

February 21, 2023

Jason Xi, PE, CFM
Engineering Manager - Department of Public Utilities-Water/Wastewater
City of Naperville
3612 Plainfield-Naperville Road
Naperville, IL 60564

**Subject: Trillium Lift Station Rehabilitation Design
RFP 22-114, Work Order #3**

Dear Mr. Xi:

We are pleased to submit our proposal for the Trillium Lift Station Rehabilitation Project.

Our Project Review

The Ciorba Group design team has provided design considerations and optional services for the lift station rehabilitation project.

Why Ciorba?

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.

We appreciate the opportunity to submit on this project. Should you have any questions about this proposal, please contact me at 773.775.4009 or at klopez@ciorba.com

Sincerely,
Ciorba Group, Inc.



Katrina Lopez, PE, LEED AP
Water Resources Project Manager



CiorbaGroup

CONSULTING ENGINEERS



Proposal for

Trillium Lift Station Rehabilitation Design

22-114 Work Order #3



Naperville

TABLE OF CONTENTS

- 1. Scope of Services**
- 2. Addendum #1**
- 3. Anticipated Project Schedule**
- 4. Naperville Calculation Sheet**
- 5. Base Fee and Work Breakdown Structure**
- 6. Organizational Chart**
- 7. Staff Resumes**
- 8. Hourly Rate Schedule**



1. SCOPE OF SERVICES

Scope of Work City of Naperville Water Utilities

For
Trillium Lift Station Rehabilitation Design
(RFQ 22-114, Work Order #3)
Naperville, IL
February 17, 2023

UNDERSTANDING OF THE PROJECT

The City of Naperville Water Utilities group would like to rehabilitate the existing Trillium Lift Station. The station was constructed in 1995 and has original components. The station consists of a prefabricated steel wet well and valve vault, pump controller cabinet and standby generator.

Improvements are summarized as follows:

- Lining the wet well and valve vault.
- Removing and replacing pumps and accessories, discharge piping and valving.
- Replace level control with radar and transducers.
- Install a wet well mixer.
- Removing and replacing the pump controller, control panel, standby generator, and ATS.
- Lining the manhole upstream of the wet well, replacing collar and concrete around cover.
- Installation of new flow meter and pressure gauge in concrete manhole.
- Replace wet well and valve vault anodes.
- Add safety grate to wet well.

DESIGN CONSIDERATIONS

After reviewing the existing station plans and attending the site visit, the following is a list design items we feel should be considered.

- **By-pass pumping and project sequence.** We anticipate the following will be detailed in the by-pass pumping plan. Work sequence will be important in maintaining the station in operation and minimize lane closures for the work:
 - First, cut in a by-pass connection in a manhole downstream of the valve vault. This will allow the existing valve vault to be coated and new discharge piping installed. The manhole will house the proposed flow meter, gate valve and tee connection to serve as a by-pass connection. The manhole would also be used as a location where PICA screening sensors can be inserted into the forcemain at a future date to perform the forcemain in-line screening.
 - Second, setup bypass with portable pump system from manhole adjacent to wet well or first manhole south of station, to new bypass connection.
 - Third, complete all mechanical, electrical, controls, and lining work.
 - All work shall be timed once all equipment and panels are in the contractor's possession. Establishing the new electrical service and performing advanced work (concrete pads, buried conduit, etc.) shall be completed ahead of the bypass work to ensure a short bypass window.
- **Existing trees must remain in place.** Therefore, we recommend installing the new pump controller and generator just north of the existing station to allow the existing to be used during construction, given long lead times on electrical equipment.
- **No changes to the depth of the wet well will be included in the improvements.** This may eliminate Vaughn from being able to provide a pump for the project, as their pumps are traditionally taller than other manufacturer's submersible/grinder pump heights.



1. SCOPE OF SERVICES

- **IEPA permit submittal.** We recommend submitting to IEPA and the building department with the pre-final design submittal, in lieu of the 100% design. IEPA has up to 60 days to review the plans from the date they receive the submittal. Submitting early in the design will ensure that the bidding process is not delayed awaiting review comments and approval.

SCOPE OF SERVICES

The following describes the work that Ciorba Group will provide as part of the project.

