



VILLAGE OF RIVER FOREST SPECIAL VILLAGE BOARD MEETING

Monday, May 10, 2021 – 6:00 PM
Village Hall – 400 Park Avenue – River Forest, IL 60305
Community Room

AGENDA

Physical attendance at this public meeting is limited to 36 individuals, with Village Board officials, staff and consultants having priority over members of the public. Public comments will be shared with the Village President and Board of Trustees. You may submit your written public comments via email in advance of the meeting to: vbot@vrf.us. You may listen to the meeting by participating in a Zoom conference call as follows: dial-in number: 312-626-6799 with meeting ID: 863 0722 2739 or by clicking here: <https://us02web.zoom.us/j/86307222739>. If you would like to speak during public comment, please email sphyfer@vrf.us by 4:00 PM on Monday, May 10, 2021. If you would like to watch the livestream, please go to the Village website: <https://www.vrf.us/events/event/2076>.

1. Call to Order/Roll Call
2. Pledge of Allegiance
3. Citizen Comments
4. Consent Agenda
 - a. Village Board of Trustees Meeting Minutes – April 26, 2021
 - b. Amendment to Title 5, Chapter 10, “Village Waterworks and Sewerage System” of the River Forest Village Code in Regard to Water and Sewer Rates – Ordinance
 - c. Ratification of Ordinances Approving the Fiscal Year 2021-2022 Annual Budget for the Village of River Forest and the Fiscal Year 2021-2022 Compensation Plan – Ordinance
 - d. Resolution Supporting Restoration of Local Government Distributive Fund Revenue – Resolution
5. Consent Items for Separate Consideration
6. Recommendations of Boards, Commissions and Committees
7. Unfinished Business
 - a. Approval of Flag Policy Regarding Use of Village Flag Pole
8. New Business
 - a. Waiver of Formal Bid (Due to Competitive RFP) and Award of Contract to Christopher B. Burke Engineering, Ltd. for the Stormwater Master Plan in a not-to-exceed cost of \$168,504.00
9. Executive Session
10. Adjournment

**VILLAGE OF RIVER FOREST
REGULAR VILLAGE BOARD OF TRUSTEES MINUTES
Monday, April 26, 2021**

A regular meeting of the Village of River Forest Board of Trustees was held on Monday, April 26, 2021 at 7:00 p.m. in the Community Room of Village Hall, 400 Park Avenue – River Forest, IL.

1. CALL TO ORDER/ROLL CALL

The meeting was called to order at 7:05p.m. Upon roll call, the following persons were:

Present: President Adduci, Trustees Bachner, Brennan, Cargie, O'Connell, Vazquez, Village Clerk Kathleen Brand-White

Absent: Trustee Henek

Also Present: Acting Village Administrator Lisa Scheiner, Assistant to the Village Administrator Jonathan Pape, Management Analyst Sara Phyfer, Police Chief James O'Shea, Police Commander James Greenwood, Finance Director Rosemary McAdams, Fire Chief Kurt Bohlmann, Public Works Director John Anderson, Village Engineer Jeff Loster, Village Attorney Greg Smith

2. PLEDGE OF ALLEGIANCE

President Adduci led the pledge of allegiance.

3. CITIZEN COMMENTS

President Adduci stated she is happy to see things getting slowly back to normal and having people in the Board room.

Margie Cekander, 531 River Oaks. Ms. Cekander thanked all the candidates who ran in contested elections and for the DEI appointments. She also commented about the proposed budget, specifically with regard to pension amounts, alleys and the NSMP. She suggested the Board create a search committee for the new Village Administrator.

President Adduci encouraged Ms. Cekander to listen to the audio of the previous meetings where these budget items were discussed, including the actuary report regarding pensions. She stated she is comfortable with where the Village is at regarding pensions and that there should be savings with consolidation through the State. She also stated that the alleys were discussed at length and the Board is moving ahead because of low interest rates.

Phylis Rubin, 411 Ashland. Ms. Rubin inquired about the Lake and Lathrop project and asked about deadlines. She also asked how many units were sold to people associated with the project. Ms. Rubin also asked about block parties this summer.

Ms. Scheiner stated that the last time block parties were discussed, the direction was to wait

until the region reached Phase 5, however she stated it may be appropriate to reassess with the Bridge Phase. She also noted the Park District's will be holding a small outdoor ceremony on Memorial Day in lieu of the parade this year.

4. ELECTED OFFICIAL COMMENTS & ANNOUNCEMENTS

Trustee O'Connell stated it was nice to be in Village Hall again. He reported he attended the Bicycle Exchange event last weekend and recognized the individuals who organized the event.

Trustee Brennan reviewed the benefits of composting and stated the Village's program costs \$20/month and residents are given a cart. She stated the Village will be renegotiating its waste hauler contract soon.

It was noted that compost participants are able to request that finished compost be delivered.

Trustee Brennan also reported she attended a briefing on the SAFE-T Act and read aloud ten changes the Act brings. She noted the Quarterly Community Safety meeting is on Wednesday, April 28 at 6PM.

President Adduci noted the information about the Bill will continue to be communicated by the Village.

Trustee Vazquez reminded everyone that walk-in appointments are now available for individuals who have yet to be vaccinated. He reported that Officer Ransom presented about scams at the Library and stated it is great when agencies work together. He stated that he attended an OPRF Chamber event at Good Earth Greenhouse and Café and encouraged people to attend these events. He wished everyone a happy Mother's Day.

Trustee Cargie wished everyone a happy Mother's Day.

Trustee Bachner read a statement to acknowledge that this land was once inhabited by indigenous people and stated that River Forest continues to be a place that people from diverse backgrounds live and gather. She stated she was grateful for the Bicycle Exchange event and reported that she and Acting Administrator Scheiner attended Maywood's Village Pride event to help pick up trash at various sites. She stated it was great to meet representatives and share experiences. She shared that some residents who go on long walks are able to fill up trash bags while out.

President Adduci reported that she injured her leg this week and was unable to attend the Maywood event and an Illinois Municipal League event. She stated everyone works to find funding, grants and key money that helps the Village balance the budget, and noted the budget is balanced due to Staff's hard work. She stated there is a lot of work to get legislators and the governor's office to grant funds, noting that helps balance the budget as well. She also wished everyone a happy Mother's Day.

5. CONSENT AGENDA

- a. Committee of the Whole Meeting Minutes – April 12, 2021
- b. Village Board of Trustees Meeting Minutes – April 12, 2021
- c. Award of Bid and Contract for Partial Village Hall Roof Replacement to Garland/DBS Inc. in the amount of \$45,403
- d. Award of Bid and Contract for the 2021 Sewer Lining Project to Benchmark Construction in the amount of \$163,054
- e. Award of Bid and Contract for the 2021 Street Improvement Program to Brothers Asphalt Paving in the amount of \$585,179.54
- f. Waiver of Formal Bid (Due to Competitive RFP) and Award of Contractor for Construction Engineering Services for the 2021 Street Improvement Project and Alley Improvement Project with Thomas Engineering Group in a not-to-exceed cost of \$90,729.60
- g. Appropriation of \$550,000 in Motor Fuel Tax Funds for the 2021 IDOT Maintenance Agreement – Resolution
- h. 2021 Compensation Plan Approval – Ordinance
- i. Right-of-Way Encroachment Waiver and Agreement for an Irrigation System Located at 847 Thatcher Avenue
- j. Right-of-Way Encroachment Waiver and Agreement for an Irrigation System Located at 755 William Street
- k. Sexual Assault Awareness Month – Proclamation
- l. Mental Health Awareness Month – Proclamation
- m. Arbor Day – Proclamation
- n. March Financial Report
- o. Village Administrator's Report

Trustee Brennan made a motion, seconded by Trustee O'Connell, to approve the Consent Agenda items A, C-I, K-O.

Roll call:

Ayes: Trustees Bachner, Brennan, Cargie, O'Connell, Vazquez

Absent: Trustee Henek

Nays: None

Motion Passes.

Trustee Vazquez made a motion, seconded by Trustee Brennan, to approve the Consent Agenda item B, as amended by Trustee Brennan.

Trustee Brennan requested her Trustee Comments from the last meeting be clarified in the minutes to state that she also asked for a report on Lake and Lathrop one week prior to the next meeting.

Roll call:

Ayes: Trustees Bachner, Brennan, Cargie, O'Connell, Vazquez

Absent: Trustee Henek

Nays: None
Motion Passes.

Trustee O'Connell made a motion, seconded by Trustee Cargie, to approve the Consent Agenda item J.

In response to a question from Trustee O'Connell about signatures on Right-of-Way agreements, it was determined that agents are authorized to submit the agreements on the owners' behalf, but that the form can be modified for future agreements to require written acknowledgement from the owners.

Roll call:
Ayes: Trustees Bachner, Brennan, Cargie, O'Connell, Vazquez
Absent: Trustee Henek
Nays: None
Motion Passes.

6. CONSENT ITEMS FOR SEPARATE CONSIDERATION

None.

7. RECOMMENDATIONS OF BOARDS, COMMISSIONS AND COMMITTEES

- a. Zoning Board of Appeals – Side Yard Setback Variations for a Second Story Addition at 7612 Vine – Ordinance

Trustee Vazquez made a motion, seconded by Trustee O'Connell to approve an Ordinance granting the requested variation to Section 10-9-7 of the Zoning Ordinance at 7612 Vine Street.

Ms. Scheiner summarized this item and stated the Zoning Board of Appeals made a unanimous recommendation approving the variation. She noted an adjacent neighbor submitted letter of support.

Roll call:
Ayes: Trustees Bachner, Brennan, Cargie, O'Connell, Vazquez
Absent: Trustee Henek
Nays: None
Motion Passes.

- b. Amendment of Resolution Establishing a Diversity, Equity and Inclusion Ad Hoc Advisory Group – Resolution

Trustee O'Connell made a motion, seconded by Trustee Bachner, to approve an amended Resolution establishing a Diversity, Equity and Inclusion Ad Hoc Advisory Group.

President Adduci reviewed the amendments, noting she is recommending all the applicants and to add a second trustee co-chair. She stated she recommended that when the new Board is seated, to ask Ken Johnson to take on the second trustee chairmanship. She noted that it would be best to have two trustees managing it whose terms not end at the same time, stating this is a good way to ensure that the Advisory Group maintains institutional knowledge.

Trustee Bachner commented that she is humbled and that the Group will be involved in making sure the Village gets closer to ensuring people are gaining access to resources, looking at where power lies, and that all are seen. She stated the applicants are rising to the challenge about what it can mean to be equitable in River Forest and stated it fills her with pride. She acknowledged Trustee Brennan's initial idea and her endless effort working towards this. She also proposed that a co-chair of the group be a resident applicant.

President Adduci stated Trustee Brennan has been instrumental to the Advisory Group development and emphasized that everyone is welcome to attend the meetings. She noted that Trustee Brennan has accepted to be a liaison between the Board and Dominican. President Adduci stated that her opinion is that it would be best for the co-chair to be a trustee for institutional knowledge.

Trustee Cargie stated it is important the chairs be accountable to the electorate, noting that Mr. Johnson should share in leading the Group because he has that status.

Trustee Bachner stated her suggestion is not that another chair not be a trustee, but that it could be effective to have one of the applicants with expertise be a co-chair.

Trustee Vazquez stated he is excited about the 43 applicants and that he likes the idea of the co-chairs being Board members, noting the importance of the staggering terms for institutional knowledge. He also highlighted that subcommittees could work on different issues.

Trustee Cargie stated this was how the Deer Committee organized their workload.

Trustee Brennan thanked Trustee Bachner and President Adduci for their kind words and stated it has been her goal since June to have the Advisory Group going and to have a mantel for change. She expressed confidence in Trustee Bachner's ability to lead this. She noted it could be difficult to get work done with 43 members but it proves to be seen, noting she is confident everyone is aiming towards the same goal. She agreed with Trustee Bachner's suggestion that it would be helpful to have a resident in a leadership position as well.

In response to a question from Trustee Vazquez, Attorney Smith stated all members of the Group are subject to the Open Meetings Act and that would apply to any subsidiary groups as well.

Trustee O'Connell stated that a group this size executed properly will cover a lot of territory in a shorter period of time than with a smaller group, and he stated he is on board with the three chairs.

Trustee Bachner noted the work will still take years but it does mean that they have the ability to tackle a few things at once.

Trustee Vazquez stated he agreed and that he anticipated some of the Group's goals might be broken up into smaller ones and prioritized over others. He stated he is looking forward to this.

President Adduci also stated she is excited and very happy about the 43 residents.

Roll call:

Ayes: Trustees Bachner, Brennan, Cargie, O'Connell, Vazquez

Absent: Trustee Henek

Nays: None

Motion Passes.

c. Board and Commission Appointments – Diversity, Equity and Inclusion Advisory Group: Erika Bachner, Co-Chairperson, Lisa Scheiner, Co-Chairperson, Members: Dwetri Addy, Guillermo Arauz, Stacey Austin, Tina Baird, David Bonner, Tim Brandhorst, Laurel Burkett, Mindy Credi, Alexandra DeSorbo-Quinn, Renee Duba-Clancy, James Norman, Holly Economos, Chuck Foster, Doug Garcia-Luce, Cecilia Graham, John Grant, Jessica Hartshorn, Anja Herrman, Jessica Iverson, Kirk Johnson, Stephanie Kang, Megan Keskitalo, Farzad Khaledan, Kent Kirk, Brett Kreisman, Susan Lucci, Susan Macaulay, Rosey McAdams, Claudia Moreno, Robert Navarro, Nancy Nicolas, Sharon Oates, Christina Papirnik, Teresa Peavy, Roshni Ray, Anthony Riley, Abigail Rogers, Cindy Shea, Liz Simon, Dorota Szerszenowicz-Olweny, Richard Schumacher, Glen Weissenberger, Sun-Hee Yoon

Trustee Vazquez made a motion, seconded by Trustee O'Connell to concur with the recommendation of the Village President to appoint those listed on the agenda to the Diversity, Equity, and Inclusion Ad Hoc Advisory Group.

In response to a question from Trustee Brennan, Village Attorney Smith stated there is no conflict having the spouse of an elected official serve on an advisory committee in an uncompensated role, and that it is up to the individual trustees if they can be fair and impartial. He noted that it is up to the trustees if they want to vote.

Roll call:

Ayes: President Adduci, Brennan, Cargie, Vazquez

Absent: Trustee Henek

Nays: None

Abstain: Trustee Bachner, Trustee O'Connell

Motion Passes.

8. UNFINISHED BUSINESS

a. Update: Lake & Lathrop

Sedgwick Development [provided an update](#) to the status of their planned development. Jay Feeley presented on the vision of the project and highlighted the amenities of the development and the River Forest market. He discussed the phased approach with assembling land and remediating the property, noting that is complete and that the next phase is vertical construction.

Mark McKinney reviewed the project milestones, including the demolition, ComEd relocations, and remediation. He emphasized that the site is now clean and stated the No Further Remediation letter does not come until the building is in place. He noted that in order to obtain the building permit, they are currently working through mechanical items, the fire protection submittal, and approval from MWRD. He reviewed the next phases of construction, including site utilities removal and excavation. He stated the goal is to start the foundation and vertical construction in August.

Dan Tausk from Mid-America reviewed the retail market and what types of commercial spaces are being targeted. He noted there is one active letter of intent with a national veterinary practice and there is interest in the adjacent space from an upscale pet supplies tenant.

In response to a question from Trustee Brennan, Mr. Tausk stated they have one actively negotiating letter of intent and that it is rare that that would not lead to a lease. He noted there is interest from other retailers but no letters of intent yet.

In response to a follow up question from Trustee Brennan, Mr. Tausk stated he is confident he can get a third of the retail committed shortly. Mr. Feeley stated they are on a good pace with residential sales and that with that alone, they believe they will be able to secure the financing on the construction loan but that retail letters of intent would be additive, noting since it is not a commercial development but storefront retail as part of a condo development, the latter drives the financing.

Cory Robertson from Corwin Partners reviewed the overall state of the condo market and buyer profiles and noted 32% of the units are pre-sold with a total of 22 units.

In response to a question from Trustee Brenna, Mr. Robertson noted there are six contracts through attorney review and one currently in attorney review.

Mr. Feeley stated that about 9 contracts or 40% of units sold would satisfy construction financing.

In response to a question about elevators, it was clarified there would be four elevators to service two sides.

In response to a question about the IEPA approval, Mr. McKinney clarified that the developers have IEPA approval to proceed with construction and that the No Further Remediation letter comes with the integration of the building to the site, which creates a barrier separating the

building from the soil.

President Adduci emphasized that it is the common process for the letter to come at the end of construction.

In response to a question from Trustee Bachner, Mr. McKinney stated the treatment has been done on the entire site and that any future construction project would have to maintain the barrier but no further remediation would need to be done.

Trustee Cargie commented that the developers need to be better neighbors with regard to debris and snow removal and asked that they consider their neighbors throughout the construction process.

President Adduci stated there were a few questions about the contractual obligation of the dates, and Attorney Smith cautioned the Board to not discuss their ideas about the project's future timeline or to negotiate in open session.

In response to a question about the construction timeframe, Mr. McKinney stated they have earmarked 16 months for the construction of the building.

In response to a question from Trustee Brennan about the building permit status, Mr. McKinney stated there is one open mechanical comment, the fire submittal is pending, and the MWRD review is still pending.

