

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

Village of Hoffman Estates

Public Works and Utilities Committee Meeting Agenda

August 15, 2022

Immediately Following the Finance Committee
Village Hall, 1900 Hassell Road, Hoffman Estates, IL 60169

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- I. Roll Call
- II. Approval of Minutes -July 18, 2022

NEW BUSINESS

- 1. Request authorization to award contract for Fire Station #23 roofing overlay to Solaris Roofing Solutions, Elburn, IL, (low bid) in an amount not to exceed \$37,000.
- 2. Request authorization to award contract to Ciorba Group, Chicago, IL, for engineering services for Pfizer Lift Station improvements in an amount not to exceed \$95,500.

REPORTS (INFORMATION ONLY)

- Department of Public Works Monthly Report
- 2. Engineering Division Monthly Report
- III. President's Report
- IV. Other
- V. Items in Review
- VI. Adjournment

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PUBLIC WORKS & UTILITIES COMMITTEE MEETING MINUTES

July 18, 2022

I. Roll call

Members in Attendance: Anna Newell, Chairperson

Michael Gaeta, Vice Chair Gary Stanton, Trustee Karen Mills, Trustee Gary Pilafas, Trustee Karen Arnet, Trustee William McLeod, Mayor

Management Team Members in Attendance:

Eric Palm, Village Manager

Dan O'Malley, Deputy Village Manager

Art Janura, Corporation Counsel Joe Nebel, Director Public Works Monica Saavedra, Director HHS Darek Raszka, Interim IT Director

Kasia Cawley, Police Chief

Alan Wax, Fire Chief

Pete Gugliotta, Director Dev. Services Rachel Musiala, Director of Finance Darek Raszka, Acting Director IT Alan Wenderski, Village Engineer Patrick Seger, Director of HRM Ric Signorella, CATV Coordinator

Suzanne Ostrovsky, Asst. Village Manager

Sarah Marccuci, EMA Coordinator

Bev Romanoff, Village Clerk

Tricia O'Donnell, Comms Manager

Telephonic Attendance: Ben Gibbs, GM NOW Arena

The Public Works and Utilities meeting was called to order at 8:11 p.m.

II. Approval of Minutes – June 27, 2022

Motion by Trustee Gaeta, seconded by Trustee Arnet, to approve the Public Works and Utilities Committee Meeting minutes from June 27, 2022. Voice vote taken. All ayes. Motion carried.

NEW BUSINESS

1. Request authorization to extend 2020 contract for 2022/23 Janitorial Maintenance Services to Eco Clean Maintenance, Inc. Elmhurst, IL, for a total contract amount not to exceed \$78,000.

An item summary sheet by Joe Nebel and Paul Petrenko was presented to Committee.

Motion by Trustee Gaeta, seconded by Trustee Mills, to extend 2020 contract for 2022/23 Janitorial Maintenance Services to Eco Clean Maintenance, Inc. Elmhurst, IL, for a total contract amount not to exceed \$78,000. Voice vote taken. All ayes. Motion carried.

REPORTS (INFORMATION ONLY)

1. Department of Public Works Monthly Report

The Department of Public Works Monthly Report was received and filed.

2. Engineering Division Monthly Report

The Engineering Division Monthly Report was received and filed.

Mr. Wenderski provided an update on capital projects.

Trustee Pilafas asked numerous questions about road repairs and Trustee Stanton inquired about persistent weed issue on Randi Lane. Wenderski provided comments and update.

- III. President's Report
- IV. Other
- V. Items in Review
- VI. Adjournment

Motion by Trustee Gaeta, seconded by Trustee Arnet, to adjourn the meeting at 8:25 p.m. Voice vote taken. All ayes. Motion carried.

Minutes submitted by:		
Jennifer Djordjevic, Director of Operations and	Date	
Outreach / Office of the Mayor and Board		

COMMITTEE AGENDA ITEM VILLAGE OF HOFFMAN ESTATES

SUBJECT:

Request authorization to award contract for Fire Station #23

roofing overlay to Solaris Roofing Solutions, Elburn, IL, (low

bid) in an amount not to exceed \$37,000.

MEETING DATE:

August 15, 2022

COMMITTEE:

Public Works & Utilities

FROM:

Joseph Nebel, Director of Public Works

Paul Petrenko, Superintendent of Facilities and Arena

Maintenance

PURPOSE:

Award contract for the roof overlay project at Fire Station #23, located at 1300 Westbury Drive.

BACKGROUND:

Fire Station #23 was constructed in 1975 and expanded with an addition in 2001. The flat roof section over the kitchen and dayroom consists of a built-up roof system (BUR), is 30 years old, and has reached the end of its useful life. The total area of the roof is approximately 7,600 square feet.

A specification was assembled for the overlay of a mechanically fastened 60 millimeter Thermoplastic Polyolefin (TPO) single-ply roofing membrane over the existing roof along with some additional insulation to increase energy efficiency. This material has a 20-year warranty.

DISCUSSION:

In August 2022, eight bids were submitted, summarized in the table below. Staff reviewed all proposals and received favorable references for Solaris Roofing Solutions, the low qualifying bidder.

Vendor	Bid Amount
Solaris Roofing Solutions, Inc.	\$35,000
Weatherguard Roofing Co.	\$40,920
Select Roofing & Gutter	\$41,365
J.L. Adler Roofing	\$41,470
NIR Roof Care, Inc.	\$44,560
Metalmaster Roofmaster, Inc.	\$49,773
G.E. Riddiford Roofing Company, Inc.	\$56,800
Tori Construction, LLC	\$135,440

FINANCIAL IMPACT:

There is \$38,320 in the 2022 Capital Improvements Program for Fire Station #23 roof repair/replacement. The qualified low bid was \$35,000 and we are requesting an additional \$2,000 for project contingencies.

RECOMMENDATION:

Request authorization to award contract for Fire Station #23 roofing overlay to Solaris Roofing Solutions, Elburn, IL, (low bid) in an amount not to exceed \$37,000.

Note: Complete bid documents are available in the white Public Works & Utilities binder in the Trustee's ante room.

VILLAGE OF HOFFMAN ESTATES PUBLIC WORKS DEPARTMENT PROPOSAL FORM

FIRE STATION #23 ROOFING

The undersigned, having examined the specifications, the site of work, and all conditions affecting the cost of performing the work, hereby proposes to furnish all labor, equipment and material, and to perform said work in accordance with the specifications thereof. Product specification sheets, as pertaining to proposed equipment has been included with this proposal form.

There is enclosed herein a Bid Bond, Certified or Bank Cashier's Check in the amount of five (5) percent of the base bid, as stipulated under "INSTRUCTIONS TO BIDDERS" section.

It is understood that the Village reserves the right to reject any and all proposals (including alternate proposals) and to waive any technicalities.

A)	All inclusive primary proposed sum for Base as specified in scope of work.	8 <u>35,000</u>
	eximate number of weeks for work start follow ward of contract by the Village;	ving 4-6 weeks
Note:	All work proposed under the terms of this November 31, 2022	s bid must be completed on or before
	ris Roofing Solutions, Inc Bidder's Firm Name	By: Signature and Title
1n05	0 Linlar Drive	Scott Roberts, President
	Address	Print Name and Title
Elbur	rn, IL 60119	630-639-5400
	City, State, Zip	Telephone
		nhaase@solarisroofing.com Email Address
		Imiai / Xdaless
Ву	VILLAGE OF HOFFMAN ESTATES	Accentance
	VILLAGE OF HOFFINAN ESTATES	Acceptance

This form is mandatory. Please include three signed copies of this form with your bid documents.

RETURN WITH BID

THE VILLAGE OF HOFFMAN ESTATES BID SPECIFICATION ADDENDUM ACKNOWLEDGMENT FORM

CONCERNING: FIRE STATION 23 ROOFING - ADDENDUM NO. 1

To Whom It May Concern:

Please be advised of one (1) item which constitute Addendum No. 1, specific to the above referenced bid item.

Also be advised that you must reference receipt of Addendum No. 1, via your placement of a written/typed note, to the effect, upon the bid proposal form identified within the bid document package.

Addendum No. 1

- A) Install new cleats to secure loose edges of the sheet metal work. Use material compatible with sheet metal to be secured by the edge strip.
- B) Roofing Skylights will be replaced by owner prior to roofing start.

The above Addendum No. 1; item A and B is presented for clarification. The Village also desires to insure that when you prepare your bid, you base your proposal sum upon the identical service scope that all others will.

Please direct any questions to Paul Petrenko, Superintendent of Facilities and Arena Maintenance, at (847) 781-2718.

I/We hereby acknowledge receipt of the addendum as it applies to the above stated Bid Specifications.

Firm Name:	Solaris Roofing Solutions, Inc	
Address:	1n050 Linlar Drive, Elburn IL 60119	
Telephone:	630-639-5400	
Signature:	Scor Roberts	Title: President

THIS FORM MUST ACCOMPANY YOUR FIRM'S BID PROPOSAL!!



Contract

			Month and Year	
between the	Village	of	Hoffman Estates	
acting by and through its	Mayor and Board o	f Trustees	known as the party of the first part, and	
		his/their	r executors, administrators, successors or assigns,	
known as the party of the se	econd part.			
nd performed by the party of grees with said party of the	of the first part, and according to the first part at his/their own proper cos the plans and specifications here!	e terms expressed in t and expense to do	entioned in the Bid/Proposal Documents hereto attached, to be in the Bond referring to these presents, the party of the second all the work, furnish all materials and all labor necessary to come d in full compliance with all of the terms of this agreement an	d part nplete
	Prevailing Wage Act (if applicable).		safety requirements and all laws and statutes of the State of II rages are revised by the Illinois Department of Labor and are ava	
 And it is also underst laps and Contract Proposal hereto attached, and the Pla 		to Bidders, General	Conditions, Specifications, Scope of Services, Special Provisio	ıns, Sit
ín Hoffm	nan Estates	, appro	oved by the Village of Hoffman Estates in the	
Otata of Illinoia			reserve of this could all and over a part borner	
State of Illinois	Date	, are essential docu	uments of this contract and are a part hereof	
		1.45		
5. IN VYITNESS VVHERI	EOF, The said parties have execute	a tnese presents on t	the date above mentioned.	
Attest:		The Village	of Hoffman Estates	
	Clerk	Ву	0 10 5 10	
Seal)			Party of the First Part	
			(If a Corporation)	
		Corporate Name	Solaris Roofing Solutions, Inc	
		Orporate Name	Ma . Ar	
		By O	resident Party of the Second Part	
		.,	galderic 1 arry of this occount i sit	
			(If a Co-Partnership)	
Attest:				
Scow Robert	5			
Secre	_			
		-		
			Partners doing Business under the firm name of	
			Party of the Second Part	
			(If an Individual)	
			Party of the Second Part	

This Contract form is mandatory. Please include three signed copics of this form or your signed contract with your bid documents. RETURN WITH BID

COMMITTEE AGENDA ITEM VILLAGE OF HOFFMAN ESTATES

SUBJECT: Request authorization to award contract to Ciorba Group,

Chicago, IL, for engineering services for Pfizer Lift Station

improvements in an amount not to exceed \$95,500.

MEETING DATE: August 15, 2022

COMMITTEE: Public Works & Utilities

FROM: Joseph Nebel, Director of Public Works

Haileng Xiao, Superintendent of Water and Sewer

PURPOSE: To award contract for engineering and design services for the

replacement or rehabilitation of Pfizer Lift Station, located at 2090

Central Road.

BACKGROUND: Pfizer Lift Station was originally constructed in 1975 and is a dry

well/wet well prefabricated steel duplex-style underground pumping station with two pumps rated at 1,200 gpm each. This station discharges sewage through a 10-inch diameter force main that runs south under the tollway and connects to an 18-inch

diameter gravity sewer.

This station's service area was originally zoned for warehouse and light industrial use. In recent years, changes in the service area include the Bell Works development at the former AT&T site, to include residential and commercial/office space, and the upcoming

datacenter.

Due to the anticipated increase in sanitary sewer volume as a result of these projects, a preliminary capacity analysis and independent inspection of the station was completed in July 2021. Both reports indicated the station requires rehabilitation or replacement, due to the station's age and condition, with an additional recommendation

to increase pumping capacity.

DISCUSSION: In 2022, staff prepared an RFP for engineering and design services

for the replacement or rehabilitation of Pfizer Lift Station including preparation of plans, bid documents, and other related materials. The goal of this study is to evaluate the existing system's configuration, assess current condition, and identify potential solutions. Possible options include rehabilitation of the existing station with pumping capacity upgrades or a full replacement with a higher capacity

station at a new location, among other alternatives.

DISCUSSION (Continued):

The RFP was sent to seven firms on the Village's list of prequalified engineering firms in June 2022. The Village received five proposals, ranging from \$65,493 to \$227,100. Staff evaluated each proposal based on a number of criteria, including the firm's: understanding of the project scope; technical approach; relevant experience; capacity to complete the work; and estimated staff hours dedicated to the project. Ciorba Group's proposal was deemed to be the most thoughtful, innovative, and comprehensive, providing project specific responses that illustrated a high level of commitment to project success. In addition, Ciorba has been awarded the Cook County Department of Transportation and Highway's contract for Central Road Phase II design and drainage improvements, which will give Ciorba unique opportunities to coordinate these projects and avoid potential conflicts. While cost was not a primary determining factor, Ciorba's proposal was also the lowest, a base cost of \$65,493.

Ciorba's proposal included some optional add-on services such as subsurface utility investigation (\$7,185), third party flow testing of the existing station (\$16,900), and inspection of the existing wet well structure (\$3,190), among other additions. Staff believes these optional services may be advisable to produce the highest quality final design and to minimize unknowns before design begins. The final decision to include these services may be made after additional field work is completed. There also remains the potential for additional work as unknown field conditions are discovered.

FINANCIAL IMPACT:

Funding for this project has been contributed by the project developer. The cost of this project includes \$65,500 for the base proposal with contingency funds (\$30,000) reserved for additional services that may be added/necessary as the work progresses, for a total of \$95,500.

RECOMMENDATION:

Request authorization to award contract to Ciorba Group, Chicago, IL, for engineering services for Pfizer Lift Station improvements in an amount not to exceed \$95,500.

NOTE: Complete proposal documents are available in the white Public Works & Utilities binder in the Trustees' Ante Room.



July 15, 2022

Attn: Joseph Nebel Director of Public Works Village of Hoffman Estates 2305 Pembroke Avenue Hoffman Estates, IL 60169

Subject: Design Engineering

Pfizer Sanitary Sewer Lift Station Rehabilitation/Replacement

Dear Mr. Nebel:

Please find enclosed an electronic copy of our Proposal for the above referenced project.

Why Ciorba?

Experience. Ciorba Group staff has over 20 years' experience in performing conditional assessments, design, and/or construction management for pump and lift station projects for various municipalities throughout northeastern Illinois.

Understanding. Ciorba Group has reviewed the scope of work, supplemental information, and aerial/virtual images of the site to prepare a list of design considerations and preliminary lift station layout for the Village's review. We believe this approach demonstrates our expertise to perform the required work.

Additional Services. We have also included roadway, structural and wetland considerations to the design approach, to ensure that these key components be included in the design. We believe this will reduce unexpected costs and coordination issues during construction.

The Village of Hoffman Estates deserves a partner that cares about quality, budget, constructability, responsiveness, and Client relations. We are eager for the opportunity to provide exceptional services required for this project.

Should you have any questions about this proposal, please contact me at 773.355.2958 or at klopez@ciorba.com at any time.

Duare Opiu

Sincerely,

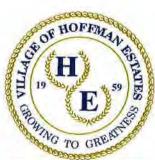
Ciorba Group, Inc.

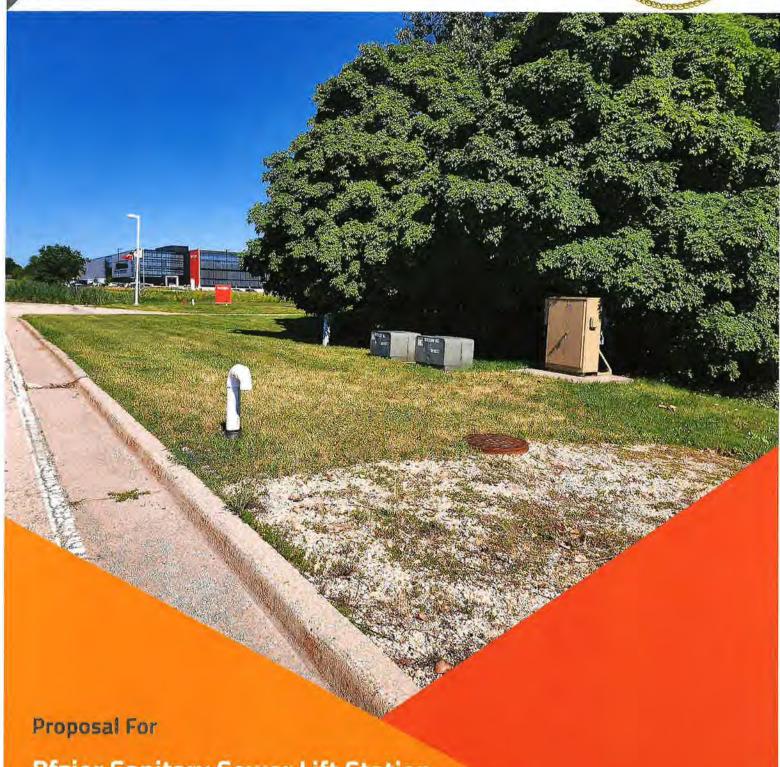
Katrina Lopez, PE, LEED AP Water Resources Project Manager

ann Kopa

Duane O'Laughlin, PE Project Principal







Pfzier Sanitary Sewer Lift Station Rehabilitation/Replacement Project

TABLE OF CONTENTS

- 1. Project Approach/Project Schedule
- 2. Firm Experience/Past Performance
- 3. Staff Capabilities and Resumes
- 4. Scope of Services with Hours and Fees
- 5. Suggested Tasks
- 6. References



PROJECT UNDERSTANDING

It is our understanding that the Village is looking to improve the existing Pfizer Sanitary Sewer Lift Station to increase station capacity for the approved Bell Works multi-unit residential building and Microsoft Data Center. The Village would also like to assess whether the underground duplex dry-pit/wet well station should be decommissioned and replaced with a new submersible type duplex lift station.