Task 1 - Meetings, Data Collection & Coordination

Ciorba will schedule a kickoff meeting with the City to discuss project scope, preferred equipment and permitting requirements. Ciorba will visit the station after the meeting to obtain specific measurements and information necessary for design.

Task 2 - Topographic Survey

Ciorba will perform a full topographic survey of the lift station site to obtain curb line, utilities, vegetation, trees, signs and right-of-way. Survey will be performed by means of total station. Ciorba will set horizontal and vertical control points. Vertical control will be based on NAVD'88 datum.

Ciorba will also request utility information for all known utility companies located within the project limits by contacting the Joint Utility Location Information for Excavators (JULIE).

Aerial images that will be used in combination with the survey will be obtained from the United States Geological Survey (USGS) website.

Base files will be prepared based on compiling existing conditions retrieved during field survey, utility atlas information received from JULIE request, and USGS aerial images.

Task 3 - 30% Design Submittal

Preliminary Design

Ciorba will review existing plans, SCADA data and maintenance information to understand station design and operation. Based on our findings, Ciorba will prepare a preliminary design memo (PDM) for the City's review. The submittal will include the following:

- Proposed Pump Selection and Calculations
- Proposed Station Operation
- Anticipated Equipment Selection
- Site Layout Plan
- Station Cross-Section
- Engineer's Opinion of Probable Costs

Meetings

One (1) meeting to discuss the preliminary design submittal with the City is included in this task.

Task 4 - 90% Design Submittal

Prefinal Design

Upon the City's review and approval of the preliminary design, Ciorba will prepare design plan drawings, detail drawings, specifications and cost estimate. The design will meet City and State design requirements. Plan drawings will consist of existing conditions, removal plans, by-pass pumping plan, proposed site layout, station elevation views, soil erosion and sediment control,



1. SCOPE OF SERVICES

and maintenance of traffic plan. Detail drawings will include one-line diagram, controller details, station operation, SCADA point list, generator details, and conduit/equipment installation details.

The following are the anticipated sheets that will be included in the plan drawings:

Sheet Title	No. Of Sheets
Cover Sheet	1
General Notes/Legend/ Index of Sheets	1
Existing Conditions & Demolition Plan	1
By-pass Pumping Plan and Sequence of Work	1
Proposed Lift Station Plan and Details	1
Site Plan	1
Enlarged Station Plan	1
Station Cross Sections	1
Restoration and Erosion Control Plan	1
Electrical Site Plan and Schedule	1
Electrical Details and One-line Diagrams	1
Generator Plan and Details	1
SCADA Data Point List	1
Mechanical Details	1
Civil Details	1
Maintenance of Traffic Details	1
Record Drawings of Existing Station	3

Technical specifications will be prepared in a CSI format. Ciorba will complete permit forms and submit to IEPA.

Coordination and Meetings

Ciorba will coordinate electric service connection for the new pump controller with Com Ed. Ciorba will also coordinate the gas service for the new standby generator. It is assumed that the City will pay for any fees required to upgrade the service due to age and increased in pressure required for the new generator.

One (1) meeting to discuss the City's comments is included in this task.

Task 5 - Final Design Submittal

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

Task 6 - Bid Documents

Ciorba will respond to comments and finalize the plans and specifications. Ciorba will submit a bid package to the City which includes:

- One full size set of bid plans
- One hardcopy of contract documents
- Contract plans and documents in a pdf format
- Contract plans in an AutoCAD format
- Contract documents in a Word format



1. SCOPE OF SERVICES

Task 7 - Construction Assistance

Ciorba has capped the budgeted construction hours at 95 per the City's request, to account for the following services:

- Attending pre-construction meeting and prepare meeting minutes.
- Respond to bidder's Request for Information (assume a maximum of two submittals).
- Perform shop drawing reviews (assume a minimum of eight submittals).
- Performing two site visits during construction to review station piping and electrical components.
- Attending the station startup.
- Performing additional site visits as time allows considering the City's cap at 95 hours.
- Preparing record drawings.

Task 8 - QC/QA

Ciorba will perform internal quality control/quality assurance in accordance with company's QC/QA procedures.

Task 9 - Project Management & Administration

Work included in this task is for project oversight, project progress reports, and updating the schedule.