In response to a follow up question, Mr. McKinney stated these items and the site utilities removals are targeted to be complete in May. He stated the next step is excavation and then vertical construction, however they need to finalize the loan prior to vertical construction.

President Adduci reminded everyone that the permitting costs are not insignificant.

In response to a question from Trustee Bachner, Mr. McKinney confirmed that after the excavation, the 16 months begins for construction. He stated they have earmarked August 1 as the construction start.

In response to a follow up question from Trustee Brennan, Mr. McKinney confirmed they have the financing for the excavation and the financing for the construction loan is already in process. He also stated that the financing is anticipated to be closed August 1 in line with the vertical construction, which includes the foundations.

In response to a question from Trustee Brennan, the developer stated buyers commit 10% in earnest money.

The Village Board asked that the developer provide monthly updates and make the slide deck available.

9. NEW BUSINESS

a. Fiscal Year 2022 Annual Operating and Capital Budget – Ordinance

Trustee Vazquez made a motion, seconded by Trustee Bachner, to approve an Ordinance Adopting the Annual Budget for the Fiscal Year Commencing on the 1st Day of May, 2021 and Ending on the 30th Day of April, 2022 for the Village of River Forest, Illinois.

Ms. Scheiner stated they appreciate the questions presented by members of the public and noted the budget is one of the most important things the Village does. She noted that she provided a response in the packet to the questions raised. She stated she is pleased to present a balanced budget to the Board.

President Adduci stated the Board appreciates all the meetings that go behind the preparation and that she knows how much work it is.

Roll call:

Ayes: Trustees Bachner, Brennan, Cargie, O'Connell, Vazquez

Absent: Trustee Henek

Nays: None

Motion Passes.

b. Approval of Policy Regarding Use of Village Flag Pole

Management Analyst Phyfer reviewed this item. She noted language can be included in commemorative resolutions directing Staff to fly certain flags, and that this action would not affect the pole as a nonpublic forum or violate free speech requirements.

President Adduci stated this accomplishes what the Village Board wants to do.

In response to a question from Trustee Vazquez about passing resolutions annually, Attorney Smith stated it is a matter of policy but that it would be best to adopt the resolutions each year and confirmed that following this routine would not risk changing the pole to a public forum.

President Adduci stated there is consensus from the Board to create a policy and bring it back to the Board for a vote.

10. EXECUTIVE SESSION

None.

11. ADJOURNMENT

Trustee Cargie made a motion, seconded by Trustee O'Connell, to adjourn the regular Village Board of Trustees Meeting at 9:15p.m.

Roll call:

Ayes: Trustees Bachner, Brennan, Cargie, O'Connell, Vazquez

Absent: Trustee Henek

Nays: None

Motion Passes.

Kathleen Brand-White, Village Clerk



MEMORANDUM

Date: May 1, 2021

To: Lisa Scheiner, Acting Village Administrator

From: Rosey McAdams, Director of Finance

Subject: Ordinance Authorizing an Amendment to Water and Sewer Rates

Attached please find *An Ordinance Amending Title 5, Chapter 10, Titled "Village Waterworks and Sewerage System" of the River Forest Village Code in Regard to Water and Sewer Rates*. This ordinance includes the previously discussed changes in the Village's water and sewer rates effective June 1, 2021 that are included in the Village's Fiscal Year 2022 Annual Budget. The recommended rates are as follows:

	Current Rate	Rate Effective June 1, 2021	Increase
Water	\$6.77	\$6.82	\$0.05
Sewer	\$4.39	\$4.39	\$0.00
Total	\$11.16	\$11.21	\$0.05
Percentage			0.45%

The recommended rate increase is based on an \$0.05 or .45% to cover an increase in the cost of water from the City of Chicago. The City ordinance provides for an increase on June 1 of each year for the lesser of 5% or the increase in the Consumer Price Index (Chicago All Items). The City has announced a 1.10% increase effective June 1, 2021.

The attached ordinance requests approval of an \$0.05 increase in the water rate from \$6.77 to \$6.82 and no increase in the sewer rate, effective June 1, 2021. This water and sewer rate increase will be effective for bills issued on or after June 1, 2021.

Requested Board Action: Motion to Approve *An Ordinance Amending Title 5, Chapter 10, Titled "Village Waterworks and Sewerage System" of the River Forest Village Code in Regard to Water and Sewer Rates*.

ORDINANCE NO. _____

**AN ORDINANCE AMENDING TITLE 5, CHAPTER 10, TITLED “VILLAGE
WATERWORKS AND SEWERAGE SYSTEM” OF THE RIVER FOREST VILLAGE
CODE IN REGARD TO WATER AND SEWER RATES**

WHEREAS, the Village of River Forest (the “Village”), is a duly incorporated and existing non-home rule municipality, created under the provisions of the laws of the State of Illinois, and now operating under the provisions of the Illinois Municipal Code, and all laws amendatory thereof and supplementary thereto; and

WHEREAS, the President and Board of Trustees find that amending the obligations of the Village’s water and sewer systems best serves the Village’s and its residents’ health, safety, and welfare.

BE IT ORDAINED by the President and Board of Trustees of the Village of River Forest, County of Cook, State of Illinois:

SECTION 1: That Title 5, entitled “Public Ways and Property,” Chapter 10, entitled “Village Waterworks and Sewerage System”, Sections 5-10-3 A and 5-10-4 B, be amended as follows:

5-10-3: RATES FOR SEWERAGE SERVICE:

A. Effective June 1, 2021, there shall be charged for sewerage service four dollars and thirty-nine cents (\$4.39) per one hundred cubic feet of metered water used on each metered account connected to the village water system, including elementary schools, high schools, colleges, churches, River Forest Park District, River Forest Public Library and the community center.

5-10-4: WATER USE RATES:

C. Water Rate: Effective June 1, 2021, there shall be charged six dollars and eighty-two cents (\$6.82) per one hundred cubic feet of metered water used by each metered account connected to the village water system including elementary schools, high schools, colleges, churches, the River Forest Park District, River Forest Public Library, and the community center.

SECTION 2: That all ordinances or parts of ordinances in conflict with this Ordinance are hereby repealed.

SECTION 3: This Ordinance shall be in full force and effect from and after its passage, approval and publication in pamphlet form as provided by law.

PASSED on a roll call vote of the Corporate Authorities on the 10 day of May, 2021.

AYES: _____

NAYS: _____

ABSENT: _____

APPROVED by me this ____ day of _____, 2021

Catherine Adduci, Village President

APPROVED and FILED in my office this ____ day of _____, 2021 and published in pamphlet form in the Village of River Forest, Cook County, Illinois.

ATTEST:

Kathleen Brand-White, Village
Clerk



Village of River Forest
Village Administrator's Office

400 Park Avenue
River Forest, IL 60305
Tel: 708-366-8500

MEMORANDUM

Date: May 4, 2021

To: Catherine Adduci, Village President
Village Board of Trustees

From: Sara Phyfer, Management Analyst/Deputy Clerk

Subj: Ordinance Ratifying Ordinances 3835 and 3833

Issue: At its April 26, 2021 meeting, the Village Board took appropriate action to approve the Fiscal Year 2022 Operating Budget and Fiscal Year 2022 Compensation Plan ordinances. Given the significance of these items, the Village Attorney has recommended that the Board ratify the attached ordinance due to the citation of 2021 on the meeting agenda.

Requested Action: It is recommended that the Village Board approve the attached ordinance ratifying Ordinances 3835 and 3833.

Attachment:

Ordinance

ORDINANCE NO. _____

AN ORDINANCE RATIFYING ORDINANCES 3835 AND 3833 APPROVING THE FISCAL YEAR 2021 – 2022 ANNUAL BUDGET FOR THE VILLAGE OF RIVER FOREST AND THE FISCAL YEAR 2021-22 COMPENSATION PLAN

WHEREAS, the Village of River Forest (“Village”), is a non-home rule unit of local government as provided by Article VII, Section 7 of the Illinois Constitution of 1970; and

WHEREAS, on April 26, 2021, the Village President and Board of Trustees adopted both Ordinance 3835, which approved the annual budget for the Village for the fiscal year beginning May 1, 2021 and ending April 31, 2022, and Ordinance 3833, which approved the compensation plan for the Village for the fiscal year beginning May 1, 2021 and ending April 31, 2022 (together the “Ordinances”); and

WHEREAS, a question was raised regarding the descriptions of the Ordinances on the agenda of the meeting of the Village President and Board of Trustees at which the Ordinances were approved; and

WHEREAS, while the Ordinances were validly and properly approved, in order to resolve any questions regarding the status of the Ordinances, the President and Board of Trustees of the Village desire to ratify, confirm and reapprove the Ordinances;

NOW, THEREFORE, BE IT ORDAINED by the President and Board of Trustees of the Village of River Forest, Cook County, Illinois, as follows:

SECTION 1: Incorporation. That the recitals above shall be and are hereby incorporated in this Section 1 as if restated herein.

SECTION 2: Ratification. That the Ordinances are hereby ratified, confirmed and reapproved.

SECTION 3: Severability. That if any Section, paragraph or provision of this Ordinance shall be held to be invalid or unenforceable for any reason, the invalidity or unenforceability of such Section, paragraph or provision shall not affect any of the remaining provisions of this Ordinance.

SECTION 4: Effectiveness. That this Ordinance shall be in full force and effect upon its passage and approval according to law.

[THIS SPACE INTENTIONALLY LEFT BLANK]

PASSED this 10th day of May, 2021 by the Village President and Board of Trustees pursuant to a roll call vote as follows:

AYES: _____

NAYS: _____

ABSENT: _____

APPROVED by me this 10th day of May, 2021.

Catherine Adduci, Village President

ATTEST:

Kathleen Brand-White, Village Clerk



Village of River Forest

Village Administrator's Office

400 Park Avenue
River Forest, IL 60305
Tel: 708-366-8500

MEMORANDUM

Date: May 6, 2021

To: President Adduci
Village Board of Trustees

From: Lisa Scheiner, Acting Village Administrator

Subj: Resolution Requesting the Complete Restoration of Local Government Distributive Fund (LGDF) Revenue to Local Governments and Opposing any Further Reduction to LGDF Revenue

Issue: Local governments, including the Village of River Forest, provide fundamental and important services to their constituents including, but not limited to, transportation infrastructure, public safety services, ensuring a safe built environment, election administration, and more. The State of Illinois has a long-standing agreement to help support these local services through the collection and distribution of tax revenues on behalf of local governments.

Analysis: When the State Income Tax was adopted in 1969, the state agreed to share ten percent (10%) total income tax collections through the Local Government Distributive Fund (LGDF). Governor JB Pritzker has proposed that the State Fiscal Year (SFY) 2022 State Budget include a 10% reduction in the amount of LGDF revenue distributed to counties and municipal governments. This revenue reduction is being proposed at a time when local governments are already expending additional funds on the COVID-19 emergency response, experiencing lost revenues due to the pandemic, and managing finances to deliver services residents expect in a fiscally responsible manner.

Distributions from the LGDF play a part in maintaining a low local tax burden. The Village of River Forest has managed LGDF revenue responsibly and used revenue for the benefit of its residents. A decrease in LGDF revenue to the Village of River Forest will have an adverse impact to residents throughout the State of Illinois.

Board Action: The Village Board of Trustees will be asked to consider adopting a Resolution supporting restoration of LGDF Revenue at the May 10, 2021 Village Board of Trustees meeting.

Attachment: Resolution Supporting Restoration of LGDF Revenue



RESOLUTION NO. 21-XX

RESOLUTION SUPPORTING RESTORATION OF LGDF REVENUE

WHEREAS, municipalities across the State of Illinois provide essential services to their residents that include public safety support, transportation and storm/wastewater infrastructure and community health services along with many others; and

WHEREAS, the State of Illinois has maintained a long-held agreement with municipalities to support and invest in these local services through the Local Government Distributive Fund (LGDF), which includes the collection and distribution of tax revenues on behalf of municipalities; and

WHEREAS, since the state income tax was adopted in 1969, state government has shared a percentage of total income tax collections through the LGDF with municipalities on a per capita basis in lieu of a local income tax; and

WHEREAS, these shared revenues have been significantly reduced by the State since 2011 from 10% to now 6.06%; and

WHEREAS, municipalities depend on LGDF dollars, which can account between 10 and 20% of a municipality's operating budget, to lessen the burden on taxpayers and reduce the reliance on property taxes; and

WHEREAS, Governor JB Pritzker has proposed that the Fiscal Year 2022 state budget include a further 10% reduction in the amount of LGDF revenue distributed to local governments; and

WHEREAS, this revenue reduction has been proposed at a time when municipalities are continuing to spend additional funds on the COVID-19 emergency response; and

WHEREAS, in addition to LGDF cuts over the years, the State has also reduced municipalities' share of the personal property replacement tax and increased sales tax collection fees while cities and villages have had to fund skyrocketing pension costs, which account for substantial budget increases each year; and

WHEREAS, those municipalities with fewer revenue sources, such as retail businesses with higher equalized assessed values on property, suffer the most and will be forced to explore increasing property taxes or cutting services amid further LDGF reductions.

NOW, THEREFORE BE IT RESOLVED, that Village of River Forest urges the General Assembly and the Governor to restore LGDF payments to the promised 10% rate so municipalities across Illinois may provide basic levels of service and lessen the reliance on property taxes.

AYES:

NAYS:

ABSENT:

Catherine Adduci, Village President

APPROVED by me this 10th day of May, 2021.

Kathleen Brand-White, Village Clerk



Village of River Forest
Village Administrator's Office

400 Park Avenue
River Forest, IL 60305
Tel: 708-366-8500

MEMORANDUM

Date: May 6, 2021

To: Catherine Adduci, Village President
Village Board of Trustees

From: Sara Phyfer, Management Analyst/Deputy Clerk

Subj: Use of the Village Flag Pole – Policy

Issue:

At its April 26, 2021 meeting, the Village Board directed Staff to create a Flag Pole Display Policy. This Policy is based on and borrows language from the Pittsburg, California policy, which is also attached for your reference. As you may recall, the approach outlined in this Policy would not open up the Village's flagpole as a public forum or limited public forum, nor would it risk violating free speech requirements.

Of note, this policy accepts requests for use of the flag pole only through an elected official. Elected officials may make such requests by submitting the request in writing (use of email is sufficient) to the Village President and the Village Administrator.

Recommendation:

It is recommended that the Board make a motion to approve the Flag Pole Display Policy.

Attachments:

Flag Pole Display Policy
City of Pittsburg Outdoor Flag Pole Display Policy

VILLAGE OF RIVER FOREST
OUTDOOR FLAG POLE DISPLAY POLICY

The River Forest Village Board desires to establish a flag pole policy regarding the outdoor display of commemorative flags on the River Forest Village Hall flag pole.

In adopting this policy, the Village Board declares that the Village of River Forest's flag pole is not intended to serve as a forum for free expression of the public, but rather for the display of Federal, State, and Village flags, and any commemorative flag as may be authorized by the Village Board, as an expression of the Village Board's official sentiments.

The purpose of this flag pole policy is to provide procedural guidance for the outdoor display of flags on the River Forest Village Hall flag pole.

Policy:

I. Standards

Flags shall be displayed in accordance with Federal and State statutes, including, but not limited to, 4 U.S.C. § 1, *et seq.*, as amended, the Illinois Flag Display Act, 5 ILCS 465/1, *et seq.*, as amended, and this Policy.

II. Commemorative Flags

1. The Village's flag pole is not intended to serve as, nor serves as, a forum for free expression by the public. The Village shall display commemorative flags only if authorized by the Village Board through a commemorative or honorary resolution adopted by the Village Board, as an expression of the Village's official sentiments. The Village Board shall only consider a request to display a commemorative flag if the request is made by a member of the River Forest Village Board.
2. Commemorative flags shall be displayed for a period of time that is reasonable or customary for the subject that is to be commemorated, but no longer than thirty-one (31) continuous days. Annual commemorations shall be considered on an annual basis.
3. Commemorative flags approved for display through a commemorative or honorary resolution adopted by the Village Board shall be displayed exclusively on the River Forest Village Hall flag pole.
4. Commemorative flags displayed on the River Forest Village Hall flag pole shall be displayed in the last position of honor, beneath the Village of River Forest Flag, unless otherwise directed by the Village Board, and to the extent such

display does not conflict with Federal and State statutes or this Policy.

5. If flags are lowered to half-mast, a total of three flags shall be displayed, and any commemorative flag on display shall replace the Village of River Forest flag so no flags touch the ground.

CITY OF PITTSBURG OUTDOOR FLAGPOLE DISPLAY POLICY

The Pittsburgh City Council desires to establish a flagpole policy regarding: 1) the outdoor display of the United States Flag, the California State Flag, and the City of Pittsburgh Flag on Pittsburgh City Hall flagpoles; and 2) the outdoor display of commemorative flags on Pittsburgh City Hall flagpoles.

In adopting this policy, the City Council declares that the City of Pittsburgh's flagpoles are not intended to serve as a forum for free expression of the public, but rather for the display of Federal, State, and City Flags, and any commemorative flag as may be authorized by the City Council as an expression of the City Council's official sentiments.

The purpose of this flagpole policy is to provide procedural guidance for the outdoor display of flags on City-owned and/or maintained flagpoles.

Policy:

I. Standards

Flags shall be displayed in accordance with Federal and State statutes, including, but not limited to, Title 4, Chapter 1 of the United States Code and Sections 430 through 439 of the California Government Code, and this policy.