The Village provided third party lift station capacity analysis and site inspection report for the station performed in 2021 with the RFP. Reviewing the information provided it appears that the existing underground structure is leaking and has started to corrode; and, pump no. 2 has alignment issues and a small amount of water leaking from the seal packing gland. We would agree with Lift Station Capacity Analysis Report that it would be best to replace the existing station with a new wet well with submersible type pumps. This would eliminate confined space entry into the station and allow the new station to be located further away from the roadway, less susceptible to vehicular damage.

During our tour of the station on 7/12/2022 the following were also noted while discussing the station with maintenance personnel:

- The existing wet well structure may need to be abandoned as grating is deteriorating and structure is in poor condition.
- The station does not have a by-pass connection as shown on the station drawing included in the RFP.
- The existing vent pipe was replaced as it was hit by vehicular traffic over the winter.
- · Village Staff had to connect the portable generator to the station once this past year.

The Village is looking for contract plans and documents to be prepared by January 31, 2023 to meet the Village's anticipated construction schedule. An anticipated design schedule has been provided for reference, see page 5. The schedule is based on MWRD adhering to their 15 day review times listed in the Watershed Maintenance Ordinance. It has been our experience that review times will extend beyond this at times and the project schedule may need to be adjusted accordingly.

We have provided a preliminary layout that we believe would allow for the existing station to remain in place during construction and minimize bypass pumping operations to switch over to the proposed station. The layout is overlaid on the phase I roadway plans for the Central Road Project. Adjustments to the layout would be made during design while coordinating the location of a new 42" RCP sewer to be installed adjacent to station under County project and new Com Ed electric service for the station.

We would like to highlight that the Cook County Department of Transportation and Highways has awarded Ciorba Group the Phase II design for roadway and drainage improvements to Central Road, between Old Barrington Road to Huntington Boulevard/Freeman Road. We believe this will give us the unique opportunity to coordinate and eliminate future modifications to the lift station under the County project.

Local developer funds and Village's Capital Improvement Program will be used for the design and construction.







DESIGN CONSIDERATIONS

Based on drawings provided with the RFP we would recommend that the following components be considered during design:

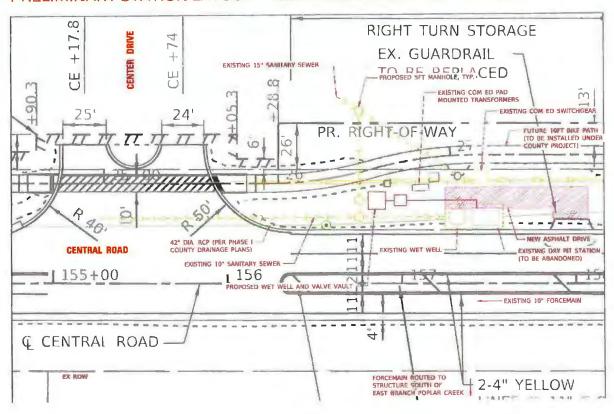
Design Component	Recommendations
Upgrade Existing Com Ed Electric Service	It appears that the station electric service is 120/240V, 3-phase. This configuration has a high-leg and is less desirable for new electric services. We would recommend either a 120/208V, 3-phase or 277/480V, 3-phase configuration, whichever is available. In reviewing the original station drawings it appears that the electric service was going to be upgraded when the station reached future flow conditions.
Station Flow	We would recommend verifying the station's actual flows by either reviewing water usage information from the businesses tributary to the station or by performing flow analysis. It appears that the original MWRD permit may have considered future flow conditions as part of the submittal, that are no longer applicable. Calculation of flows based upon water usage, GIS and SCADA data has been included in our fee. Flow metering has been listed as an additional service in the event that the study of water usage and/or SCADA data does not produce accurate results. The anticipated cost for third party flow testing is \$16,900 and can be coordinated during design should the Village elect to pursue this option. The cost of this work can be reduced to \$11,400 if flow monitoring data can be provided for station flow analysis in lieu of an official report. MWRD will require PE calculations be submitted for the station improvements justifying existing and future flow conditions. Having a more accurate idea of the stations actual flows would assist in the designing the station for current and future needs. Also MWRD may not allow lift station flows to be calculated based on various MWRD business/residential building permitted flows, as included in the appendix of
Utility Survey	the capacity analysis report. Ciorba recommends that a survey of subsurface utilities be performed as part of the design engineering services. This will be required for MWRDGC to tie the project into NAVD88 coordinate system, and for a County construction permit. This information would also assist in identifying potential utility conflicts. While touring the station on 7/12/2022 it was noted that there is communication, electrical utility conduits/equipment (single phase transformers and switchgear) and storm sewers located within the ROW. The anticipated cost received from SAM Engineering to perform a subsurface utility investigation and survey services is \$7,185.00. Included in this cost is identification of the north right-of-way, which will be required for construction purposes. Preparation of design drawings is based on utilizing record drawings for the station, and plats of survey. Subsurface utility investigation and survey services are listed as an additional service. As this service was not specifically listed in the RFP.



Design Component	Recommendations
	Geotechnical engineering services have been included in the fee and includes the
	following services. We believe this is crucial to the station design given the proximity
	of the station to Central Road, existing Com Ed transformers/switchgear, floodplain
	and wetlands.
	 One soil boring to evaluate subsurface conditions within the area where
Contachnical Engineering	the new lift station will be located.
Geotechnical Engineering	One soil boring to evaluate subsurface conditions adjacent to the existing
	lift station, to assist in providing details to decommission the existing
	station and for contractor to prepare braced excavation submittal during construction.
	Potential Impacted Property (PIP) evaluation for completion of form LPC-
	662 for CCDD Certification.
	A preliminary station layout was prepared and can be found on page 3. We believe
	given that the existing forcemain is routed below the tri-state and East Branch
	Poplar Creek, and within a gas transmission ROW, that this will be important aspect
	of the proposed station layout. Minimizing impacts to the existing forcemain
Deslinations, Charlies Lavaurk	configuration as it leaves the existing lift station will be key in the design, and was
Preliminary Station Layout	basis of the preliminary layout prepared. Additional limited ROW is also a concern,
	but appears that this will be addressed as part of the Central Road Improvement
	project. Coordination and minimizing impacts to existing utilities will also be critical
	in the proposed station layout as their is existing watermain, storm sewer, electrical,
	communications and cable lines located within the ROW.
	An alternate station layout has been prepared and can be found on page 4. This
Alternate Station Layout	layout was based on reusing the existing wet well structure should it be determined
	that the wet well will not need to be lined or require major improvements.
	If the Village would prefer that the existing prefabricated steel structure be reused
	then we would recommend performing ultrasonic testing during design to identify
Reuse of Existing Steel	the scope of structural work required. This is a non-destructive testing procedure
Structure	and could be coordinated on the behalf of the Village during design. The cost of this
	work was not included in our fee, and Ciorba can coordinate this work during
	design
	Based on information we received from the County as part of the Phase I study for
	the Central Road Improvement project it was noted that there are wetlands
Wetland Protection	identified just west for Center Drive and approximately 100ft east of the existing
Treadile Flotection	station. Protection of these areas will need to be included in permit submittal and
	will limit staging areas during construction.

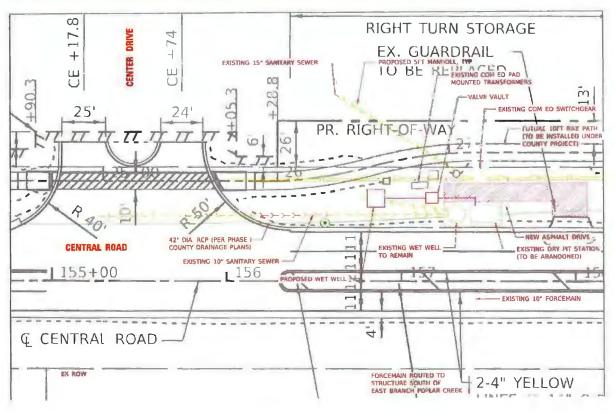


PRELIMINARY STATION LAYOUT - NEW SUBMERSIBLE LIFT STATION





ALTERNATE STATION LAYOUT - REUSING EXISTING WET WELL





ANTICIPATED PROJECT SCHEDULE

				2022							2023			
1921g	JUN	JUL	AUG	SEP	ОСТ	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL
Award of Project			8/15/22											
Kick-Off Meeting			08/22/22											
Existing Flow Analysis			8/29/22 ta	9/22/22										
Preliminary Design Memo			8/23/22 to	9/23/22										
Village Review and Alternative Selection				9/23/22	to 10/7/22									
Com Ed Coordination				8/2	9/22 to 12/16	/22								
Prefinal Design Submittal					10/7/22 to	11/18/22								
MWRD* & Village Review						11/21/22	to 12/9/22							
Final Design Submittal							12/9/2 to 12/23/22							
MWRD* & Village Review							12/23/22	to 1/13/22						
Bid Plans and Contract Documents*								1/31/2023						

Assumptions:

- 1. The Village will pay initial design fees to Com Ed if required for the new electric service.
- 2. Ultrasonic testing of the existing prefabricated steel structure is not included in the submitted in the scope of services.
- 3. The pump controller will consist of electrical and control components mounted in a multi-door weatherproof cabinet.



Chatham Lift Station



PROJECT DESCRIPTION

The Village of Buffalo Grove determined the need for the rehabilitation of the Chatham Lift Station (1,250 GPM total capacity), a critical sewer system component serving a large residential community including public schools. Ciorba was selected to carry out the engineering evaluation, design and construction inspection for the project.

Phase I engineering services involved the civil engineering inspection of manholes, force main, wet well, dry well and adjacent properties; Structural inspection of interior / exterior coating of the dry well, cathodic protection system, steel walls, and access appurtenances; Mechanical assessment of pumps and motors, valves, piping, supports and fittings; Electrical assessment of electrical service, standby generator and switchgear. A preliminary engineering report was prepared, including a hydraulic analysis to determine if the pump operations and duty points coincide with the service area and outfall variables; Assessment of pump run-time data for appropriateness of sizing, capacity and reliability; Assessment of site information with respect to ownership, easements,

construction impact and flooding impact;
Assessment of alignment, profiles, and sizing of incoming sewer and discharge force main;
Assessment of wet well and dry well civil works for useful life; Assessment of mechanical components, motors, and electrical works (including generator) for defects, useful life and operational issues (with particular focus on discharge pipe cracking); Assessment of controls components for general condition and operational issues.

The comprehensive inspections and hydraulic evaluation resulted in an inspection report including alternative improvements with cost estimates. Ciorba provided the design of the duplex submersible lift station that services a 290 acre residential area. The project consisted of converting an existing wet well / dry well station into a submersible station with ground level bypass. Improvements included the construction of a new wet well, and full mechanical, electrical, and constrols installation on the site. Station bypass was limited to a total of 4 hours during construction.

LOCATION

Buffalo Grove, IL

CLIENT

Village of Buffalo Grove

CONTACT

Mr. Kyle Johnson, PE Assistant Public Works Director 847.259.2523

CONSTRUCTION COST

\$1.05 Million

PROJECT TEAM

Resident Engineer
Luke Mattson, PE
Electrical Engineer
Joseph Vondra, PE, LC
QC/QA Engineer
Tony Wolff, PE, CFM
Water Resources Engineer
Corinne Benton, PE

SCOPE OF SERVICE

- ▶ Preliminary Engineering
- ▶ Final Design
- Construction Observation



Lift station type: Sanitary Sewer Triplex Submersible Lift Station Lift station capacity: 1,307 GPM @ 26' TDH 2 x 27 HP Pumps

Ciorba Group is offering value to the Village of Buffalo Grove by providing consistency in inspection approach and recommendations based on previous work at the Camelot and Golfview Lift Stations. Assessment phase is streamlined based on vetted considerations from previous work.



Huntington Lift Station



PROJECT DESCRIPTION

The Village of Mount Prospect determined the need for the reconstruction of the Huntington lift: station, adjacent to the Golf Road right of way, west of Hunt Club Drive and east of the entrance drive of Trinity United Methodist Church. The existing station was a prefabricated Smith and Loveless style wet well / dry well arrangement with primary mechanical and electrical equipment located in the buried steel dry well. Steel deterioration or other age. factors had compromised the operation of the pump station, leading to emergency flooding and bypass situations. This station is in continuous operation, pumping sanitary flows from a separate sanitary sewer basin made up primarily of multi-family properties with some commercial and single-family properties.

The design capacity of the Huntington lift station was 1,200 gpm at 30' (est.)gpm maximum, consequently the lift station came to the end of its useful life. The Village selected Ciorba Group to perform preliminary engineering, final design, and construction observation of the replacement lift station.

The proposed improvement included the conversion of the existing station to a duplex submersible pump station including valve vaults, meter vaults, and ground level controls in a traffic box enclosure. Since the Village proposed to use the TOPS system, a new pre-fabricated wet well was required The alternative approach was to install a pre-fabricated TOPS base into the floor of the existing wet well. However, due to the existing large diameter (10') of the basin; the 45 year old age of the wet well; and the need to continue pumping during construction, a TOPS base retro-fit was not utilized, SCADA integration was not part of the scope but was a parallel effort by the Village's system integrator. Ciorba coordinated with / supervised the system integrator to ensure the full system improvements were completed at the same time.

An MWRD WMO permit and an IEPA construction permit were required. An IDOT utility permit was also required for work within the Golf Road right of way.

LOCATION

Mourit Prospect, IL

CHENT

Village of Mount Prospect

CONTACT

Mr. Casey R. Botterman Water/Sewer Division Foreman 847, 879,5640

CONSTRUCTION COST

\$835,000

PROJECT TEAM

Resident Engineer
Luke Mattson, PE
Electrical Engineer
Joe Vondra, PE, LC
Water Resources Engineer
Jingyun Sun, PE, CEM
QA/QC Engineer
Tany Wolff RE, CEM

SCOPE OF SERVICE

- Preliminary Engineering
- ▶ Final Design
- Construction Observation

Lift station type: Sanitary Sewer Duplex Submersible Lift Station Lift station capacity: 1,477 GPM @ 40' TDH 2 x 20 HP Pumps Ciorba Group offered value to the Village of Mount Prospect by permitting an increase in pump horsepower, thereby allowing the system to accommodate additional infiltration and inflow. The design also added flow monitoring and station bypass capabilities.



Golfview Lift Station



PROJECT DESCRIPTION

Ciorba provided the design of a duplex submersible lift station to serve a 240 acre residential and commercial area. The design capacity of the lift station is 2,800 gpm maximum in order to handle peak wet weather flows. The project consisted of converting an existing well / dry well station into a submersible station with ground level bypass. Improvements included the construction of a new well well, and full mechanical,

electrical, and controls installation on the site. Services include the preparation of plans and specifications; construction cost estimation; bid documents; permitting; collecting construction bids and making recommendations to the client.

Ciorba Group also provided construction engineering services for the Village.

LOCATION

Buffalo Grove IL

CLIENT

Village of Buffalo Grove

CONTACT

Mike Skibbe Director of Public Works 847 459 2523

CONSTRUCTION COST

\$820,000

PROJECT TEAM

Project Manager/Project Engineer
Resident Engineer
Luke Mattson, PE
Electrical Engineer
Joseph Vondra, PE, LC
Water Resources Engineer
Jingyun Sun, PE, CFM
QC/QA Engineer

SCOPE OF SERVICE

- Preliminary Engineering
- Design Engineering
- ▶ Construction Observation

Lift station type: Sanitary Sewer Duplex Submersibl Lift station capacity: 1,300 GPM @ 82' TDF 2 x 50 HP Pumps Ciorba Group offered value to the Village of Buffalo Grove by designing multiple bypass options upstream and downstream of the lift station. Ciorba Group also offered consistency in design to the Camelot Lift Station which was assessed, designed, and managed during construction by Ciorba Group.



Cambridge Lift Station Reconstruction



PROJECT DESCRIPTION

Ciorba is providing preliminary engineering, final design and construction engineering, including the impact of new MWRD permitting requirements, on the replacement design of two existing lift stations in a historically shared basin. The study resulted in the proposed consolidation of the basin for service by a single lift station. Ciorba studied the basin with smoke testing and flow monitoring to identify sources of infiltration and inflow that could negatively impact, httpre operations. Detailed design was completed for the new duplex submersible station and force main for construction in 2022. Ciorba Group offered value to the Village of Buffalo Grove by

identifying an improvement alternative that minimizes City maintenance and operational costs by reducing a lift station.

The project scope was expanded to include the design of an expanded detention pond and runoff volume control facility to accommodate a planned future development adjacent to the lift station site. Extensive permitting coordination was necessary with MWRD to obtain the Watershed Management Ordining permit for this multifaceted project.

Ciorba is currently providing construction observation services.

LOCATION

Buffalo Grove II

CHEN

Village of Buffalo Grove

CONTACT

Mr. Kyle Johnson, PE, CFM Civil Engineer 847,459,2523

CONSTRUCTION COST

\$2.4 million (est.)

PROJECT TEAM

Luke Mattson, PE
Electrical Engineer
Joseph Vondra, PE, LC
QC/QA Engineer
Tony Wolff, PE, CFM
Water Resources Engineer

SCOPE OF SERVICE

- Preliminary Engineering
- Final Design

Lift station type: Sanitary Sewer Duplex Submersible Lift Station Lift station capacity: 840 GPM @ 55' TDH 2 x 25 HP Pumps

Ciorba Group offered value to the Village of Buffalo Grove by identifying an improvement alternative that minimizes Village maintenance and operational costs by reducing a lift station.



Cambria Lift Station Rehabilitation



PROJECT DESCRIPTION

The Village of Lombard determined the that the Cambria Lift Station required a complete rehabilitation due to the age of equipment and deterioration of existing structures. While at another firm, Katrina (Ballado) Lopez prepared the design drawings and contract documents for the project.

The project was broken up into two projects. The first project was to rehabilitate an existing 8ft diameter manhole located upstream of the station. The Village requested that the structure be lined and by-pass suction piping/connection be installed ahead of the station rehabilitation project. This would assist with reducing clogging in the structure; temporary by-pass operations as the station while it was off-line for an extended period of time; and, by providing additional by-pass connections at another structure to eliminate temporary piping routed above grade to a manhole located at the intersection of Westmore-Meyers Rd and Wilson Rd.