FEE CALCULATION

Ciorba Group proposes the following fees to provide design engineering service for the Trillium Lift Station Rehabilitation (RFQ 22-114, Work Order #3)

Base Engineering Services

Ciorba Labor & Overhead Costs:	\$ 53,517.00
Ciorba In-House Direct Costs:	\$ 334.75
Design Subtotal:	\$53,851.75

Integrator Allowance

City's Integrator Allowance	\$25,000.00
Integrator Allowance Subtotal:	\$25,000.00

Construction Assistance

Ciorba Labor & Overhead Costs (95 hours maximum)*	\$15,619.50
Ciorba In-House Direct Costs:	\$ 286.65
Construction Subtotal:	\$15,906.15

* Construction assistance will be charged T&M as requested in the RFP. The above cost is based on the anticipated hours and staff that will perform the various services listed in the task. Hourly rates are provided at the end of the proposal for your reference.



1. SCOPE OF SERVICES

Optional Services

CCDD Testing and Certification

Should the City desire that CCDD services be provided as part of the project we have included the costs to take a sample, perform testing and completion of LPC-663 form.

Cost associated with this work is \$4,450*

**The cost is based a proposal received from Rubino Engineering, Inc., a certified WBE/DBE.*

In-Line Screening of the Forcemain

We understand the City has developed a long-term plan to perform in-line screening of all forcemains within the City. Cost to include PICA pipers screening as part of the improvement project to verify forcemain pressure, leakage, air pockets, geometry/vertical alignment, magnetic anomalies, and report of findings.

The approximate cost associated with this work is \$25,000*

**The cost is based on City maintenance staff installing two sensors in a new gate valve in the flow meter manhole and retrieving them in the discharge manhole with a basket screen.*



**CITY OF NAPERVILLE
NAPERVILLE, ILLINOIS**

**RFQ 22-114 WO#3
SUMMERFIELD LIFT STATION**

TRILLIUM LIFT STATION REHABILITATION DESIGN

The attention of bidders is called to the following changes, clarifications and/or additions/deletions to the original contract specifications and drawings and they shall be taken into account in preparing proposals and shall be part of the Contract Documents:

SCOPE CHANGES

1. An additional manhole shall be installed next to the current valve vault, which will include a new flow meter and cleanout.
2. The concrete collar around existing sanitary manhole needs to be replaced.
3. The traffic box doors need to be opened toward the street; It might need to be enlarged to fit all the new equipment. Any necessary survey needed for this project would need to be included in the design scope.
4. The existing lift station is located within the Right-of-Way. Refer to the engineering plan sheet 8 which was included the original RFP.

Bidders shall include this Addendum #1 in the Offer to Contract.

Attachments:

Jason Xi
Engineering Manager
March 17, 2022



3. ANTICIPATED PROJECT SCHEDULE

Task/Milestone	Duration	2023												2024											
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Award of Project (3/3/2023)				█																					
Notice to Proceed (3/17/2023)				█																					
Kick-Off Meeting (3/20/2023)				█																					
Topographic Survey (3/27/2023-4/7/2023)	2 weeks			█	█																				
Julie Request (3/27/2023 - 4/14/2023)	3 weeks			█	█																				
Preliminary Design Submittal (4/17/2023 - 4/28/2023)	2 weeks				█																				
Village Review (5/1/2023 - 5/5/2023)	1 week					█																			
Prefinal Design Submittal (5/8/2023 - 6/2/2023)	4 weeks					█	█																		
IEPA Review (6/5/2023 - 8/4/2023)	60 days (approx 8.5 weeks)						█	█	█																
Village Review (6/5/2023 - 6/16/2023)	2 weeks						█	█																	
Final Design Submittal (6/19/2023 - 7/14/2023)	4 weeks						█	█																	
Village Review (7/17/2023 - 7/21/2023)	1 week							█																	
Bid Documents (7/24/2023 - 8/4/2023)	2 weeks							█	█																
Advertise for Bids (8/7/2023)									█																
Bids Due (9/1/2023)										█															
Bid Award (9/19/2023)											█														
Notice to Proceed (9/29/2023)												█													
Shop Drawing Submittal (10/2/2023 - 12/1/2023)	8 weeks												█	█	█										
Construction (3/4/2024 - 4/26/2024)	8 weeks																								
Pump Startup (4/29/2023)																									



4. NAPERVILLE CALCULATION SHEET



- Include this document in the submittal, fill the maximum fee calculated above in the last page of this document and provide the signature.

