Village, IL, in an amount not to exceed \$15,264.

*NOTE: Complete bid information is available in the white binder in the Trustees' ante room.*

**COMMITTEE AGENDA ITEM  
VILLAGE OF HOFFMAN ESTATES**

**SUBJECT:** Request authorization to award contract for 2019-2020 Sanitary Sewer Rehabilitation for compliance with the Metropolitan Water Reclamation District (MWRD) Infiltration/Inflow Control Program (IICP) to Michels Pipe Services, Brownsville, WI, in an amount not to exceed \$160,000.

**MEETING DATE:** October 28, 2019

**COMMITTEE:** Public Works & Utilities

**FROM:** Joseph Nebel, Director of Public Works  
Haileng Xiao, Superintendent of Water & Sewer

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**PURPOSE:** To seek authorization for contract award for 2019-2020 Sanitary Sewer Rehabilitation for MWRD's IICP.

**BACKGROUND:** In July 2014, the Metropolitan Water Reclamation District adopted the Infiltration/Inflow Control Program and requires the Village within the first five years:

1. Conduct a prioritized condition assessment of high risk public sanitary sewer infrastructure through various inspection and testing methods to determine points of source of infiltration and inflow, etc.
2. Begin rehabilitation of major defects within three years of identification.
3. Utilize inspections to catalog illegal connections in high risk areas for disconnection in Private Sector Program (PSP).
4. Develop and implement a Private Sector Program (PSP) and Long Term Operation and Maintenance Program (LTOMP).
5. Submit annual reports under PSP and LTOMP.

The scope of the above required work covers a total of 12 sub-basins of the sanitary sewer system identified as high risk areas consisting of over 530 sanitary sewer manholes and over 125,000 feet of sanitary sewer mains. Starting in 2015 staff has been making substantial progress every year for work required under each of the five categories, such as, camera inspection of manholes & sewer mains, smoke & dye water testing, etc. for prioritized condition assessment.

**BACKGROUND continued,**

The completed PSP and LTOMP have been submitted to MWRD. By now all work is mostly complete with the exception of Item 2 for rehabilitation of major defects. In 2017 staff has accomplished rehabilitation of 28,800 feet of sanitary sewer main by cured-in-place pipe (CIPP) lining & rehabilitation of 10 manholes by cement seal coating, replacement of 13 lamp holes with standard manholes and replacement of 90 feet of severely back pitched and collapsed sanitary sewer, etc. Despite the above substantial amount of repairs, work required under Item 2 is not complete. In addition the list of remaining sites is still growing as it is being compiled by the engineer in his review of inspection footage for sewer condition assessment. Staff is focused to take the next two to three years or even longer to repair all major defects. The engineer recently submitted a list of 42 critical sites for repair and rehabilitation. Staff selected 14 sites according to operational importance. The selected list consists of approximately 3,500 feet of 8-inch diameter sanitary sewer for rehabilitation by manhole-to-manhole CIPP lining.

**DISCUSSION:**

Plans and bid documents were completed for these priority sites in late September 2019 and the bid document provides the Village with an option to change or add items of identical work at the same bid prices. The total of the engineer's estimated cost for the project is \$155,000. The project was bid out on September 20, 2019. At bid closing on October 16, 2019, six bid proposals were received and they are summarized as follows:

<u>Company Name</u>	<u>Total Bid Amount</u>
Michels Pipe Services Brownsville, WI	\$125,717
Insituform Technologies USA, LLC Orland Park, Illinois	\$126,178
National Power Rodding Corp. Chicago, Illinois	\$128,600
Hoerr Construction, Inc. Peoria, Illinois	\$136,590
Visu-Sewer of Illinois, LLC Bridgeview, Illinois	\$151,350
Benchmark Construction Bartlett, Illinois	\$155,450

Almost all bids are below the engineer's estimates. Such a favorable bid result is contributable to the timing of our bid and additional competition in the industry. Both staff and consultant engineer reviewed each of the bids and find Michels Pipe Services (MPS) to be the lowest responsible bidder. Michels has been in business since 1959, focusing on underground pipeline installation. They have been a certified and licensed installer of Premier-Pipe (cured-in-place) since 2002 and have installed over 5,000,000 linear feet of liners. MPS's corporate office is located in Wisconsin but their lining crews are based in their Montgomery, IL and Bedford Park, IL offices. The project manager selected has successfully completed several

**DISCUSSION continued,**

lining projects for the Village in the last 10 years. Baxter & Woodman Engineers recommends award of the contract to Michels Pipe Services. Staff fully concurs.

**FINANCIAL IMPACT:**

This line item is covered by FY 2019 Budget as part of bond funded capital improvement projects. The total proposed cost by Michels Pipe Services of \$125,717.00, which is far below the engineer's estimate of \$155,000 and the CIP approved amount of \$170,000. Due to the favorable bid prices staff recommends additional sanitary sewer rehabilitation work be added to the project. With the original quantities identified as 3,500 feet there are ample additional sanitary sewer lines that require lining but were left off of the list due to concerns of the total project price. Adding needed lining at the unit prices provided is a great financial benefit to the Village and will maximize economies of scale. The authorization amount requested will also be inclusive of any contingencies required as the result of unknown conditions found during construction, which we expect. To cover both additional sanitary sewer lining and contingencies for unknown conditions, staff is requesting \$160,000 be authorized as the maximum contract amount.

**RECOMMENDATION:**

Request authorization to award contract to Michels Pipe Services, Brownsville, WI for 2019-2020 Sanitary Sewer Rehabilitation for compliance with the Metropolitan Water Reclamation District (MWRD) Infiltration/Inflow Control Program (IICP), in an amount not to exceed \$160,000.

# BAXTER & WOODMAN

8678 Ridgefield Road, Crystal Lake, IL 60012 • 815.459.1260 • baxterwoodman.com

October 16, 2019

Mr. Joe Nebel  
Director of Public Works  
Village of Hoffman Estates  
2305 Pembroke Avenue  
Hoffman Estates, Illinois 60195

## **RECOMMENDATION TO AWARD**

***Subject: Village of Hoffman Estates - 2019 Sanitary Sewer Lining***

Dear Mr. Nebel:

The following bids were received for the 2019 Sanitary Sewer Lining project on October 16, 2019:

<b><u>Bidder</u></b>	<b><u>Amount of Bid</u></b>
Michels Pipe Services Brownsville, WI	\$ 125,717.00
Insituform Technologies USA, LLC Orland Park, Illinois	\$ 126,178.00
National Power Rodding Corp. Chicago, Illinois	\$ 128,600.00
Hoerr Construction Inc. Peoria, Illinois	\$ 136,590.00
Visu-Sewer of Illinois, LLC Bridgeview, Illinois	\$ 151,350.00
Benchmark Construction Bartlett, Illinois	\$ 155,450.00

The Engineer's Opinion of Probable Cost for this Project was \$155,000. Attached is the tabulation of the individual bids. We believe the lower bid prices are due to a favorable bidding climate.

We have reviewed each of the bids and find Michels Pipe Services (MPS) to be the lowest responsive and responsible Bidder. Michels has been in business since 1959, focusing on underground pipeline installation. They have been a certified and licensed Installer of Premier-Pipe (cured-in-place) since 2002 and have installed over 5,000,000 feet of liners. MPS's corporate office is located in Wisconsin but their lining crews are based in their Montgomery, IL and Bedford Park, IL offices. The project manager, Mike Figlio, was previously with Insituform Midwest and has successfully completed several lining projects for the Village. Based upon our past experience with this Bidder, we believe MPS is qualified to complete the Project.

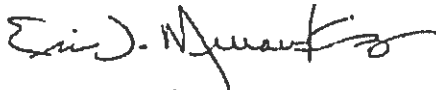
# BAXTER WOODMAN

We recommend award of the Contract to MPS in the amount of \$125,717.00, with the stipulation of adding additional work at the unit bid prices up to the maximum amount allowed.