The second project was to rehabilitate the lift station. Design considerations for the second project were proximity/depth of the wet well structure adjacent to existing town homes, and limited working space for contractors. The lift station is located within a 40ft easement, approximately 15ft west of a town home in the Cambria Subdivision (see above project photo). The existing 10ft diameter x 33ft deep

steel wet wellhad to be reused to minimize impact to home foundations by installing a new wet well structure. For this reason the Village requested that wet well lining options be researched and presented. A comparison matrix was prepared to assess structural and non-structural lining options, life expectancy and cost for each type of lining system. During construction the steel structure was lined with a 9.5ft diameter fiberglass pipe.

Additional improvements to the station consisted of three new 45 Hp submersible type pumps, 9ftx9ft precast concrete valve vault, flow metering manhole, air/vacuum valve manhole, 200A-277/480V, 3-phase pump controller, above grade pump cable junction boxes, manual transfer switch, additional by-pass pumping manholes, and repaving the asphalt drive.

Katrina was also able to obtain Com Ed energy incentives for reduction in power consumption at the station by installing VFD's for each pump.

Katrina assisted the Village in the bidding process and construction engineering.

The project was completed with municipal funds

LOCATION

Lombard, IL

CLIENT

Village of Lombard

CONTACT

Mr. Luke Sharp Water Treatment and Wastewater Pumping Supervisor

CONSTRUCTION COST

\$1 Millior

DATES

2019

PROJECT TEAM

Project Engineer Katrina (Ballado) Lopez, PE, LEED AP

SCOPE OF SERVICE

▶ Final Design









Fairview Lift Station Improvements



PROJECT DESCRIPTION

The Village of Lombard requested that contract documenets be prepred for improvements to their Fairview Lift Station based on a Preliminary Design Memo prepared in 2013. It was determined that the existing pumps were operating outside of the best efficiency points, which resulted in damage to pumps and fracturing base elbows. While at another firm, Katrina (Ballado) Lopez prepared design drawings and contract documents for the project

During the design it was determined that station improvements should consist of (2) 20HP low flow pumps that would operate under normal flow conditions, and (2) 85 HP main pumps, that under larger flow conditions, which included a large amount of infiltration during storm events. One main pump was provided as a backup pump based on the existing MWRD permit. The low flow pumps were provided with VFD's and main pumps with reduced voltage motor starters to be better adjust the pumps due to varying flow conditions.

It was also determined to minimize impacts to the site that the existing 10ft x 12ft x 30ft deep wet well structures would be lined and reused to house the main pumps. All existing structutes and electrical equipment would be raised 1.5ft above existing finish grade due to flooding issues on the site in 2011, where the station was submerged under 1ft of food water during a large storm event.

The village negotiated a 10ft permanent easement and 5ft temporary easement with the park district as part of the project to increase the site for the proposed improvements.

Additional improvements to the station included a 7ft x 7ft x 30ft deep concrete structure to house low flow pumps, a 6ft x 6ft vault (for low flow pump valves), 350kW natural gas generator and natural gas service, gate valve in manhole structure to isolate the station from the forcemain, a flow meter manhole, and regrading the site.

Electrical improvements consisted of a new 600A, 277/480V, 3-phase electric service, pump controller, main disconnect, ATS, MTS, portable generator receptacle and site lighting. Katrina assisted the Village in the bidding process as well as shop drawing review during construction. This project was completed with municipal funds.

LOCATION

Lombard, I

CLIENT

Village of Lombard

CONTACT

Water Treatmenet and Wasterwater Pumping Supervisor

CONSTRUCTION COST

25 Millio

DATES

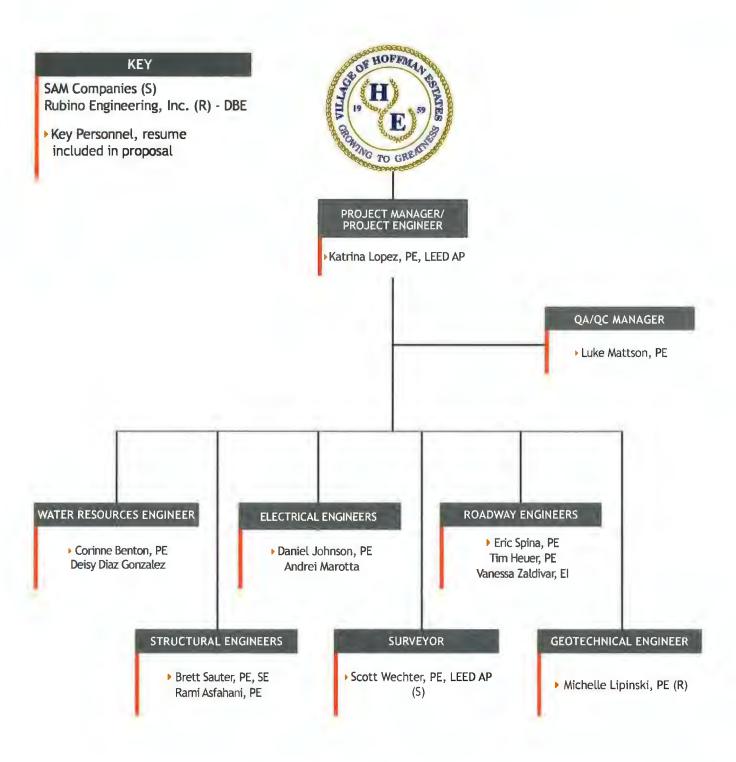
PROJECT TEAM

Project Engineer
Katrina (Ballado) Lopez, PE, LEED, AP

SCOPE OF SERVICE

▶ Final Design









EDUCATION

Bachelor of Science Civil Engineering
University of Illinois at Urbana-Champaign

Master of Science Mechanical Engineering
University of Illinois at Chicago

PROFESSIONAL REGISTRATION

Professional Engineer Illinois #062-061610

CERTIFICATION

U.S. Green Building Council

EXPERTISE

Pump Stations Lift Stations Construction Observation

*Completed while employed at another company

Katrina Lopez, PE, LEED AP

Project Manager/Project Engineer

ABOUT KATRINA

Ms. Lopez is a Civil/Mechanical Engineer with experience in a wide array of design and construction projects encompassing civil/mechanical/electrical applications. Experience includes assisting in the design of roadway/site lighting, wastewater facilities, sanitary lift stations, potable water pump stations, and site irrigation. Responsibilities include determining initial design criteria, evaluating design scenarios, creating design submittals, creating exhibits, preparation of construction plan drawings and documents, developing cost estimates, shop drawing review and construction observation.

REPRESENTATIVE PROJECT EXPERIENCE

Cambria Lift Station Rehabilitation, Village of Lombard.*

Project Engineer responsible for the design of the rehabilitation of 7 cfs lift station built in 1991. The shell of the existing station had to be preserved since the station was located within 15ft of residential townhomes. Different types of lining and structural products were analyzed and presented to the Village for their consideration. The station improvements consisted of lining the wet well with fiberglass lining system, replacing (3) 45hp submersible type pumps, installing new valves/by pass connections in a 9'x9' valve precast concrete vault, a new flow meter and air/vacuum valve manhole, a new 200A pump controller and VFD's. With the incorporation of VFD's at the station, the Village was eligible to receive energy incentives from ComEd for reducing the station's motor loads on the electrical grid. CBBEL completed and submitted necessary application forms, calculations and exhibits to ComEd for the Village to receive energy incentives.

Fairview Lift Station, Village of Lombard.*

Project Engineer responsible for the design of the rehabilitation of a regional sewage lift station including new duplex high flow pump (1500 gpm) and duplex low flow (500 gpm) pumps, new pump controls, 250 kw natural gas standby generator, SCADA integration, reuse/recondition existing concrete wet well, new flow meter, check and isolation valves and new air/vacuum valve on existing 9000 ft. PVC forcemain, pump controller and VFD's. With the incorporation of VFD's at the station the Village was eligible to receive energy incentives from Com Ed, for reducing the station's motor loads on the electrical grid. CBBEL completed and submitted necessary application forms, calculations and exhibits to Com Ed for the Village to receive energy incentives.

Generator Replacement at the Police Station and Charles Lane Pump Station, Village of Lombard.*

Project Manager for generator replacement at the Village Police Station which consisted of removal of an existing 300kW diesel generator located within the police station and installing a new 300kW diesel generator outside of the building. This work included analyzing generator size based on current and future electrical loads, removal of existing generator (including diesel tank, muffler mounted to the roof of the police station and duct work), extending existing conduit and cables to connect the proposed generator to existing building power/controls and new load bank docking station. The generator replacement at Charles Lane Pump Station consisted of removal of an existing temporary 150kW diesel portable generator and installing a new permanent 150kW natural gas generator. This work included modifications to existing pump controller for the permanent generator, new gas service and removing and replacing existing portable generator receptacle.

Salt Storage Facility Improvements, Village of Oak Brook.*

Project Engineer responsible for the MEP design for a 11,000 SF salt barn and site lighting, electrical design consisted of a water service for salt barn fire protection system, electrical/lighting/heating for the salt barn MEP Room, and salt storage area high bay lighting. Site electrical included parking lot lighting mounted to the salt barn/lean-to structure and vehicle entrance gate operator.



Salt Barn Facility, City of West Chicago.*

Project Engineer responsible for the MEP design for a 7-ton salt barn and site lighting. Electrical design for the salt barn consisted of an electrical and high bay lighting for salt storage area, parking lot lighting mounted to the salt barn and vehicle entrance gate operator.

Project Heartland, City of Westfield, IN.*

Project Engineer responsible for the design of a new 200 gpm lift station that serves a new two-story facility for Abbott. The station consisted of new fiberglass package station with two 200 gpm submersible type pumps, valve vault with by-pass connection, pump controller, and 1500 ft of forcemain with tracer wire system.

Addison Creek Reservoir, Metropolitan Water Reclamation District of Greater Chicago.*

Project Engineer responsible for the design of a 63 cfs storm water pump station. The station is used to dewater a proposed 600 ac-ft flood control reservoir that serves to temporarily store Addison Creek floodwaters during a significant rain event. The pump station is located at the bottom of the reservoir and pumps water to a discharge structure located the top of the reservoir. Storm water is discharged to the Addison Creek by gravity through a 48" steel pipe. The proposed pump station houses 6 submersible type centrifugal pumps to pump the reservoir down in less than 7 days. Four main pumps are used to dewater the reservoir, and two low pumps are provided to remove ground/rainwater from the reservoir. Other station components included in the design were a 30'x12' precast concrete control building, 12'x36' discharge chamber, HDPE bar screen at the intake of the pump station, creek level monitoring structure, water service connection to clean debris from the pump station bar screens and grating, site lighting, electric and telephone services. Construction is expected to be completed in 2022.

Little Eagle Creek Levee - Segment LEC-04 Rehabilitation, City of Indianapolis, IN.*

Project Engineer responsible for the design of a 35 cfs storm water pump station to replace existing gravity structures. The new station was designed with a weir structure located upstream of the station to allow storm water to be routed to the Little Eagle Creek by a gravity connection, however during 100yr rainfall event will divert storm water to the pump station to be pumped into the creek. The proposed pump station houses 4 submersible type centrifugal pumps in a 19ft x 10ft concrete structure. Other station components included in the design were a 10ft x 10ft weir structure, coring the existing levee wall for discharge piping, 100 kW natural gas standby generator, pump station controller, electric and natural gas services. This project required permitting and coordination with the following entities: Citizen's Energy Group and Indianapolis Power & Light Company.

Main Pump Station - Pump #3 and #4 Replacement, Village of Lincolnwood.*

Project Engineer responsible for designing replacement of one existing 40hp and 60hp horizontal split case pumps. The pumps were replaced with two 60hp pumps operating on VFD's. These improvements allowed the new pumps to operate more efficiently to meet the Village's water demands, while minimize motor electrical loads. The existing MCC was modified to remove existing soft starters, connect new pumps and VFD's to existing motor starters. This work included modifying existing SCADA set points for the system to integrate the new pumps, as well as improve overall operation.

IL Route 53 Storm Water Pump Station, Village of Lombard.*

Project engineer responsible for the design of a 170 cfs storm water pump station to replace an existing 50 cfs storm water station. The new station would be connected to the existing station, which would act as a detention structure, slowly releasing storm water above grade over existing wetlands, to the East Branch of the DuPage River. The design consisted of rehabbing the existing wet well structure, lining 700 ft of 72" RCP to act as pressurized forcemain between the two stations, and a proposed 37'x33' underground pump station. The proposed pump station housed 5 axial flow submersible propeller pumps and 2 submersible type centrifugal pumps. Other station components included in the design were a 650 kW diesel fuel standby generator, a 30'x12' precast concrete control building, 9'x33' above grade discharge chamber, a 10'x10' pressurized junction chamber, site storm water detention, landscaping, pavement, watermain, sanitary sewer, storm sewer, and electric service. This project required permitting and coordination with the following entities: DuPage County Stormwater Management, IEPA, ISTHA, IDOT, Forest Preserve District of DuPage County, Com Ed, Comcast, Nicor, and Milton Township.

Plant No. 2 Water Works Improvements, Village of Darien.*

Project Engineer responsible for assisting with vehicle storage garage design & preparation of contract drawings. Project included the demolition of existing 250,000 gallon high tank and combined office/vehicle storage garage; construction of new 1,500,000 gallon silo water storage tank; improvements to existing potable water pump station; and construction of a new tenant/vehicle storage garage. Upgrades to water pump station consisted of upgrading pump motors, addition of variable frequency drives and connecting existing piping to new silo tank.

75th Street Pump Station Potable Water Works Improvements, Village of Darien.*

Assisted in the design and plan preparation for the addition of two new 25 Hp potable water booster type pumping units, new pump controls, variable frequency drives, electrical service and additional piping and valving to an existing subsurface structure.

*Completed while employed at another company





EDUCATION

Bachelor of Science Mechanical Engineering University of Illinois

Bachelor of Science Physics

Augustana College

PROFESSIONAL REGISTRATION

Professional Engineer

Illinois #062-059493

Indiana #PEI1600626

Wisconsin #40501-6

Namibia # PE 29034

PROFESSIONAL AFFILIATIONS

American Public Works Association (APWA)
American Water Works Association (AWWA)

EXPERTISE

Lift Stations

Sanitary Sewers

Pump Stations

Water Main

Drainage Studies and Design

Construction Observation

Luke Mattson, PE

QA/QC Engineer

ABOUT LUKE

Luke has over 20 years of engineering experience specializing in water resources infrastructure improvement projects, including potable water, sanitary, and drainage design and hydraulic analysis for municipal governmental agencies. Luke has designed, managed, and inspected over 25 lift stations since joining Ciorba Group in 2013.

REPRESENTATIVE PROJECT EXPERIENCE

Country Club Lift Station Reconstruction, City of St. Charles

Project Manager / Project Engineer / Resident Engineer for the reconstruction of this duplex sanitary lift station (105 GPM - 2 x 5 hp submersible pumps)

Cambridge Lift Station Reconstruction, Village of Buffalo Grove

Project Manager / Project Engineer / Resident Engineerfor the reconstruction of this duplex sanitary lift station (840 GPM - 2 x 25 hp submersible pumps)

Chatham Lift Station Reconstruction, Village of Buffalo Grove

Project Manager / Project Engineer / Resident Engineerfor the reconstruction of this duplex sanitary lift station (1,800 GPM – 2 x 20 hp submersible pumps)

Fairview Lift Station Reconstruction, Village of Mount Prospect

Project Manager / Project Engineer / Resident Engineer for the reconstruction of this duplex sanitary lift station (1,000 GPM – 2 x 15 hp submersible pumps)

Huntington Lift Station Reconstruction, Village of Mount Prospect

Project Manager / Project Engineer / Resident Engineer for the assessment, design, and construction management for the reconstruction of this duplex sanitary lift station (1,477 GPM - 2 x 20 hp submersible pumps)

Golfview Lift Station Reconstruction, Village of Buffalo Grove

Project Manager / Project Engineer / Resident Engineer for the design and construction management for the reconstruction of this duplex sanitary lift station (1,300 GPM – 2 x 50 hp submersible pumps)

Walnut Lift Station Reconstruction, Village of Schaumburg

Project Manager / Project Engineer for the design and construction management for the reconstruction of this triplex sanitary lift station (1,725 GPM – 3 x 70 hp submersible pumps)

South Wheeling Road Stormwater Lift Station, Village of Wheeling

Project Engineer for the design for the new construction of this duplex dewatering lift station (1,500 GPM – 2 x 15 hp submersible pumps)

North Shore Community Bank Lift Station, Village of Wilmette

Project Manager / Resident Engineer for the engineering plan and submittal review and construction inspection of this privately developed duplex submersible stormwater lift station (270 GPM – 2 x 5 hp submersible pumps)

Bode Road Lift Station Reconstruction, Village of Schaumburg

Project Manager / Resident Engineer for the retrofit design and construction inspection of this duplex sanitary lift station (750 GPM – 2 x 20 hp submersible pumps)

Camelot Lift Station Reconstruction, Village of Buffalo Grove

Project Manager for the design for the reconstruction of this duplex sanitary lift station (1,000 GPM -2×25 hp submersible pumps)

Louis Street Relief Station, Village of Mount Prospect

Project Manager / Project Engineer / Resident Engineer for the design and construction management for the reconstruction of this duplex sanitary relief station (225 GPM – 2 x 3 hp submersible pumps)





EDUCATION

Bachelor of Science Environmental Engineering

Georgia Institute of Technology

PROFESSIONAL REGISTRATION

Professional Engineer Illinois #062.073419

EXPERTISE

Water Resources Infrastructure Improvement Design

Corinne Benton, PE

Water Resources Engineer

ABOUT CORINE

Corinne is a key design team member of Ciorba's Water Resources Department. She has assisted on a variety of projects, including the Country Club lift station in St. Charles, and Chatham / Cambridge Lift Stations in Buffalo Grove. Corinne's expertise also includes sanitary sewer and water main design.