II. Procedure

A. United States Flag, California State Flag, and City of Pittsburgh Flag

1. No other flag shall be placed above the United States Flag and no other flag shall be larger than the United States Flag. Other flags may be flown at the same height and in the same size, in accordance with this policy. Where both the United State Flag and the California State Flags are flown, they shall be of the same size.
2. Flags should be hoisted briskly and lowered ceremoniously. The United States Flag should be hoisted first and lowered last.
3. Flags shall be displayed during operating hours on all days on which the City is open for business, and on national and state holidays, at a minimum. Flags may be displayed twenty-four (24) hours a day as long as they are illuminated during darkness.
4. Flags shall not be displayed during inclement weather, unless they are determined to be all-weather flags.

5. When flags are displayed on a single pole, the order from top to bottom shall be: the United States Flag, the California State Flag, and if displayed, the City of Pittsburg Flag.
6. When the flags are flown from adjacent flagpoles, the United States Flag shall be flown at the highest point of honor, which is either the tallest flagpole of the furthest point to the left from the standpoint of the observer ("the flag's right"). The "standpoint of the viewer," shall be considered right-of-way to which the City facility adjacent to the flagpole is addressed (e.g. City Hall is located at 65 Civic Avenue, thus the standpoint of the viewer shall be considered Civic Avenue). The California State Flag shall be placed in the second position of honor. The City of Pittsburg Flag, if displayed, shall be placed in the third position of honor.
7. The United States Flag, the State of California Flag and the City of Pittsburg Flag shall be flown on the City Hall flagpoles.

B. Commemorative Flags

1. The City's flagpoles are not intended to serve as a forum for free expression by the public. The City shall display commemorative flags only if authorized by the City Council as an expression of the City's official sentiments. Any such authorization shall be given at a duly noticed meeting of the City Council.
 - a) The City Council shall only consider a request to display a commemorative flag if the request is made by a member of the Pittsburg City Council.
2. Commemorative flags shall be displayed for a period of time that is reasonable or customary for the subject that is to be commemorated, but no longer than thirty-one (31) continuous days.
3. Commemorative flags shall be displayed exclusively on Pittsburg City Hall flagpoles and shall not be displayed on flagpoles at City Park or Small World Park.
4. Commemorative flags displayed on the Pittsburg City Hall flagpoles shall be displayed in the last position of honor beneath the City of Pittsburg Flag, unless otherwise directed by the City Council and to the extent such display does not conflict with federal law, state law, or this policy.



MEMORANDUM

DATE: May 10, 2021

TO: Lisa Scheiner, Acting Village Administrator

FROM: Jeff Loster, Village Engineer

SUBJECT: Stormwater Master Plan – Consultant Selection

Issue: Staff is seeking the award of a contract for the creation of a Stormwater Master Plan (SMP).

Analysis: Per direction from the Village Board, Staff had previously issued a Request for Qualifications (RFQ) regarding this project. A total of nine Submittals of Qualifications were received and reviewed by Staff, resulting in a short-list of four firms. These firms included:

1. Christopher B. Burke Engineering (CBBEL)
2. Engineering Resource Associates (ERA)
3. Stantec Consultants (Stantec)
4. V3 Companies (V3)

A Request for Proposals (RFP) was then issued to these four firms, officially requesting a full proposal for creation of an SMP based on the scope of services previously reviewed by the Village Board and Village residents. The four proposals received were also reviewed by Staff and ultimately, the submittal from CBBEL was selected based solely on the project proposal submitted. Upon selection of the CBBEL proposal, the fee proposal was also reviewed. With an allocated budget of \$180,000, the CBBEL fee proposal of \$168,504.00 was found to be acceptable.

Recommendation: Consider a Motion to approve an agreement with Christopher B. Burke Engineering, Ltd. for a not-to-exceed cost of \$168,504.00 and authorize the Acting Village Administrator to execute the contract agreement.

Attachments: CBBEL SMP Proposal
CBBEL Fee Proposal

MARCH 12, 2021

REQUEST FOR PROPOSAL

RIVER FOREST STORMWATER MASTER PLAN



SUBMITTED TO:
JEFFREY LOSTER, PE
VILLAGE ENGINEER
VILLAGE OF RIVER FOREST
400 PARK AVENUE
RIVER FOREST, IL 60305
JLOSTER@VRF.US



SUBMITTED BY:
THOMAS BURKE, JR., PHD, PE
CHRISTOPHER B. BURKE ENGINEERING, LTD.
9575 WEST HIGGINS ROAD, SUITE 600
ROSEMONT, IL 60018
TBURKE@CBBEL.COM



CHRISTOPHER B. BURKE ENGINEERING, LTD.

9575 W Higgins Road, Suite 600 Rosemont, Illinois 60018-4920 Tel (847) 823-0500 Fax (847) 823-0520

March 10, 2021

Village of River Forest
400 Park Avenue
River Forest, IL 60305

Attention: Jeffrey Loster, PE
Village Engineer

Subject: ***Request for Proposal for Professional Engineering Services
Village of River Forest – Stormwater Master Plan***

Dear Mr. Loster:

Christopher B. Burke Engineering, Ltd. (CBBEL) is pleased to submit our response to your Request for Proposal (RFP) to provide professional engineering services to prepare a comprehensive Stormwater Master Plan for the Village of River Forest (Village). We are excited to have been selected to the advance to the next phase of the selection process. We trust that the information provided in the enclosed submittal will demonstrate that our team is highly qualified to successfully provide the required engineering services requested by the Village.

At your direction, we have re-submitted our qualifications to perform these important services for the Village. We have also provided a Fee Estimate in a separate sealed envelope and have updated Tab 4 with a detailed Scope of Services that describes our anticipated tasks. As always, we remain available to discuss our qualifications or our specific approach to this project. We strongly encourage you to contact the references we provided in Tab 2 to get their perspective on our services as well as additional references in Tab 7.

Our team is available immediately and our goal is to complete the work to your satisfaction while consistently delivering quality, on-time results. The project team will be led by Jeff Julkowski, PE. Jeff has over 22 years of extensive water resource experience in drainage studies and Stormwater Master Plans having worked recently with the City of Park Ridge on a Stormwater Plan and subsequent stormwater construction projects resulting from the Stormwater Plan.

If you have any questions or need any additional information, please do not hesitate to contact Jeff or myself at (847) 823-0500.

Sincerely,

Thomas T. Burke, Jr., PhD, PE
Executive Vice President
Head, Water Resources Department

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TAB 1

INTRODUCTION



COMPANY PROFILE

FIRM HEADQUARTERS

Christopher B. Burke Engineering, Ltd. (CBBEL)
9575 West Higgins Road, Suite 600
Rosemont, Illinois 60018
T: 847.823.0500 | F: 847.823.0520
cbbel.com



Addison Creek Wetland Restoration (Northlake)



US 52 and River (Shorewood)



Main Street Streetscape (Algonquin)



Fountain Square (Evanston)

CBBEL is a full-service consulting engineering and surveying firm that comprehensively meets the needs of our clients, whether in the public or private sector. Founded in 1986 by CEO Christopher B. Burke, our Illinois-based staff of 207 consists of experienced and responsive professionals who provide engineering, surveying and environmental services on a personal level. Committed to delivering consistently accurate, timely and cost-effective solutions to a wide range of engineering and environmental challenges, our team's expansive list of specializations provide professionalism and a depth of expertise that promote project success.

92 LICENSED PROFESSIONALS

TOTAL STAFF 207

35 YEARS IN BUSINESS

RESOURCES



Christopher B. Burke, PhD, PE

Having received his doctoral degree in civil engineering from Purdue University, CBBEL CEO Christopher B. Burke embraces education and encourages continued learning among his employees. Our staff includes five PhDs, 86 licensed professional engineers, a team of licensed professional land surveyors, 2 licensed structural engineers and 1 landscape architect. Additionally, two employees are LEED accredited professionals, four are professional traffic operations engineers (PTOE), and four have received the designation of Diplomate Water Resource Engineer (D.WRE). Twenty five staff members are certified floodplain managers (CFM), 14 are certified professionals in erosion and sediment control (CPESC) and nine are certified professionals in stormwater quality (CPSWQ).

Our resources are geographically distributed to create a network of effective and convenient service. Rosemont is home to our main office while our other Illinois locations include Evanston and Lockport.

Through leadership positions and active membership in a variety of professional and educational associations, CBBEL is able to deliver cutting-edge technology and techniques as they emerge. The outcome is a context-sensitive approach that rejects outdated cookie-cutter remedies and provides the best solution. We are proud to be involved with the American Society of Civil Engineers (ASCE), American Council of Engineering Companies (ACEC), American Public Works Association (APWA), and more.

Our commitments to hiring exceptional personnel, prioritizing client relationships and valuing education have earned CBBEL numerous prestigious awards from the Illinois Department of Transportation, the Illinois Tollway and the Illinois Chapters of ACEC, APWA, ASCE and the American Planning Association. Recently, CBBEL was recognized with the IL ESGR State Award for our "strong support to the National Guard and





Lincolnwood Transmission Main (Lincolnwood)

Reserve.” US 52 at River Road (Village of Shorewood); Main Street Streetscape (Village of Algonquin); Saylor/Swain/Vallette Stormwater Improvements (City of Elmhurst) and Lincolnwood Transmission (Village of Lincolnwood) were awarded APWA Chicago Metro Chapter 2021 Project of the Year. In 2019, CBBEL was recognized as Kane County DOT’s Consultant of the Year and ASCE’s Private Sector Employer of the Year. In 2017, CBBEL clients and projects received national awards from the APWA, including the Northside Stormwater Management Project (Village of River Forest) and Elmwood Park Flood Mitigation Project (Village of Elmwood Park). In addition, five employees have been the recipient of an APWA Top Ten Leader of the Year award, two of which went on to win at the national level.

SERVICES

Since its founding in 1986, the size of our company and the complexity of our projects have grown. We are proud to have served as lead engineer on a variety of major municipal and county undertakings, including the design, permitting and construction of numerous major transportation and local municipal roadway projects, multi-use paths, on-street and off-street bike lanes, roundabouts, bridges, flood control reservoirs, pump stations, embankments, storm sewers, large open channels, water mains and water systems.

As a full-service firm we also conduct water resource related studies, perform GIS services, environmental resource assessments, mitigation planning and permitting and a myriad of traditional civil engineering functions.

CBBEL has provided professional review services for municipalities, counties and state agencies. Our experience includes the review of drainage, roadway, subdivision, sanitary sewer and mechanical engineering submittals prepared by third-party consultants for both private and public sector clients.

Our office prepares a significant number of high-quality stormwater management studies and permit applications, having obtained more than 2,000 US Army Corps of Engineers Section 404 permits with accompanying IEPA water quality certifications, more than 500 Illinois Department of Natural Resources-Office of Water Resources floodway construction permits and 450 Federal Emergency Management Agency Letters of Map Amendment and Letters of Map Revision.

Whether you require consulting for an individual project or the full-service resources from one of our departments, you can rely on CBBEL to take the time to thoroughly understand your needs and partner with you to create innovative, cost-effective solutions. Diversification and flexibility are the keys to our successful, long-term

relationships with a wide variety of clients, including municipalities, counties, townships, sanitary districts and drainage districts throughout Chicagoland. We have unique knowledge and experience with various funding programs available to our county and municipal clients, providing an added service not easily found in the engineering industry: from grant writing and design procedures to record keeping and funding reporting, CBBEL is your full-service firm.

GREEN INITIATIVES

CBBEL is proud to have consistently been at the forefront of sustainability and green initiatives and is a corporate leader when it comes to implementation. Through the dedication of our company’s Sustainability Committee, CBBEL’s Rosemont office has a parking lot garden, an aggressive composting/recycling program, four electric car charging stations and a long-range plan to implement other energy saving devices.

CBBEL was selected as the 2018 Illinois Road and Transportation Builders Association’s Sustainability Champion Award, the first two-time winner of this award (2014 and 2018). CBBEL was named one of the Best Workplaces for Commuters in 2021 for the 4th consecutive year for offering exceptional employee-provided commuter benefits. In 2012 and 2013, CBBEL received the Governor’s Sustainability Award for achievements in protecting the environment, improving the economy and helping to sustain the future. CBBEL also received a Conservation and Native Landscaping Award from Chicago Wilderness.




One of the sustainability efforts for which the firm is perhaps best known is our award-winning Bike to Work Program, in which CBBEL provides mileage reimbursement, changing facilities and bicycle storage. Over 180 employees (from all of the Burke Group companies) have participated in the program and more than 400,000 miles have been commuted on bike.

CBBEL is recognized by the League of American Bicyclists as a “Platinum” level Bicycle Friendly Business, in recognition of our efforts to encourage a more bicycle-friendly atmosphere for employees and clients. CBBEL is one of two Illinois firms to be awarded Platinum status and is one of the few Midwestern non-bike related businesses to be awarded Gold status or higher.



 **OVER 400,000**
MILES COMMUTED ON BIKE

APPROXIMATELY
800,000
POUNDS OF CO₂
ELIMINATED 
BASED ON 15 MPG AND 20 LBS. CO₂/GAL

 **OVER 18,500,000**
CALORIES BURNED

OVER \$85,500
IN GAS MONEY SAVED 

TAB 2
FIRM QUALIFICATIONS
AND EXPERIENCE





FIRM QUALIFICATIONS AND EXPERIENCE

We are proud of our project experience and believe it is more in depth, localized and more relevant than any other firm can offer. As requested in the RFQ, we have provided five representative projects. We welcome the opportunity to discuss community-wide stormwater studies we have done throughout the region.

PARK RIDGE STORMWATER PLANNING/ CITY OF PARK RIDGE

CLIENT CONTACT:

**Wayne Zingsheim, Director of Public Works
City of Park Ridge
505 Butler Place
Park Ridge, IL 60068
wzingshe@parkridge.us | 847.318.5247**

Park Ridge is a combined sewer community with a complex network of relief sewers which interface with Metropolitan Water Reclamation District's (MWRD) TARP system and also overflow to the Des Plaines River. Park Ridge's stormwater efforts, like many other communities, were prompted by major flood events starting in 2008. Since that time, CBBEL has been engaged in several studies and design projects. We have prepared a hydrologic and hydraulic model of the City's entire combined sewer system to establish system capacities and identify critical areas. We have developed several stormwater infrastructure improvement projects, including ten project areas for which design plans were developed and for which CBBEL also completed construction observation. CBBEL also recently completed a Stormwater Master Plan for the City to guide future long-term stormwater planning, as well as a stormwater utility study to investigate funding options. Among the projects completed for the City are the following:



- Citywide Sewer Study (2010)
- Flood Reduction Program Phase 1 Plans (2012)
- Flood Reduction Program Phase 1 Construction Observation (2012-2013)
- Flood Reduction Program Phase 2 Plans (2013)
- Flood Reduction Program Phase 2 Construction Observation (2013-2014)
- Stormwater Utility Study (2014)
- Stormwater Master Plan (2016)

LINCOLNWOOD VILLAGE-WIDE STREET STORAGE PLAN/VILLAGE OF LINCOLNWOOD

CLIENT CONTACT:

Nadim Badran, Director of Public Works
Village of Lincolnwood
6900 N. Lincoln Avenue
Lincolnwood, IL 60712
nbadran@lwd.org | 847.745.4859

The Village of Lincolnwood (Village) faces similar challenges as many Cook County communities developed around the same time – undersized sewer systems, reliance on MWRD regional sewers, and a highly impervious land area. It also lacks any significant public open spaces that could facilitate stormwater improvement projects. While overland flooding is not a major concern, sewer backup and basement flooding is a major issue. To better protect homes from sewage backup, the Village has installed measures to detain storm water in the street before entering the sewer system. The goal of the Street Storage Program in the Village is to alleviate the combined sewer system within the project area by detaining water in the roadway and parkway to attenuate the flows entering the sewer system.



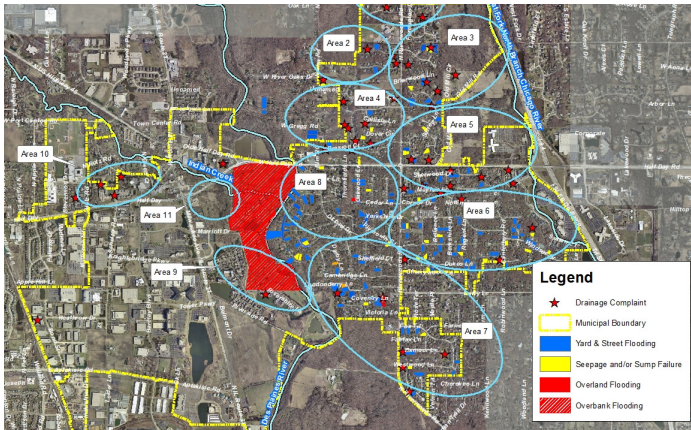
CBBEL has been designing the Street Storage Program, which includes containment berms on the streets and submerged restrictors placed selectively in inlet structures throughout the Village. The first phase of the project installed 135 restrictors varying from 2” to 6” in diameter and 20 containment berms. The next phase is currently under design and will install in the range of 220 restrictors and 50 containment berms. As part of the project, the Village purchased and installed flow meters to capture pre- and post-project data so that the project’s effectiveness can be measured.