We look forward to your decision and to the successful completion of the Project.

Sincerely,

BAXTER & WOODMAN, INC.  
CONSULTING ENGINEERS



Eric J. Murauskas, P.E.

EJM:jmc  
Enc.

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## SCHEDULE OF UNIT PRICES

No.	Pay Item	Approximate Quantity	Unit Price	Amount
1	CURED-IN-PLACE PIPE (MH TO MH): 8-Inch	3,500 LIN FT	\$ 32.00	\$ 112,000.00
2	SERVICE LATERAL REINSTATEMENT:	86 EACH	\$ 130.00	\$ 11,180.00
3	TRIM PROTRUDING SERVICE LATERAL:	6 EACH	\$ 152.00	\$ 912.00
4	CIPP SAMPLE TESTING:	5 EACH	\$ 325.00	\$ 1,625.00
TOTAL AMOUNT OF BID			<u>\$ 125,717.00</u>	

5. Bidder agrees the Work will be substantially completed within 120 calendar days after the Contract Time commences to run as provided in paragraph 2.03 of the General Conditions, and completed and ready for final payment in accordance with Paragraph 1.11 of the Supplementary Conditions within 150 calendar days after the Contract Time commences to run
- a. Bidder accepts the provisions of the Supplementary Conditions as to liquidated damages in the event of failure to complete the Work on time.
6. Bidder submits the required Bid Security in the form of (Certified Check or Bid Bond) in the amount of \_\_\_\_\_ or 10% Percent of the Bid Amount.
7. Bidder will be obtaining Performance and Payment Bonds through the following local agent or broker:  
 Name: Continental Casual Company, a CNA Surety Co.  
 Address: 801 Warrenville Road, Suite 700 Lisle, IL 60532  
 Telephone: 630-719-3100 email: Heather.Goedtel@willistowerswatson.com
8. Bidder submits all items listed in Section 00 43 93 – Bid Submittal Checklist.
9. Terms used in this Bid which are defined in the Standard General Conditions of the Construction Contract included as part of the Bidding Documents have the meanings assigned to them in the General Conditions.

10. Bidder acknowledges receipt of the following Addenda:

<u>Addendum Number</u>	<u>Date Received</u>
<u>NONE</u>	_____
_____	_____
_____	_____
_____	_____

11. The person signing this Bid certifies that: (Check applicable box.)

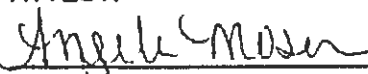
- He/She is the person in the Bidder's organization responsible within that organization for the decision as to the prices being bid and that he/she has not participated, and will not participate, in any action contrary to that above; or
- He/She is not the person in the Bidder's organization responsible within that organization for the decision as to the prices being bid but that he/she has been authorized to act as agent for the persons responsible for such decision in certifying that such persons have not participated, and will not participate, in any action contrary to the above, and as their agent shall so certify; and shall also certify that he/she has not participated, and will not participate, in any action contrary to that above.

Respectfully submitted, signed, and sealed this 14<sup>th</sup> day of October, 2019.

Michels Pipe Services; a division of Michels Corporation  
Bidder

(SEAL)

By   
Mike Figlio, Regional Manager Pipe Services  
Name - Title

ATTEST:  
  
Angela Moser, Admin Assistant Pipe Services  
Name - Title

END OF BID FORM

## SCHEDULE OF UNIT PRICES

No.	Pay Item	Approximate Quantity	Unit Price	Amount
1	CURED-IN-PLACE PIPE (MH TO MH): 8-Inch	3,500 LIN FT	\$ 32.10	\$ 112,350.00
2	SERVICE LATERAL REINSTATEMENT:	86 EACH	\$ 116.00	\$ 9,976.00
3	TRIM PROTRUDING SERVICE LATERAL:	6 EACH	\$ 397.00	\$ 2,382.00
4	CIPP SAMPLE TESTING:	5 EACH	\$ 294.00	\$ 1,470.00
TOTAL AMOUNT OF BID			<u>\$ 126,178.00</u>	

5. Bidder agrees the Work will be substantially completed within 120 calendar days after the Contract Time commences to run as provided in paragraph 2.03 of the General Conditions, and completed and ready for final payment in accordance with Paragraph 1.11 of the Supplementary Conditions within 150 calendar days after the Contract Time commences to run
- a. Bidder accepts the provisions of the Supplementary Conditions as to liquidated damages in the event of failure to complete the Work on time.
6. Bidder submits the required Bid Security in the form of (Certified Check or Bid Bond) in the amount of 10% of amount bid or \_\_\_\_\_ Percent of the Bid Amount.
7. Bidder will be obtaining Performance and Payment Bonds through the following local agent or broker:
- Name: JW Terrill
- Address: 825 Maryville Centre Drive, Suite 200, Chesterfield, MO 63017
- Telephone: (314) 594-2700 email: N/A
8. Bidder submits all items listed in Section 00 43 93 – Bid Submittal Checklist.
9. Terms used in this Bid which are defined in the Standard General Conditions of the Construction Contract included as part of the Bidding Documents have the meanings assigned to them in the General Conditions.

10. Bidder acknowledges receipt of the following Addenda:

<u>Addendum Number</u>	<u>Date Received</u>
_____	_____
_____	_____
_____	_____
_____	_____

11. The person signing this Bid certifies that: (Check applicable box.)

- ( ) He/She is the person in the Bidder's organization responsible within that organization for the decision as to the prices being bid and that he/she has not participated, and will not participate, in any action contrary to that above; or
- (X) He/She is not the person in the Bidder's organization responsible within that organization for the decision as to the prices being bid but that he/she has been authorized to act as agent for the persons responsible for such decision in certifying that such persons have not participated, and will not participate, in any action contrary to the above, and as their agent shall so certify; and shall also certify that he/she has not participated, and will not participate, in any action contrary to that above.

Respectfully submitted, signed, and sealed this 16 day of October, 2019.

Insituform Technologies USA, LLC  
Bidder

(SEAL)

By Whitney Schulte

Whitney Schulte, Contracting & Attesting Officer  
Name - Title

ATTEST:

Christanda Adkins

Christanda Adkins, Contracting & Attesting Officer  
Name - Title

END OF BID FORM

## SCHEDULE OF UNIT PRICES

No.	Pay Item	Approximate Quantity	Unit Price	Amount
1	CURED-IN-PLACE PIPE (MH TO MH): 8-Inch	3,500 LIN FT	\$ 33.00	\$115,500.00
2	SERVICE LATERAL REINSTATEMENT:	86 EACH	\$ 100.00	\$ 8,600.00
3	TRIM PROTRUDING SERVICE LATERAL.	6 EACH	\$ 250.00	\$ 1,500.00
4	CIPP SAMPLE TESTING:	5 EACH	\$ 600.00	\$ 3,000.00
TOTAL AMOUNT OF BID				<u>\$128,600.00</u>

5. Bidder agrees the Work will be substantially completed within 120 calendar days after the Contract Time commences to run as provided in paragraph 2.03 of the General Conditions, and completed and ready for final payment in accordance with Paragraph 1.11 of the Supplementary Conditions within 150 calendar days after the Contract Time commences to run
- a. Bidder accepts the provisions of the Supplementary Conditions as to liquidated damages in the event of failure to complete the Work on time.
6. Bidder submits the required Bid Security in the form of (Certified Check or Bid Bond) in the amount of \_\_\_\_\_ or ten Percent of the Bid Amount.
7. Bidder will be obtaining Performance and Payment Bonds through the following local agent or broker:  
 Name: Arthur J. Gallagher, Risk Management Services, Inc.  
 Address: 2850 Golf Road, Rolling Meadows, IL 60008  
 Telephone: 800-747-3719 email: bhockber@travelers.com
8. Bidder submits all items listed in Section 00 43 93 – Bid Submittal Checklist.
9. Terms used in this Bid which are defined in the Standard General Conditions of the Construction Contract included as part of the Bidding Documents have the meanings assigned to them in the General Conditions.