REPRESENTATIVE PROJECT EXPERIENCE

Fairview Lift Station Reconstruction, Village of Mount Prospect

Design Engineer for the reconstruction of this duplex sanitary lift station (1,000 GPM - 2 x 15 hp submersible pumps)

Country Club Lift Station Reconstruction, City of St. Charles

Design Engineer for the reconstruction of this duplex sanitary lift station (105 GPM - 2 x 5 hp submersible pumps)

Cambridge Lift Station Reconstruction, Village of Buffalo Grove

Design Engineer for the reconstruction of this duplex sanitary lift station (840 GPM - 2×25 hp submersible pumps)

Chatham Lift Station Reconstruction, Village of Buffalo Grove

Design Engineer for the reconstruction of this duplex sanitary lift station (1,800 GPM $-2 \times 20 \text{ hp}$ submersible pumps)

Sunset Drive / Brookview Lane Sanitary Sewer Design.

Water Resources Engineer for new sanitary sewer service to the residents on Sunset Drive and Brookview Lane. The existing system is comprised of private septic systems, and this project will provide improved service to the 21 properties in this neighborhood. The proposed 2,000-foot, 8-inch sanitary sewer system will provide a more reliable, less maintenance-intensive, long term solution for these residents.

Green Bay Road / Brier Street Water Main Replacement, Village of Kenilworth

Water Resources Engineer for design of 5,600 feet of 8" directionally drilled and open cut water main in residential areas and in the commercial corridor of Green Bay Road under IDOT jurisdiction.

Arbor Vitae Water Main Improvements, Village of Deerfield.

Water Resources Engineer for the design to replace 3,200 feet of 6-inch water main with 9-inch water main on Arbor Vitae Road and Apple Tree Lane in residential Deerfield. Design includes the crossing of one river with directional drilling technology.

2020 Sewer and Water Program, Village of Streamwood

Resident Project Representative for the Village's 2020 sewer and water program including 350' of 6" residential open cut water main replacement, 5,500' of 8" directionally drilled and open cut water main replacement on Schaumburg Road in Cook County Right of Way, 320' of 21" storm sewer lining, 1,100' of 8" sanitary sewer lining, and 530' of 12" – 21" storm sewer replacement. The project required the transfer of 75 residential water services and compliance with Cook County Highway Permit requirements.

Arbor Drive Water Main Improvements, Phases 1-3 City of Rolling Meadows.

Water Resources Engineer/ Alternate Resident Project Representative for preliminary and final design for the replacement of 4,200 feet of 12-inch water main serving the Arbor Drive Loop residential, commercial, and business properties.

Old Mill Drive and Garden Avenue Water Main Replacement, Village of Palatine

Water Resources Engineer for 4,200 feet of 8" open cut water main in residential areas of Palatine on Old Mill Drive and Garden Avenue.





EDUCATION

Master of Science Civil Engineering
University of Illinois- Chicago

Bachelor of Science Civil Engineering
Valparaiso University

PROFESSIONAL REGISTRATION

Structural Engineer

Illinois #081-006844 (2009)

Professional Engineer

Illinois #062-060429 (2008)

Indiana #11300159 (2013)

Louisiana #40930 (2016)

Michigan #621060664 (2013)

Wisconsin #43430-6 (2014)

CERTIFICATION

FHWA/NHI - Inspection of Fracture Critical Members Course

FHWA/NHI- Safety Inspection of In Service Bridges

IDOT - Element Level Inspection

IDOT – Documentation of Contract Quantities (#10-0563)

IDOT - Program Manager for Bridge Inspection

INDOT - Certified Bridge Inspection Team Leader (IN000483-2019-ATL)

OSHA - Confined Space Training

EXPERTISE

Bridges and Structures Concept / Feasibility Studies Structural Inspection Load Ratings and Condition Reports

PROFESSIONAL AFFILIATIONS

Construction Services

American Council of Engineering Companies

IDOT Bridge Committee

American Society of Civil Engineers

Structural Engineers Association of Illinois

Structural Engineering Institute

Illinois Chapter Past Chair

International Association of Bridge and Structural Engineering

American Railway Engineering and Maintenanceof-Way Association

Brett Sauter, PE, SE

Structural Engineer

ABOUT BRETT

Brett Sauter leads Ciorba's Structural Group, and has over 20 years of experience including concept studies and final design for bridge projects of various levels of complexity for the Illinois Department of Transportation, the Indiana Department of Transportation, the Illinois Tollway and various municipalities and counties. His design experience includes post-tensioned and prestressed concrete structures, long steel plate girder bridges, railroad bridges and bridges with complex geometry and staging. Brett has the proven ability to positively interact with other disciplines such as roadway, water resources and with owners to define the project constraints, to prepare accurate project scopes and cost estimates.

REPRESENTATIVE PROJECT EXPERIENCE

Camelot Lift Station, Village of Buffalo Grove.

Structural Engineer for the structural design elements of a duplex submersible lift station to serve 680 residential properties. The design capacity of the lift station is 1,200 gpm maximum in order to handle peak wet weather flows. The project consisted of converting an existing wet well / dry well station into a submersible station with ground level bypass. Improvements included the demolition of the existing dry well, conversion of the wet well for a duplex pump system, and full mechanical, electrical, and controls installation on the site. Services include the preparation of plans and specifications; construction cost estimation; bid documents; permitting; collecting construction bids and making recommendations to the client.

Central Reservoir Pump Station Improvements, Village of Oak Park

Structural Engineer for the structural design elements and Resident Engineer during construction for the rehabilitation of the Village's 5.0 MG potable water reservoir. Project improvements included the excavation of embankment over the reservoir; elastomeric coating of the 1 acre roof slab; cleaning and structural repair of the reservoir interior; installation of a new transducer level control system; vault access and flooding alarm installations; pump station discharge header improvements to address existing pump priming issues; maintenance yard layout improvements; retaining wall construction; and park facility reconstruction.

North / South Pump Station Improvements, Village of Oak Park.

Structural Engineer for the structural design elements of the Village's two satellite 2.0 MG reservoir / pump station facilities. Project improvements included a new structural catwalk system for maintenance of suspended discharge header valves and meters; process piping discharge check valves reconstruction; color code painting of piping / conduit systems; electrical modifications; floor and wall coating systems improvements; and structural improvements to access stairwells.

Golfview Lift Station, Village of Buffalo Grove.

Structural Engineer for the structural design elements of a duplex submersible lift station to serve a 240 acre residential and commercial area. The design capacity of the lift station is 2,800 gpm maximum in order to handle peak wet weather flows. The project consisted of converting an existing wet well / dry well station into a submersible station with ground level bypass. Improvements included the construction of a new wet well, and full mechanical, electrical, and controls installation on the site. Services include the preparation of plans and specifications; construction cost estimation; bid documents; permitting; collecting construction bids and making recommendations to the client.

William Street Relief Station, Village of Mount Prospect.

Structural Engineer for the structural design elements of a duplex submersible relief station to protect residential properties from stormwater surcharge from the downstream combined sewer system. The design capacity of the lift station was limited to 70 gpm in order to match the existing permit capacity approved by the Metropolitan Water Reclamation District of Greater Chicago. Improvements included the lining and retrofit of an existing wet well, installation of a new duplex pumps, site electrical, and site controls reconstruction.





EDUCATION

Master of Science in Civil Engineering
University of Illinois at Chicago

Bachelor of Science in Civil EngineeringPortland State University

PROFESSIONAL REGISTRATION

Professional Engineer

Illinois #062-062856 (2010) Indiana# PE12000388 (2020) Oregon #72738PE (2008)

EXPERTISE

Lighting Traffic Signals ITS

PROFESSIONAL AFFILIATIONS

American Society of Civil Engineers
Illuminating Engineering Society
Institute of Transportation Engineers

Daniel T. Johnson, PE

Electrical Engineer

ABOUT DAN

Mr. Johnson has 18 years of experience designing lighting, traffic signal, and ITS installations for projects on local roads, state arterial streets, interstate expressways, and parking lots. These projects were completed for the City of Chicago, municipalities, counties, Illinois Department of Transportation, and the Illinois Tollway.

REPRESENTATIVE PROJECT EXPERIENCE

Melas Park Electrical Upgrades, Village of Mount Prospect.

Electrical Engineer for the design of two permanent cabinets supplying electricity for the Mount Prospect Lions Club Annual Village Festival that occurs each Independence Day at Melas Park. These cabinets provide electricity for all the various food and game tents as well as some of the rides found at the festival. An arc fault study completed by the Village revealed that the existing cabinets were unsafe and needed to be replaced prior to the next event. Design and construction of the new cabinets was completed in five months, including the fabrication of the control cabinets, which are typically a long-lead time item.

80th Avenue Reconstruction, Will County Division of Transportation.

Electrical Engineer assisting in the the preparation of design plans and specifications for the complete replacement of the existing traffic signal installation at the intersection of 80th Avenue with 183rd Street, fiber optic cable relocations for IDOT, new fiber optic cable ducts for Tinley Park, and a new signal installation at the intersection of 80th Avenue with 185th Street. This project also included 1.5 miles of decorative roadway lighting along 80th Avenue and 183rd Street, temporary and permanent roadway lighting along I-80, underpass lighting for the 80th Avenue bridge crossing over along I-80 and site lighting within the Village of Tinley Park's Public Works Facility. STP funding will be used for construction.

Clavey Road Reconstruction, City of Highland Park

Electrical Engineer for the reconstruction of Clavey Road from US 41 to Green Bay Road within the City of Highland Park. The pavement will be reconstructed due to its poor condition but will remain a two lane urban collector street. A new traffic signal installation was designed for the Clavey Road at Green Bay Road intersection. The City's existing 288-fiber was in conflict with the proposed improvements. New ducts were provided and the existing cable was removed and installed in the new duct to mimize cost to the City.

FAI Route 55 (I-55) over IL-53 and Joliet Road, Illinois Department of Transportation, District One.

Lead Electrical Engineer supervising the preparation of design plans and specifications for the relocation of existing roadway lighting and fiber optic facilities to accommodate the widening of the I-55 bridge structures at IL Route 53 and Joliet Road. New underpass lighting was provided for both locations. Temporary and permanent traffic signal improvements were also provided for the intersections at the I-55 Ramps at IL Route 53. ITS improvements included the installation of 3.5 miles of 96-count fiber optic cable and associated duct, handholes, and splices. The fiber optic cable will be relocated prior to the bridge work to minimize cost and required service interruption for splicing.

Washington Street over West Branch of DuPage River, City of Naperville

Signal Engineer for the final design of the traffic signal modernization at the intersection of Washington Street and Aurora Avenue as a result of the replacement of the Washington Street Bridge over the West Branch of the DuPage River in downtown Naperville. This project also included temporary signals at the intersection of Washington Street and Chicago Avenue and interconnection work at 4 additional signals. Mr. Johnson also served as Lighting Engineer for decorative roadway installed along two blocks of Washington Street.





EDUCATION

Bachelor of Science Civil Engineering Illinois Institute of Technology

PROFESSIONAL REGISTRATION

Professional Engineer
Illinois #062-065508 (2013)
Indiana # PE1100742 (2018)

CERTIFICATION

APWA - Certified Public Infrastructure Inspector

LCSMC - Designated Erosion Control Inspector IDOT - Documentation of Contract Quantities

EXPERTISE

Arterial Streets
Highway
Municipal Streets
Parking Lots
Studies and Reports
Construction Observation

Eric Spina, PE

Roadway Engineer

ABOUT ERIC

Mr. Spina has over 16 years of experience in preliminary, design, and construction engineering services for infrastructure improvement projects. His expertise includes roadway geometric studies, intersection design studies, capacity analysis, and crash data analysis for improvements to arterial streets and local roads. For design engineering, Eric specializes in MOT design and has lead teams in the plan preparation for improvements to expressways and arterial streets. He has also supervised the plan preparation for annual street improvement programs for local agencies. Eric has obtained permits from IDOT, Counties, and municipalities for his projects.

REPRESENTATIVE PROJECT EXPERIENCE

McHenry Avenue Rehabilitation, City of Crystal Lake.

Project Engineer preparing the plans and specifications for the rehabilitation of McHenry Avenue. Work included pavement milling and patching, curb and gutter repairs, bituminois resurfacing and replacing all sidewalks at intersections for ADA compliance. Additional improvements included 1500 feet of new bicycle/pedestrian path and storm sewer installation to alleviate localized flooding. STP funds were use to construct the improvements so all services were completed in accordance with IDOT BLR&S requirements.

Clavey Road Reconstruction, City of Highland Park

Project Engineer for the final design for the reconstruction of Clavey Road from US 41 to Green Bay Road. STP funding is being used for construction. The pavement will be reconstructed due to its poor condition but will remain a two lane urban collector street. The roadway alignment will be shifted two feet to the north to accomodate a new multi use path within the south side parkway for the entire length of the project. The path will be designed to minimize tree removal while meeting ADA and AASHTO standards for horizontal alignment. A new roadway bridge with pedestrian facilities will be constructed to replace the existing roadway and pedestrian structures over the Skokie River. Other improvements include a new traffic signal at Green Bay Road, a new storm sewer system and a new water main the length of the project.

Austin Avenue Improvements, Village of Morton Grove.

Project Engineer for the preparation of design plans, specifications, and cost estimates to rehabilitate/ reconstruct Austin Avenue from Oakton Street to Lincoln Avenue. Austin Avenue is a two lane urban road with parking lanes on both sides of the street. Improvements consisted of reconstructing the parking lanes, rehabilitating the two travel lanes, replacing curb and gutter the length of the project, storm sewer improvements and replacing sidewalk to conform to ADA requirements. Capacity and safety were improved at Austin Avenue/Oakton Street intersection by expanding the corner radii and complete replacement of the existing traffic signal installation. Plans and specifications were prepared in accordance with IDOT BLR&S requirements since federal STP funds were used for construction of improvements.

80th Avenue Reconstruction, Will County Division of Transportation.

Project Engineer supervising final design engineering for the reconstruction of 80th Avenue from 191st Street to 183rd Street. STP funding is being used for construction. Road will be widened from a two lane rural section to a four lane urban section. Improvements including new turn lanes will be made to the intersections with 189th Street, 186th Street, 185th Street, and 183rd Street. The existing two lane bridge carrying 80th Avenue over I-80 will be replaced with a new four lane structure. New structures were also designed for the 80th Avenure crossing over Union Ditch and a Union Ditch tributary. Other improvements included designing traffic signals, street lighting, water main, storm sewer system, a multi-use path, and landscaping along the corridor. Eric obtained approval from both Will and Cook counties.





Scott Wechter, PE, LEED, AP

Project Engineer

Mr. Wechter is a civil engineer with experience ranging from preliminary to final engineering; through project plan approval and final acceptance by governing authorities. He has broad experience that includes the development of up to 25 million dollar project budgets and supervision of plan execution, value engineering, and adaptation of the engineering process with the use of information technology. Mr. Wechter's current responsibilities include assisting in the professional review of SAM's SUE work for projects in Illinois.

Project Experience

I-190 Terminal-Cumberland - 3D, O'Hare Airport Chicago, IL

As PE, Mr. Wechter and team completed a Quality Level B (QL-B) SUE investigation. SAM was issued 4 Work Orders (151, 152, 153, & 161) with work beginning in April of 2020 and final delivery of all works orders in November 2020. With more than 213,000 Lineal Feet of utilities across a 3-mile corridor the density required intense review of existing records (QL-D) and above-ground appurtenances (QL-C) to correlate and confirm existing facilities such as FAA Fiber and Electric, CTA Electric and water mains measuring up to 90" in diameter. SAM staff implemented a systematic approach to records research, utility designating, surveying & mapping and QA/QC to ensure all existing facilities were properly detailed in both 2D and 3D deliverable datasets. SAM was able to complete this high-profile project on time and on budget while simultaneously handling multiple Work Orders for IDOT.

PTB 161 Item 027 WO 004 & 005, FAP 646 (IL 40) Knoxville Avenue, IDOT District 4

As PE, Mr. Wechter provided final QA review of the QL-D, C and B SUE services for the design project. SAM completed records research and field surveying to identify above ground appurtenances and designated approx. 106,000 L.F. of underground utilities using a full suite of geophysical equipment and included work to locate underground anomalies (abandoned rail) with GPR. SAM also completed the mapping of storm drainage structures and overhead utility crossings. The project utilities were modeled to conform the IDOT CADD standards and presented in both 2D and 3D formats. While adhering to the DBE requirement, SAM utilized and coordinated with Millennia as our survey consultant.

PTB 180 Item 004 WO 128 Oakton Street at IL 72 Higgins Road 3D, IDOT District 1

As SAM's PE, Mr. Wechter provided final QA review of the QL-D, C and B utility investigations for the improvement project. SAM completed records research, field surveying to identify above ground appurtenances and designated approx. 100,000 L.F. of underground utilities and mapping using a suite of geophysical tools. SAM also completed terrestrial scanning of storm drainage structures and overhead electrical utilities. All utilities were then modeled to conform the IDOT CADD standards and presented in both 2D and 3D formats. While adhering to the DBE requirement, SAM utilized and coordinated with CWA as our survey consultant.

1-294: Wolf Rd and Franklin Ave., Franklin Park, IL, Illinois Tollway

As SAM's Project Engineer for this Work Order, Scott provided final QA review of the Tollway Project 1-17-4302. SAM provided 30 test holes in support of the design of this project to verify the presence of casings on crossing utilities.





MICHELLE A. LIPINSKI, PE PRESIDENT

Education

Bachelor of Science in Civil Engineering, University of Illinois Urbana-Champaign, 2003

Work Experience

Professional Service Industries, Inc. - January 26, 2004 to August 31, 2009 (Staff Engineer to Branch Manager)

Rubino Engineering, Inc. - September 1, 2009 to present (President)

Certifications/Registrations / Technical Training

- Professional Engineer, Illinois No. 062-061241
- OSHA 10, IDOT Training: HMA Level 1, HMA Level 2, HMA Level 2, PCC Level 1, PCC Level 2, PCC Level 3, S-33, Documentation of Contract Quantities, ACI Aggregate, ACI Strength, ACI Field Level 1

Affiliations / Memberships

APWA - American Public Works Association

Chapter Membership Co-Chair – 2009 – 2014 / Young Professionals Co-Chair 2012 - Present Fox Valley Branch President – 2018

ASCE - American Society of Civil Engineers

Secretary, Vice Chair, Chair - Urban Planning and Development Group - 2009 - 2013, 2015

NSPE - National Society of Professional Engineers, DuKane Chapter of Illinois

Vice President - 2007 - 2010 / President - 2010 - 2011

Professional Experience - 16 Years Geotechnical Engineering / Construction Material Testing

As President and sole owner of Rubino Engineering, Inc., Michelle prepares and reviews geotechnical engineering reports as well as performs geotechnical and construction materials testing cost estimation. Specific experience includes shallow and deep foundation design for structures, earth retention structures soil analysis, pavement reconstruction and widening including subgrade stability, slope stability analysis and recommendations for sites with unsuitable or organic soils, and soil modification.