IMPORTANT DTAES

- City will host a mandatory site visit on January 24 (Tuesday), 9:30 AM at Trillium Station. (2426 Trillium Ln, Naperville)
- The quota proposal is due on February 17 (Friday), 3:00PM. Please email your quota to Jason Xi at xij@naperville.il.us

The cost of all equipment and labor to complete the work as identified shall be:

\$ \$94,757.90 (Maximum Fee, See Note 1 Below)

Quote Provided by: Salvatore Di Bernardo Salvatore Di Bernardo, PE, SE
Signature Printed

Company and Address: Ciorba Group

8725 W. Higgins Road, Suite 600

Chicago, IL 60631

QUOTES ARE DUE NO LATER THAN 3:00 P.M. STANDARD CENTRAL TIME ON FRIDAY, February 17, 2023. QUOTES TO BE SUBMITTED BY EMAIL TO Jason Xi AT jxi@naperville.il.us. ANY QUESTIONS SHOULD BE EMAILED TO Jason Xi AT JXI@naperville.il.us. THE CITY OF NAPERVILLE IS TAX EXEMPT.

NOTE 1:

Maximum Fee listed above is made up of the three subtotals outlined in the RFP.

1. Design Subtotal: \$53,851.75
2. Integrator Allowance Subtotal: \$25,000.00
3. Construction Subtotal: \$15,906.15



5. BASE FEE AND WORK BREAK-DOWN STRUCTURE

Activity	Grand Total	Principal	Project Manager	QA/QC	Lead WR Engineer	WR Senior Project Engineer	WR Project Engineer	Lead Electrical Engineer	Senior Survey Technician
TOTAL	422	0	47	8	82	170	64	33	18
1. Meetings, Data Collection & Coordination	Task Total: 8		6		2				
0100 Meetings	Subtotal: 8		6		2				
Prepare Agenda/Exhibits for Meetings	2		2						
Kick-off Meeting and Site Visit	4		2		2				
Meeting Minutes (# mtg x # hr/mtg minutes)	2		2						
2. Topographic Survey	Task Total: 21					1	4		16
0200 Field Survey	Subtotal: 21					1	4		16
Horizontal Topographic Survey	8								8
ROW Investigation	4								4
Down Loading Total Station	4								4
Julie Utility Request	1					1			
Drafting Utilities (gasmain, electrical, etc.)	4						4		
3. Preliminary Design Submittal	Task Total: 57		6		11	34	4	2	
0300 Preliminary Design Submittal	Subtotal: 53		2		11	34	4	2	
Review Existing Station Plans and SCADA Data	5				1	4			
Pump Calculations and Selection (3 Manufacturers)	7				1	6			
Retention and Pump Cycling Calculations	4					4			
Structure Coating Coordination	2				2				
Equipment Selection	3				1	2			
Generator Calculations	3				1			2	
Station Base File Preparation	4						4		
Site Plan Layout	5				1	4			
Station Elevation View	8					8			
Engineer's Opinion of Probable Construction Costs	2				2				
Preliminary Design Memo	10		2		2	6			
0310 Meetings	Subtotal: 4		4						
Design Review Meeting	2		2						
Meeting Minutes	2		2						
4. Prefinal Design Submittal	Task Total: 152		9		30	68	16	27	2
0400 Prefinal Design Submittal	Subtotal: 142		5		24	68	16	27	2
Disposition of Comments	2		2						
Cover	2						2		
General Notes and Legend (1 Sheet)	2				1		1		
Alignment, Ties and Benchmarks (1 Sheet)	4					2			2
Existing Conditions/Removal Plan (1 Sheet)	6					6			
By-Pass Pumping Plan and Sequence of Work (1 Sheet)	5				1	4			
Maintenance of Traffic Plan (1 Sheet)	2					2			
Site Plan (1 Sheet)	7				1	6			
Erosion Control Plan and Notes (1 Sheet)	4						4		
Erosion Control Details (1 Sheet)	2						2		
Site Restoration Plan (1 Sheet)	2						2		
Station Plan View and Elevation Plan (1 Sheet)	6					6			
Coating Plan (1 Sheet)	3				1	2			
Enlarged Site Plan (2 Sheets)	10				2	8			
Pump Curve and System Operation (1 Sheet)	3				1	2			
Conduit and Cable Plan (1 Sheet)	7				1			6	
Generator Plan and Details (2 Sheets)	7				1			6	
Electrical Details and One-lines (2 Sheets)	11				1			10	
SCADA Data Point List (1 Sheet)	2				1		1		
Mechanical Details (1 Sheet)	4					4			
Civil Details (1 Sheet)	2					2			
Maintenance of Traffic Details (1 Sheet)	2					2			
Record Drawings of Existing Station (3 Sheets)	4						4		
Submittal Preparation	9		2		1	6			
Voltage Drop Calculations	2				1			1	
Load Calculations	5				1			4	
Permit Submittal	6		1		1	4			
Technical Specifications	10				4	6			
Quantity Calculations	7				1	6			
Engineer's Opinion of Probable Construction Costs	4				4				