10. Bidder acknowledges receipt of the following Addenda

<u>Addendum Number</u>	<u>Date Received</u>
_____	_____
_____	_____
_____	_____
_____	_____

11. The person signing this Bid certifies that: (Check applicable box.)

- (X) He/She is the person in the Bidder's organization responsible within that organization for the decision as to the prices being bid and that he/she has not participated, and will not participate, in any action contrary to that above; or
- ( ) He/She is not the person in the Bidder's organization responsible within that organization for the decision as to the prices being bid but that he/she has been authorized to act as agent for the persons responsible for such decision in certifying that such persons have not participated, and will not participate, in any action contrary to the above, and as their agent shall so certify; and shall also certify that he/she has not participated, and will not participate, in any action contrary to that above.

Respectfully submitted, signed, and sealed this 16th day of October, 20 19.

National Power Rodding Corp

Bidder

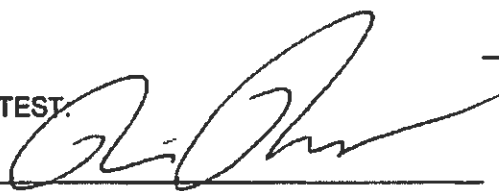
(SEAL)

By 

William T. Kriedler, President

Name - Title

ATTEST:



Reid W. Ruprecht, Vice President

Name - Title

END OF BID FORM

## SCHEDULE OF UNIT PRICES

No.	Pay Item	Approximate Quantity	Unit Price	Amount
1	CURED-IN-PLACE PIPE (MH TO MH): 8-Inch	3,500 LIN FT	\$ 36. <sup>00</sup>	\$ 126,000. <sup>00</sup>
2	SERVICE LATERAL REINSTATEMENT:	86 EACH	\$ 90. <sup>00</sup>	\$ 7,740. <sup>00</sup>
3	TRIM PROTRUDING SERVICE LATERAL:	6 EACH	\$ 350. <sup>00</sup>	\$ 2,100. <sup>00</sup>
4	CIPP SAMPLE TESTING:	5 EACH	\$ 150. <sup>00</sup>	\$ 750. <sup>00</sup>
TOTAL AMOUNT OF BID				\$ 136,590. <sup>00</sup>

5. Bidder agrees the Work will be substantially completed within 120 calendar days after the Contract Time commences to run as provided in paragraph 2.03 of the General Conditions, and completed and ready for final payment in accordance with Paragraph 1.11 of the Supplementary Conditions within 150 calendar days after the Contract Time commences to run
- a. Bidder accepts the provisions of the Supplementary Conditions as to liquidated damages in the event of failure to complete the Work on time.
6. Bidder submits the required Bid Security in the form of (Certified Check or Bid Bond) in the amount of \_\_\_\_\_ or Ten Percent of the Bid Amount.
7. Bidder will be obtaining Performance and Payment Bonds through the following local agent or broker:
- Name: First Mid Insurance Group, J. L. Hubbard Construction and Bonds Division
- Address: 1090 S Route 51, PO Box 14, Forsyth, IL 62535
- Telephone: 217-877-3344 email: ghoffman@firstmid.com
8. Bidder submits all items listed in Section 00 43 93 – Bid Submittal Checklist.
9. Terms used in this Bid which are defined in the Standard General Conditions of the Construction Contract included as part of the Bidding Documents have the meanings assigned to them in the General Conditions.

10. Bidder acknowledges receipt of the following Addenda:

<u>Addendum Number</u>	<u>Date Received</u>
_____	_____
_____	_____
_____	_____
_____	_____

11. The person signing this Bid certifies that: (Check applicable box.)

He/She is the person in the Bidder's organization responsible within that organization for the decision as to the prices being bid and that he/she has not participated, and will not participate, in any action contrary to that above; or

( ) He/She is not the person in the Bidder's organization responsible within that organization for the decision as to the prices being bid but that he/she has been authorized to act as agent for the persons responsible for such decision in certifying that such persons have not participated, and will not participate, in any action contrary to the above, and as their agent shall so certify; and shall also certify that he/she has not participated, and will not participate, in any action contrary to that above.

Respectfully submitted, signed, and sealed this 14<sup>th</sup> day of October, 2019.

Hoerr Construction, Inc.

Bidder

(SEAL)

By

Max P. Hoerr II

Max P. Hoerr II, President

Name - Title

ATTEST:

Robert H. Kilbride

Robert Kilbride, Vice President & Treasurer

Name - Title

END OF BID FORM



## SCHEDULE OF UNIT PRICES

No.	Pay Item	Approximate Quantity	Unit Price	Amount
1	CURED-IN-PLACE PIPE (MH TO MH): 8-Inch	3,500 LIN FT	\$ 40.50	\$ 141,750.00
2	SERVICE LATERAL REINSTATEMENT:	86 EACH	\$ 75.00	\$ 6,450.00
3	TRIM PROTRUDING SERVICE LATERAL:	6 EACH	\$ 400.00	\$ 2,400.00
4	CIPP SAMPLE TESTING:	5 EACH	\$ 150.00	\$ 750.00
TOTAL AMOUNT OF BID				<u>\$ 151,350.00</u>

5. Bidder agrees the Work will be substantially completed within 120 calendar days after the Contract Time commences to run as provided in paragraph 2.03 of the General Conditions, and completed and ready for final payment in accordance with Paragraph 1.11 of the Supplementary Conditions within 150 calendar days after the Contract Time commences to run

a. Bidder accepts the provisions of the Supplementary Conditions as to liquidated damages in the event of failure to complete the Work on time.

6. Bidder submits the required Bid Security in the form of (~~Certified Check or Bid Bond~~) in the amount of — or TEN Percent of the Bid Amount.

7. Bidder will be obtaining Performance and Payment Bonds through the following local agent or broker:

Name: MARSH & McLENNAN AGENCY, LLC

Address: 2725 S. MOORLAND ROAD PO BOX 510925 NEW BERLIN, WI  
53151-0925

Telephone: (262) 796-8826 email: DEBBIE.HINKES@MARSHMMB.COM

8. Bidder submits all items listed in Section 00 43 93 – Bid Submittal Checklist.

9. Terms used in this Bid which are defined in the Standard General Conditions of the Construction Contract included as part of the Bidding Documents have the meanings assigned to them in the General Conditions.

10. Bidder acknowledges receipt of the following Addenda:

<u>Addendum Number</u>	<u>Date Received</u>
_____	_____
_____	_____
_____	_____
_____	_____

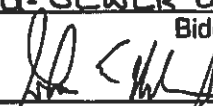
11. The person signing this Bid certifies that: (Check applicable box.)

- He/She is the person in the Bidder's organization responsible within that organization for the decision as to the prices being bid and that he/she has not participated, and will not participate, in any action contrary to that above; or
- He/She is not the person in the Bidder's organization responsible within that organization for the decision as to the prices being bid but that he/she has been authorized to act as agent for the persons responsible for such decision in certifying that such persons have not participated, and will not participate, in any action contrary to the above, and as their agent shall so certify; and shall also certify that he/she has not participated, and will not participate, in any action contrary to that above.

Respectfully submitted, signed, and sealed this 16<sup>TH</sup> day of OCTOBER, 2019.