Representative Project Management Experience - Geotechnical Utility Projects

- 2023 Schaumburg Water Main Improvements Chastain (2022)
- Adams & Van Buren Water Main Improvements, Oswego Village of Oswego (2022)
- St. Charles Eastern Interceptor Sewer Engineering Enterprises, Inc (2021)
- 2022 Watermain Replacement Project, Mt. Prospect Thomas Engineering Group (2021)
- 2021 Watermain and Resurfacing, Hanover Park, IL Village of Hanover Park (2021)
- Park Street Storm Sewer Improvements, Rolling Meadows Baxter & Woodman (2021)
- Huntley Watermain Replacement CBBEL (2021)
- IL Rt 47 Water Main Replacement, Huntley CBBEL (2020)
- Virginia & Patricia Water Main Replacement, Elmhurst Gonzalez (2020)
- Four Lake Water Main Improvements, Lisle Strand (2020)
- VOMP 2020 Water Main Project, Mt. Prospect Burns and McDonnell (2020)
- 1st Avenue Storm Sewer Improvements, Maywood Ciorba Group (2019)
- Water Delivery, Homewood, IL Burns & McDonnell (2019)
- Green Alleyways, Broadview Edwin Hancock Engineering Co. (2019)
- Elgin Alleyways Burns and McDonnell (2019)



SCOPE OF SERVICES WITH HOURS AND FEES

Ciorba Group proposes the following fees to and complete Engineering Design, Preparation of Plans and Bid Documents for the Pfizer Sanitary Sewer Lift Station Rehabilitation/Replacement Project.

ENGINEERING SERVICES

Total Fee:	\$65,493.06
Rubino Geotechnical Services Costs:	\$ 6,750.00
Ciorba In-House Direct Costs:	\$ 210.60
Ciorba Labor & Overhead Costs:	\$ 58,532.46

The tables on the following pages provide detailed hours by task and direct cost estimates broken out by task as well as current staff hourly rates.

OPTIONAL SERVICES

The design fee excludes third-party flow analysis, utility survey and wetland delineation (see design considerations for additional information).

Third-party flow testing is listed as an optional service and would add \$16,900 to the fee summarized above.

A subsurface utility survey is listed as an optional service and would add \$7,185 to the fee summarized above.

SCOPE OF SERVICES WITH HOURS BY TASK

Task No. and Description	Manhours	Direct Costs	Services By Others	Total
Task 1 - Data Collection and Kick-off Meeting	6			\$ 1,264.08
Task 2 - Project Coordination and Meetings	12	\$210.60		\$ 2,233.31
Task 3 - Review and Modeling of Existing Station	36		\$6,750.00	\$ 11,247.79
Task 4 - Preliminary Design Report	16			\$ 3,101.49
Task 5 - Pre-Final Plans and Specifications	215			\$ 31,279.27
Task 6 - Final Plans and Specifications	78			\$ 12,015.48
Task 7 - Bid Plans and Document	28			\$ 4,351.64
	\$65,493.06			



SCOPE OF SERVICES WITH HOURS AND FEES

HOURLY RATES

Classification	Total
Project Manager	\$193.84
QA/QC Manager	\$219.13
Lead Water Resources Engineer	\$117.99
Water Resources Engineer	\$ 96.94
Lead Structural Engineer	\$235.98
Structural Engineer	\$137.66
Lead Electrical Engineer	\$136.25
Electrical Engineer	\$ 99.73
Roadway Engineer II	\$140.47
Roadway Engineer I	\$ 96.64



SUGGESTED TASKS

Ciorba Group proposes the following tasks for the Pfizer Sanitary Sewer Lift Station Rehabilitation/Replacement Project. These tasks are based on the information provided in the RFP and will be modified as required based on the kick-off meeting with Village personnel.

TASK 1 - DATA COLLECTION AND KICK-OFF MEETING

Ciorba will meet with Village personnel to discuss design objectives and collect all available data which include the following:

- MWRD Permits
- Lift station design/record drawings
- Lift station improvement project drawings
- Existing right-of-way drawings or plats of survey
- Adjacent development plans
- GIS information of Village's sanitary sewer tributary to the station
- Preferred equipment

Project constraints, permitting and construction challenges will be identified and discussed at the meeting. Ciorba will prepare meeting notes for the meeting and distribute to the meeting attendees.

TASK 2 - PROJECT COORDINATION AND MEETINGS

Ciorba has included the following coordination meetings based on the RFP as well as coordination with the proposed development project:

- One (1) meeting with Village and/or Developer to discuss any utility or design impacts
- One (1) meeting with Com Ed
- Two (2) meetings with Village Staff to review preliminary design report and pre-final design submittal
- One (1) meeting with Cook County to coordinate lift station improvements

TASK 3 - REVIEW AND MODELING OF EXISTING STATION

Ciorba will perform a site visit to review the existing station with Village personnel. Ciorba will photograph/document conditions of station equipment and features; and will also note what improvements Village maintenance staff would like included in the design based on the existing station operation.

Ciorba will also review and model the existing system to be used in preparation of the preliminary design report:

- Review water bills and GIS Maps to determine existing flow conditions for the station
- Review Village's pump operation data for the station as recorded by SCADA for 2020-2022.
- Model the existing system in XPSWMM to verify pump and forcemain designs
- During this task Rubino Engineering will perform a soil boring to verify soil conditions to be used for structural design for proposed lift station structures.



SUGGESTED TASKS

TASK 4 - PRELIMINARY DESIGN MEMO

A preliminary design memo (PDM) will be prepared and submitted to the Village for review of design alternatives as described in the RFP. Details of what will be required for both design alternatives will be based on information collected in Tasks 1 through 3. It is anticipated that the memo will include the following:

- Station design flows for existing and future flow conditions
- Structural improvements to the existing prefabricated structure based on ultrasonic testing results (if the Village would like to reuse the existing structure)
- New station layout, including stand-by generator and station controls
- Abandonment of existing structures
- Bypass pumping
- Proposed equipment

Included in this task is coordinating and submitting the new electric service application to Com Ed.

TASK 5 - PRE-FINAL PLANS AND SPECIFICATIONS

Upon the Village's review and approval of the PDR, Ciorba will prepare design plan drawings, detail drawings, specifications and cost estimate. The design will meet all applicable Local, County and MWRD standards. Plan drawings will consist of existing conditions, removal plans, proposed layout, soil erosion and sediment control, maintenance of traffic and section views. Detail drawings will include one-line diagrams, stand-by power, and details of specific equipment. Technical specifications will be prepared in a CSI format. Ciorba will complete permit forms and submittals to MWRDGC and Cook County for review.

TASK 6 - FINAL PLANS AND SPECIFICATIONS

Ciorba will respond to review comments from all agencies, and revise the plans, specifications and cost estimate accordingly. Ciorba will then resubmit the revised design for final review.

TASK 7 - BID PLANS AND DOCUMENT

Ciorba will finalize the plans and specifications, and submit them to the Village in the preferred format for bidding purposes. A final engineer's opinion of construction cost will be provided to the Village.



REFERENCES

1. Kyle Johnson

Assistant Director of Public Works Village of Buffalo Grove Fifty One Raupp Boulevard Buffalo Grove, IL 60089 P: 847.459.2545 E: kjohnson@vbg.orgs

2. Casey Botterman

Utilities Superintendent
Village of Mount Prospect
1700 West Central Road
Mount Prospect, IL 60056
P: 847.870.5640
E: cbotterman@mountprospect.org

3. Michael Hall

Director of Engineering and Public Works
Village of Schaumburg
101 Schaumburg Court
Schaumburg, IL 60193
P: 847.705.4000
E: mhall@schaumburg.com

4. Luke Sharp*

Water Treatment and Wastwater Pumping Supervisor Village of Lombard 255 E. Wilson Avenue Lombard, IL 60148 P: 630.620.5740 E: sharpl@villageoflombard.org

5. Nabil Quafisheh*

Director of Water Management Village of Wilmette 1200 Wilmette Avenue Wilmette, IL 60091 P: 847.853.7531 E: quafishehn@wilmette.com

6. Greg Koch*

Principal Civil Engineer
Metropolitan Water Reclamation District of Greater Chicago
111 E. Erie Street
Chicago, IL 60611
P: 312.751.5600
E: Gregory.Koch@mwrd.org



^{*} Reference for Katrina (Ballado) Lopez, for design performed while at another firm.

Agreement for Engineering Services Village of Hoffman Estates Pfizer Lift Station Improvements Design Engineering Services

This AGREEMENT, made effective this _______ day of ______, 20____ by and between the <code>Village of Hoffman Estates</code> (hereinafter referred to as the "VILLAGE"), and Ciorba Group, Inc. located at 8725 W. Higgins Road, Suite 600 in Chicago, Illinois, a firm of Consultants (hereinafter referred to as "CIORBA"), with regard to providing <code>design</code> engineering and other services in connection with the _Pfizer Lift Station Improvements Project_ (hereinafter referred to as the "PROJECT"). The PROJECT involves <code>design of the rehabilitation or replacement of the Pfizer Sanitary Lift Station</code>. NOW THEREFORE, the <code>VILLAGE</code> and CIORBA, in consideration of the mutual covenants hereinafter set forth, agree to as follows:

Basic Agreements of Ciorba

- 1. CIORBA, in signing this AGREEMENT, certifies that it is in compliance with the Illinois Statutes relating to professional registration of individuals and to corporate practice for rendering such services. CIORBA further certifies that 362525351 is its correct Federal Taxpayer Identification Number and that it is doing business as a corporation.
- CIORBA does hereby certify that it is not barred from entering into this contract as a result of a violation of either Sec. 720 ILCS 5/33E-3 or 720 ILCS 5/33E-4 of Chapter 38, Illinois Revised Statutes.
- 3. CIORBA warrants that it has complied with applicable Federal, State and local laws pertaining to labor, equal employment opportunity and contract procurement and knows of no violations thereof, and such warranty shall survive until time of completion of the project.
- 4. CIORBA agrees to perform certain enumerated services in connection with the PROJECT hereinafter stated as described in EXHIBIT A—SCOPE OF SERVICES. CIORBA will serve as the VILLAGE'S representative in those phases of the Project to which this Agreement applies and will give consultation and advice to the VILLAGE during the performance of its services.
- 5. The work shall commence within five (5) days of receiving written authorization to proceed from the VILLAGE. Services shall be completed *by January 31*, *2023*. Time to complete the services excludes from consideration periods of delay caused by circumstances beyond the control of CIORBA and, if applicable, review time by any necessary State and Federal agencies.



6. CIORBA agrees to maintain insurance coverage in the following minimum amounts:

Professional Liability \$2,000,000 per claim/aggregate

General Liability \$1,000,000 Each Occurrence - Bodily Injury \$1,000,000 Each Occurrence - Property Damage \$2,000,000 Aggregate

Automotive Liability - including non-ownership and hired car coverage \$1,000,000 Per Person/Per Occurrence

Employer's Liability \$500,000 Each

Worker's Compensation Per Statutory Amount

CIORBA shall file with the VILLAGE a Certificate of Insurance showing complete coverage of all insurance required, signed by the insurance companies or their authorized agents. Each certificate shall provide that the coverage shall not be terminated without 30 days advance written notice to the VILLAGE except for 10 days notice for cancellation due to non-payment. CIORBA shall name the VILLAGE as an additional insured for general liability and automotive liability for limits stated above. CIORBA shall require all subcontractors and subconsultants to carry insurance in the amounts stated above.

- 7. As per Exhibit A, CIORBA will attend conferences and will visit the site of the work at any reasonable time when requested to do so by the VILLAGE.
- 8. All studies, reports, plans, contract documents and estimates to be furnished by CIORBA, pursuant to this AGREEMENT, will be in accordance with current standard specifications and policies of the VILLAGE. It is understood that all such studies, reports, plans, contract documents and estimates shall, before being finally accepted, be subject to the approval of the VILLAGE.
- 9. All plans and other documents furnished by CIORBA pursuant to this AGREEMENT will be endorsed by CIORBA and show the requisite professional seal where such is required by law.
- 10. CIORBA shall perform its services consistent with the prevailing practices and customs of like firms performing similar services. CIORBA shall be responsible for the accuracy of its own services and shall promptly make necessary revisions or corrections resulting from its errors or negligent acts without additional compensation for such services. Acceptance of the Work by the VILLAGE will not relieve CIORBA of the responsibility for subsequent corrections of any such errors or omissions or for clarification of any ambiguities.

Basic Agreements of the Village

- 1. The VILLAGE'S representative for this project shall be the Village *Director of Public Works* or his authorized designee. CIORBA'S designated representative shall be Tony Wolff. Such representatives shall have authority to act on behalf of their respective principals and render decisions efficiently. Either party may change its designated representative by a writing sent to the other.
- 2. The VILLAGE will pay CIORBA for the performance of the contract as follows:



- a. On a monthly basis upon receipt of an invoice based on the actual cost of work completed. "Actual Cost" is defined as the direct labor costs associated with the personnel used for the work times a direct labor multiplier to cover profit, overhead, payroll burden and fringe benefits plus direct costs. Direct costs are travel, printing, and other out-of-pocket expenses as well as subconsultant costs. Direct costs will be reimbursed to CIORBA at their cost with no additional service charge. If VILLAGE identifies an item in the invoice which appears to be in error, VILLAGE may withhold the amount in question but shall pay the balance of the invoiced amount and provide CIORBA with a statement concerning the questioned item. Alternatively, the VILLAGE may pay the full amount of the invoice, provide a statement of the questioned item, and adjustment, if appropriate, will be made in the next subsequent invoice submitted by CIORBA, all pending further discussion between the parties. Direct labor costs for employees shall be consistent with the hourly rate ranges shown on the attached EXHIBIT B.
- b. The upper limit of compensation shall not exceed \$76,578.06 and is detailed in EXHIBIT B.
- c. The upper limit of compensation may be increased or decreased by subsequent agreement between the contractual and approving parties in writing with signatures by both the VILLAGE and CIORBA if there is a major change in the scope, character or complexity of the work.
- 3. The VILLAGE agrees to furnish CIORBA with all available plans, utility atlases and survey data useful to the work to be done by CIORBA. CIORBA shall have the right to rely on the accuracy of any information provided by the VILLAGE or VILLAGE consultants. CIORBA shall not be responsible for the acts or omissions of the VILLAGE other consultants, or any other person or entity performing work on the PROJECT who are not under the direct control or authority of CIORBA.
- 4. The VILLAGE agrees that, should the VILLAGE require Extra Work, the VILLAGE will pay CIORBA for such Extra Work on the basis of his actual costs "actual cost" being defined in paragraph 2.a. of the BASIC AGREEMENTS OF THE VILLAGE. Extra Work is defined as any engineering services required beyond the Scope of Services listed in paragraph 4 of the BASIC AGREEMENTS OF CIORBA. The maximum compensation for Extra Work shall be an amount mutually agreed to by the VILLAGE and CIORBA. Extra Work shall not commence until written authorization is received from the VILLAGE. Notwithstanding the foregoing, should CIORBA receive subpoenas or be subject to court orders arising from the Work, CIORBA shall upon notice to the VILLAGE be compensated for compliance with said subpoenas or orders by VILLAGE at CIORBA'S then prevailing hourly rates.
- 5. That, should the VILLAGE require changes in any of the detailed reports, studies or estimates except for those required pursuant to paragraph 10 of the BASIC AGREEMENT OF CIORBA, after they have been approved by the VILLAGE, the VILLAGE will pay CIORBA for such changes on the basis of his actual costs "actual cost" being defined in paragraph 2.a. of the BASIC AGREEMENTS OF THE VILLAGE. The maximum compensation for these changes shall be an amount mutually agreed to by the VILLAGE and CIORBA. It is understood that "changes" as used in this paragraph shall in no way relieve CIORBA of his responsibility to prepare the work completely and adequately to the reasonable satisfaction of the VILLAGE.

General Conditions

- 1. This contract shall constitute the entire agreement and understanding by and between the parties hereto, and it shall not be considered modified, altered, changed or amended in any respect unless done so in writing with signatures by both the VILLAGE and CIORBA.
- 2. The VILLAGE and CIORBA each binds himself and his partners, successors, executors, administrators and assigns to the other party of this Agreement and to the partners, successors, executors, administrators and assigns of such other party, in respect to all covenants of this Agreement.



Nothing herein shall be construed as creating any personal liability on the part of any officer or agent of any public body, which may be a party hereto. Both VILLAGE and CIORBA agree that neither shall take any action to assert any claims or lawsuits against an individual officer, employee, agent, owners of the other. This AGREEMENT shall not be construed as giving any rights or benefits hereunder to anyone other than the VILLAGE and CIORBA. No third party beneficiaries are created by this AGREEMENT.

- 3. Copies of tracings, plans, reports, estimates, maps, survey notes, computations, electronic data files and other documents prepared by CIORBA in accordance with this AGREEMENT shall upon request be delivered to the VILLAGE per Exhibit A.
- 4. That none of the services to be furnished by CIORBA, other than those shown in EXHIBIT A, shall be sublet, assigned, or transferred to any other party or parties without written consent of the VILLAGE. The consent to sublet, assign or otherwise transfer any portion of the services to be furnished by CIORBA shall not be construed to relieve CIORBA of the responsibility for the fulfillment of this AGREEMENT.
- 5. CIORBA assumes no responsibility for the detection or removal of any hazardous substances found at the job site.
- 6. CIORBA shall have right of access to the project site whenever work is in progress.
- 7. Any difference between CIORBA and the VILLAGE concerning their interpretation of the provisions of this AGREEMENT shall, before any litigation is commenced, be referred to a mediation committee as a condition precedent to litigation. The committee shall consist of one member appointed by CIORBA, one member appointed by the VILLAGE and a third member appointed by the two other members.
- 8. This AGREEMENT may be terminated by the VILLAGE upon giving notice in writing to CIORBA at his last known post office address. Upon such termination, CIORBA shall cause to be delivered to the VILLAGE all surveys, permits, agreements, reports, drawings, partial and completed estimates and data, if any from soil survey and subsurface investigations with the understanding that all such material becomes the property of the VILLAGE subject to CIORBA retaining all intellectual property rights including common law, statutory, copyright, and other reserved rights in the instruments of service.
- 9. The VILLAGE agrees that, should the Project or any part thereof be abandoned or terminated at any time after CIORBA has performed any part of the services provided for in this AGREEMENT; and prior to the completion of such services, the VILLAGE shall reimburse CIORBA for his actual costs, incurred up to the time he is notified in writing of such abandonment or termination, actual cost being defined in paragraph 2.a. under "BASIC AGREEMENTS OF THE VILLAGE".
- 10. In accepting and utilizing any drawings, reports, documentation and other technical submissions (in any form including electronic media) generated and furnished by CIORBA, the VILLAGE agrees that these are all instruments of service of CIORBA, who shall be deemed the author, and shall retain all common law, statutory law and other rights, including copyrights.