The stormwater design was completed with XP-SWMM software utilizing the 2-D modeling feature. Each inlet was linked to a digital terrain model of the ground surface so that runoff to each inlet could be identified and the appropriate restrictor size determined. This highly detailed, iterative process was used throughout the study area for sizing the restrictors. While a number of “in the weeds” modeling lessons were learned, the general response of the system to the inlet restrictors and sensitivity to restrictor sizing are critical experience that we will bring to the Village of River Forest’s project.

LINCOLNSHIRE STORMWATER MASTER PLAN/VILLAGE OF LINCOLNSHIRE

CLIENT CONTACT:

**Wally Ditttrich, Asst. Public Works Director/
Village Engineer**
Village of Lincolnshire
One Olde Half Day Road
Lincolnshire, IL 60069
wditttrich@lincolnshireil.gov | 847.913.2387



Due to localized surface flooding in numerous locations during moderate to heavy rain fall events, CBBEL completed a Village-wide Stormwater Management Plan (Plan) to identify and develop proposed flood reduction projects and policies to address drainage problems within the residential portions of the Village of Lincolnshire (Village).

The methodology for analyzing the storm sewer system for the Plan included a comprehensive review of the existing storm sewer system, resident meetings, hydrologic and hydraulic modeling of the existing drainage system, identification of system limitations and development of proposed drainage improvements. Public input was a significant component of the development of the Plan, and a public open house was held prior to the start of the detailed analysis. In addition, online flood questionnaires were made available to every resident through the Village website. During the public input portion of the analysis, the Village experienced a significant storm event on September 12-13th 2019 which recorded a burst of 1.6 inches in a half hour. This high-intensity short burst of precipitation is becoming a common occurrence. CBBEL was able to collect drone footage and additional public input relative to this storm event. Overall the outreach effort generated over 250 total responses.

CBBEL identified flood service areas developed and calibrated hydrologic and hydraulic models using the detailed accounts and pictures from residents. The modeling was verified based on the high-water marks observed during the September 12-13 storm event. CBBEL developed a conceptual engineer’s estimate of probable cost for each of the proposed drainage improvement alternatives. In addition to the underground drainage system, CBBEL evaluated and developed cost estimates for numerous existing detention and stormwater management facilities scattered throughout the Village. Finally, numerous reports of flooding on private property throughout the residential portions of the Village were received through the data collection process. CBBEL evaluated and developed cost estimates for common residential drainage improvements while suggesting that the improvements be the responsibility of the landowners in accordance with Illinois Drainage Law. CBBEL also provided the Village with options for private property owner improvements including the possibility of providing design assistance to property owners that wish to implement drainage improvements on their property.

DEERFIELD STORMWATER MASTER PLAN/ VILLAGE OF DEERFIELD

CLIENT CONTACT:

Tyler Dickinson, Assistant Village Engineer
Village of Deerfield
465 Elm Street
Deerfield, IL 60015

tdickinson@deerfield.il.us | 847.719.7463

CBBEL was hired in 2020 to complete a Village-wide stormwater study to identify drainage problem areas, develop projects that work in conjunction with the capital improvement plans for the Village, and provide a prioritization matrix for future planning efforts.



Due to localized flooding in numerous locations throughout the Village during moderate to heavy storm events, CBBEL is preparing a Village-wide Stormwater Master Plan (Plan) to identify and develop flood reduction projects to address drainage problems throughout the Village. CBBEL collected a variety of data for the study, including engineering plans, flood questionnaires, photographs, videos, and survey data. Because an open house was not able to be held, CBBEL also met with numerous residents one-on-one and performed additional field assessments.

Utilizing the collected data, as well as GIS storm sewer data provided by the Village, CBBEL created a detailed hydrologic and hydraulic analysis of the entire Village. This analysis, in addition to the collected data, helped identify capacity limitations and levels of service, which resulted in forty-one project study areas. The study areas were categorized into three types: structure, street, and rear yard flooding. Conceptual solutions and associated costs are being prepared for each study area. A Village-wide stormwater report will present each drainage issue and present the detailed concept solutions. The proposed projects designed to reduce flooding, range from increased conveyance capacity to stormwater storage. An evaluation of each project and its benefits will be summarized in the report.

CBBEL has met with Village staff numerous times to present updates on the study's findings and recommended solutions. The report will also provide the Village with options for private property owner improvements, including the possibility of providing design assistance to property owners that wish to implement drainage improvements on their property.

SEWER SEPARATION EVALUATION PROJECT/ VILLAGE OF FOREST PARK

CLIENT CONTACT:

Tim Gillian, Village Administrator
Village of Forest Park
517 Desplaines Avenue
Forest Park, IL 60130

tgillian@forestpark.net | 708.615.6201



This project consisted of an XP-SWMM evaluation of the existing sewer systems within the Village of Forest Park (Village), including both relief sewers and combined sewers. A storm sewer separation plan was ultimately developed to reduce the risk of future flooding. The storm sewer separation plan involves the installation of a new storm sewer system that will outlet directly to the historic outlet for this drainage area at the Des Plaines River. CBBEL developed phasing plans that established multiple work areas to be implemented over time.

Following the initial plan development, the Circle Avenue Sewer Separation project was designed and constructed as the Village's first step in separating the sewer systems. CBBEL assisted the Village in obtaining \$2 million in grant funding from the Metropolitan Water Reclamation District (MWRD), which was critical to constructing this project which included the installation of 700' of 60" storm sewer, 700' of 48" storm sewer, 600' of 24" storm sewer, 350' of 12" storm sewer, replacement of 800' of water main, pavement patching, resurfacing, and restoration.

TAB 3 PROJECT APPROACH





PROJECT APPROACH



STORMWATER MASTER PLANS

*PARK RIDGE
ELMHURST
ELMWOOD PARK
DEER PARK
DES PLAINES
LIBERTYVILLE
LINCOLNSHIRE
LINCOLNWOOD
WILMETTE
RIVERSIDE
WHEELING
MERRILLVILLE, IN
DYER, IN
GRIFFITH, IN
O'HARE AIRPORT*

The following sections describe our thoughts and recommendations on what we see as major elements of the project:

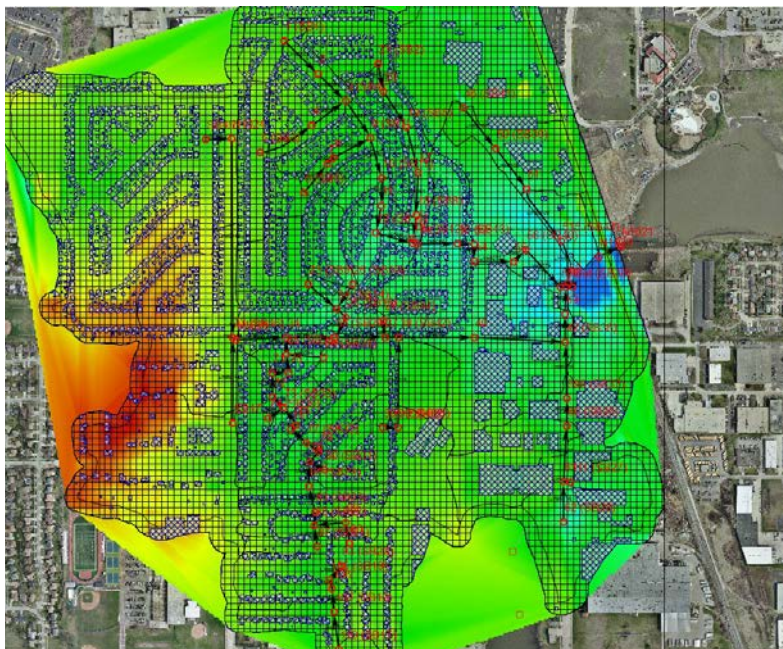
PROJECT EXPERIENCE

We've stated it several times in this statement of qualifications, because we think it's important – we believe our experience in preparing Stormwater Master Plans (SMP) is second to none. Per the allowance of the RFQ, we've selected five similar projects as shown in TAB 3. Each is a prime example of a community-wide modeling effort to establish the capacity of existing drainage systems, achieve a consensus for the desired level of protection, and develop a stormwater CIP program. We have more similar project experience than can be included here and welcome the opportunity for further discussion. It's also important to note that the key staff from all of the SMPs listed are currently with our Water Resources department and available to contribute to the Village's project. Our Water Resources department includes 21 engineers, all of whom have direct experience with SMPs.

We also have significant experience within the Village. CBBEL prepared sewer modeling in the northern portion of the Village which led to the development of a sewer separation plan as a preferred alternative. CBBEL ultimately designed and implemented construction for the ACEC/APWA award-winning Northside Stormwater Management Project, which was constructed in 2015. This project provides us with a great starting basis of understanding of the Village's sewer systems, limitations, and goals.



NORTHSIDE STORMWATER MANAGEMENT PROJECT | RIVER FOREST, ILLINOIS



MODELING APPROACH

Development of the sewer system models is the major component of the overall project. Having prepared multiple, large-scale, complex stormwater models for municipalities throughout the Chicago region, CBBEL is uniquely qualified to complete the modeling analysis for the Village of Skokie. CBBEL proposes to utilize XPSWMM software to prepare models representing the entire sewer system throughout Skokie. Following a review of the data, CBBEL will decide whether to construct one model for the entire Village or break it into multiple models as needed. XPSWMM is a FEMA approved dynamic model capable of representing the complex interaction between rainfall runoff, subsurface sewer components (combined, relief, and storm), and overland flow and flood areas. XPSWMM is a widely used and accepted hydraulic and hydrologic

modeling software in the water resources engineering community for urban sewer system modeling. While XPSWMM is a proprietary model, there is XPViewer software that allows Village staff and other consultants to view input and results from the XPSWMM model for free. It is also compatible with EPA SWMM. XPSWMM is our software of choice, but we also have experience with InfoSWMM and EPA SWMM as well. If the Village has a strong preference, we are open to discuss software options. However, we do recommend using XPSWMM for the simple reason that if the modeling is ultimately used to design new Village-wide infrastructure, a widely used software familiar to many engineering consultants would be preferred.

Based on our experience with previous similar urban stormwater modeling, CBBEL proposes to utilize the XP2D feature to model the areas of the Village where limited sewer capacity and overland flooding are prevalent. The XP2D feature links the subsurface sewer system to the surface using a digital terrain model (DTM) which would be generated from detailed Cook County LiDAR. When sewers exceed capacity, the excess stormwater enters the 2D model surface and flood water is conveyed based on elevations in the DTM. This method provides a more accurate representation of flood depths and limits along overland flow routes and depressional storage areas as well as providing vivid graphics for presentation of a flood event. The XP2D feature may be beneficial for evaluating rear yard drainage issues where water collects but has a limited outlet or no outlet at all other than infiltration.

XPSWMM

FLOW MONITORING

In areas that rely on combined sewers for storm and sanitary flow, flow monitoring is an important tool that allows for proper model calibration. The biggest flooding issue with combined sewer systems is basement backups. Combined sewer backups can occur when there is no overland flooding present, but the hydraulic grade line (HGL) in the sewer exceeds the elevation of any basement drains. Real-time flow monitoring allows us to understand how the sewer system reacts to different storm events and provides real data for model calibration. We are excited to see that flow monitoring is included as part of this RFQ.

A full scope for flow monitoring can be prepared at a later date should we be fortunate to be selected for this project. However, based on prior experience, we have several recommendations. The cost of flow monitoring is typically dependent on the number of monitored locations and the duration they are installed. While more is always better, based on the Village's size, we believe 6 locations may be sufficient. The cost associated with the time that the equipment is installed can often be a wild card,



as representative calibration storms may not occur, requiring an extension of the recording period and additional costs. CBBEL has recently partnered with a newer subconsultant, StormSensor. StormSensor is a company

which focuses on flow metering and data analysis. Their business model allows for and encourages long-term leasing of the monitoring equipment. Once installed, the equipment is leased annually at a relatively low cost. The cost to install one flow meter and collect a full year of data is often similar to an 8-week collection period for traditional flow metering companies. While we are open to working with the Village on any preferences, we believe this arrangement would be beneficial to the Village. We would be happy to discuss all flow monitoring scenarios with the Village to arrive at a plan that works best for the Village. Information on StormSensor is provided following our proposed organizational chart in TAB 5.

Making use of the flow data requires quality rainfall data. If the Village does not already collect rain data, we recommend the installation of a quality weather station that records at similar intervals. One recording station is sufficient for the Village. If needed, we can assist with the selection and installation of the station.

ORDINANCE REVIEW

While most developments in the Village must meet the MWRD stormwater ordinance requirements, single-lot residential projects are exempt from most regulations. This presents challenges for communities dealing with residential tear-downs and increasing impervious areas. The information learned from the SMP process will help guide recommendations and potential ordinance revisions to better manage these issues. In other communities, we've recommended ordinance language to mitigate the stormwater impacts of tear-downs on neighboring properties. We've proposed policies on the direct connection of downspouts and sump pumps to the storm sewer system, maximum impervious percentage for various lot sizes, and stormwater management storage to mitigate increases in runoff volume. We also formulated a policy to properly elevate new homes that are located in non-FEMA flood prone areas.

FUNDING ANALYSIS



The RFQ asks for an overview of available funding sources, including the potential implementation of a Stormwater Utility Fee. An obvious source is grant funding, such as MWRD Stormwater funding. We have helped many clients obtain MWRD grants to construct stormwater projects. Other state and federal grants occasionally become available. One of the main reasons to prepare a SMP is so that if grants become available, project needs and estimated costs are readily available. However, a more proactive approach to provide the

needed funding is through a Stormwater Utility Fee (SWU). While the SWU development is not part of this project, we are able to provide the requested overview and guidance on feasibility of implementing a SWU. We have worked with many of our municipal clients on these issues to complete SWU studies as shown by the list provided.



STORMWATER UTILITY FEE STUDIES

*TOWN OF DYER, IN
DOWNERS GROVE
MT. PROSPECT
NORTHFIELD
OAK LAWN
ORLAND PARK
SCHAUMBURG
WILMETTE
PARK RIDGE
LOMBARD
LAKE BLUFF*



TAB 4
**PROJECT UNDERSTANDING/
SCOPE OF SERVICES**





PROJECT UNDERSTANDING/ SCOPE OF SERVICES

The Village's RFQ states that it seeks an engineering consultant with "substantial" experience in the preparation of Stormwater Master Plans (SMP). We believe no other firm can demonstrate better experience in this area, and more importantly, apply the knowledge gained from that experience – starting with an Understanding of Responsibilities. Why do communities prepare SMP's? Often it is in response to a particular flood event. These types of studies may start with some doubt by the public, but we've seen how public engagement can successfully motivate and energize a project. Other times, the motivation is prudent long-term infrastructure planning. We've done SMP's that started along one path until a flood event occurred during the study, changing people's understanding of "level of protection".

Each of these experiences has shaped our approach to preparing a SMP. While our previous SMP's have many things in common, they are also unique to the community for which they were prepared. Each community has its own drainage issues, goals, constraints, etc. We understand our responsibilities for this project to be two-fold. The first is technical – to prepare hydrologic and hydraulic models of the Village's sewer systems, and to use those tools to evaluate, recommend, and prioritize long-term infrastructure improvements designed to meet a design criteria. The tasks involved in that process are spelled out well in the RFQ and are specifically addressed in the following section. The second responsibility of the consultant is to use our experience to engage the Village – staff, elected officials, and residents – to solicit first hand information, to set appropriate and effective goals, and to effectively present our recommendations to the public.

CBBEL has the ability and enthusiasm to achieve these responsibilities, and we look forward to the opportunity to discuss our experience further.



SCOPE OF SERVICES

The following Scope of Services has been developed by reviewing the Village's RFP and incorporating our experiences from completing many similar studies throughout the Chicago region. We welcome the opportunity to discuss the specifics of this scope and to tailor it to meet the Village's specific needs. We have prepared a Fee Estimate, provided separately, which corresponds to the items listed below and includes our work hour estimate for each task.

TASK 1 – MEETINGS AND DATA COLLECTION: The following meetings and data collection tasks are included in the Village's RFP. The work hours budgeted for each task are detailed in our Fee Estimate included under separate cover. Additional detail on each task is as follows:

- 1.1 Kick-off Meeting.** Our Project Manager and QA/QC Lead will meet with Village Staff to transfer materials and gain an overall understanding of project goals.
- 1.2 Progress Meetings.** In our experience, the frequency of progress meetings varies depends on the phase of the study. For instance, the modeling phase will take several months and there will be limited need for updates. However, development of the CIP projects will require back and forth coordination. Overall, we have budgeted for six coordination meetings with Village staff throughout the study and have assumed two CBBEL staff for each meeting.
- 1.3 Review of Available Data.** We understand that the Village's GIS data generally does not include sewer inverts. Obtaining invert data without wholesale surveying of the Village's sewer system will be a challenge. Any data the Village can provide will be helpful. We will review the data provided and will use the information to update the GIS data under the Sewer Modeling task.

1.4 Field Investigation and Topographic Surveying. This task will include time for CBBEL staff engineers to complete site visits as needed to understand drainage conditions, obtain input data for the sewer model, and observe specific problem areas. Under this task we will also complete topographic surveying of the combined sewer system. While it would be ideal to survey all structures in the system, we have assumed this to be cost prohibitive. Instead, we have made assumptions on the survey requirements and are happy to adjust our plan to meet the Village's expectations.