(SEAL)

VISU-SEWER OF ILLINOIS, LLC  
Bidder

By 

JOHN E. NELSON JR.  
Name - Title

ATTEST:



JAMES S. SERKETICH  
CORPORATE SECRETARY  
Name - Title

END OF BID FORM

## SCHEDULE OF UNIT PRICES

No.	Pay Item	Approximate Quantity	Unit Price	Amount
1	CURED-IN-PLACE PIPE (MH TO MH): 8-Inch	3,500 LIN FT	\$ 38.50	\$ 134,750.00
2	SERVICE LATERAL REINSTATEMENT:	86 EACH	\$ 200.00	\$ 17,200.00
3	TRIM PROTRUDING SERVICE LATERAL:	6 EACH	\$ 250.00	\$ 1,500.00
4	CIPP SAMPLE TESTING:	5 EACH	\$ 400.00	\$ 2,000.00
TOTAL AMOUNT OF BID			\$ 155,450.00	

5. Bidder agrees the Work will be substantially completed within 120 calendar days after the Contract Time commences to run as provided in paragraph 2.03 of the General Conditions, and completed and ready for final payment in accordance with Paragraph 1.11 of the Supplementary Conditions within 150 calendar days after the Contract Time commences to run

a. Bidder accepts the provisions of the Supplementary Conditions as to liquidated damages in the event of failure to complete the Work on time.

6. Bidder submits the required Bid Security in the form of (Certified Check or Bid Bond) in the amount of \_\_\_\_\_ or 10% Percent of the Bid Amount.

7. Bidder will be obtaining Performance and Payment Bonds through the following local agent or broker:

Name: LIBERTY MUTUAL

Address: 1411 OPUS PL., DOWNERS GROVE IL 60515

Telephone: 888-939-2061 email: KScanlon@columbianagency.com

8. Bidder submits all items listed in Section 00 43 93 – Bid Submittal Checklist.

9. Terms used in this Bid which are defined in the Standard General Conditions of the Construction Contract included as part of the Bidding Documents have the meanings assigned to them in the General Conditions.

10 Bidder acknowledges receipt of the following Addenda:

<u>Addendum Number</u>	<u>Date Received</u>
_____	_____
_____	_____
_____	_____
_____	_____

11. The person signing this Bid certifies that: (Check applicable box.)

- He/She is the person in the Bidder's organization responsible within that organization for the decision as to the prices being bid and that he/she has not participated, and will not participate, in any action contrary to that above; or
- He/She is not the person in the Bidder's organization responsible within that organization for the decision as to the prices being bid but that he/she has been authorized to act as agent for the persons responsible for such decision in certifying that such persons have not participated, and will not participate, in any action contrary to the above, and as their agent shall so certify; and shall also certify that he/she has not participated, and will not participate, in any action contrary to that above.

Respectfully submitted, signed, and sealed this 16<sup>th</sup> day of OCTOBER, 2019.

(SEAL)

BENCHMARK CONSTRUCTION CO, INC.  
 Bidder  
 By [Signature]  
MARK ATKINS, PRESIDENT  
 Name - Title

ATTEST:  
[Signature]  
DONNA CIBELLI, CORP. SECRETARY  
 Name - Title

END OF BID FORM

**COMMITTEE AGENDA ITEM  
VILLAGE OF HOFFMAN ESTATES**

**SUBJECT:** Request authorization to:

- a) Purchase 1,500 tons of winter road salt in 2019 at \$82.71 per ton from Morton, Inc., Chicago, IL, at a cost of \$124,065.
- b) Award contract for State of Illinois joint purchase of 2019-2020 winter road salt to Cargill, Inc., North Olmstead, OH, based on the purchase of 2,000 tons in 2019 at \$89.33 per ton from Cargill, Inc. at a cost of \$178,660.
- c) Purchase a minimum of 2,400 tons (80%) of winter road salt from Cargill, Inc. North Olmstead, OH in 2020 at \$89.33 per ton at a cost not to exceed \$214,000.

**MEETING DATE:** October 28, 2019

**COMMITTEE:** Public Works & Utilities

**FROM:** Joseph Nebel, Director of Public Works  
Kelly Kerr, Assistant Director of Public Works

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**PURPOSE:** To provide a supply of road de-icing salt for the 2019-2020 winter season.

**BACKGROUND:** On March 25, 2019, the Village Board authorized participation in joint purchase with Illinois Department of Transportation (IDOT) for 2019-2020 procurement of 5,500 tons of road salt. Fiscal Year 2019 provides \$235,000 for road salt needs of which a balance of \$58,205 remains. In previous years, the Village has participated in joint purchases with IDOT in an effort to guarantee a supply and reduce cost.

**DISCUSSION:** On October 9, 2019, the Village received notification from the State on road salt bid results. The Village has pre-committed to 5,500 tons of road salt and is responsible for ensuring that the 80% (4,400 tons) guaranteed purchase requirement is met by contract end (June 30, 2020) although up to 120% (6,600 tons) may be obtained at the same contract price. The contract was awarded to Cargill Salt, Inc., North Olmstead, OH, at a cost to Hoffman Estates of \$89.33 per ton. The Village is

**DISCUSSION continued,**

currently in possession of approximately 1,500 tons of salt stored in the dome. Average seasonal salt usage for the past ten snow and ice seasons is approximately 4,520 tons per season. In an effort to reduce costs contact was made with our 2018 and 2019 salt supplier, Morton Salt, Inc., to determine if an amount of salt could be obtained and what the price per ton would be. Morton Salt indicated they could supply up to 3,000 tons at \$82.71 per ton but ordering needed to occur prior to December 15, 2019.

**FINANCIAL IMPACT:**

As a result of the early onset of snow storms, during the 2018-2019 season, coupled with a large number of storms occurring late in the season, the demand for salt was high and a number of agencies were required to adjust their salting operations severely to prevent running out completely. This left stockpiles extremely low and the 2019-2020 procurement process for bulk road salt by the State of Illinois experienced supply related issues which has resulted in significantly higher pricing for the 2019-2020 season. Due to the unpredictability of weather events, it is uncertain how much salt will be required for the 2019-2020 winter season. Current forecasting services are indicating snow amounts and low temperatures paralleling those of last season. This said we can state with reasonable certainty that our usage for the 2019-2020 season should fall within the 80% to 120% contract range. Should staff believe there is a need to exceed the requested amount for the 2020 operating budget (\$214,000) we will return to request permission from the Committee to purchase additional salt.

Current and past State pricing for salt F.O.B. Hoffman Estates is as follows:

Year	Amount (tons)	Cost per ton	Season Usage
2018-2019	4,300	\$48.97	4,840
2017-2018	3,600	\$48.97	4,308
2016-2017	3,500	\$65.08	2,507
2015-2016	3,500	\$65.08	3,171
2014-2015	6,960	\$52.31	3,420
2013-2014	5,800	\$52.31	7,549
2012-2013	2,000	\$53.38	4,885
2011-2012	6,000	\$60.33	2,940
2010-2011	7,500	\$68.82	5,897
2009-2010	7,500	\$68.82	5,687

**RECOMMENDATION:**

Request authorization to:

- a) Purchase 1,500 tons of winter road salt in 2019 at \$82.71 per ton from Morton, Inc., Chicago, IL, at a cost of \$124,065.

**RECOMMENDATION continued,**

- b) Award contract for State of Illinois joint purchase of 2019-2020 winter road salt to Cargill, Inc., North Olmstead, OH, based on the purchase of 2,000 tons in 2019 at \$89.33 per ton from Cargill, Inc. at a cost of \$178,660.
- c) Purchase a minimum of 2,400 tons (80%) of winter road salt from Cargill, Inc. North Olmstead, OH in 2020 at \$89.33 per ton at a cost not to exceed \$214,000.

**COMMITTEE AGENDA ITEM  
VILLAGE OF HOFFMAN ESTATES**

**SUBJECT:** Request authorization to award contract for the Almond Lane and Audubon Street Culvert Replacement Project to A Lamp Concrete Contractors, Inc., of Schaumburg, IL (low bid), in an amount not to exceed \$359,366.