The VILLAGE agrees not to reuse any drawings, reports, documentation and other technical submissions (in any form including electronic media), in whole or in part, for any purpose other than for the Project. The VILLAGE agrees not to transfer the drawings, reports, documentation and other technical submissions (in any form including electronic media) to others without the prior written consent of CIORBA. The VILLAGE further agrees to waive all claims against CIORBA resulting in any way from any unauthorized changes to or reuse of any drawings, reports,



documentation and other technical submissions (in any form including electronic media) for any other project by anyone other than CIORBA.

In addition, the VILLAGE agrees, to the fullest extent permitted by law, to indemnify and hold harmless CIORBA, its officers, directors, employees and subconsultants against all damages, liabilities or costs, including reasonable attorneys' fees and defense costs, arising from any changes made by anyone other than CIORBA or from any unauthorized reuse of any drawings, reports, documentation and other technical submissions (in any form including electronic media) without the prior written consent of CIORBA.

Under no circumstances shall delivery of any drawings, reports, documentation and other technical submissions (in any form including electronic media) for use by the VILLAGE be deemed a sale by CIORBA, and CIORBA makes no warranties, either express or implied, of merchantability and fitness for any particular purpose. In no event shall CIORBA be liable for indirect or consequential damages as a result of the VILLAGE'S reuse of the any drawings, reports, documentation and other technical submissions (in any form including electronic media).

Nothing contained herein shall create a contractual relationship with, or any rights in favor of, any third party, including any contractors, subcontractors, design professionals, or subsequent users.

11. Electronic files furnished by either party shall be subject to an acceptance period of 30 days during which the receiving party agrees to perform appropriate acceptance tests. Ciorba shall correct any discrepancies or errors detected and reported within the acceptance period. After the acceptance period, the electronic files shall be deemed to be accepted and Ciorba shall have no obligations to correct errors or maintain electronic files.

The VILLAGE is aware that differences may exist between the electronic files delivered and the printed hard-copy construction documents. In the event of a conflict between the signed construction documents prepared by CIORBA and electronic files, the signed or sealed hard-copy construction documents shall govern.

12. This AGREEMENT and the enforcement therefore shall be governed, construed and controlled in all respect by the laws of the state where the Project is located.



IN WITNESS WHEREOF, the parties have caused this AGREEMENT to be executed on the date first above written.

Executed by the:

<u>Village of Hoffman Estates</u> of the State of Illinois, acting by and through its Board of Trustees.

Ву:	Village President	ATTEST:	Villa ge Clerk
Name:		Name:	
Date:		Date:	
Ciorba	a Group, Inc.		
Ву:	Sollater Ditamb	ATTEST:	
Name:	Salvatore Di Bernardo	Name:	
Title:	CEO and President	Title:	
Date:	08/10/2022	Date	

Ciorba Group will perform the following Scope of Services:

TASK 1 - DATA COLLECTION AND KICK-OFF MEETING

Ciorba will meet with Village personnel to discuss design objectives and collect all available data which include the following:

- MWRD Permits
- Lift station design/record drawings
- Lift station improvement project drawings
- · Existing right-of-way drawings or plats of survey
- Adjacent development plans
- GIS information of Village's sanitary sewer tributary to the station
- · Preferred equipment

Project constraints, permitting and construction challenges will be identified and discussed at the meeting. Ciorba will prepare meeting notes for the meeting and distribute to the meeting attendees.

11.SK 2 - PROJECT COORDINATION AND MEETINGS

Ciorba has included the following coordination meetings based on the RFP as well as coordination with the proposed development project:

- One (1) meeting with Village and/or Developer to discuss any utility or design impacts
- One (1) meeting with Com Ed
- Two (2) meetings with Village Staff to review preliminary design report and pre-final design submittal
- One (1) meeting with Cook County to coordinate lift station improvements

TASK 3 - REVIEW AND MODELING OF EXISTING STATION

Ciorba will perform a site visit to review the existing station with Village personner. Ciorba will photograph/document conditions of station equipment and features; and will also note what improvements Village maintenance staff would like included in the design based on the existing station operation.

Ciorba will also review and model the existing system to be used in preparation of the preliminary design report:

- Review water bills and GIS Maps to determine existing flow conditions for the station
- Review Village's pump operation data for the station as recorded by SCADA for 2020-2022.
- Model the existing system in XPSWMM to verify pump and forcemain designs
- During this task Rubino Engineering will perform a soil boring to verify soil conditions to be used for structural design for proposed lift station structures.

TASK 4 - PIRELIMINARY DESIGN LIEMO

A preliminary design memo (PDM) will be prepared and submitted to the Village for review of design alternatives as described in the RFP. Details of what will be required for both design alternatives will be based on information collected in Tasks 1 through 3. It is anticipated that the memo will include the following:

- Station design flows for existing and future flow conditions
- Structural improvements to the existing prefabricated structure based on ultrasonic testing results (if the Village would like to reuse the existing structure)
- New station layout, including stand-by generator and station controls
- Abandonment of existing structures
- Bypass pumping
- Proposed equipment

Included in this task is coordinating and submitting the new electric service application to Com Ed.

TASK 5 - PRE-FINAL PLANS AND SPECIFICATIONS

Upon the Village's review and approval of the PDR, Ciorba will prepare design plan drawings, detail drawings, specifications and cost estimate. The design will meet all applicable Local, County and MWRD standards. Plan drawings will consist of existing conditions, removal plans, proposed layout, soil erosion and sediment control, maintenance of traffic and section views. Detail drawings will include one-line diagrams, stand-by power, and details of specific equipment. Technical specifications will be prepared in a CSI format. Ciorba will complete permit forms and submittals to MWRDGC and Cook County for review.

TASK 6 - FINAL PLANS AND SPECIFICATIONS

Ciorba will respond to review comments from all agencies, and revise the plans, specifications and cost estimate accordingly. Ciorba will then resubmit the revised design for final review.

TASK 7 - BID PLANS AND DOCUMENT

Ciorba will finalize the plans and specifications and submit them to the Village in the preferred format for bidding purposes. A final engineer's opinion of construction cost will be provided to the Village.

OPTIONAL SERVICES

Subsurface Utility Exploration (SUE)

Ciorba will coordinate with SAM, LLC to perform a SUE for the project to identify within a 75ft x 200ft area around the existing lift station. SAM will utilize a combination of public utility markings. electromagnetic and locatable equipment to identify utility routing and depths (where possible). SAM, LLC will also identify the right-of-way.

Wet Well Inspection

Ciorba will inspect the existing concrete wet well structure to determine the condition of the concrete structure. The inspection will consist of a visual inspection and use of a sounding hammer to verify structural stability. Due to the structure type and location, OSHA confined space requirements listed under e 29 CFR 1910.146 will be adhered to. A memo summarizing the results from the inspection will be prepared and submitted to the Village for review. Included in the memo will be photos and exhibits of proposed improvements, if required.

Ciorba Group proposes the following fees to and complete Engineering Design, Preparation of Plans and Bid Documents for the Pfizer Sanitary Sewer Lift Station Rehabilitation/Replacement Project.

BASE ENGINEERING SERVICES

Total Base Fee:	\$65,493.06
Rubino Geotechnical Services Costs:	\$ 6,750.00
Ciorba In-House Direct Costs:	\$ 210.60
Ciorba Labor & Overhead Costs:	\$ 58,532.46

The tables on the following pages provide detailed hours by task and direct cost estimates broken out by task as well as current staff hourly rates.

OPTIONAL SERVICES

The base design fee excludes existing wet well inspection, third-party flow analysis, subsurface utility exploration, and wetland delineation. Based on discussions with the Village, proposed additional fees are provided below for the addition of a structural inspection of the existing wet well for potential re-use, as well as the addition of a subsurface utility exploration (SUE). These optional services will only be performed upon authorization by the Village.

Total Fee:	\$76,578,06
Subsurface Utility Exploration	\$ 7,185.00
Existing Wet Well Structural Inspection:	\$ 3,900.00

SCOPE OF SERVICES WITH HOURS BY TASK (BASE FEE)

Task No. and Description	Manhoyrs	Direct Costs	Services By Others	Total
Task 1 - Data Collection and Kick-off Meeting	6			\$ 1,264.08
Task 2 - Project Coordination and Meetings	12	\$210.60		\$ 2,233.31
Task 3 - Review and Modeling of Existing Station	36		\$6,750.00	\$ 11,247.79
Task 4 - Preliminary Design Report	16			\$ 3,101.49
Task 5 - Pre-Final Plans and Specifications	215			\$ 31,279.27
Task 6 - Final Plans and Specifications	78			\$ 12,015.48
Task 7 - Bid Plans and Document	28			\$ 4,351.64
			Total	\$65,493.06



HOURLY RATES

Classification	Total
Project Manager	\$193.84
QA/QC Manager	\$219.13
Lead Water Resources Engineer	\$117.99
Water Resources Engineer	\$ 96.94
Lead Structural Engineer	\$235.98
Structural Engineer	\$137.66
Lead Electrical Engineer	\$136.25
Electrical Engineer	\$ 99.73
Roadway Engineer II	\$140.47
Roadway Engineer I	\$ 96.64





VILLAGE OF HOFFMAN ESTATES

DEPARTMENT OF PUBLIC WORKS

July 2022 MONTHLY REPORT

SUBMITTED TO: Public Works Committee

August 2022

løseph Mebel Director of Public Works Kelly Kerr

Assistant Director of Public Works

WATER SYSTEM INTERCONNECT WITH PALATINE

June 2020: Village Board authorized an intergovernmental agreement with the Village of Palatine (VoP) for joint engineering and construction of an emergency water system interconnect. A contract was awarded to Baxter and Woodman Inc. (B&W) for engineering services (design) and construction management of this project.

April 2021: Obtained easement agreement with Little City, owner of the property through which the system interconnect will be constructed. Preliminary engineering plan outline is complete with all necessary approvals from VoP, VoHE, and Little City. Design of the interconnect station and control system is complete. Topographical survey of the construction site is complete. Geotechnical investigation of the proposed route is complete. Preparation of bid documents and construction plan continues.

May 2021: Detailed design of the system interconnect is complete. Critical sites have been selected for soil sampling and Clean Construction or Demolition Debris (CCDD) testing. Final review of project PS&E is ongoing before bidding.

June 2021: Soil sampling and testing are complete for the CCDD assessment. Following a successful bid process, recommendation was made to award the construction contract in early July.

July 2021: Contracts for manufacturing the interconnect booster station (EFI Solutions) and installation of the booster station pumping system and water mains (Mauro Sewer Construction, Inc.) were awarded. Construction is pending IEPA permit approval.

August 2021: IEPA permit was issued for installation of water main in Palatine. The permit for installation of water main and the booster station in Hoffman Estates is pending. A preconstruction meeting was held for this project. Shop drawings for the booster station are being reviewed by staff.

September 2021: Installation of over 120 feet of water main, including a valve, in Palatine is complete. IEPA permit is pending for installation of water main and the booster station in Hoffman Estates. Review of shop drawings for the booster station is partially complete with instructions to the engineer.

October 2021: Installation of over 2,200 feet of water main in Palatine, including 9 valves and 5 hydrants, is complete. Flushing, pressure testing, disinfection, and water sample testing of the new water main is complete with an IEPA operating permit issued. An IEPA permit has also been issued for installation of water main and a booster station in Hoffman Estates.

November 2021: Water main and service line work in Palatine and Little City is substantially complete, pending final connection to Palatine's primary feed water mains and pavement restoration. Water main installation in Hoffman Estates is ongoing with approximately 80' of mains completed this month.

December 2021: The final connection was made to Palatine primary feed water mains (Little City area) and street pavement restoration is complete.

January 2022: Work continued in Hoffman Estates with 120 feet of 12" water main installed.

February 2022: A total of 330 feet of 12" water main was installed with successful pressure testing, thus completing the water main connection between the Village of Hoffman Estates and the Village of Palatine. Site preparation for the booster station installation has begun.

March 2022: Foundation for the booster station was installed. The existing hydrant at Well 18 was relocated to clear the way for future access to the new station.

April 2022: Site restoration started with with 90% of the disturbed site completed. Delivery of the booster station is scheduled for mid-May.

June 2022: The prefabricated booster station building was delivered and set up on site, pending new power line connection by ComEd.

July 2022: New conduit was installed for ComEd service to the site.

HUNTINGTON ROAD WATER MAIN REPLACEMENT

August 2019: Village Board authorized a contract with HR Green for engineering services for the replacement of approximately 2,500' of 16" transmission water main along Huntington Boulevard between Lakewood and Mundhank. The soil in this location is highly corrosive, causing excessive degradation of water main in this area.

May 2020: Design and engineering plans are complete. This includes 2,350' of 18" HDPE pipe with necessary valves and hydrants. IEPA construction permit issued. An application has been submitted to the State of Illinois Rebuild Illinois Public Infrastructure grant program to secure funding for this project.

May 2022: This project continues to be on-hold. The Village was not awarded grant funding for this project through the Rebuild Illinois Public Infrastructure Program. Staff will review this project and prepare plans to proceed at a later date.

July 2022: This project continues to be on-hold, pending decision on funding source.

GOLF LIFT STATION REPLACEMENT

May 4, 2020: Village Board authorized the construction contract with Rausch Infrastructure, LLC for Golf Road Lift Station Replacement. The scope of work covers replacing the existing steel can style lift station with a submersible pump lift station, temporary bypass pumping, demolition of the existing structure, rehabilitation of the existing wet well, and installation of the following: new concrete wet well and valve vault; submersible pumps and motors; controls in a prefabricated concrete building; and new emergency generator.

August 5, 2020: Pre-construction meeting was held and notice for construction to proceed was issued.

September 2020: Review of shop drawings for necessary revisions and corrections is complete. Construction was delayed due to unanticipated IDOT permit requirements.

October 2020: Construction was further delayed due to new ComEd requirements concerning the electric service line for the new station. The IDOT construction permit application was resubmitted including a widened driveway and directional boring for conduit installation that will cross Golf Road for the new electric line.

December 2020: Design of the new Golf Road conduit crossing for the ComEd service line is complete.

February 2021: Responded to all final comments from IDOT with corrected application and plan. Delivery of variable frequency drives (VFDs) has been scheduled.

March 2021: IDOT permit was issued. Construction is scheduled to begin in April.

April 2021: Construction has begun with installation of site fencing and closing of the right turn lane on Golf Road at this location. Removal of existing landscape vegetation and pavement is complete. New wet well H-beams were positioned for installation. Force main, bypass line, and electrical connection were exposed via hydro-excavation to avoid accidental damage.

May 2021: Installation of H-beams for new wet well structure is complete. Excavation for new wet well is 80% complete. Revisions to the new bypass pumping system plans are ongoing following discovery of a conflict with an existing conduit containing an IDOT traffic control signal fiber.

June 2021: Excavation for the new wet well is complete. Installation and construction of the new cast-in-place structure is 50% complete. A purchase order was issued to IDOT's contractor to relocate a traffic signal fiber/conduit that is in conflict with this project. This relocation work is pending IDOT approval.

July 2021: Installation and construction of the cast-in-place structure for the new wet well and valve vault is 75% complete. Further investigation of the IDOT conduit confirmed that the line was abandoned and no longer in conflict with construction.

August 2021: Exterior coating of the new wet well and valve/piping vault is complete. Submersible pump elbow piping installation is complete.

September 2021: Surface preparation for the interior coating of the new wet well and valve vault is complete. Coating will start in early October. The existing force main was exposed for connection to the new wet well and new discharge piping. Foundation work for the new generator started with the old generator relocated to a temporary location. Installation of bypass pumping is schedule in early October, 2021.

October 2021: Interior coating of the new wet well and valve vault is complete. Construction of the flow meter vault and force main bypass connection is complete. Installation of new pumps is scheduled for November.

November 2021: Installation of new pumps with conduit to the future control building, the valve vault safety hatch, and the flow meter is complete. A temporary control panel has been installed until the planned electric service upgrade is complete, likely in spring 2022.

December 2021: Installation of the new driveway and removal of the old bypass connection is complete. A concept plan for future permanent bypass pumping was submitted for review.

March 2022: Two 16" gate valves and 12" temporary bypass flow line with a valve were installed. Interior coating was patched up for areas where conduit and pipe connections were made.

April 2022: Two 16" sewer pipes were installed to connect new and old wet wells. The temporary control system was installed for sewer pumping to bypass the old wet well. The old dry well was demolished with old pumps and the control system removed. The station is running on the temporary system under close monitoring by both staff and contractor.

May 2022: A vent pipe connecting the new and old wet wells was installed. Concreate pads were constructed for the new 250 kW generator and new control building. Both the new generator and control building were delivered to the site. Some site restoration has begun.

June 2022: Control equipment including VFD, SCADA panel, transfer switch, and power cabinets has been delivered and installed inside the control building. The old wet well was cleaned and prepared for rehabilitation and hatch installation. Installation of 4" conduit via directional boring under Golf Road was completed.

July 2022: Site concrete work is complete, including pads and pavement. Rehabilitation of the old wet well with hatch installation is complete. Installation of the new ComEd service line is complete via new 4" conduit across Golf Road. Installation of the permanent fence is complete. Installation of the new control system is substantially complete, pending test operation.