CBBEL has previously surveyed the area north of Division Street for the Northside Stormwater Management project and will use that data for this study. Manhole invert data is available within the Village's GIS for the area south of the railroad tracks, therefore no surveying will be needed here. We have assumed that invert data can be obtained from MWRD for their interceptors and from IDOT for Lake Street and Harlem Avenue. We will field survey combined manholes between Division Street and Central Avenue. The layout of the combined sewer system appears to be very regular. We plan to survey a manhole at each intersection within this area and will assume a constant pipe slope for the sewers between each surveyed manhole. We have budgeted to survey approximately 120 structures, which is approximately 25% of the structures in this area. This data will ultimately be used to update our GIS shapefiles, which will be provided to the Village to update its system.

1.5 Public Outreach Meetings. We have done many such outreach meetings as part of prior Stormwater Master Plans and can accommodate whatever format the Village desires. Based upon the direction of the RFP, we have budgeted for two 3-hour meetings. We have assumed one meeting would be early in the study to solicit information,

and one would be later to discuss potential projects. We have budgeted to provide three staff engineers but can provide additional staffing if needed.

1.6 Village Board Presentation. This task includes both the preparation of a PowerPoint presentation summarizing the overall study and attending a Village Board meeting to give the presentation. To be consistent with the RFP, this task will be completed under the stand-alone Task 9. No fees associated with this task are included under Task 1.

1.7 Flood Questionnaire. This task was not requested in the RFP but in our experience it is an important part of the Stormwater Master Plan process. We will provide a questionnaire that can be placed on the Village website or distributed to residents as the Village prefers. CBBEL will be responsible for managing the completed questionnaires and entering them into a GIS format so that the results of various questions can be mapped. The mapping often helps to identify problem areas or areas where additional detail in the analysis is needed. This task can be handled by Village staff if desired, however we have included it in our Fee Estimate.

TASK 2 – SEWER MODELING: Using the information obtained in Task 1, we will develop a storm sewer model of the Village's combined, relief, and storm sewer systems. As stated in the RFP, we will include all sewers 9" in diameter and larger. We intend to use the XP-SWMM model for the sewer system modeling. XP-SWMM is proprietary but a free viewer can be provided and the models can be converted to be compatible with EPA SWMM, which has been used previously within the Village. The model will include the sewer systems, overland flow routes, and depressional storage areas. This task will include development of the model and verification of its validity. Evaluation of the system capacity will be completed in a later task. A comprehensive project report including narrative and key results will be completed under a separate task.

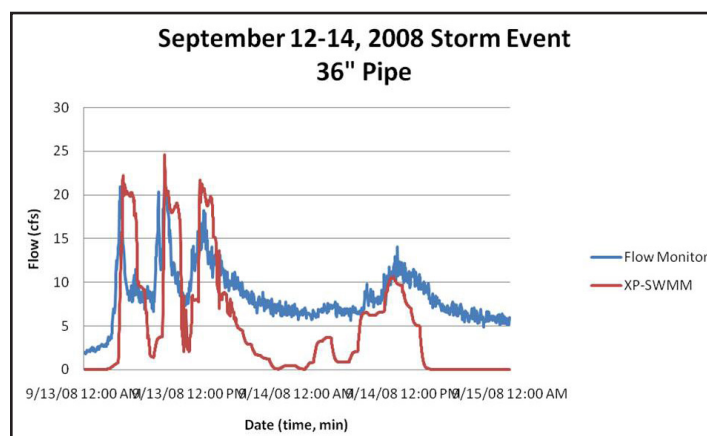
TASK 3 – FLOW MONITORING: The RFP did not specify any parameters regarding the number of monitoring locations and the duration of monitoring to occur. The costs included in our separate Fee Estimate are based on the following assumptions and our recommendations, however we look forward to discussing our recommendations with the Village and tailoring our plan to meet the Village's expectations.



We will partner with StormSensor, a flow monitoring company whom we have successfully worked with previously. We recommend installing flow meters in six locations. Due to the sewer separation that

has already occurred at the north end of the Village, we do not recommend installing a monitor in this area. The remaining areas of the Village include three main "collector" combined sewers which run east-west on Chicago Avenue, Lake Street, and Madison Street. We recommend installing a monitor near the downstream end of each system and one upstream in the network so that both the overall system and a small drainage area can both be calibrated. While additional monitoring location would improve model accuracy, in our opinion the six recommended locations are the minimum needed to balance between project costs and obtaining sufficient data. If the Village desires additional locations we can adjust our plan. It should also be noted that our flow monitoring costs include one full year of data acquisition.

TASK 4 – CALIBRATION: We will utilize the sewer model developed in Task 2 and the flow monitoring data obtained in Task 3 to calibrate the sewer model. We have assumed that the Village has an adequate rainfall gage that reports in five minute (or more frequent) intervals. If not, we have worked with other municipalities to install rain gage networks and can assist the Village if needed. One rainfall gage will be sufficient. We will select two calibration storms and input the storm data to the sewer model. Adjustments will be made to



provide a reasonable match of flow, volume, and water surface elevations at the monitoring locations. A comprehensive project report will be completed under a separate task which will summarize the calibration process.

TASK 5 – SYSTEM EVALUATION: Once the model is calibrated, we will simulate a range of storm events using the Illinois State Water Survey's Bulletin 75 rainfall data. This process will determine the critical duration of the system, which is the duration of the storm event which produces the greatest amount of flooding for each recurrence interval. Once the critical duration is determined, we will run the 1-year through 100-year storm events so that the capacity and level of protection of the system can be determined. Prior to this analysis, we will coordinate with the Village so that we have the same understanding of "level of protection" and whether it refers to basement flooding, street flooding, or overland flooding of structures.

This task will also include the other requirements listed in the Village's RFP including recommendation of design standards and recommendations of ordinance modifications based upon the results of the evaluation.

TASK 6 – CAPITAL IMPROVEMENT PLAN PROJECTS: Once a comprehensive design standard is agreed upon, we will develop a range of alternatives that will achieve this level of protection to all areas of the Village. If the standard is not reasonable for a particular area, we will explain why and will achieve the highest reasonable standard. Projects will be developed to a concept level and concept-level exhibits and cost estimates will be prepared. We acknowledge and will complete all sub items for this task included in the Village's RFP, although some we have not shown as separate tasks in our Fee Estimate. We have included the RFP text below for thoroughness:

- i. Conceptual-level development of CIP projects Village-wide to mitigate issues identified by System Evaluation. These projects may be located within public or private properties.
- ii. Specific analysis of existing green infrastructure and current benefits in addition to opportunities for new green infrastructure.
- iii. Conceptual-level development of Engineers Opinion of Probable Cost for all recommended CIP projects – including any required operation and maintenance costs
- iv. Recommended prioritization of all recommended CIP projects.
- v. Provide analysis of benefits associated with all recommended CIP projects, including resulting levels of protection.
- vi. Provide all analysis/narrative/exhibits/costs for recommended CIP projects in a manner suitable to be used for presentation to the Village Board

- vii. Provide analysis of the Northside Stormwater Management Project (Phase 2) to determine its prioritization within the context of all recommended CIP projects
- viii. Provide analysis of the Village's annual Sewer Lining CIP project to determine if scope or budget adjustments are necessary
- ix. Though not technically part of the CIP, the Village also wishes to have a review performed of the current sewer backflow prevention subsidy program to determine whether or not any changes (e.g. funding levels, projects/work eligible for reimbursement, reimbursement levels, etc.) need to be made.

TASK 7 – STAFFING LEVEL ANALYSIS: We will work with Village staff to review the resources available for managing the Village's stormwater management systems. We will consider both the current system and its operational and maintenance needs, as well as potential future projects which will add complexity and additional maintenance needs. The deliverable will be recommendations on staffing needs which will be included in the overall project report.

TASK 8 – STORMWATER MASTER PLAN: We will prepare an overall report which documents all tasks completed under this Scope of Services. We will provide a narrative report which discusses flow monitoring, development of the sewer model, the calibration process, evaluation of the system, and development of the CIP projects. The report will include maps, exhibits, etc., to adequately portray the findings and recommendations of the report.

TASK 9 – VILLAGE BOARD PRESENTATION: We will prepare a PowerPoint presentation of the key materials developed throughout the Stormwater Master Plan process. The presentation will be coordinated with Village staff and will include all of our findings and recommendations. We have budgeted for one presentation.



TAB 5 PROJECT SCHEDULE





STORMWATER MASTER PLAN PROJECT SCHEDULE

The timeline to complete a quality Stormwater Master Plan is typically around one year. This allows time for engagement of the public both at the beginning of the study – collecting data through flood questionnaires and/or public meetings – as well at the end when the CIP projects are developed. For the Village’s project, there are additional time constraints related to the collection of flow data and potentially a significant amount of data collection since sewer inverts are not available. However, we feel the one year timeline is still reasonable. We have provided a high-level project schedule showing the general phases of the project below.

We also note that the RFQ assumes a contract will be awarded on **May 1, 2021**. Ideally, flow monitors would be installed as early as possible to capture spring rains. We would encourage the Village to establish a contract as early as possible so that flow monitoring portion can proceed.

TASK	2021								2022			
	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR
DATA REVIEW/FLOW MONITORING SETUP												
DATA COLLECTION (SURVEYING)												
MODELING												
CIP DEVELOPMENT												
REPORT PREPARATION & PRESENTATION												

TAB 6
PROJECT TEAM
ORGANIZATIONAL CHART
RESUMES





JEFFREY JULKOWSKI, PE PROJECT MANAGER

JEFF JULKOWSKI is a Senior Water Resources Project Manager with over 22 years of experience that includes the development and implementation of stormwater infrastructure projects throughout the region. His experience in recent years has focused heavily on drainage improvements and flood mitigation studies in urban/suburban environments, and includes sewer modeling, stormwater planning studies in the City of Park Ridge, Village of Lombard, and Village of Riverside, among others. Jeff will be the Project Manager for the project.



THOMAS BURKE, JR., PHD, PE QA/QC (Modeling)

THOMAS BURKE is Executive Vice President and Head of CBBEL's Water Resources Department, responsible for over 21 water resources engineers performing technical analysis and design. Thomas is a Professional Engineer experienced in civil and water resources engineering. Thomas is familiar with the requirements of this project based on his extensive drainage experience with other municipalities. Several Stormwater Master Plan projects have been successfully implemented in Park Ridge, Elmhurst, Winnetka, Orland Park, Highland, Merrillville and Dyer that were a result of recent stormwater studies completed by CBBEL to relieve flooding. Many of these projects have included a Stormwater Utility component.



JASON SOUDEN, PE QA/QC (CIVIL)

JASON SOUDEN has been assigned to perform QA/QC for the Village's water main program. Jason is Vice President and the head of our Civil Engineering Design Department and has been with CBBEL for over 28 years. Jason has provided oversight and QA/QC for several similar water main improvements projects for Rolling Meadows, Carpentersville, Arlington Heights and Bensenville. Jason recently worked with the Village of Lincolnshire to design and permit the Indian Creek Streambank Stabilization project.



PROJECT TEAM



JEANA GOWIN, PE MODELING

JEANA GOWIN is a Water Resources Project Manager with 19 years of experience. Jeana is responsible for stormwater modeling and permitting, and has analyzed and developed concepts for several municipalities including New Lenox, Streamwood, Franklin Park, Lombard, Villa Park and Elmwood Park.



DAVID BUCKLEY, PE MODELING

DAVE BUCKLEY is a Water Resources Project Manager responsible for engineering studies including flood studies, watershed studies, steady and unsteady hydraulic analyses, stormwater management studies, NPDES Phase II compliance, permit applications to various agencies including Illinois Department of Natural Resources (IDNR- OWR) as well as municipalities and counties. Dave's experience includes NPDES Phase II compliance, engineering review, BMP design, implementation and design of flood reduction projects resulting from watershed management studies in Wilmette, Winnetka and Libertyville.



MICHAEL BURKE, PE MODELING

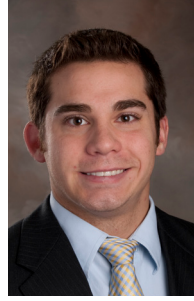
MIKE BURKE is a Water Resources Project Manager with 10 years of experience. He is responsible for stormwater modeling and permitting, and has analyzed and developed concepts for several municipalities including Arlington Heights, Deer Park, and Mount Prospect. Mike will bring that key experience to the Village of River Forest's Stormwater Master Plan.



ANDREA MAERTENS-PIZZO, PE MODELING

ANDIE MAERTENS-PIZZO is a Water Resources Engineer responsible for water resources engineering project analysis and design in addition to securing project permits. Andie has worked on many stormwater and floodplain reviews for various municipalities such as Bartlett,

Cary, Crystal Lake to name a few. Andie also worked on a sewer separation evaluation study in Forest Park. Andie grew up as a resident of River Forest and still has family that resides in the Village.



JOHN LAPAGLIA, PE COST ESTIMATING

JOHN LAPAGLIA is a Project Manager responsible for the development of various design projects, including road design, water main, residential, commercial, industrial, and site development projects. Duties include grading design, roadway design, earthwork analysis, cost

estimation, and stormwater management design. Additional responsibilities include preparing design plans, planning studies, specifications, cost estimates, permitting and project coordination with other professionals. John was the Project Engineer for annual roadway resurfacing and water main construction projects for Clarendon Hills and Oak Lawn, and was the Design Engineer for the Village's Westminster Way Water Main and Resurfacing Project.



STEPHANIE MAIER MODELING

STEPHANIE MAIER is a Water Resources Engineer responsible for water resources engineering project analysis and design including hydrologic and hydraulic engineering tasks including floodplain/floodway delineation, detention and compensatory storage. Stephanie has

worked on many drainage related projects with several communities including Rolling Meadows, Darien, Lake Forest and Northfield.



JOSEPH DEFRENZA, PE COST ESTIMATING

JOE DEFRENZA is a Civil Engineer assisting Project Engineers on various design projects including roadway construction, utility replacement and rehabilitation, water mains, sanitary sewer systems, and storm water management systems. His responsibilities include preparation

of construction plans and specifications, construction cost estimates, and bidding assistance.



KEVIN WILSON, PE IMPROVEMENTS/ COST ESTIMATING/ CONSTRUCTABILITY

KEVIN WILSON is Assistant Department Head of the Construction Department with 19 years of experience in construction engineering. He has performed construction observation on

infrastructure improvement projects including roadway, watermain, sanitary and storm sewers. Kevin recently completed resident engineer duties for a large diameter relief sewer project in the Village of Lincolnwood (24" – 60") and is currently the construction project manager for multiple large diameter storm sewer projects in the Village of Wilmette. Kevin will be responsible for the constructability review and all cost estimates for the project.



LUKE SHERRY, PE PERMITTING

LUKE SHERRY is a Water Resources Project Manager with 17 years of experience. Luke has performed numerous sewer modeling and flood reduction studies, hydrologic and hydraulic analyses, and was the lead in the development of the Technical

Guidance Manual (TGM) for the Watershed Management Ordinance (WMO) for the Metropolitan Water Reclamation District (MWRD). He also is a member of the WMO Technical Advisory Committee. Luke has obtained dozens of Watershed Management Permits for various types of projects and will handle the MWRD permitting for this project.

ORGANIZATIONAL CHART

STORMWATER PLAN REVIEW



PROJECT MANAGER

Jeffrey Julkowski, PE

QA/QC

Thomas Burke Jr., PhD, PE
(Modeling)
Jason Souden, PE
(Civil)

FLOW MONITORING

Erin K. Rothman, M.SC.
StormSensor

MODELING

David Buckley, PE
Michael Burke, PE
Jeana Gowin, PE
Andrea Maertens-Pizzo, PE
Stephanie Maier

IMPROVEMENTS/ COST ESTIMATING/ CONSTRUCTABILITY

Kevin Wilson, PE
John LaPaglia, PE
Joseph DeFrenza

FUNDING ANALYSIS

Thomas Burke Jr., PhD, PE
Stephanie Maier

ORDINANCE REVIEW

Luke Sherry, PE





YEARS EXPERIENCE: 22
YEARS WITH CBBEL: 22

EDUCATION

Bachelor of Science, 1998
Agricultural Engineering
University of Illinois at
Urbana-Champaign

PROFESSIONAL REGISTRATION

Professional Engineer, IL,
062.057976, 2004

CERTIFICATIONS

Certified Floodplain Manager,
IAFSM

PROFESSIONAL DEVELOPMENT

FEQ Unsteady Flow
Modeling Seminar

National Highway Institute-
HEC-HMS Training Seminar

ASCE-Illinois Section EE&WR
Technical Group-XP-
SWMM2000 Training Course

Ethics in City Government,
Ethics Training for CDA/OMP
Contractors, Vendors and
Employees

PROFESSIONAL AFFILIATIONS

Illinois Association for
Floodplain and Stormwater
Management

AWARDS

APWA Transportation Project
of the Year, over \$10M,
2003, Butterfield Road
(South), LCDOT

Jeffrey Julkowski, PE, CFM

Senior Water Resources Project Manager

Professional Engineer experienced in water resources; responsible for engineering project management and analysis. Duties include performing the following hydrologic and hydraulic engineering tasks: land use characterization, watershed studies, floodplain/floodway delineation, detention and compensatory storage determination, steady state hydraulic analyses, and design of conveyance systems, and stormwater management permitting. Computer modeling experience includes TR-20, HEC-HMS, HY8, HYDRAFLOW, HEC-2, HEC-RAS, WSP-2, InfoSWMM, and XP-SWMM.