**MEETING DATE:** October 28, 2019

**COMMITTEE:** Public Works & Utilities

**FROM:** Alan Wenderski

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**PURPOSE:** Present the bids for the Almond Lane and Audubon Street Culvert Replacement Project and recommend approval of award of contract.

**BACKGROUND:** In January 2019, Public Works crews discovered multiple surface wash-outs adjacent to dual culvert pipes under Almond Lane near Higgins Road (IL 72). As the surface wash-outs were addressed, cleaning and inspection of the culverts revealed severely deteriorated conditions within both pipes. The Almond Lane Culvert was not identified as a future project in the 2015 Storm Sewer analysis.

At an adjacent location, replacement of culvert pipes under Audubon Street near Higgins Road (IL 72) was previously identified and included within the 2019 budget for replacement.

A request to authorize consultant design engineering services was approved by the Public Works & Utilities Committee on March 25, 2019 as the need for replacement of both culvert pipes is considered urgent. The existing culverts have multiple structural failures and significantly restrict flow. Temporary repairs are not practical or feasible.

**DISCUSSION:** On October 21, 2019, six bids were received for the Almond Lane and Audubon Street Culvert Replacement Project. The engineer's estimate for the project was \$412,745. The bid summary is shown in the Table 1 below.



**DISCUSSION: (Continued)****Table 1 – Bid Summary**

Bidder	Bid Cost
<b>A Lamp Concrete</b>	<b>\$ 359,366</b>
Martam Construction	\$ 547,593
Alliance Contractors	\$ 561,416
DiMeo Brothers	\$ 574,699
Berger Excavating	\$ 640,233
Mauro Sewer	\$ 798,833

A Lamp Concrete submitted the lowest qualified bid of \$359,366. A Lamp Concrete has completed several recent drainage projects for the Village, including the Oakmont Storm Sewer and Grand Canyon Culvert. All previous projects were completed in a satisfactory manner.

Pending permit issuance by IDOT, A Lamp is scheduled to complete culvert pipe installations by the end of the year. Final restoration would be completed in spring 2020.

**FINANCIAL IMPACT:**

While \$75,000 is included in the 2019 budget for the Audubon Culvert from the Stormwater Utility Fund, no funding was identified in 2019 for the Almond Lane Culvert. Of the 2019 budgeted amount, \$31,004 was expended for design services. As part of the recent State Capital Bill, \$250,000 was identified for funding of the Almond-Audubon Culvert Project. The \$250,000 from the State Capital Bill is proposed as part of the 2020 budget. At this time staff is still coordinating with the State on how and when the funding from the State Capital Bill will be received. The funding summary is shown in Table 2 below.

**Table 2 – Funding Summary**

Project Costs	
Design Engineering – Chastain Associates	\$31,004
Construction Contract (Low Bid)	\$359,366
<b>Total Project Costs</b>	<b>\$390,370</b>

Project Funding	
2019 Budget – Audubon Culvert	\$75,000
State Capital Bill (TBD)	\$250,000
<b>Budget Shortfall Amount</b>	<b>\$65,370</b>

Stormwater Utility Fund balance is available to fund the \$65,370 over budget amount.

**RECOMMENDATION:**

Request authorization to award contract for the Almond Lane and Audubon Street Culvert Replacement Project to A Lamp Concrete Contractors, Inc., of Schaumburg, IL (low bid), in an amount not to exceed \$359,366.




# VILLAGE OF HOFFMAN ESTATES

## DEPARTMENT OF PUBLIC WORKS

### September 2019 MONTHLY REPORT

SUBMITTED TO: Public Works Committee  
October 2019

  
Joseph Nebel  
Director of Public Works

  
Kelly Kerr  
Assistant Director of Public Works

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#### MAJOR PROJECT STATUS

##### Well 9 Abandonment

On August 19, 2019 Village Board authorized the contract with Water Well Solutions for the work to proper abandonment of the Well 9. Pre-Construction Meeting was held shortly. Permit application has been submitted to Cook County Public Health Department PHD. The plan for well abandonment was revised per County instruction and was resubmitted to the County PHD. The work started the week of September 23. By the end of September the well pump and column piping has been removed. Filling of the well started and is expected to be complete in October.

##### Water Distribution Systems Study

On April 1, 2019 Village Board authorized the contract with Burns & McDonnell for engineering services to study & evaluate the Village's water distribution systems for infrastructure capital project planning. Project Kick-Off Meeting was held on May 14, 2019. Due to the long time needed for the massive amount of data collection and processing on the Village's water distribution system, field work did not start until September. Work completed in September includes loading Historian program into the SCADA system for comprehensive analysis of water system operation and laying out field work for fire flow testing and telog installation. Hydraulic model for the water system is being created. In October the plan is to conduct field work including fire flow testing and telog data collection, calibrating the water system model utilizing the field data, and begin addressing storage and transmission scenarios.

##### 2019 Valve Assessment Program

Project kick-off meeting was held on July 30, 2019 with M.E. Simpson for the exercise and assessment of 800 valves and concurrent leak survey. Work started on the same day. Before the end of September 795 valves located in Parcel A, B, HL, NA, NB, NC, and BS were exercised and/or mapped with GPS coordinates determined. The concurrent leak survey covered 1,500 water system fixtures (valves, hydrants and service shut-offs) and a total of 9 leaks were found, including three significant hidden leaks. All leaks reported in the period have been repaired. Boxes/vaults of the completed valves were pumped down by staff. The project is substantially completed, pending final report.

##### MWRD IICP Engineering

On July 2, 2018 the Village Board approved a contract with Baxter & Woodman Consulting Engineers for engineering and field services required for compliance with MWRD' Infiltration/Inflow Control Program (IICP). The services will cover the following areas:

1. Conduct a prioritized condition assessment of high risk public sanitary sewer system infrastructure through various inspection and testing methods.
2. Begin rehabilitation of major defects within three years of identification.
3. Utilize inspections to catalog illegal connections in high risk areas for disconnection in Private Sector Program (PSP).
4. Develop and implement a Private Sector Program (PSP).
5. Develop and submit annual reports under the Short Term Requirements and Long Term Operation and Maintenance Program (LTOMP)

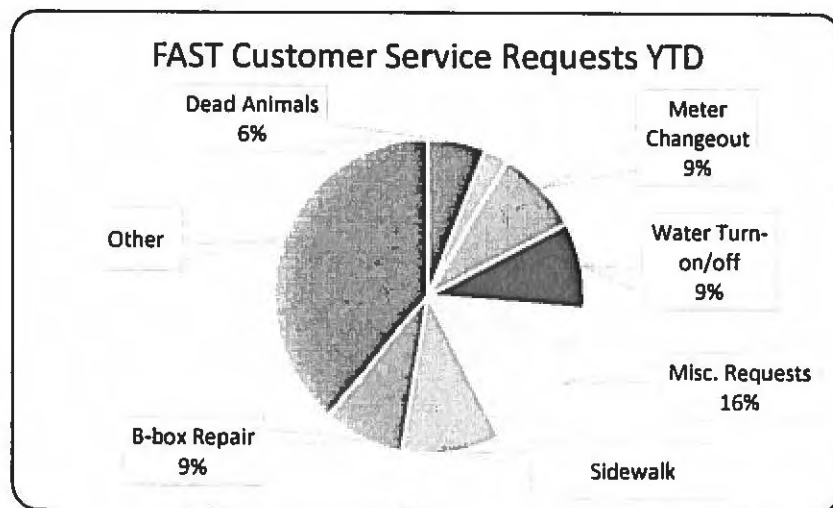
Project Kick off meeting was held on August 8, 2018 with planning of the immediate task of smoke testing of all sanitary sewer in high risk areas, which was completed in October, 2018 and covered all High Risk Areas (12 sub-basins with a total of 133,133 feet of sewer mains) per MWRD standards. Review of the final report is completed and 4 areas have been identified for dye water testing to further determine point of source of infiltration and inflow into the sanitary sewer system. The actual work of dye water testing was completed in June. Camera inspection of remaining 173 manholes inspection is in May 2019. A list of critical sewer repairs has been selected for IICP compliance in 2019 and 2020. Design engineering and preparation of bid documents was completed in September 2019. Bid closing is scheduled in October. Work is to start in November or December. MWRD is still reviewing the Private Sector Program (PSP) and the Long Term Operation and Maintenance Program (LTOMP) submitted by staff.