Activity		Grand Total	Principal	Project Manager	QA/QC	Lead WR Engineer	WR Senior Project Engineer	WR Project Engineer	Lead Electrical Engineer	Senior Survey Technician
0420	Meetings and Coordination	Subtotal:	10	4		6				
	Electric Service Coordination with Com Ed (Including Site Visit)		4			4				
	Gas Service Coordination with Nicor		2			2				
	Design Review Meeting		2	2						
	Meeting Minutes		2	2						
5.	Final Design Submittal	Task Total:	50	5		5	20	16	4	
0500	Final Design Submittal	Subtotal:	50	5		5	20	16	4	
	Disposition of Comments		2	2						
	Plan Revisions		36	2		2	12	16	4	
	Technical Specification Revisions		6	1		1	4			
	Quantity Calculations		4				4			
	Engineer's Opinion of Probable Construction Costs		2			2				
6.	Bid Documents	Task Total:	23	3		6	14			
0610	Bid Documents	Subtotal:	23	3		6	14			
	Plan Revisions		11	1		2	8			
	Technical Specification Revisions		3	1		2				
	Preparation of Bid Package		9	1		2	6			
7.	Construction Assistance	Task Total:	95	10		28	33	24		
0700	Construction Assistance	Subtotal:	95	10		28	33	24		
	Pre-Construction Meeting Agenda		2			2				
	Pre-Construction Meeting		8	4		4				
	Pre-Construction Meeting Minutes		2			2				
	Shop Drawing Review - Assuming a Min. of Eight		25	2		2	21			
	Request for Information (RFI) - Assuming Max. of Two		15	1		2	4	8		
	Site Visits - Assuming a Min. of Two (Review Piping and Electrical)		4			4				
	Station Start-up		18	2		8	8			
	Record Drawings		21	1		4		16		
8.	QA/QC Review	Task Total:	8		8					
0800	QA/QC Review	Subtotal:	8		8					
	QA/QC Review		8		8					
9.	Project Management & Administration	Task Total:	8	8						
0900	Management Subtotal	Subtotal:	8	8						
	Project Management		8	8						



6. ORGANIZATIONAL CHART AND RESUMES



Naperville

**PROJECT MANAGER/
RESIDENT ENGINEER**

Katrina Lopez, PE, LEED AP

QA/QC MANAGER

Tony Wolff, PE, CFM

WATER RESOURCES ENGINEERS

**Lead Water Resources
Engineer**

Luke Mattson, PE

Senior Project Engineer

Corinne Benton, PE

Project Engineer

Danielle daSilva Hossler, EI

ELECTRICAL ENGINEER

Daniel Johnson, PE

SURVEYOR

Palmen Milenov





Katrina Lopez, PE, LEED AP

Project Manager/Resident 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 sanitary lift stations, wastewater facilities, roadway/site lighting, 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.