Cypress Area Stormwater Improvements, Arlington Heights: Project Manager for design of a stormwater improvement project in the area of Cypress Street. CBBEL previously completed a stormwater analysis which developed the conceptual improvements, which included construction of 3,500 LF of relief storm sewers and a new 30 ac-ft detention basin on Village-owned property. The Village expanded the scope of the project to include replacement of over 10,000 LF of watermain adjacent to the project area and the reconstruction of 3,000 LF of streets in the project area. The project included preparation of final contract documents, bidding, and ultimately construction engineering.

Lincolnwood Street Storage Program: Lead Water Resources Engineer responsible for the modeling analysis and coordination with plan development. Project involved placing inlet restrictors and containment berms to temporarily store runoff on street surfaces to reduce peak flows into system. Modeling analysis completed using 2D XP-SWMM model.

I-290 Flooding Study, Forest Park: Lead Engineer for flooding evaluation portion of IDOT Location Drainage Study. Repeated flooding has occurred on I-290 near Des Plaines Ave. As part of the Phase I planning for reconstruction of I-290, IDOT requested a detailed flood study of this area. An XP-SWMM model was developed and calibrated to record pump station data. Alternatives were developed that included new conveyance systems, an enlarged pump station, and underground storage vaults.

Riverside Comprehensive Sewer Study: Project Manager responsible for project management, development of improvement alternatives, project QA/QC and public presentations of study results. Scope included development of Info SWMM sewer model of Village's entire combined and storm sewer system.

Park Ridge Stormwater Master Plan: Project Manager for a citywide study initiated to identify flood control projects throughout the City. Thirteen projects totaling over \$100 million were identified. Project included significant public coordination and multiple city council presentations.

Park Ridge Citywide Sewer Study: Lead Engineer that developed InfoSWMM model of entire City's sewer system. Project need resulted from repeated severe flooding events in recent years. Responsible for coordinating development of InfoSWMM models for 3 major sewer systems and development of 12 project areas to reduce the risk of flooding. Completed benefit/cost analysis. Prepared final report and gave presentation of results to City Council.

Park Ridge Sewer Improvement Program: Project Manager for follow-up to Citywide Sewer Study. Ongoing project to develop conceptual improvements into construction projects. Responsible for coordinating InfoSWMM modeling and development of final construction documents.

Park Ridge Stormwater Utility Study: Project Manager for project to determine the feasibility of implementing a stormwater utility fee in the City of Park Ridge. Responsibilities included developing an impervious area database, determining the Equivalent Residential Unit, and making multiple presentations to City Council.

O'Hare Modernization Program – Master Drainage Plan, Chicago: Ongoing project includes drainage master planning work to expand and reconfigure the airfield at O'Hare International Airport. Responsibilities included determining the layout of numerous storm sewer systems to collect runoff potentially contaminated with aircraft deicing fluids. Sizing of these systems was done using XP-SWMM modeling software. Responsibilities also included the sizing of 3 large detention basins, coordination with numerous airfield design projects, and technical support for permitting through IDNR-OWR, DuPage County, IEPA, MWRDGC, and FAA. Also oversaw preparation of permit submittal to IDNR-OWR for improvements within Crystal Creek watershed.

Lombard Terrace View Pond: Project Manager for drainage study and development of flood control project to create 8 acres-ft of flood storage by lowering water elevation of existing pond. Project also included construction of stormwater pump station and relief sewer to address local street flooding.

Homestead Gardens Detention Basin, Highland, IN: XP-SWMM analysis of existing drainage system. Project involved developing XP-SWMM model of area that has experienced repeated flooding. Proposed alternative included construction of a flood control basin and relief storm sewers.

Lombard Combined Sewer Modeling: Project Manager for an ongoing analysis of 2 areas of the Village's storm and combined sewer system encompassing approx. 1,900 acres. Runoff from these areas is conveyed to various sewer treatment facilities, until those systems reach capacity and overflow to East Branch DuPage River. Project will determine existing system capacities and frequencies of combined sewer overflow events,

with the goal of developing a sewer separation plan that will reduce frequency of CSO's. Analysis uses the XP-SWMM hydraulic model which will be calibrated to recorded rainfall and pipe flow data. After the model is calibrated, deficient areas will be identified and a sewer separation plan will be developed.

Will County Stormwater Technical Manual: After assisting Will County with the drafting of its countywide Stormwater Management Ordinance, CBEL prepared a Technical Guidance Manual to complement the Ordinance and to describe the technical basis for requirements of the Ordinance. Responsibilities included drafting of text and examples, creation of figures, and integration of review comments from Stormwater Committee. Manual includes information in regards to: requirements for stormwater management, erosion and sediment control, protection of special management areas, Stormwater Management Permit submittal requirements, long-term maintenance, and enforcement and penalties.

USX-Southworks, Chicago: Developed a Stormwater Management Plan that uses the site's location and unique characteristics to complement the concept of sustainable development and reduces impact to both the proposed on-site and existing off-site infrastructure. Stormwater Management Criteria were proposed for 6 zones. Each zone is defined by a different set of criteria. Criteria are based on: desire to recharge groundwater and convey clean runoff to Lake Michigan, reducing stormwater flow to the City's sewer system and promoting BMPs to reduce and treat runoff. BMPs were used to remove pollutant loading from stormwater runoff for water quality control and reduce stormwater runoff and to lessen the impact to existing and proposed infrastructure. Developed conceptual grading plan and utility plans for watermain and sanitary sewer. Designed infiltration basins and vegetated swales/bioswales and used Ecoloc® permeable pavers.

Town of Cicero Comprehensive Plan: Developed drainage and flood reduction strategies to be included in the long term Comprehensive Plan. Responsibilities included drafting report text and participating in open house meetings with Town residents.

STORMWATER AND FLOODPLAIN MANAGEMENT PERMIT APPLICATIONS

Tinley Park Retail Center: Project included development of a retail center on a 109-acre parcel, of which approx. 92 acres was located within a Zone A 100-year floodplain. Responsibilities included designing detention storage basins to meet the requirements for both Village and MWRDGC, design of several compensatory storage basins to mitigate for floodplain fill, a hydraulic analysis to define the limits of Zone A floodplain, and design of an inverted siphon system using XP-SWMM to allow runoff to cross below Union Drainage Ditch and access the site's detention basin.

Brach-Brodie Property, Naperville: Responsibilities included determination of detention storage requirements and preparation of permit submittal to City and DuPage County. Also completed drainage study of IL Route 59 and offsite areas to design a bypass culvert through the development. Completed permitting through IDOT-Hydraulics. Project involved development of 100-acre plus parcel of land. The property, bordered on the north by 75th Ave and on the west by IL Route 59, was converted from farmland into commercial space. Project included construction of a 52 acre-foot stormwater management facility, new wetland in adjacent Forest Preserve parcel, new ½ mile 4 lane roadway, new signalized intersections on IL Route 59 and 75th Ave, new turn lanes in existing medians of IL Route 59 and 75th Ave, and roadway widening of IL Route 59 and 75th Ave. Project also included coordination of 80,000 plus CY of imported structural fill and construction of 5 building pads ranging in size from 10,000 SF to 150,000 SF.

Highlands of Lombard Retail Site: Performed a stormwater detention analysis for 2 watersheds on the site, and a wetland hydrology analysis for existing and proposed conditions. Completed permit submittals through Village of Lombard and DuPage County. The 32 acre property was developed from open space into a commercial and residential development. CBEL worked with the owner and development team to permit the stormwater management for the entire development. The site has over 30' of elevation change from north to south and is tributary to 2 different watersheds.

The Reserve Subdivision by Pulte Homes, Elgin: Developed stormwater plans for a 44-acre subdivision adjacent to Otter Creek. Development included several large wetland areas, 5 detention basins, compensatory storage, and a new culvert crossing of an unnamed tributary to Otter Creek. Permitting was completed through the City of Elgin and IDNR-OWR.

Butterfield Road Reconstruction (North and South), Libertyville: Stormwater management studies included detention storage for 2 watersheds and sizing of storm sewer systems. HEC-2 hydraulic modeling of Bull Creek to size proposed culvert replacement. Permitting through LCSMC. Project consisted of reconstruction of Butterfield Rd from Bull Creek to IL Route 137, a distance of approx. 2 miles and from Huntington Rd South to Bull Creek, a distance of over 2 miles. The existing two lane rural cross-section was reconstructed to provide five 12' lanes bound by B.6-24 curb and gutter. Reconstruction included complete removal of existing bituminous pavement and replacement with full depth asphalt pavement, new curb and gutter, new storm sewer system, detention facilities, and utility relocations.

Edgewater Subdivision by Pulte Homes, Elgin: Performed hydraulic modeling for proposed realignment of Otter Creek from a channelized agricultural ditch to a natural meandering stream. Hydraulic modeling included one new culvert crossing, improvements to existing crossing at Bowes Rd, and relocation of regulatory floodway. The modeling was used in support of permitting through IDNR-OWR. Designed several basins adjacent to Otter Creek to provide detention and floodplain storage. Completed stormwater permit submittals through the City.

Metra Laraway Road Station, New Lenox: Project Engineer for construction of a transit-orientated development just east of the intersection of Cedar Rd and Laraway Rd. Designed a detention pond for Phase I improvements. Project consisted of installation of storm sewers, municipal water main, and municipal sanitary sewers. Analyzed existing and proposed conditions by using XP-SWMM, TR-20 and Hydra flow models, and prepared a stormwater report for submittal to the Village.

FLOOD CONTROL

Palanoid Park Flooding Study, Palatine: Project included hydrologic analysis of an existing subdivision to develop alternatives for drainage improvements. The existing storm sewer network and depressional storage in the subdivision was modeled using the XP-SWMM hydraulic model, and was calibrated to match reported flood elevations for known rainfall events. The study was coordinated with an analysis of sanitary sewer system by SPACECO, Inc., and included several public meetings with the Village and area residents.

Rolling Meadows Stormwater Management Study: Project Engineer. During the summer and fall of 2001 the City experienced flooding during several intense rainfall events. The City identified 12 areas to be studied so that improvements could be made. Responsibilities included analysis of existing conditions for each of the areas, development of flood reduction alternatives, and analysis of each alternative with XP-SWMM to provide recommendations. Recommendations were summarized in a report and presented to City staff.



YEARS EXPERIENCE: 30

YEARS WITH CBBEL: 25

EDUCATION

Doctor of Philosophy, 1996
Civil Engineering
Purdue University

Master of Science, 1992
Civil Engineering
Purdue University

Bachelor of Science,
1991 Civil Engineering
Northwestern University

PROFESSIONAL REGISTRATION

Professional Engineer, IL,
062.052048, 1998

Professional Engineer, IA,
17060, 2004

Professional Engineer, IN,
10708209, 2007

Professional Engineer, MI,
6201062525

Professional Engineer, TX,
121172, 2015

Professional Engineer, PA,
084728, 2016

CERTIFICATIONS

Diplomate Water Resources
Engineer (D.WRE)

Certified Floodplain
Manager IAFSM

Certified Professional in
Erosion and Sediment Control

Certified Professional
in Stormwater Quality,
Envirocert International

Kane County-Engineer
Review Specialist

AWARDS

Young Civil Engineer of the
Year, ASCE-IL Section, 2000

Edmund Friedman Young
Engineer Award for
Professional Achievement,
ASCE, 2001

Charles Ellet Award, Western
Society of Engineers, 2001

Chi Epsilon Chapter
Honor Member, Purdue
University, 2001

Thomas Burke, PhD, PE, D.WRE, CFM, CPESC, CPSWQ

Executive Vice President, Head of Water Resources Department

Professional Engineer experienced in civil and water resources engineering. Responsible for water resources engineering projects, designs, and reviews, including land use characterization, watershed and floodplain/floodway delineation, steady and unsteady river hydraulics analysis, stormwater management, feasibility studies, and development of countywide ordinances. Head of Water Resources Department, responsible for 21 water resources engineers performing technical analysis and design. Projects include developing hydrologic and hydraulic models, establishing floodplain and floodway limits, evaluating proposed modifications, stormwater management design for commercial, industrial, and residential development, obtaining permits through municipal, county, state and federal agencies and Letters of Map Change. Served as an expert witness for cases involving stormwater management. Stormwater consultant for the Lake County Surveyor's Office, Lake County Drainage Board and Town of Dyer in Indiana. Oversee the stormwater reviews for several communities in the Chicagoland area and northwest Indiana.

SPECIAL STUDIES

Winnetka Flood Risk Reduction Study: Performed a flood risk reduction analysis based on the flooding from the September 2008 event. The purpose of the study was to evaluate the existing storm sewer systems for the 2-, 5-, and 10-year design events, establish causes for the flooding and provide improvement plans to reduce the risk of future flooding. There were 5 study areas identified through a series of public meetings and flood damage questionnaires. Causes of flooding were identified and conceptual improvement plans, along with estimated costs, were prepared. The study was then expanded to cover 3 additional areas and include evaluation of protection up to the 100-year design storm event following significant flooding in July 2010.

Elmhurst Comprehensive Flood Plan: Completed an overall study of 10 areas that significantly flooded during the July 2010 storm event. After analyzing the existing conditions, proposed solutions were provided to reduce the risk of future flooding. Hydrologic and hydraulic modeling were used in the evaluation of alternatives. Cost estimates were determined for each solution. We also reviewed the current stormwater practices and made recommended improvements. Several presentations were made to the City and many meetings with a citizen task force were held.

St. Margaret Mercy Healthcare Centers, Inc., Dyer, IN: Hart Ditch overtopped its banks, causing significant overbank flooding through the Town of Dyer and substantial flood damage to the hospital campus. CBBEL was retained to evaluate the cause of the flooding and prevent future flooding. A flood protection barrier was proposed. CBBEL developed a hydrologic model for the Plum Creek/Hart Ditch Watershed and calibrated to August 2007 storm event using measured rainfall data; developed an unsteady HEC-RAS hydraulic model to determine benefits of flood storage, a summary report and creation of temporary and permanent flood protection for the campus. This information was used for further development of flood storage needed.

Economic Impact Study, MWRDGC: Managed an engineering analysis and report, in support of the Economic Impact Study, to evaluate the site impacts and corresponding stormwater infrastructure costs associated with implementing the Draft Watershed Management Ordinance. The report was provided to an economic consultant to assist in the preparation of the Economic Impact Study conducted by MWRDGC.

Orland Park Flood Risk Reduction Assessment: As the result of significant flooding in the Village from a severe rainstorm on July 27, 2003, CBBEL performed a flood risk reduction analysis. The primary goal at the study was to determine the extent and cause of flood damage throughout the Village. There were 21 study areas identified within the Village and conceptual estimates of construction costs were prepared for possible solutions. A flood damage questionnaire was distributed throughout the Village and multiple neighborhood meetings were held.

Orland Park Stormwater Management Plan: Utilizing the analysis prepared in the Orland Park Flood Risk Reduction Assessment, CBBEL prepared a stormwater management plan for the Village which addressed implementing specific drainage improvements in 16 of the 21 study areas. The plan varied from construction of new storm sewers to increasing storage capacity to modifying overland flow routes.

Wood Dale – Itasca Spillway: Design and analysis of a spillway diverting large flows into a reservoir. Performed wave run-up calculations for permitting and hydraulic analysis using FEQ unsteady-state model to analyze the economic benefit of many scenarios. Project includes the optimization of four gate setting for diverting flow from Salt Creek into a large pump-evacuated reservoir. Used economic data to determine project benefits for State funding.

Lincoln Park Zoo, Chicago: Part of a consulting team renovating the South Pond area that will inspire lifelong environmental stewardship for Chicago area students, families, and community members. CBBEL worked on the design to enhance the pond by improving the water quality by replacing surrounding asphalt paths with

native vegetated edges, introduce interactive elements along the pond, add a boardwalk through the pond, restore and protect the island in the pond and improve the surrounding landscape.

Morton Arboretum Main Parking Lot Design, Lisle: CBBEL incorporated BMPs into the design of their 6-acre Main Parking Lot. The Main Parking Lot is located in the floodplain of the East Branch of the DuPage River, and stormwater runoff from the parking lot will drain to Meadow Lake. The design of the Main Parking Lot included the following BMPs: Wetland Sedimentation Basin, Porous Pavement, Depressed Medians, and Subsurface Stormwater Storage. Following the completion of the project a study comparing the results of runoff volume from the Main Parking Lot with the runoff volume from the staff parking lot (typical impervious coverage) was performed to demonstrate the reduction of runoff using BMPs.

Graue Mill HOA, Hinsdale: CBBEL performed a detailed hydraulic study of Salt Creek and designed flood control measures to protect the residential community that experienced devastating flooding several times. Obtained FEMA funding for construction of the project that included levees, pump 2 stations, raising utilities, automated floodwalls and berms.

WATERSHED PLANNING STUDIES

Upper Salt Creek FEQ Study, DuPage County: Performed hydraulic analysis using FEQ unsteady-state model for a comparison study with HEC-2 steady-state model.

Flagg Creek Watershed Plan, DuPage County: Performed hydraulic analysis using FEQ unsteady-state model, economic analysis of damages from historical events and assisted in the preparation of a watershed plan.

Addison Creek Watershed Plan, DuPage County: Performed hydraulic analysis using HEC-2 steady state model, economic analysis of damages from design storm event and preparing a watershed plan which allows the Village of Bensenville to plan and obtain funding for regional stormwater projects.