WATER TOWER PAINTING - T2 AND T4

December 2, 2019: The Village Board authorized a contract with L.C. United Painting Co. for the painting of water towers at Stonington Boulevard (T2) and Huntington Boulevard (T4) and other miscellaneous items of work.

February 2020: Final approval for a low interest loan from the IEPA to fund this project was received.

April 2020: A pre-construction meeting was held. The siren post at T4 was relocated to avoid being damaged during this project and a temporary pole was installed to allow relocation of existing antennas affixed to the tower. Interior cleaning of T4 is complete with exterior cleaning in progress. A significant majority of metal repairs were completed including welding of the wet interior roof hatch and other minor rehabilitation.

May 2020: T4 painting is substantially complete including all metal repairs, foundation painting, and other miscellaneous work.

June 2020: T4 was returned to service on June 4, 2020 following disinfection and two consecutive successful water samples. Preparation for the painting of T2 began with minor metal repairs. All remaining work on T2 is scheduled to begin in September, 2020.

July and August 2020: No work was performed. The contractors was making effort to hire Illinois workers for the remaining work of T2 painting.

September 2020: Antennas for cellular services have been relocated back to T4 and the temporary tower has been removed. Landscape restoration is also complete at T4 site. The contractor is waiting for approval by the attorney general office for exemption from the employment act so that they can use the same crew of non-Illinois workers to start T2 painting.

October 2020: A request for a completion date extension was submitted to the IEPA for approval. The proposed new substantial completion date is June 30, 2021 with a new final completion date of July 30, 2021. The changed completion date will provide the contractor a guaranteed period of favorable weather to start and complete the project.

November 2020: Received IEPA approval for Change Order #2 regarding the extension of the final contract completion date to July 30, 2021.

June 2021: No progress. The contractor awarded this project has requested an extension to complete this project. The contractor has reported delays due to supply chain interruptions due to the COVID-19 pandemic, preventing them from obtaining the paint required for this project.

July 2021: No progress. Staff is in discussion with the IEPA regarding loan term extension and with the contractor regarding options for settlement of possible liquidated damages for not fulfilling the contracted work.

August 2021: Staff has completed the form to extend the loan with the IEPA. Approval is pending.

September 2021: IEPA approved loan term extension to July 30, 2022.

July 2022: No progress.

WATER DISTRIBUTION SYSTEM STUDY

April 1, 2019: The Village Board authorized a contract with Burns & McDonnell for engineering services to study and evaluate the water distribution system.

May 2019: A project kick-off meeting was held. Data collection and processing began.

September - November 2019: Necessary software was integrated with the Village SCADA system to allow a comprehensive analysis of water system operation. Plans were made for fire flow testing and telog installation. Work began on a hydraulic model of the water system. Field measurements (fire flows and pressures), field data insertion into the model, and model calibration is complete. Water tower evaluation is complete.

June 2020: A hydraulic evaluation of the distribution system continued, following a delay due to the COVID-19 pandemic, including analysis of existing or future water tower locations, potential water main improvements, and water storage turnover/replenishment as well as a detailed review and simulation of the hydraulic model.

July 2020: Preparation continued on the final report of this study. Analysis continued on pumping, pressure, and storage turnover/replenishment.

August 2020: Team meeting was held to review draft report and conduct simulation run of the hydraulic model of the water distribution system under various scenarios. Parameters for water main replacement analysis was outlined.

September 2020: Successful coordination meeting was held with JAWA operation team on pressure and flow control for T2 painting project.

October 2020: Evaluation of T2 isolation for painting and analysis of water system storage turnover/replenishment is complete.

November 2020: Finalized recommendations for the capital improvement plan concerning future plans for the water tower located at Aster Lane.

December 2020: Initial transmission main system improvement evaluations are complete.

February 2021: Conducted site visits to evaluate existing pump stations.

April 2021: Work for the final report, an in-depth evaluation of a water main replacement program, continues.

May 2021: Review of an initial draft report is complete. Comments have been submitted to the Engineer requesting revisions.

September 2021: A revised draft report has been submitted for review.

October 2021: Comments for further revision of the draft report were sent to the Engineer.

November 2021: Staff review of the 2nd draft report is complete. Additional feedback has been provided to the consultant as work on the final report continues.

January 2022: Errors in the draft report were corrected (e.g. water tower overflow levels). Mapping of water main leaks and breaks is complete to assist with planning future water main replacement.

February 2022: A second draft report has been submitted for staff review.

March 2022: The team reviewed the second draft with comments and directions provided to the engineer for improvement.

April 2022: Provided additional feedback to the consulting engineer concerning the final report.

May 2022: Received the final report.

June 2022: Final comments were provided to the engineer for clarification of the addendum contents for the final report.

July 2022: Final report with revised addendum was received and the project is closed.

MWRD IICP ENGINEERING

July 2, 2018: The Village Board approved a contract with Baxter & Woodman Consulting Engineers for engineering and field services required for compliance with the MWRD Infiltration/Inflow Control Program (IICP), including: condition assessment of high-risk sanitary sewer infrastructure; preparation of a plan for rehabilitation of major defects within three years of identification; recording identified illegal connections in high-risk areas; development and implementation of an ongoing program to identify and disconnect these connections as a Private Sector Program (PSP); and development and submittal of annual reports under the MWRD Short Term Requirements and Long Term Operation and Maintenance Program (LTOMP).

August 2018: A project kick-off meeting was held. Planning for smoke testing of sanitary sewers in high-risk areas began.

October 2018: Smoke testing was completed in 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 complete and 4 areas were identified for dye water testing to further determine the source of infiltration and inflow at these sites.

May – June 2019: Camera inspection of the remaining 173 required manholes is complete. Dye water testing is complete. A list of critical sewer repairs to occur in 2019 and 2020 was selected for IICP compliance.

September 2019: Design engineering and preparation of bid documents is complete. The project was successfully bid out and awarded to Michels Pipe Services.

December 2019: A pre-construction meeting was held and work planning completed.

January – February 2020: Sewer cleaning and inspection is complete. The required annual compliance report was submitted to MWRD.

June 2020: Sanitary sewer rehabilitation via cured-in-place pipe (CIPP) lining began, delayed due to the COVID-19 pandemic. Rehabilitation of approximately 1,630' of pipe is complete.

July 2020: Repair and rehab is substantially complete in compliance for MWRD IICP for Year 2020. Approximately 4,350' of lining and all post lining video-inspection is complete. Compilation of a deficiency list is in progress with on-going review.

August 2020: The list of deficient items was send to contractor and correction has been completed. Also completed is the 3rd party testing of rehabilitated sewer for structure strength, pending engineer's review and approval.

September 2020: Review of the 3rd party testing results is completed by the engineer with recommendation to approve closing the 2020 project of sanitary sewer rehabilitated, pending final invoice from the construction contractor.

October 2020: Continued review of inspection footage in preparation for the 2021 critical sanitary sewer rehabilitation program.

November 2020: The final invoice for completed 2020 sewer rehabilitation work and review of MWRD comments on the annual compliance report are pending.

December 2020: The engineering proposal was reviewed and approved for assistance in completing the final 2020 compliance report. This work is projected to begin in January, 2021. Final invoice is pending for construction work completed in 2020.

January 2021: Annual compliance report for 2020 is being assembled. The final invoice has been approved for construction work completed in 2020.

February 2021: Annual compliance report for 2020 was submitted to MWRD.

March 2021: Prepared response for comments from MWRD and continued CCTV inspection of high risk sewers.

April 2021: Received final approval letter from MWRD regarding the Village's proposed Private Sector Program and Long-term Operation and Maintenance Program.

May 2021: Received final approval verbally from MWRD regarding the Village's annual compliance report for years 2017, 2018, and 2019. The Village is awaiting the formal approval letter.

July 2021: The Village received formal approval on the annual compliance reports for 2017, 2018, and 2019. The next phase of compliance work will begin following approval of the 2020 annual compliance report, submitted in March 2021.

November 2021: A draft proposal for engineering services for the 2022/23 sanitary sewer rehab program as required by the MWRD Inflow and Infiltration Program.

January 2022: Received one proposal for engineering services for 2022/2023 sanitary sewer rehabilitation, pending review.

February 2022: An RFP has been distributed seeking more proposals from qualified engineering firms for year 2022 and 2023 sanitary sewer rehabilitation project.

March 2022: Five proposals were received and the recommendation was made to award the contract for engineering services for 2022/23 Sanitary Sewer Rehabilitation to Baxter & Woodman Consulting Engineers.

April 2022: The kick-off meeting for the 2022/23 Sanitary Sewer Rehabilitation program was scheduled for May.

May 2022: The kick-off meeting was held on May 5, 2022 with specific requests provided to the engineer for design work for 2022/23 Sanitary Sewer Rehabilitation including an analysis of the condition of Eric Lift force mains.

June 2022: Field investigation was conducted to determine the condition of the force main for Eric Lift Station.

July 2022: Completed review of manhole inspection reports. Prepared conceptual plans for 2022/23 sanitary sewer rehab program.

UPGRADE OF THE SCADA SYSTEM FOR WATER AND SEWER OPERATION CONTROL CENTER

April 2022: The Village Board authorized a contract with Gray Matter Systems for professional services and equipment acquisitions for software/hardware upgrades to the Supervisory Control and Data Acquisition (SCADA) system for water and sewer operations. A project kick-off meeting is being scheduled for May.

May 2022: The kick-off meeting was held on 5/11/2022. The engineer received the software licenses for the Village's new program and retrieved the existing iFix files for upgrade planning.

June 2022: Delivery of all hardware required for the project was scheduled for July. The remote connection was established with the Village's system at the Control Center and needs iFix files uploaded for upgrade and replacement.

July 2022: All hardware required for the project was deliverd to Gray Matter Systems with the exception of the switch (firewall system). System programming is being installed on the new hardware.

2022 VALVE ASSESSMENT PROGRAM

July 2022: A project kick-odd meeting was held with Wachs Water Services. Work is scheduled to begin the week of August 16th and will include exercising of 500 valves with concurrent leak survey. Vaults/boxes will be pumped down for visual inspection. This project is expected to last 3-4 weeks.

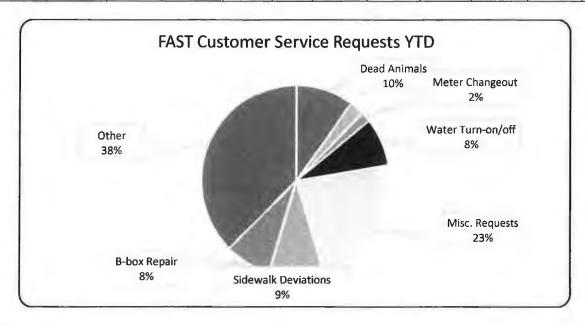
Administration

- 1. Continued Cartegraph asset management software implementation.
- 2. Assisted with coordination of the 2022 Northwest Fourth Fest, including site setup, various responsibilities throughout the event, and site cleanup.

Customer Services

Fast Action Service Team (FAST):

				Fas	st Action	Service	Team (F	AST)				-
				(Custome	r Servic	e Reques	its				
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
141	113	119	127	198	130	154						982



Customer Service Team:

			-		Custom	ner Serv	ice Team	-val				
			V	Vater Billi	ng - Cust	omer S	ervice Ap	pointme	nts			
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
12	30	44	36	14	26	21						183
				Finance-	generat	ed Wate	er Meter	Reading	s			
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
74	66	72	45	101	131	110						599
				D	elinque	nt Wate	r Accour	nts				
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
122	117	103	103	101	97	139						782

				Ne	ew Const	ruction	Inspecti	ons				
Jan	Feb	Mar	Apr	May	Jun	lut	Aug	Sep	Oct	Nov	Dec	Total
1	0	0	0	0	1	1						3
			Cust	omer Serv	vice Requ	uests - (Gov Q&A	/Meter F	Repairs			
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
10	7	15	10	5	6	5						58
					В-	oox Rep	pairs					
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
0	1	2	4	2	3	2						14
				MIL	J Installa	itions/I	Replacem	nents				
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
4	6	9	2	3	13	3						40

Utility Locates Team:

- 1. Continued providing locates related to the Microsoft Data Center project and for ComEd mainline upgrades in north Hoffman.
- 2. Continued providing locates related to the 16,000 ft. AT&T fiber installation project in Governor's Square.
- 3. Continued to provide locates in coordination with the 2022 Road Reconstruction Program.

					Utilit	y Locate	es Team					
					JL	JLIE Loc	ates					
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
174	224	513	699	742	835	824						4,011
					Emerge	ncy JUL	IE Locate	es				
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
23	19	16	34	94	88	94						368
					Utili	ty Joint	Meets					
Jan	Feb	Mar	Арг	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
7	5	9	12	7	12	8						60

Facilities

- 1. Replaced Sunderlage House water heater.
- 2. Replaced Public Works Center bathroom exhaust fan motor.
- 3. Replaced cooling tower fan motor at Village Hall.
- 4. Painted all three overhead garage doors at the Public Works Center.
- 5. Completed UPS PMs at Village Hall and Police station.

						Facilitie	S					
			Р	reventativ	ve Maint	enance	Program	- Staff Ho	urs			
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
92	68	132	110	103	103	70						669

Fleet Services

- 1. Prepared new unit 20 for service.
- 2. Coordinated installation of shop floor crane.
- 3. Prepared EV charging stations at Village Hall for service.

					FI	eet Serv	ices					
			Prev	entative N	/laintena	nce Pro	gram - Nu	ımber of	Repairs			
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
16	20	27	24	20	16	29						152
				Vel	nicles Ser	nt for W	arranty R	epair				
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
12	6	4	10	4	3	2						41

Forestry

- 1. Performed stump grinding at various location.
- 2. Coordinated special brush pick-up due to the the 7/4/22 storm.
- 3. Continued work on Village Hall landscaping improvments.

						Forest	ry						
Customer Service Requests													
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	
4	4	16	26	46	54	52						202	

Maintenance & Construction

Storm Sewer Team:

- 1. Completed concrete restoration at 8 water/sewer excavation sites.
- 2. Performed creek cleaning duties in Parcel B.

				100 11	Storm Se	wer Tea	m		-	S-1		
				Feet	of Storm	Sewer F	lushed					
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1,250	900	625	730	630	300	0						4,435
					Catch Bas	in Rebui	lds					
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
0	0	0	0	3	2	9						14

Construction/Maintenance Team:

1. Performed leak detection survey in Highlands subdivision.

				Co	nstructio	n/Main	tenance 1	Геат				
					B-box Re	epair/Re	eplaceme	nt				
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
3	2	4	4	3	4	6						26
					Hydra	nt Repl	acement					
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1	0	1	4	2	1	3						12
					Valve Re	epair/Re	placeme	nt				
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2	3	3	3	1	0	2						14
				Wate	r Main/S	ervice L	ine Leak	Repairs				
Jan	Feb	Mar	Apr	May	Jun	lut	Aug	Sep	Oct	Nov	Dec	Total
2	2	3	3	1	2	2						15

Traffic Operations

Pavement Maintenance Team:

- 1. Assisted with Village Hall EV charging station site preparation.
- 2. Completed approximately 11,000 feet of in-house pavement striping.
- 3. Repaired drives on Arizona Blvd. in coordination with an Engineering Department stormwater project.
- 4. Performed asphalt inlet repairs at various locations.

					Pavemen	t Mainte	nance Tea	am	-		1	
					Tons of I	lot Asph	alt Install	ed				
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
0.0	0.0	0.0	0.0	19.6	41.8	37			1			98.4
					Tons of C	old Asph	alt Install	ed				
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
3.8	3.3	7.5	3.5	0.5	1.0	1						20.6

Sign Team:

1. Prepared various signage for the 2022 Northwest Fourth Fest and parade.

						Sign Tea	am					
					Repaire	d/Repl	aced Sign	is				
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
15	1	29	14	13	2	5						79
				5	igns Fab	ricated a	and Insta	lled				
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
40	21	1,768	110	123	160	51						2,273

Street Light Team:

- 1. Repaired a ground faults on Westbury and Dexter.
- 2. Assisted with the Public Works EOC/Supervisor office remodeling project.
- 3. Conducted site clearance trimming at various street light locations.
- 4. Installed a new controller box and pulled wire for new electric service on Gannon.

					Stre	et Light	Team					-
					Custome	er Servic	e Reques	ts				
Jan	Feb	Mar	Арг	May	Jun	lut	Aug	Sep	Oct	Nov	Dec	Total
0	1	0	2	3	0	1		1				7
					Street	Lights I	Repaired					
Jan	Feb	Mar	Apr	May	Jun	lut	Aug	Sep	Oct	Nov	Dec	Total
7	1	9	6	10	2	8						43

Water Operations

Operations Team:

- 1. Pulled pump #3 at Abbey Wood Pumping Station for repair.
- 2. Coordinated pressure washing of the ground reservoirs at Abbey Wood Pumping Station.
- 3. Coordinated interior inspections of water towers #2 and #5.
- 4. Continued oversight of Golf Lift Station construction project.
- 5. Assisted with installation of electrical components for the Village Hall EV charging stations.

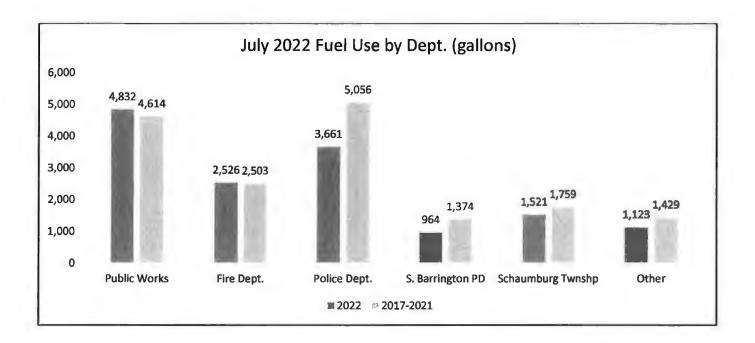
					Opi	erations	Team					
				F	Resident	Water C	Quality Te	sts				
Jan	Feb	Mar	Apr	May	Jun	lut	Aug	Sep	Oct	Nov	Dec	Total
2	3	3	3	4	3	4						22

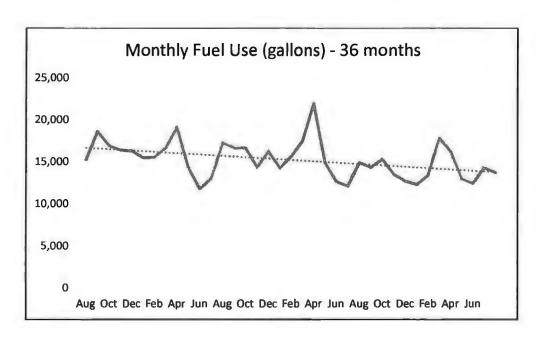
Sanitary Sewer Flow Management Team:

1. Continued hydrogen sulfide treatments at WDA and University lift stations.

				Sanit	ary Sewer	Flow Man	agement	Team				
					Sewer L	ines Flush	ed (feet)					
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
7,300	2,400	5,600	15,000	25,400	21,000	23,000						99,700
				S	anitary M	lain Inspec	tions (fee	et)				
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
300	1,100	325	0	125	0	330						2,180

Fuel Use Report







VILLAGE OF HOFFMAN ESTATES DEPARTMENT OF DEVELOPMENT SERVICES

ENGINEERING DIVISION MONTHLY REPORT

SUBMITTED TO: PUBLIC WORKS & UTILITIES COMMITTEE

BY: Alan Wenderski, P.E. Director of Engineering

1-3

August 2022

General Strike Update: A tentative agreement was reached and operators have returned to work in all area aggregate quarries.