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

LEED Accredited Professional
U.S Green Building Council

EXPERTISE

Pump Stations

Lift Stations

Construction Observation

*Completed while employed at another company





Luke Mattson, PE

Lead Water Resources 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 30 lift stations since joining Ciorba Group in 2013.

REPRESENTATIVE PROJECT EXPERIENCE

North Park Lift Station Reconstruction, Village of Streamwood

Construction Engineer for the reconstruction of this duplex sanitary lift station (1,050 GPM - 2 x 25 hp submersible pumps)

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 Engineer for the reconstruction of this duplex sanitary lift station (840 GPM - 2 x 25 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)

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)

Chatham Lift Station Reconstruction, Village of Buffalo Grove

Project Manager / Project Engineer / Resident Engineer for the reconstruction of this duplex sanitary lift station (1,800 GPM - 2 x 20 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)

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 x 25 hp submersible pumps)

EDUCATION

Bachelor of Science Mechanical Engineering
University of Illinois

Bachelor of Science Physics
Augustana College

PROFESSIONAL REGISTRATION

Professional Engineer

Illinois #062-059493

Indiana #PE11600626

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





Corinne Benton, PE

Senior Project 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

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 x 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 x 20 hp submersible pumps)

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)

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.

80th Avenue Water Main Relocation, Will County.

Water Resources Engineer for relocation of 5,700 feet of 24-inch transmission main. Design includes the crossing of 2 waterways and Interstate 80, and associated state and federal permitting.

EDUCATION

Bachelor of Science Environmental Engineering

Georgia Institute of Technology

PROFESSIONAL REGISTRATION

Professional Engineer

Illinois #062-073419

EXPERTISE

Lift Stations

Sanitary Sewers

Pump Stations

Water Main

Drainage Studies and Design

Construction Observation





Danielle daSilva Hossler

Project Engineer

ABOUT DANIELLE

Danielle is a Water Resources Engineer specializing in the preliminary analysis and preparation of construction plans for water resources improvement projects, including stormwater management, water supply, and sanitary projects.

REPRESENTATIVE PROJECT EXPERIENCE

Chatham Lift Station Reconstruction, Village of Buffalo Grove

Water Resources Engineer for the reconstruction of this duplex sanitary lift station (1,800 GPM – 2 x 20 hp submersible pumps)

Cambridge Lift Station Reconstruction, Village of Buffalo Grove

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

Walnut Lift Station & Force Main Reconstruction, Village of Schaumburg.

Water Resources Engineer for the replacement of a wet well / dry well configuration constructed around 1970. Scope of work included select demolition of existing facilities, pump replacements, process piping improvements including valves and metering, force main improvements as required including bypass connection valve-work, on-site generator, site work, flow control, civil works, enclosures, controls cabinetry, structural rehabilitation (as required), building repurposing or addition (as required) and other contributory civil, mechanical, and electrical components supportive of the major items of work. Ms. daSilva assisted with the preparation of plans and specifications; construction cost estimation; bid documents; permitting; collecting construction bids and making recommendations to the client.

Wheeling Road Stormwater Lift Station, Village of Wheeling.

Water Resources Engineer for preliminary and final design services for the Wheeling Road Stormwater Lift Station. The project is part of the regional flood reduction program to minimize flood events along Wheeling Road and other areas tributary to Echo Lake in the Village. Services included a hydraulic analysis to determine the feasibility of drawing down Echo Lake during significant storm events with the use of a stormwater lift station; permitting; and development of preliminary cost estimates for improvements and review with the Village.

Washington Street Bridge Reconstruction, City of Naperville

Water Resources Engineer for the design of the sanitary siphon and water main crossings of the DuPage River.

Arbor Drive Water Main Improvements, City of Rolling Meadows

Water Resources Engineer for design and construction management for the 5,300' multi-year Arbor Drive Water Main Improvements.

City of Highland Park Water System Services, City of Highland Park

Water Resources Engineer for the 2018 hydraulic modelling and master plan update and annual water main design projects (2016-2022).

Arbor Vitae Water Main and Rehabilitation Design, Village of Deerfield.