### Customer Services

#### Fast Action Service Team (FAST):

1. Continued salt dome roller replacement project;
2. Completed second round of mudjacking program;
3. Began second round of sidewalk replacement program.

Fast Action Service Team (FAST)												
Customer Service Requests												
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
116	106	159	206	210	251	235	197	156				1636



**Customer Service Team:**

Customer Service Team												
Water Billing - Customer Service Appointments												
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
40	45	63	56	68	47	47	52	52				470
Finance-generated Water Meter Readings												
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
233	411	296	349	280	271	234	319	210				2603
Delinquent Water Accounts												
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
139	106	115	107	88	101	101	75	101				933
New Construction Inspections												
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
8	6	4	4	5	5	3	6	3				44
Customer Service Requests - Gov Q&A/Meter Repairs												
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
19	34	32	21	43	20	27	22	19				237
Siding Permit Inspections												
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
0	0	0	0	0	0	0	0	0				0
B-box Repairs												
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
0	2	4	1	0	2	0	3	0				12
MIU Installations/Replacements												
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
16	15	43	18	15	36	57	42	16				258

**Utility Locates Team:**

1. Assisted with locates for the 2019 road reconstruction program;
2. Provided locates for Nicor at Greenspoint Parkway.

Utility Locates Team												
JULIE Locates												
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
176	172	677	800	889	746	639	683	706				5488
Emergency JULIE Locates												
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
9	14	23	42	47	52	28	33	34				282
Utility Joint Meets												
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
4	3	6	5	7	9	7	6	5				52

## Facilities

1. Replaced chiller water pump at Village Hall;
2. Installed replacement bathroom heater at Fleet Services;
3. Replaced thermostat and redirected duct work at Aster pumping station;
4. Applied protective sealant around floor drains at Fire Station #23 apparatus bay.

Facilities												
Preventative Maintenance Program - staff hours												
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
98	102	112	116	106	91	90	90	126				931

## Fleet Services

1. Continued repairs to various Fire vehicles, including units FT22, FT22R, FT21A, and FT24A;
2. Took delivery of Fire Unit# 22;
3. Completed repairs to units #85, #66, and #67;
4. Continued snow and ice preparations.

Fleet Services												
Preventative Maintenance Program - Number of Repairs												
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
19	22	22	29	17	20	16	20	13				178
Vehicles Sent for Warranty Repair												
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
3	3	2	4	7	2	17	14	3				55

## Forestry

1. Completed the fall brush pickup program;
2. Performed stump grinding at various locations;
3. Prepared Greve Cemetery for scheduled burial.

Forestry												
Customer Service Requests												
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
11	9	20	28	66	82	98	55	49				418

## Maintenance & Construction

### Storm Sewer Team:

1. Installed drain tile for parkway project at 1835 Picardy;
2. Poured concrete at Sears Centre Arena for generator project;
3. Installed 12" concrete outflow pipe at Brookside Pond;
4. Performed IEPA required monthly outflow inspections.

Storm Sewer Team												
Feet of Storm Sewer Flushed												
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2,390	1,940	2,907	970	540	200	0	0	0				8,947
Catch Basin Rebuilds												
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
0	0	0	4	4	5	5	4	3				25

**Construction/Maintenance Team:**

- 1) Repaired JAWA main line valve on Hassell Road;
- 2) Performed leak detection services at former AT&T site.

Construction/Maintenance Team												
B-box Repair/Replacement												
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1	4	9	4	3	12	4	4	3				44
Hydrant Replacement												
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1	0	0	2	1	2	0	3	2				11
Valve Repair/Replacement												
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1	1	2	1	2	3	1	4	2				17
Water Main/Service Line Leak Repairs												
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2	3	4	3	2	2	3	6	1				26

**Traffic Operations**

**Pavement Maintenance Team:**

1. Coordinated monthly tailgate, JSA, fork lift, and low-boy semi-dump training;
2. Assisted with generator project at Sears Centre Arena.

Pavement Maintenance Team												
Tons of Hot Asphalt Installed												
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
0.0	0.0	0.0	14.0	29.0	37.0	64.5	36.5	23.0				204.0
Tons of Cold Asphalt Installed												
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
7.0	19.5	14.5	5.5	4.0	5.5	1.5	1.0	1.5				60.0

**Sign Team:**

1. Performed type-I sign reposting on Sweetflower Drive, Berkley Lane West, Colony Lane, Harrison drive, Regent Drive, Cranshire Court, and Anjou Lane;
2. Fabricated and assembled signs for special events including PD Training and corn hole game boards for 60th Anniversary picnic.



Sign Team												
Repaired/Replaced Signs												
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
20	12	24	14	11	4	4	2	6				97
Signs Fabricated and Installed												
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
40	100	167	150	80	134	16	155	150				992

**Street Light Team:**

1. Notified ComEd of (1) street light out under their jurisdiction;
2. Assisted with pulling feeder cables at Sears Centre Arena for generator project;
3. Assisted with DEF cabinet installation and fuel island upgrades at Fleet Maintenance facility.

Street Light Team												
Customer Service Requests												
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
13	7	12	6	6	9	8	8	8				77
Street Lights Repaired												
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
27	18	31	15	40	79	24	25	31				290

**Water Operations**

**Operations Team:**

1. Coordinated decommissioning and removal of well #9;
2. Assisted with repairs to water main break on Central Road.

Operations Team												
Resident Water Quality Tests												
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1	0	2	1	1	0	1	1	1				8