VILLAGE PROJECT UPDATES

2022 Drainage Project

Design nearing completion. Project targeting fall construction.

2022 Preventative Maintenance Project

Contract awarded to Patriot Pavement Maintenance on August 1st. Awaiting scheduling of preconstruction meeting.

2022 Street Revitalization Project

Work ongoing, see attached project update.

Arizona Boulevard Storm Sewer

All underground work completed. Pavement patching scheduled to be completed week of August 15th. Full completion of sod restoration expected in late summer. Chastain & Associates contracted for construction inspection services.

Bridge Inspections (2021-2022)

Received final inspection report for Hoffman Boulevard (SN 016-6350). Awaiting final report for Harmon Boulevard Culvert (SN 016-6939). Civiltech contracted for inspection services.

Eagle Way Sewer Replacement Project

Work began the week of August 8th. Project expected to be completed by end of November. Ciorba Group contracted for construction inspection services.

Higgins Road Culvert Railing

Headwall repairs completed. Awaiting manufacturing and installation of railing. Lead time for railing manufacturing is approximately 12 weeks.

COMMERCIAL PROJECT UPDATES

BMO – 1199 W Higgins Rd (Formerly 1400 Gannon Dr)

Demolition work nearing completion. Awaiting as-built drawings and permit closeout.

BP - 2598 W Higgins Rd

Site work underway. Underground installation substantially complete.

H90 - 2685 Eagle Way

Site grading work underway. Limited water main work to being week of August 15th.

Dunkin Donuts – 1670 Algonquin Road

MWRD permit issued. Project guarantee received.

Microsoft Data Center - 2190-2200 Lakewood Blvd

Onsite paving and restoration ongoing. Completion of site sewer connection and onsite lift station underway.

Popeye's - 65 E Golf Rd

Awaiting issuance of MWRD, IDOT permits. Project guarantee received and Village permit issued.

Roselle TIF Culvert Replacement

MWRD permit issued. Conditional Letter of Map Revision (CLMOR) issued by FEMA. Awaiting project guarantee for Village permit issuance.

SAMC ED Renovation - 1555 N Barrington Rd

Work ongoing.

RESIDENTIAL PROJECT UPDATES

Walnut Pond Estates – NE Corner of Rohrssen Rd & McDonough Rd (Formerly Airdrie Estates)

Single-family home construction on Lot 7 ongoing. Final inspection for Rohrssen and McDonough sidewalk completed.

MISCELLANEOUS UPDATES

Released an RFP for preliminary design services for Village Collector Street Lighting.

Personnel

August 8th – Welcomed Tommy Kedra, Civil Engineer I

Seasonal Engineering Interns Ella Hutchison, Jaden Schafer, Lauren Wojcik returned to school. We thank them for their assistance this summer.

Stormwater Updates

Received results of National Flood Insurance Program (NFIP) Community Rating System (CRS) 5-year cycle verification. See attached.

Preparation for required dry weather outfall inspections are underway.

Rebuild Illinois Capital Plan Funds – Stormwater

The Village has been unsuccessful in obtaining a timeline for accessing the Rebuild Illinois capital funds that were originally approved in the 2019 capital plan. Staff continues to monitor the release of these funds and possible reallocation of funds for the approved projects. The 2019 capital plan allotted for a 5-year period to release all funds. Below is a table of the stormwater related projects included in the plan:

Legislative Description	Project	Type of Work	Funding
General	Almond / Audubon	Culverts	\$250,000
General	Arizona	Storm Sewer	\$300,000
Hermitage Lane	Hermitage	Storm Sewer	\$300,000

Grant agreement executed for Arizona Storm Sewer project. Funds to be reimbursed to Village upon expenditure of construction funds. A request for grant term extension to December 31, 2022 to allow for grant reporting was submitted to DCEO for approval.

Meetings and Training Attended

- Flint Creek/Spring Creek Watershed Meeting (July 20th) Alan Wenderski
- Managing Map Changes and Community Acknowledgment (July 27th) Oscar Gomez
- Northwest Council Methodology/Functional Classification Revisions Discussion (August 2nd) Alan Wenderski

Engineering Site Plan Reviews

- Seasons at Moon Lake
- Thomas Jefferson School

Floodplain Inquiries

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Total
2021	0	0	0	1	0	0	1	0	1	0	0	0	3
2022	1	0	20	8	2	0	1	0					32

Freedom of Information Requests

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Total
2021	1	2	4	1	0	2	3	3	1	0	0	1	18
2022	1	1	2	0	1	1	1	2					9

Permit Inspections

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Total
2021	14	4	8	28	30	46	34	58	51	70	62	24	429
2022	19	20	32	44	64	83	48	20					330

Permit Reviews

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Total
2021	3	2	14	12	26	34	21	45	55	18	18	4	252
2022	2	4	29	48	58	38	28	20					227

Residential Drainage Investigations

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Total
2021	2	0	5	5	10	2	7	6	1	1	0	1	40
2022	0	0	10	11	19	13	1	6					60

2022 Street Revitalization Project Schedule Update: (Week of August 8, 2022)

		Pre-	Constru	ction						Const	ruction						Lands	caping	
RECONSTRUCTION STREETS	Start Date ¹	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	Striping	Backfill Topsoil	Sod & Seed	Percent Complete
1 AMHERST LANE Gentry Rd to Highland Blvd	6/6/2022																		85%
2. CAMPBELL LANE Kingsdale Rd to Fairmont Rd	4/27/2022																		100%
CHERRY COURT Westbury Dr to End of Street	8/22/2022																		0%
4 EVERGREEN LANE Jones Rd to Dennison Rd	8/10/2022																		10%
5 FIR COURT Chesapeake Dr to End of Street	8/22/2022																		0%
6 HASSELL CIRCLE Hassell Rd to End of Street	7/26/2022		N/A																55%
7 HASSELL PLACE Hassell Rd to End of Street	7/25/2022		N/A																85%
8. LAKESIDE PLAZA PH I 1910N-840W Hillcrest Blvd to 840 Lakeside Plz	7/25/2022		N/A																40%
9 LAKESIDE PLAZA PH II 840W-806W 840 Lakeside Plz to Hillcrest Blvd (E)	8/15/2022		N/A																10%
10 WESTVIEW STREET Washington Blvd to Osage Ln	8/29/2022																		0%
¹ Tentative / Actual	1													Comple	ted			In Prog	ress

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.

Striping Completion of permanent pavement striping.

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.

2022 Street Revitalization Project Schedule Update: (Week of August 8, 2022)

		Pre-Con	struction					Constr	uction					Lands	caping	
RESURFACING STREETS	Start Date	Layout	Sawcutting	Concrete Removal	Asphalt Removal	Storm Sewer	Curb & Gutter	Driveway Aprons	Sidewalks	Asphalt Binder	Asphalt Patching	Asphalt Surface	Striping	Backfill Topsoil	Sod & Seed	Percent Complete
BLUEBONNET LANE E Ash Rd to End of Street	6/24/2022			N/A			N/A	N/A	N/A							96%
BURNHAM DRIVE Dimstead Dr to Amber Cir	9/1/2022															0%
BURNING BUSH LN funtington Blvd to Crimson Dr	8/22/2022															0%
CYPRESS COURT below to End of Street	5/9/2022										N/A		N/A			100%
DIXON COURT Dixon Dr to End of Street	9/16/2022															0%
DIXON DRIVE Vinston Dr to Dixon Ct	9/16/2022															0%
ELLIOTT DRIVE Deer Valley Ln to Landers Dr	4/22/2022										N/A		N/A			100%
FIRE STATION 23 Vestbury Dr Driveway	7/5/2022				N/A					N/A		N/A	N/A			100%
JODY LANE Randi Ln to Bode Rd	4/25/2022										N/A					100%
0 LAFAYETTE LANE arleton Rd to Hampton Rd	6/27/2022															100%
MALLARD LANE Mallard Ln to End of Street MAPLE LANE	4/22/2022										N/A		N/A			100%
Vestern St to Maywood Ln 3. McDONOUGH ROAD	7/5/2022															75%
hotkoski Dr to End of Street McDONOUGH ROAD	4/20/2022										N/A					100%
Vicholson Dr to Shoe Factory Rd MUMFORD COURT	6/23/2022							N/A			N/A					99%
// MUMFORD COURT // Mumford Dr to End of Street // MUMFORD DRIVE	8/29/2022															0%
Vestbury Dr to Olmstead Dr 7. NEWMAN PLACE	8/29/2022															0%
ark Un to Freeman Ct Tentative : Actual	9/21/2022															0%

2022 Street Revitalization Project Schedule Update: (Week of August 8, 2022)

		Pre-Con	struction	Construction										Lands	caping	
RESURFACING STREETS	Start Date ¹	ayout	Sawcutting	Concrete Removal	Asphalt Removal	Storm Sewer	Curb & Gutter	Oriveway Aprons	Sidewalks	Asphalt Binder	Asphalt Patching	Asphalt Surface	Striping	Backfill Topsoil	Sod & Seed	Percent Complete
18. NEWPORT ROAD N Frederick Ln to Hillcrest Blvd	6/27/2022															100%
19. OAKMONT ROAD N 1583 Oakmont to Higgins Rd	6/6/2022															100%
20. PEBBLE BEACH COURT Pebble Beach Dr to End of Street	5/9/2022										N/A		N/A			100%
21 RANDI LANE Jody Ln to End of Street	4/25/2022										N/A		N/A			100%
22. THORNBARK DRIVE Palatine Rd to Bradwell Rd	9/7/2022															0%
23 WESTERN STREET Westview St to Maple Ln	7/5/2022															75%
24. WESTVIEW STREET Osage Ln to Milton Ln	8/22/2022															0%
25. WINDING TRAIL LANE Whispering Trails Dr to Dogwood Dr	9/14/2022															0%
Tentative / Actual											Complete	ed			In Progre	ess



July 29, 2022

Mr. Eric Palm Hoffman Estates Village Manager 1900 Hassell Road Hoffman Estates, Illinois 60169

Dear Mr. Palm:

The purpose of this letter is to provide the results of your community's 5-year cycle verification and accompanying field visit for the National Flood Insurance Program (NFIP) Community Rating System (CRS). The field verification report is enclosed for your records.

I regret to inform you the Department of Homeland Security, Federal Emergency Management Agency (FEMA), has determined your community does not have sufficient credit points to retain a CRS Class 6. Accordingly, the Village of Hoffman Estates will retrograde to a CRS Class 7. The premium discount for flood insurance policyholders will decrease from 20 percent to 15 percent, effective April 1, 2023. The deficiencies noted in the enclosed verification report were communicated to your CRS Coordinator by the Insurance Services Office, Inc. Even though its CRS Class did retrograde, your community is still recognized for implementing voluntary floodplain management program activities and NFIP policyholders will continue to receive premium discounts as a result of these activities.

The CRS rating for your community will automatically be renewed each year as long as there are no NFIP noncompliance actions, so a notification letter will not be sent annually. The annual renewal will take place as long as your community continues to implement the CRS activities you certify in your annual recertification documentation. If you make no modifications or add new CRS activities, the next verification visit for your community will be in accordance with its established 5-year cycle. In the interim, FEMA will periodically send the NFIP/CRS Update newsletter and other notices to your CRS Coordinator to keep your community informed.

I commend your community's actions and your determination to lead your community toward disaster resilience. This commitment enhances public safety and property protection, helps preserve the natural functions of floodplains, and reduces flood insurance premiums.

If you have any questions or need additional information, please contact the FEMA Region V Office, CRS Coordinator Ashley Reimann at (312) 408-5563.

Sincerely,

William H. Lesser, CRS Coordinator

William Hlower

Federal Insurance and Mitigation Administration

Enclosure

cc: Mr. Alan Wenderski, P.E., CRS Coordinator



COMMUNITY RATING SYSTEM

VERIFICATION REPORT

Village of Hoffman Estates, IL

Verified Class 7

NFIP Number: 170107

Cycle

Date of Verification Visit: September 22, 2021

This Verification Report is provided to explain the recommendations of Insurance Services Office, Inc. (ISO) to DHS/FEMA concerning credits under the Community Rating System (CRS) for the above named community.

A total of 2618 credit points are verified which results in a recommendation that the community retrograde from a CRS Class 6 to a CRS Class 7. The community has not met all Class 6 prerequisites. The following is a summary of our findings with the total CRS credit points for each activity listed in parenthesis:

<u>Activity 310 – Construction Certificate Management:</u> Credit is provided for having written construction certificate management procedures for all new and substantially improved/substantially damaged buildings. (38 points)

Activity 320 – Map Information Service: Credit is provided for furnishing inquirers with basic flood zone information from the community's latest Flood Insurance Rate Map (FIRM). Credit is also provided for the community offering additional FIRM information, information about problems not shown on the FIRM, and natural floodplain functions. The service is publicized annually, and records are maintained. (90 points)

<u>Activity 330 – Outreach Projects:</u> Credit is provided for informational outreach projects and general outreach projects. These projects are disseminated annually. (22 points)

<u>Activity 340 – Hazard Disclosure:</u> Credit is provided for state regulations requiring disclosure of flood hazards. (15 points)

<u>Activity 350 – Flood Protection Information:</u> Credit is provided for floodplain information displayed on the community's website. (10 points)

<u>Activity 360 – Flood Protection Assistance:</u> Credit is provided for offering one-on-one advice regarding property protection and making site visits before providing advice. (55 points)

<u>Activity 410 – Floodplain Mapping</u>: Credit is provided for conducting and adopting flood studies for areas not included on the FIRMs and that exceed minimum mapping standards. (156 points)

Activity 420 – Open Space Preservation: Credit is provided for preserving approximately 83 percent of the Special Flood Hazard Area (SFHA) as open space and preserving open space land in a natural state. (1345 points)

<u>Activity 430 – Higher Regulatory Standards:</u> Credit is provided for enforcing regulations that require development limitations, freeboard for new construction and substantial improvement, foundation protection, cumulative substantial improvement, lower substantial improvement, protection of critical facilities, and local drainage protection. Credit is also provided for the enforcement of building codes. (258 points)

Activity 440 – Flood Data Maintenance: Credit is provided for maintaining and using additional map data in the day to day management of the floodplain. Credit is also provided for maintaining copies of all previous FIRMs and Flood Insurance Study reports. (124 points)

<u>Activity 450 – Stormwater Management:</u> The community enforces regulations for stormwater management, soil and erosion control, and water quality. (165 points)

<u>Section 502 - Repetitive Loss Category:</u> The Village of Hoffman Estates, IL is a Category A community for CRS purposes and no action is required. (No credit points are applicable to this section)

Activity 510 – Floodplain Management Planning: Credit is provided for the Cook County Multi-Jurisdictional Hazard Mitigation Plan, adopted on November 4, 2019. A progress report must be submitted on an annual basis. (50 points)

<u>Activity 540 – Drainage System Maintenance:</u> Credit is provided for the regular inspection and maintenance of the community's natural drainage system, identified problem sites, and storage basins and records are maintained. The community enforces a regulation prohibiting dumping in the drainage system and annually publicizes the regulation. (290 points)

<u>Activity 710 – County Growth Adjustment</u>: All credit in the 400 series is multiplied by the growth rate of the county to account for growth pressures. The growth rate for Cook and Kane County, IL is 1.03.

Attached is the Community Calculations Worksheet that lists the verified credit points for the Community Rating System.

CEO Name / Address:

Eric Palm Village Manager 1900 Hassell Road Hoffman Estates, Illinois 60169

Date Report Prepared: March 15, 2022

CRS Coordinator Name / Address:

Alan Wenderski Director of Engineering Division 1900 Hassell Road Hoffman Estates, Illinois 60169 (847) 252-5800

720 COMMUNITY CREDIT CALCULATIONS (Cycle):

CALCULATION SECTION:

OALGGE	AIIOIIO		1		 _		
Verified A	Activity Ca	Iculations	5 :			_	Credit
c310	38	_				_	38
c320	90	_					90
c330	22	_				_	22
c340	15	_				•	15
c350	10	-				•	10
c360	55					•	55
c370		- -				•	
c410	151	x CGA	1.03	=		•	156
c420	1306	x CGA	1.03	- - =		•	1345
		-		_		-	
c430	250	x CGA	1.03	_ =		-	258
c440	120	x CGA	1.03	_ =		-	124
c450	<u> 160</u>	x CGA	1.03	_ =			165
c510	50	_				_	50
c520		_					
c530		_					-
c540	290	-				_	290
c610							
c620		-				-	
c630		-				-	
		-				-	

Community Classification Calculation:

cT = total of above $cT = \underline{2618}$ Community Classification (from Table 110-1): $Class = 7^*$

CEO Name/Address:

CRS Coordinator Name/Address:

Eric Palm Village Manager 1900 Hassell Road Hoffman Estates, Illinois 60169 Alan Wenderski Director of Engineering Division 1900 Hassell Road Hoffman Estates, Illinois 60169 (847) 252-5800

Date Report Prepared: March 15, 2022

^{*} CRS Class 7 applies in lieu of Class 5 due to an outstanding Class 6 prerequisite.