Upper Des Plaines River Tributaries, DuPage County: Completed a Watershed Study for Willow-Higgins Creek and Bensenville Ditch as they relate to the City of Chicago O'Hare International Airport Modernization Program. The plan allows for the future development to meet the intent of the DuPage County Stormwater and Flood Plain Ordinance by reducing peak discharges leaving the airport property and identifies known flooding problems in the watershed.

Plum Creek/Hart Ditch: Completed a watershed study of the 72 square mile drainage area in Illinois and Indiana that has led to additional studies and projects providing flood protection.

ORDINANCE DEVELOPMENT

Technical Guidance Manual for the Watershed Management Ordinance, MWRDGC, Cook County (2014): Project Lead responsible for the development of the TGM to accompany the WMO, in collaboration with MWRDGC. The project involved the creation of technical guidance for stormwater management, floodplain/floodway, riparian environment, and wetland submittals under the WMO, and also included the development of all permit forms, checklists, template hydrologic models and other resources. Additionally, the project also involved numerous public training seminars that covered the WMO, TGM, and HEC-HMS hydrologic modeling.

DuPage County Stormwater Ordinance (2012): Worked on complete overhaul of the County Stormwater Ordinance to reflect the current and future development conditions. The revised ordinance was

developed with input from the Steering Committee made up of municipal engineers and County staff.

Kane County Stormwater Ordinance (2001): Worked for the Kane County Department of Environmental Management to produce an ordinance that reflects the Kane County Stormwater Master Plan and the appropriate stormwater criteria. Assisted in the writing, research and presentations of the Ordinance.

Kane County Technical Manual (2001): Responsible for the development of a manual that is used as a supplement to the new Ordinance. The manual includes example calculations and standard forms that will be used in every stormwater submittal and example plans to assist the design engineer in preparing a submittal.

State of Indiana:

Town of Dyer Stormwater Management Ordinance (2012)

Town of Dyer Stormwater Quality Management Plan (2012)

Lake County, Indiana Stormwater Management and Clean Water Regulations Ordinance (2006)

ENGINEERING REVIEW

Village of Orland Park (2004-present): As a consultant to Village Engineering and Public Works Departments, CBBEL is providing engineering project review services. The reviews range from single family lots to 70 lot residential developments. We have been involved with the conceptual meetings through final engineering review.

Lake County, IN (1996-present): Consultant to Lake County Surveyor's Office, responsible for reviewing stormwater management of proposed projects with respect to the Lake County Drainage Ordinance. Attend monthly Drainage Board meeting to assist Lake County Surveyor with proposed projects and public comments.

Town of Dyer, IN (2008-present): Consultant to Town's Storm Water Board working on various drainage problems. CBBEL has completed studies on over 10 different areas ranging from a subdivision problem to sizing a regional flood control facility. Designed Phase 2 of the Beren's-Monaldi flood control wall protecting hundreds of residents from overbank flooding. Initiated and coordinated the installation of a stream gage and rain gage in Plum Creek Watershed in conjunction with the USGS. Developed an early warning system utilizing the gages and predicted rainfall to forecast flooding and provide the Town sufficient time to prepare and respond.

Village of Northbrook (2001-present): As a consultant to Village Engineer, review the stormwater management of selected projects with respect to the Village Ordinance. Make recommendations for stormwater improvements utilizing BMPs.

Village of Downers Grove (2001-2008): Responsible for reviewing the stormwater management of proposed projects with respect to the DuPage County Countywide Stormwater and Flood Plain Ordinance.

Lake County Stormwater Management Commission (2001-2002): As a consultant to SMC, responsible for the coordination and review of stormwater management permit applications requiring base flood evaluation determinations, stormwater detention, roadway projects and wetland hydrology criteria. CBBEL reviewed over 30 permit submittals always meeting a two week turnaround requirement.

City of Northlake: As a consultant to City Engineer, review the stormwater management of selected projects with respect to the City Ordinance. Make recommendations for stormwater improvements utilizing BMPs.



YEARS EXPERIENCE: 31
YEARS WITH CBBEL: 28

EDUCATION

Master of Science, 1998
Civil Engineering,
Transportation, University of
Illinois at Chicago

Bachelor of Science, 1991
Civil Engineering, Structures
University of Illinois at
Urbana-Champaign

PROFESSIONAL REGISTRATION

Professional Engineer, IL,
062.050850, 1996

PROFESSIONAL AFFILIATIONS

American Society of Civil
Engineers

Chi Epsilon Civil Engineering
Honor Society

Illinois Road & Transportation
Builders Association

Sigma Phi Delta Professional
Engineering Fraternity

Jason Souden, PE

Vice President, Head, Civil Engineering Design Department

Head of Civil Engineering Design Department, which includes 25 civil engineers, 5 structural department engineers, 5 CAD technicians, and 1 landscape architect. Experience covers a wide variety of civil and structural engineering projects. Responsibilities include civil and structural engineering project management and design. Civil engineering experience includes design of highways, local roads, bicycle/pedestrian facilities, parks, stormwater management facilities, streambank stabilization projects, and utility projects. Structural projects include design and inspection of bridges, parking garages, dams, spillways, retaining walls, and culverts.

Lord Street Sewer Separation System, Elgin: Project Manager for the construction of a storm sewer separation system. Project consisted of separating the storm and sanitary sewers from a combined sewer system. A 96" RCP was jacked in place under US Route 20 to a new outfall of the storm sewer system into the Fox River. Upstream of the 200' long tunnel, the sewer pipe consisted of 430' of 10' by 5' box culvert, 2,600' of 66" RCP, 1700' of 60" RCP and 1,100' of 48" RCP and appurtenant structures. In addition, all of the streets where storm sewers were installed were reconstructed with a concrete base course and HMA pavement surface, curb and gutter replacement, 8" and 6" DIP water main improvements where necessary, and parkway restoration.

North/Porter Road Rehabilitation, Elgin: Project Manager responsible for day-to-day project management and point-of-contact, including oversight and development of design, permitting, construction document preparation, bidding assistance and utility coordination. This project included the replacement of existing water main with approximately 2,200' of 8" ductile iron water main, water service, valve vault and fire hydrant replacement, sanitary sewer repairs, street sign upgrades, pavement patching, sidewalk, curb and gutter and driveway removal and replacement and partial reconstruction and resurfacing of approximately 8,000 LF of narrow, residential roadway. CBBEL's team provided full-range civil engineering services, including topographic survey, geotechnical investigation and sewer televising, preliminary design development, utility coordination, IEPA water and sewer permitting, preparation of SWPPP, assistance with public involvement efforts, preparation of construction documents, bidding assistance and full-time construction engineering.

York Commons-Crescent/Cambridge Stormwater Improvements, Elmhurst: Project Manager. CBBEL provided design and construction services for installation of approx. 2,000 LF of 48" diameter storm sewer in conjunction with 11 acre-feet of flood storage created at York Commons Park. The City partnered with Elmhurst Park District and entered into an Intergovernmental Agreement with that agency to use the land for stormwater storage. Project involved the securing of temporary and permanent easements to construct a portion of the 48" diameter storm sewer through residential properties. Proposed drainage improvements provide a 100-year level of flood protection for 38 properties located throughout the study area. Construction began in Fall 2016 and was completed in July 2017.

Madison Early Childhood Center Stormwater Improvements, Elmhurst: Project Manager. CBBEL provided a full range of engineering services for this project, including topographic survey, hydrologic and hydraulic modeling, preliminary engineering, final engineering, bid assistance, and construction observation. Project consisted of installation of approx. 1,500 LF of storm sewer ranging in size from 24" to 48" in diameter to new recessed detention basin which includes a soccer field. Additionally, 800 LF of new sanitary sewer was constructed. Project involved extensive coordination with Elmhurst Community Unit School District 205. Custom curb overflow structures were designed to accept drainage and divert flow away from main line storm sewers already at capacity.

Pingree Road Reconstruction, Crystal Lake: Project Manager for federal Phase II construction bid documents for the reconstruction and widening of Pingree Rd from Rakow Rd to US 14. Services included topographic survey; preliminary site assessment for special waste; stormwater management report including best management practices; construction plans, specifications, and construction cost estimates. This project utilized STP funding.

Green Bay/Wadsworth Road, Beach Park: Project Manager for the Phase I and Phase II design of the intersection improvements. In order to meet traffic demands of an adjacent development and raise the road above the floodplain the project was extended 3,000' to the west of the intersection on Wadsworth Road. Detention and compensatory storage was required in accordance with the Lake County Stormwater Ordinance.

Addison Creek Reservoir, MWRD: Design Manager for the design of a 1,000 acre feet stormwater storage basin. The project included an intake structure, pump station, weir, channel improvement, two bridges, outlet/aeration structure, rock excavation and retaining walls.

Parkside Park, Roselle: Project Manager/Construction Manager for the design and construction. The project included storm sewer, stormwater detention and park facilities for the Village and Park District. A storm sewer system was constructed to connect a new downtown development to the new detention facility. Park features in the dry bottom pond included a concrete skate park, a little league baseball field and a Miracle League field.

The Miracle League field was specially designed for ADA accessibility to allow handicapped children to play baseball. This project received the APWA Structure Project of the Year (under \$2 million).

I-94 North Tri-State Tollway Reconstruction, Illinois Tollway: QA/QC Manager for the widening and reconstruction of five miles of the Tri-State Tollway in Lake County. This project extends from IL 60 (Town Line Road) to IL 137 (Buckley Road) and includes ramp work at the Lake Forest Oasis, ramp reconstruction at the IL 176 (Rockland Road) and Buckley Road Interchanges, widening and rehabilitation of two I-94 bridges over railroads, substantial drainage improvements including replacement of all existing median storm sewers and cross culverts, a box culvert extension, removal and replacement of all signage and all interchange lighting, and relocations of fiber optic lines and underground utilities.

IL Route 53/Madison Street Improvements, Lombard: Project Manager for the widening and resurfacing to provide a left and right turn lane and new traffic signals at the intersection. The improvements also included the reconstruction of Madison St between IL 53 and Finley Road with new curb and gutter, storm sewer, decorative lighting and sidewalk.

Golf/New Wilke Road, Rolling Meadows: Project Manager for the reconstruction of the intersection of IL 58 (Golf Road) and New Wilke Road, totaling over 4.3 lane miles of new concrete pavement. The project included providing 3 exclusive through lanes in each direction, dual left turn lanes eastbound, and exclusive right turn lanes both eastbound and westbound on Golf Road. The traffic signal at the eastern project limits was removed and replaced, and along with the signal at New Wilke and interconnected to the Golf Road system. Improvements include new storm sewer system, sidewalk, bike path, entrances, medians, short retaining walls, landscaping and lighting system relocation.

Butterfield Road (North), Lake County: Phase II Project Manager for the reconstruction and widening of Butterfield Road from Bull Creek to IL 137 (Buckley Road). Scope of improvements included widening the existing two-lane rural section to a 5-lane section with curb and gutter, storm sewer, watermain, sanitary sewer rehabilitation and replacement, detention facilities, median landscape planter and utility relocations. Project also included traffic signal modernization and improved channelization at the intersections of Butterfield Rd and Winchester Rd and Butterfield Rd and IL 137; and new traffic signals and channelization at the intersection of Butterfield Rd and Virginia Ave. Permits were required from LCSMC, USACE, IDOT and LCDOT. Coordination was required with the public, individual homeowners, ICC/METRA for railroad crossing, and various agencies including IDOT, LCSMC, IEPA, and Village of Libertyville.

Downtown Redevelopment, Lincolnshire: Project Manager for the design and permitting of a detention pond and a compensatory storage basin, retaining wall, and streambank stabilization in Phase 1 and an access road and parking lot for a future development in Phase 2. Additional work items included storm and sanitary sewer lines, water main, site lighting, and mass grading.

Schaumburg Convention Center Improvements: Project Manager for the addition of new detention storage to accommodate the Tollway's Meacham Road Interchange project. The project included new 36" storm sewer, parking lot reconstruction/reconfiguration, lighting, watermain relocation, the expansion of 3 existing detention basins and porous pavement to meet MWRD's new volume control requirements.

Hastings Lake Public Access Improvement (Phase II), Lake Villa: Principal-in-Charge and QA/QC, responsible for supervising the preparation of design plans, specifications and other contract documents for improvements to the 250 acre site which included

providing 2.5 miles of asphalt path, 1.5 miles of crushed stone trail, grading, five prefabricated boardwalk structures, 5 parking lots totaling 140 stalls approximately 3,200' of paved internal roadway, boat launch and retaining walls, 2 floating fishing piers with abutments, picnic shelter site work, restroom site work and septic field, comfort station site work, and lake overlooks. CBBEL provided land surveying, geotechnical investigations, design, engineering, hydrologic/hydraulic analysis, permitting and contract documents for the improvements. As part of the access improvement at the entrance to County Hwy A-11, a traffic study, turn bay road widening and LCDOT access permits were engineered and received approval. Also included in the design was 700' of bituminous trail along Grass Lake Rd in LCDOT ROW, requiring storm sewer with restrictor outlet, new curb/gutter & landscape restoration per LCDOT standards.

Lake Nippersink, Lake County: Project Manager for design and permitting of improvements to Lake Nippersink just north of IL Route 120 near Round Lake. LCFPD desired to create a natural and active recreational environment including fishing, hiking and picnicking. The major improvements included Limestone fishing nodes; 2 floating docks/gangways; 1 mile of natural bank stabilization and creation of an emergent shoreline planting zone with over 20,000 emergent plugs; removal of an existing land bridge; replacement of eight 24" culverts; over 900' of rock bank stabilization for shoreline fishing areas; installation of a precast concrete and steel carp guard on the lake's outlet pipes; and an aeration system. CBBEL prepared concept design alternatives and cost estimates. After the preferred alternate was selected, CBBEL prepared construction documents as well as all necessary hydraulic modeling to obtain the LCSMC permit for the proposed improvements.

Old Orchard Multi-Use Path (East), Skokie: Project Manager responsible for Phase I Engineering and Phase II design plan preparation and cost estimate for construction of 0.5 miles of a 10' wide shared use path along Old Orchard Road in the Cook County Forest Preserve between Harms Rd and Woods Dr. Improvements included removal of undesirable trees for the new path, tree replacement with desirable species, traffic signal improvements, signage, and landscape restoration. Permits were obtained from CCHD, MWRD, and NPDES with additional coordination between Village of Skokie, Cook County Forest Preserve, IDOT, and utilities for this federally funded project.

Buffalo Creek, Wheeling: Project Manager for the stabilization of 3,100' of Buffalo Creek using IEPA 319 Grant funding and local funds. The project included a combination of bio-engineering and structural stabilization techniques.

Salt Creek Streambank Stabilization, Rolling Meadows: Project Manager for three phases of streambank stabilization projects. A comprehensive study of the entire 7.2 miles of creek was prepared to outline the areas of severe erosion, recommendations for repair and associated costs. Permits were required from IDNR and USACE. Design included gabion basket walls and various bioengineering techniques. The project utilized various grant funding sources including IEPA 319 grants monies.

Long Lake Shoreline Stabilization, Lake County: Project Manager for feasibility study and Phase II design on the shoreline stabilization of 1,300' of Long Lake. The existing shoreline bank was severely eroded from overland and roadway runoff and the wave/ice action of the lake. A combination of techniques were designed to permanently stabilize the bank including a submerged stone shelf with emergent/submergent vegetation, gabion basket, sheet piling and re-grading, and re-vegetating. Wetland enhancement was a component of the project, which was partially funded through IEPA 319 Grant Program.



YEARS EXPERIENCE: 19
YEARS WITH CBBEL: 19

EDUCATION

Bachelor of Science, 2001
Agricultural Engineering
University of Illinois at
Urbana-Champaign

PROFESSIONAL REGISTRATION

Professional Engineer, IL,
062.061210, 2008

CERTIFICATIONS

Certified Floodplain Manager,
IAFSM

Certified Professional in
Stormwater Quality,
Envirocert International

PROFESSIONAL AFFILIATIONS

American Society of
Civil Engineers

Illinois Association for
Floodplain and Stormwater
Management

Environment and Water
Resources Institute (EWRI);
Vice Chair 2018-2019;
Treasurer 2017-2018;
Secretary 2016-2017

Jeana Gowin, PE, CFM, CPSWQ

Water Resources Project Manager

Water Resources Project Manager responsible for water resources engineering project analysis and design. Duties include performing the following hydrologic and hydraulic engineering tasks: land use characterization, floodplain/floodway delineation, detention and compensatory storage determination, steady state and unsteady state hydraulic analyses, and design of conveyance systems. Has prepared, submitted, and obtained IDNR floodway construction permits, dam safety permits, and FEMA LOMR, LOMR-Fs, and LOMA. Storm Sewerage Permits have been obtained from MWRDGC and Stormwater Permits from DuPage County Department of Economic and Development Planning. Has performed reviews for the communities of Addison, Carol Stream, Huntley, Inverness, Naperville, Orland Park, Prospect Heights, Rolling Meadows, Shorewood, and Wheeling.

Computer modeling skills include: HEC-1, HEC-HMS, and TR-20 hydrologic models; WSP-2, HEC-2, HEC-RAS steady state hydraulic models; Hydraflow, EPA SWMM and XP-SWMM storm sewer models; HY-8 culvert design; FEQ and HEC-RAS unsteady models; and HEC-GeoRAS and ArcMap.

New Lenox Comprehensive Plan: Project Manager for consultation related to the stormwater management and infrastructure elements of the Village's Comprehensive Plan. Responsibilities included overall analysis of stormwater management, floodplain and utilities as related to the Village and Will County Ordinances. Also coordinated efforts for review of relocation of Cedar Road and Prairie Road.