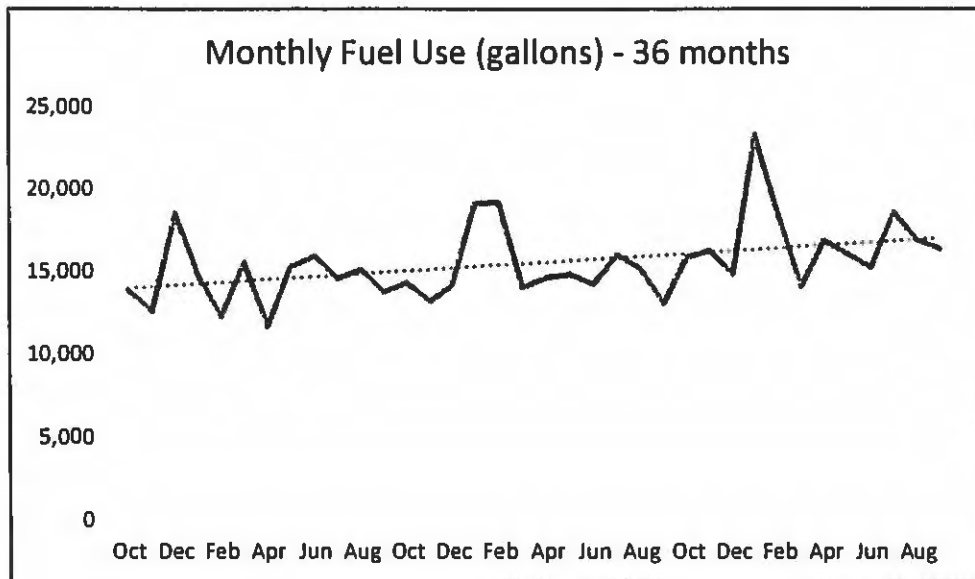
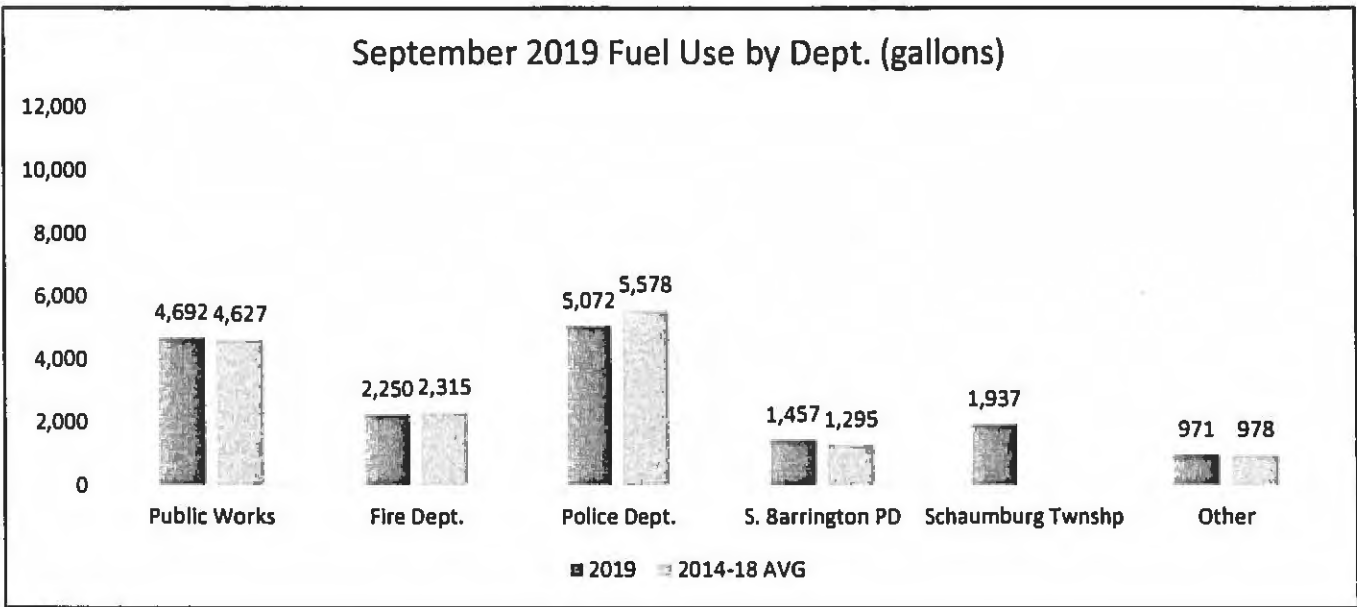
**Sanitary Sewer Flow Management Team:**

1. Installed sanitary manhole on Arlington Street.

Sanitary Sewer Flow Management Team												
Sewer Lines Flushed (feet)												
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
3,337	0	5,254	350	1,168	1,372	14,654	8,287	9,462				43,884
Sanitary Main Inspections (feet)												
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
0	355	4,747	3,965	394	282	0	0	0				9,743



## Fuel Use Report



**ENGINEERING REPORT OF THE  
TRANSPORTATION AND ENGINEERING DIVISION  
DEPARTMENT OF DEVELOPMENT SERVICES  
OCTOBER MONTHLY REPORT**

Attached is the Monthly Engineering Report of the Transportation and Engineering Division in the Department of Development Services for the period ending October 25, 2019.

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Alan Wenderski, P.E.  
Village Engineer

**MISCELLANEOUS**

Summary of miscellaneous items:

- 64 permit inspections
- 9 residential drainage investigations
- 2 floodplain inquiries
- Engineering site plan review for:
  - 1400 Gannon Drive
  - 2250 W. Higgins Road
  - 2598 W. Higgins Road - Geometry
- Reviewed permits for:
  - 8 – Drainage
  - 2 – Detached Garage/Addition
  - 4 – Patio
- Plan/permit review related to residential development:
  - 3 – Permit Plats
  - 3 – Top of Foundation
  - 12 – Final Grading
  - 6 – Certificates of Occupancy

**PROJECT STATUS**

<b>VILLAGE PROJECTS</b>	
<b>PROJECT NAME</b>	<b>DESCRIPTION</b>
<b>2019 Drainage Project</b>	Preconstruction meeting held on October 17 <sup>th</sup> . Work underway at 1623 Acorn location. Village Project Manager: Oscar Gomez
<b>2019 Preventative Maintenance Project</b>	Preconstruction meeting held on September 30 <sup>th</sup> . Sealcoating of Fire Stations 1, 2, and 3 parking lots complete. Crack sealing of all project locations completed on October 18 <sup>th</sup> . All surface patching locations completed on October 23 <sup>rd</sup> . Village Project Manager: Oscar Gomez
<b>2019 Street Revitalization Project</b>	See attached for current project status/schedule. Village Project Manager: Andy LoBosco
<b>Almond/Audubon Culvert Replacement</b>	Bid opening held on October 21 <sup>st</sup> . Lowest qualified bid submitted by A Lamp Concrete Contractors in the amount of \$359,366. Awaiting award of contract. Work scheduled to begin in late November pending issuance of IDOT permit. Chastain serving as design engineer. Village Project Manager: Shelley Walenga

<b>VILLAGE PROJECTS</b>	
<b>PROJECT NAME</b>	<b>DESCRIPTION</b>
<b>Prairie Stone Stormwater Management Plan</b>	Contract with V-3 to revise/update the 2004 Prairie Stone Stormwater Management Plan. Met with MWRD to discuss future permitting requirements within Prairie Stone on May 20 <sup>th</sup> . Progress meeting with V-3 and Prairie Stone POA held on October 4 <sup>th</sup> . V-3 to proceed with permit update, stormwater modeling.  Village Project Manager: Alan Wenderski

<b>COMMERCIAL PROJECTS</b>	
<b>PROJECT NAME</b>	<b>DESCRIPTION</b>
<b>Adesa Auto Auction</b> 5407 Trillium Boulevard	Phase 1 - Awaiting signatures on Bill of Sale required prior to public acceptance. Phase 2 – Under review. Village Project Manager: Alan Wenderski
<b>Aldi</b> 375 West Higgins Road	Work complete. Awaiting as-built drawings. Village Project Manager: Terry White
<b>Buona Beef</b> 2250-2360 West Higgins Road	Project guarantee received. Work on new building underway. Village Project Manager: Terry White
<b>Bystronic/Eagle Way Extension</b> 2200 Central Road	Site work and building work ongoing. Pavement work ongoing on Eagle Way and Central Road. North lot grading underway. Village Project Manager: Terry White
<b>Greenspoint Amenities</b> 2800 West Higgins Road 2300 Barrington Road	Exterior site improvements. Project guarantee received. Village Project Manager: Terry White
<b>Hoffman Plaza</b> Higgins and Roselle	Phase 1 - Completion of detention basin improvements ongoing. Outlot 4 – Work ongoing. Village Project Manager: Terry White
<b>Holiday Inn Express</b> 5235 Prairie Stone Parkway	Interior building work ongoing. Retaining wall complete. Exterior site work ongoing. Village Project Manager: Terry White
<b>Mercedes-Benz of Hoffman Estates</b> 1000 West Golf Road	Project complete. MWRD final inspection completed. Village Project Manager: Terry White
<b>Shell – Ricky Rocket's</b> 2590 West Golf Road	Reviewing as-built drawings. Village Project Manager: Terry White
<b>Schaumburg Township Parking Lot Expansion</b> 1 Illinois Boulevard	Work substantially completed. Awaiting MWRD final inspection and as-built drawings. Village Project Manager: Terry White