Water Resources Engineer for the final design of the replacement of 3,200 feet of 8-inch water main on Arbor Vitae Road and Apple Tree Lane in a residential neighborhood of Deerfield. Street improvements overlap this utility work on Arbor Vitae Road for a total street reconstruction length of 1,700 feet, including the widening of a cul-de-sac to improve traffic movements. In order to loop the old neighborhood system, a new water main crossing is being designed in an easement between residential properties under the West Fork of the North Branch of the Chicago River and will be constructed with directional drilling technology.

EDUCATION

Bachelor of Science Civil Engineering
University of Illinois at Chicago

PROFESSIONAL REGISTRATION

Engineering Intern
Illinois #061-039636

EXPERTISE

Lift Stations

Sanitary Sewers

Pump Stations

Water Main

Drainage Studies and Design





Daniel T. Johnson, PE

Electrical Engineer

ABOUT DAN

Dan has 19 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 minimize 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

Master of Science in Civil Engineering

University of Illinois at Chicago

Bachelor of Science in Civil Engineering

Portland State University

PROFESSIONAL REGISTRATION

Professional Engineer

Illinois #062-062856 (2010)

Indiana# PE12000388 (2020)

Oregon #72738PE (2008)

EXPERTISE

Electrical

Lighting

Traffic Signals

ITS

PROFESSIONAL AFFILIATIONS

American Society of Civil Engineers

Illuminating Engineering Society

Institute of Transportation Engineers





Plamen Milenov

Surveyor

ABOUT PLAMEN

Plamen performs topographic and route surveys for Ciorba. He has over 23 years of experience with total station and GPS equipment. Mr. Tumbev has also performed construction survey and stake-out for projects.

REPRESENTATIVE PROJECT EXPERIENCE

Eagle Way Sewer Replacement, Village of Hoffman Estates.

Surveyor responsible for performing all survey to prepare record drawings for the replacement of over 4000' of sanitary sewer on Eagle Way for the Village of Hoffman Estates. Record drawings were provided in both PDF and CAD for ease of uploading into the Village GIS database.

Cambridge Lift Station Reconstruction, Village of Buffalo Grove Road.

Surveyor responsible for performing all survey to prepare record drawings for the replacement of two existing lift stations.

Central Road Improvement, Cook County Department of Transportation and Highways.

Surveyor responsible for the topographic surveys required for the reconstruction of Central Road from Barrington Road to Huntington Boulevard. The roadway section will consist of one through lane in each direction with a middle-stripped median/left turn lane/two way left turn lane.

Ashland Avenue and Leavitt Street over I-290 Bridge Rehabilitation, Illinois Department of Transportation, District One.

Surveyor for responsible for supplemental topographic surveys required for the bridge rehabilitation of the Ashland Avenue and Leavitt Street bridges crossing over I-290 and the CTA Blue Line just west of downtown Chicago. The bridges are each three span bridges carrying traffic across I-290 which carries over 158,000 vehicles per day.

Brookfield Ave over Salt Creek Replacement, Village of Brookfield.

Surveyor responsible for performing all survey to prepare record drawings for the replacement of a two-span Precast Prestressed Concrete deck beam structure that carries one lane and sidewalk in each direction. Construction included a single span 103' long PPC I-Beam bridge on tall abutments founded on driven piles and aesthetic features, water main and storm sewer, reconstruction of 300' of approach roadway, and lighting.

Central Avenue over Ravine, City of Highland Park, 0020349.01

Surveyor responsible for performing all survey to prepare record drawings for the replacement of a single span reinforced concrete closed spandrel arch that was originally built in 1935 and is on the Illinois Register for Historic Bridges. The bridge is in a residential setting has a span length of 111 feet and is accessible for a single lane of traffic in each direction.

EDUCATION

Master of Science

University of Architecture, CE, Geodesy, Bulgari

EXPERTISE

Topographic Surveys

Construction Surveys



8. HOURLY RATE SCHEDULE

Compensation for services that will be provided on a time-and-expense basis shall be billed at the following rates through December 31, 2023:

Classification	Total
Project Manager	\$213.00
QA/QC Manager	\$282.00
Lead Water Resources Engineer	\$228.00
Senior Water Resources Project Engineer	\$139.50
Water Resources Project Engineer	\$115.50
Lead Electrical Engineer	\$151.50
Senior Survey Technician	\$144.00

Billing rates will be adjusted on January 1st.