<b>RESIDENTIAL PROJECTS</b>	
<b>PROJECT NAME</b>	<b>DESCRIPTION</b>
<b>Amber Meadows</b> NE Corner of Essex Drive and Beacon Pointe Drive	Home building ongoing. Village Project Manager: Terry White
<b>Bergman Pointe</b> NW Corner of Ela Road and Algonquin Road	Home building ongoing. Signal modifications at Ela/Algonquin substantially complete. Final inspection for public improvements ongoing. Village Project Manager: Terry White
<b>Devonshire Woods</b> SW Corner of Shoe Factory Road and Essex Drive	Home building ongoing. Final inspection for subdivision acceptance completed. Punch list work ongoing. Village Project Manager: Terry White/Oscar Gomez

## 2019 Street Revitalization Project Schedule Update: (October 18, 2019)

RECONSTRUCTION STREETS	Start Date <sup>1</sup>	Pre-Construction			Construction												Landscaping			Percent Complete
		Layout	Tree Root Pruning	Sawcutting	Concrete Removal	Asphalt Removal	Earth Excavation	Sub base Backfill	Storm Sewer	Curb & Gutter	Driveway Aprons	Sidewalks	Fine Grading	Asphalt Binder	Asphalt Surface	Stripping	Backfill Topsoil	Sod & Seed		
1 ALHAMBRA LANE Ashland St to Arizona Blvd	9/4/2019																n/a			95%
2 AVONDALE LANE Alhambra Ln to Almond Ln	9/4/2019																n/a			95%
3 HASSELL DRIVE Hassell Rd to End of Street	10/7/2019																			43%
4 LAFLEUR LANE Brittany Ln to Freeman Rd	9/25/2019		n/a																	92%
														Completed			In Progress			

<sup>1</sup>Tentative / Actual

**Definition of Construction Steps:**

- Layout: Village engineers evaluate existing conditions, determine removals, and complete construction staking
- Tree Root Pruning: A circular saw machine cuts tree roots to reduce damage to the tree during construction
- Saw Cutting: A circular saw machine cuts the concrete and asphalt at construction joints
- Concrete Removal: The contractor removes existing sidewalk, curb and gutter, and driveway aprons that will be replaced
- Asphalt Removal: The contractor either uses a backhoe or milling machine to remove existing asphalt layers
- Earth Excavation: Removal of the all materials located below the existing road to a stabilized subgrade
- Sub base Backfill: The installation of stone to a depth of 8"-12" with a layer of geotextile fabric
- Storm Sewer: Repair and replacement of existing storm sewer structures and pipes
- Curb & Gutter: The installation of concrete curb & gutter utilizing mechanical equipment or hand tools
- Driveway Aprons: The replacement of asphalt and concrete driveway aprons
- Sidewalks: The replacement of concrete public sidewalks.
- Fine Grading: The shaping of the stone sub base to ensure drainage, compaction, and elevation
- Asphalt Binder: The first layer of asphalt
- Asphalt Patching: Repair of localized pavement failures on resurfacing streets
- Asphalt Surface: The final layer of asphalt
- Stripping: Completion of permanent pavement stripping
- Backfill Topsoil: Placement of topsoil to areas that have been disturbed during construction
- Sod & Seed: Placement of sod and seed to areas that have been disturbed during construction

**2019 Street Revitalization Project Schedule Update: (October 18, 2019)**

RESURFACING STREETS	Start Date <sup>1</sup>	Pre-Construction		Construction											Landscaping		Percent Complete	
		Layout	Sawcutting	Concrete Removal	Asphalt Removal	Storm Sewer	Curb & Gutter	Driveway Aprons	Sidewalks	Asphalt Binder	Asphalt Patching	Asphalt Surface	Stripping	Backfill/Topsoil	Sod & Seed			
1 ANGOULEME LANE Bison Ln to Rohrsen Rd	5/20/2019							n/a					n/a					100%
2. ANJOU LANE Versailles Rd to Picardy Ln	7/31/2019																	99%
3 APPLE STREET Higgins Rd to Golf Rd	10/9/2019							n/a	n/a									60%
4 ATLANTIC AVENUE Bode Rd to Pacific Ave	5/23/2019												n/a					100%
5. BAYSIDE COURT W Bayside Cir to End of Street	10/16/2019					n/a								n/a				
6 BERKLEY LN W Washington Blvd to Spring Mill Dr	6/24/2019												n/a					99%
7 BORDEAUX DRIVE Versailles Rd to Charlemagne Dr	8/19/2019																	99%
8 BUCKTHORN DRIVE Huntington Blvd to Lombardy Ln	8/5/2019																	99%
9. BULRUSH DRIVE Sweetflower Dr to Harmon Blvd	6/11/2019												n/a					99%
10 CLOVER LANE Old Timber Ln to Sunflower Ln	10/21/2019													n/a				
11 COLONY LANE Firestone Dr to Lexington Dr	7/25/2019																	99%
12 CRANSHIRE COURT Regent Dr to End of Street	7/15/2019					n/a							n/a		n/a			100%
13 FOX PATH LANE Rohrsen Rd to Mallard Ln	5/20/2019										n/a		n/a					100%
14 FREEMAN ROAD Mumford Dr to Park Ln	9/5/2019																	85%
15 GREENSPPOINT PARKWAY Higgins Rd to Higgins Rd	10/8/2019												n/a					
16. HARRISON LANE Firestone Dr to Winston Dr	7/26/2019																	99%
17 LEATHERLEAF LANE Alder Dr (N) to Whispering Trails Dr	8/19/2019												n/a					99%
18 MOHAVE STREET Illinois Blvd to Lincoln St	8/28/2019																	95%
19 NANTUCKET COURT Stone Harbor Dr to End of Street	10/16/2019													n/a				
<sup>1</sup> Tentative / Actual											Completed		In Progress					
All resurfacing streets to be completed within 30 days of start date																		

**2019 Street Revitalization Project Schedule Update: (October 18, 2019)**

RESURFACING STREETS	Start Date <sup>1</sup>	Pre-Construction		Construction										Landscaping		Percent Complete	
		Layout	Sawcutting	Concrete Removal	Asphalt Removal	Storm Sewer	Curb & Gutter	Driveway Aprons	Sidewalks	Asphalt Binder	Asphalt Patching	Asphalt Surface	Striping	Backfill Topsoil	Sod & Seed		
20 NORTHVIEW LANE Shepard Rd to End of Street	9/24/2019													n/a			95%
21 PACIFIC AVENUE Bode Rd to Atlantic Ave	5/22/2019													n/a			100%
22 PARKVIEW CIRCLE Hassell Rd to Hassell Rd	10/1/2019																92%
23 PICARDY LANE Charlemaene Dr to End of Street	8/1/2019																99%
24 PRESTWICK PLACE Chambers Dr to Chambers Dr	10/21/2019																
25 REGENT DRIVE Wilshire Dr to Wilshire Dr	6/28/2019													n/a			100%
26 ROHRSEN ROAD Golf Rd to 400 feet N of McDonough Rd	5/21/2019					n/a		n/a									100%
27 SHOE FACTORY BIKE PATH Ivy Ridge Dr to CN Railroad	10/23/2019																
28 STURBRIDGE DRIVE E Mumford Dr to Westbury Dr	10/10/2019																
29 SWEETFLOWER DRIVE Harmon Blvd to End of Street	6/11/2019													n/a	n/a		100%
30 TARRINGTON DRIVE Castaway Ln to Dukesberry Ln	10/16/2019																
31 VERSAILLES ROAD Algonquin Rd to Charlemaene Dr	8/19/2019																99%
<sup>1</sup> Tentative / Actual										Completed		In Progress					

All resurfacing streets to be completed within 30 days of start date