Streamwood Comprehensive Plan: Project Manager responsible for coordination with Village and planner, advising on various stormwater and floodplain aspects of the Comprehensive Plan. Responsibilities included overall analysis of existing stormwater elements, floodplain and floodway as related to projects along Bartlett Road and Sutton Road. Also coordinated efforts to prepare a cost estimate related to the construction of various trail systems.

I-294 Industrial Park Drainage Investigation, IDOT, Franklin Park: Project Engineer responsible for preparation of XP-SWMM hydraulic analysis of existing conveyance system from County Line Road to Silver Creek. Analyzed and proposed several alternatives to provide a greater level of flood protection within the Industrial Park. Technical memorandums were prepared analyzing multiple facets of the project including alternate outlets. This Drainage Investigation is the design basis for the flood control project being implemented by the ISTHA for the Elgin O'Hare Western Access through the Village. Project includes permitting through IDNR-OWR, MWRDGC, and IEPA. Project required coordination with IDOT, Illinois Tollway, Village, and affected property owners.

Elgin O'Hare West-Bypass, IDOT: Project Engineer responsible for HEC-RAS hydraulic modeling of Willow Creek existing and proposed conditions through the study area. Also responsible for preparation of IDOT Hydraulic Report and IDNR-OWR Flow Certification for Willow Creek. This study is the design basis for the Phase II improvements associated with the Elgin O'Hare Western Access interchange on Thorndale Avenue and York Road.

Route 53 Pump Station and Terrace View Pond, Lombard: Project Engineer responsible for hydrologic and hydraulic analysis of the watershed. Used XP-SWMM sewer model to identify existing sewer capacity and flood prone areas. Developed and evaluated alternatives to provide additional flood storage by improving the Terrace View Pond and provide storm sewer improvements to reduce flooding in surrounding areas. The analysis was also used to determine a new pump rate for the upgraded Route 53 Pump Station.

Willow Road Reconstruction, IDOT, Northfield: Project Engineer responsible for the Hydraulic Reports for IDOT's Willow Road reconstruction project located approximately from IL Route 43 to I-94 within the Village. The improvement will include two lanes in each direction with B-6.24 curb and gutter and various auxiliary turn lanes where warranted. Between Three Lake Drive and Northfield Road/Happ Road, a new enclosed drainage system will be added. Design includes preparing the Hydraulic Report for the bridge crossing over the Middle Fork North Branch of the Chicago River including incorporating the Willow Road trunk sewer that outlets to the river that is designed to accommodate future Village lateral connections.

Comprehensive Flood Study, Villa Park: Project Engineer responsible for hydrologic and hydraulic analysis of Salt Creek watershed modeling for the Village's combined and separated sewer systems. Used the XP-SWMM sewer model to identify existing sewer capacity and flood prone areas. Developed and evaluated alternatives to separate existing combined sewers in addition to providing a 100-year level of protection in 13 identified study areas. Proposed projects incorporate flood storage options as well as incorporation of green infrastructure.

Combined Sewer Modeling, Elmwood Park: Project Engineer responsible for development of XP-SWMM sewer model to evaluate the existing combined sewer. Proposed a flood reduction project to reduce flooding within Westwood Subdivision and various other areas within the Village. Includes separation of 250 acres of Village area that is currently drained by combined sewers and will provide relief to MWRDGC North Avenue interceptor. New storm sewer system will discharge to Golf Course Tributary.

Combined Sewer Modeling, Lombard: Project Engineer responsible for XP-SWMM hydraulic modeling preparation and calibration. Identified Combined Sewer Overflows within the watershed and developed both an interim and a future sewer separation plan. Completed analysis of 2 areas of Village's storm and combined sewer system encompassing approx. 2,600 acres. Runoff from these areas is conveyed to various sewer treatment facilities, until those systems reach capacity and overflow to the East Branch DuPage River. Purpose of the project was to determine the existing system capacities and frequencies of combined sewer overflow events, with the goal of developing a sewer separation plan that reduces the frequency of CSO's.

Irving Park Road Relocation Location Drainage Study, Bensenville and Chicago: Project Engineer responsible for preparation of LDS. Responsibilities included assembly of existing drainage plan outlining drainage boundaries and key drainage features, design of proposed storm sewer system, and assembly of proposed drainage plan.

Lower Des Plaines River Watershed Modeling, MWRDGC: Project Engineer. Performed hydrologic and unsteady hydraulic analysis of Buffalo Creek watershed. Modeling results are being utilized to map new 100-year inundation areas and were used to propose alternatives to reduce flooding risks discovered through consultation with stakeholders and modeling results. Damage and cost estimates were used to yield benefits.

Willow Creek Relocation, O'Hare Modernization Program, Chicago: Project Engineer responsible for hydrologic and hydraulic modeling of various alternatives related to relocation of Willow Creek within the North Airfield for existing and proposed configuration of O'Hare International Airport. Included coordination with designers and hydraulic analysis of different phases of construction. Responsible for preparation of IDNR-OWR floodway construction permit.

Buffalo Grove Downtown Redevelopment: Project Engineer responsible for hydraulic analysis of the relocation of Farrington Ditch along Buffalo Grove Golf Course. Analysis included two alignments that met requirements of IDNR-OWR, LCSMC, MWRD and USACE. Study included compensatory storage and detention calculations.

Silver Creek Culvert Replacement, Franklin Park: Project Engineer responsible for hydrologic and hydraulic modeling of the sizing of channel and new culvert crossings associated with removal of an existing culvert. Included coordination with designers and hydraulic analysis of different alternatives. Responsible for preparation of IDNR-OWR floodway construction permit.

PROFESSIONAL DEVELOPMENT

IAFSM Conference, 2015, 2014, 2012, 2010, 2005

Risk and Uncertainty Analysis, 2014

Stream Restoration, 2014

EPA SWMM Seminar, 2012

Ethics in City Government, Ethics Training for CDA/OMP Contractors, Vendors and Employees, 2011, 2013

Hancor Stormwater Management Presentation, 2005

Writing Workshop, 2005

Urban Drainage Seminar, 2005

Best Management Practice Seminar, 2005

IDNR-OWR Permitting Seminar, 2005

DuPage County Flood Plain Mapping and Flood Plain Permit Submittal Seminar, 2005

FEQ Training Seminar, 2004

Polymers and Sediment Control, 2004

Sustainable Urban Drainage Systems Seminar, 2004

TR-20 Hydrologic Model Seminar, 2004

HEC-HMS Training Seminar, 2002

HEC-RAS Training Seminar, 2002



YEARS EXPERIENCE: 19
YEARS WITH CBBEL: 19

EDUCATION

Master of Science, 2003
Environmental Engineering
University of Illinois
at Chicago

Bachelor of Science, 2001
Civil Engineering
University of Illinois
at Chicago

PROFESSIONAL REGISTRATION

Professional Engineer, IL,
062.059898, 2007

CERTIFICATIONS

Certified Floodplain Manager,
IAFSM

Certified Professional in
Stormwater Quality,
Envirocert International

National Green Infrastructure
Certification Program (NGICP)

PROFESSIONAL AFFILIATIONS

American Society of Civil
Engineers, Illinois Section of
EE&WR Technical Group

Illinois Association for
Floodplain and Stormwater
Management

David Buckley, PE, CFM, CPSWQ

Water Resources Project Manager

Water Resources Project Manager responsible for engineering studies including floodplain mapping, watershed studies, water quality enhancement, green infrastructure design, water quality pollutant loading, BMP efficiency, soil erosion and sediment control layout, FEMA LOMRs, Hazard Mitigation Grant Program applications, damage analysis, steady and unsteady river hydraulic analyses, stormwater management studies, permit applications to IDNR-OWR and IDOT, continuous hydrologic and water quality simulation, and engineering review. Previous experience at the University of Illinois at Chicago includes contaminant atmospheric deposition to the Great Lakes, elemental analyses of sediment, and sediment data correlations. Computer modeling skills include HSPF, TR-20, HEC-1, HEC-2, HEC-RAS, HEC-GEO RAS, GIS, XP-SWMM, Info SWMM, and Damages.

FLOOD REDUCTION AND WATERSHED PLANNING STUDIES

Village Lincolnshire Stormwater Master Plan: Project Manager responsible for development flood study areas and XP-SWMM modeling through-out the residential portions of the Village-wide study. Questionnaires were sent to residents and open houses were conducted to help evaluate specific flooding concerns. CBBEL identified 10 Flood Study Areas (FSA) where detailed drainage analyses were completed. CBBEL developed and calibrated hydrologic and hydraulic models for each FSA using the detailed accounts and pictures from residents. The modeling was verified based on the high water marks observed during the September 12-13 storm event. CBBEL developed proposed drainage improvements to provide a minimum 10-year level of service in the storm sewer systems as well as a stormwater management mapping system and accounting table with maintenance plan. A conceptual engineer's estimate of probable cost for each of the proposed drainage improvement alternatives was prepared. These long-term capital improvements projects range in cost from \$2.2 to \$7.6 Million and total approximately \$19 Million. Modeling included an evaluation of the Village's system within the Des Plaines River floodplain and sensitivity of fluctuating water levels on the system to reduce the risk of future flooding for various design storms and level of protection. Cost estimates were developed for each proposed improvement project. CBBEL also developed a summary of detention basin condition and private property drainage issues, providing costs estimates to address detention pond and yard drainage issues.

Stormwater Master Plan, Libertyville: Project Engineer responsible for development of stormwater studies including XP-SWMM modeling of Village-wide 1500 acre study area, model calibration using observed high water marks during the storm the July 2017 storm event. GIS database development for incorporation into modeling and Village atlas, public presentations, and direction for civil design of drainage improvement projects. Village-wide drainage improvement projects were designed to reduce the risk of future flooding in response to the July 2017 flood event that devastated the Village. Questionnaires were sent to area residents, door to door interviews were conducted and open houses were conducted to help evaluate specific flooding concerns. Models and questionnaires were used to design improvements to the stormwater conveyance and storage system. Modeling included an evaluation of the Villages system within the Des Plaines River floodplain and sensitivity of fluctuating water levels on the system to reduce the risk of future flooding for various design storms and level of protection. Cost estimates were developed for each proposed improvement project.

Stormwater Master Plan, Merrillville, IN: Project Engineer responsible for developing a comprehensive stormwater management plan for the Town. Study included a complete hydrologic and hydraulic analysis of storm sewer network and drainageways throughout the entire developed portions to identify existing flood damage areas, water quality problem areas, verify adequacy of existing hydraulic structures and pinpoint areas of channel erosion. Existing storm sewer network and proposed drainage improvements provided flood protection for structures and transportation infrastructure were modeled using XP-SWMM software. Master plan included development of cost estimates for proposed drainage improvements and all-inclusive GIS database. Master plan provided identification of proposed improvement projects in a prioritized manor to be used for reference when grant or funding opportunities become available.

Stormwater Master Plan and Flood Reduction Assessment, Wilmette: Project Engineer responsible for development of stormwater studies including XP-SWMM modeling of Village-wide 2000 acre study area, model calibration using measured flow data and high water marks, GIS database development for incorporation into modeling and Village atlas, public presentations, and direction for civil design of drainage improvement projects. Village-wide drainage improvement projects were designed to reduce the risk of future flooding in response to April 2013 flood event that devastated the Village. Questionnaires were sent to area residents and open houses were conducted to help evaluate specific flooding concerns. Models and questionnaires were used to design improvements to the stormwater conveyance and storage system. Modeling included an evaluation of the Villages 585 cfs pump station and sensitivity of fluctuating water levels on Skokie River on the system to reduce the risk of future flooding for various design storms and level of protection. Cost estimates were developed for each proposed improvement project.

Flood Reduction Assessment, Winnetka: Project Engineer responsibilities included development of stormwater studies, XP-SWMM modeling, public presentations and direction for civil design of drainage improvement projects. Project included a Village-wide drainage study in response to the September 2008 flood event that devastated the Village. Five study areas were identified and drainage improvement projects were designed in each area to reduce

the risk of future flooding. Projects involved partnerships with Cook County, Village of Northfield, and FPDCC. Questionnaires were sent to area residents and used to help evaluate specific flooding concerns. Models and questionnaires were then used to design improvements to stormwater conveyance and storage system to reduce the risk of future flooding. One of the larger projects included preliminary design of an 8' diameter tunnel outletting to Lake Michigan to provide flood relief.

FLOOD CONTROL PROJECT DESIGN

Illinois Avenue Culvert Replacement, Aurora: Project Engineer responsible for completing a flood reduction feasibility study identifying the culvert replacement. A benefit cost ratio was determined and used to remove 55 structures from 100-year floodplain using federal funding from FEMA's HMGP. A LOMR was obtained to officially remove structures from the FIRM.

Berens Monaldi Phase II Flood Control Wall, Town of Dyer, Lake County, IN: Project Engineer responsible for hydrologic and hydraulic unsteady and steady modeling, design of floodwall height and alignment, coordination with Town and residents. Preparation of permit applications from the Town and LCSO. The Town constructed a floodwall along the Illinois/Indiana state line to protect Berens Monaldi Subdivision from future flooding from Plum Creek/Hart Ditch. The subdivision flooded as a result of August 2007 storm event.

Berens Monaldi Pump Station, Town of Dyer, Lake County, IN: Developed XP-SWMM analysis that was used to design a pump station. The pump station provides flood protection for the interior portions of the subdivision, which is protected by a floodwall. A benefit cost ratio was determined and used to obtain FEMA Pre-Disaster Mitigation funding (\$550,000) through the Indiana Department of Homeland Security for construction of the pump station.

Taft Street Flood Reduction, Merrillville, IN: Project Engineer responsible for development of XP-SWMM analysis, calibration of model to September 2008 storm event, and direction for civil design and construction of drainage improvements. Project included obtaining grant funding (\$750,000) from Indiana DOT to assist the Town in the construction process. Project reduced local flooding for both roadway overtopping and residential flooding in a historically flood prone area.

Tower Road Relief Storm Sewers, Winnetka: Project Engineer responsible for design of relief storm sewers along Tower Rd in the eastern and western portions of the Village. The relief storm sewers outlet to Lake Michigan and CCFPD and are designed to reduce structure flooding for the 100-year storm event.

Will County Flood Control Reservoir, Lake County Surveyor's Office, IN: Project Engineer responsible for hydrologic and hydraulic modeling that incorporates a concept level flood control reservoir, design of multiple alternatives, and quantification of downstream benefits resulting from those alternatives. As a result of August 2007 and September 2008 storm events, the Town and LCSO investigated regional flood control alternatives to prevent future flooding. A flood control reservoir located in upstream Will County, IL could reduce flooding in downstream Dyer, IN.

WATERSHED MANAGEMENT STUDIES

West Branch DuPage River Forest Preserve Wetland Mitigation Area, DuPage County: Project Engineer responsible for detailed hydrologic and hydraulic analysis of existing and proposed conditions in support of a comprehensive restoration project to remove field tiles, modify surface drainage patterns and establish +90 acres of wetland in the preserve. Project also included hydraulic modeling in support of restoring approx. 9,000' of shoreline and installing riffles on West Branch DuPage River. Detailed analysis included proposed hydrologic modeling to determine if the peak flow rates from offsite areas could be conveyed through on-site depressions and hydraulic structures without causing upstream impacts.

Hydraulic analysis included steady and unsteady state modeling of proposed conditions in support of streambank stabilization and pool riffle structure design as well as DuPage County and IDNR permitting.

Economic Impact Study, MWRDGC: Project Engineer responsible for hydrologic analysis of each site using design criteria from 5 different ordinances. This information was used to re-design/retrofit each site to accommodate the requirements of each ordinance. A comparison of land required to satisfy each ordinance was made. Role also included management of cost estimates for BMP implementation and redesign components of the sites. CBBEL completed an engineering report, in support of Economic Impact Study, to evaluate the site impacts and corresponding stormwater infrastructure costs associated with implementing the Draft Watershed Management Ordinance. Report was provided to an economic consultant to assist in preparation of Economic Impact Study conducted by MWRDGC.

Plum Creek/Hart Ditch Early Warning System and Flood Forecasting, Lake County Surveyor's Office, Dyer, IN: Project Engineer responsible for development of flood forecasting through correlations of observed USGS gage data throughout the Plum Creek/Hart Ditch Watershed. Observe and document gage readings from a system of 4 USGS gages. Responsible for hydrologic and hydraulic modeling to predict flood heights and coordination with the NWS and USGS. Utilizing measured precipitation data and National Weather Service precipitation forecast data, prediction of water surface elevation in downstream Dyer could be made using calibrated hydrologic and hydraulic models for the watershed. Information is used by downstream officials to activate an emergency management plan.

PUBLICATIONS

"Polybrominated Diphenyl Ethers in the Sediments of the Great Lakes.

1. Lake Superior", Song, W.; Ford, J. C.; Li, A.; Mills, W. J.; Buckley, D. R.; Rockne, K. J.; Environmental Science and Technology; (Article); 2004; 38(12); 3286-3293.

"Soot Deposition in the Great Lakes: Implications for Semi-Volatile Hydrophobic Organic Pollutant Deposition", Buckley, D. R.; Rockne, K. J.; Li, A.; Mills, W.J.; Environmental Science and Technology; (Article); 2004; 38(6); 1732-1739.

"Polybrominated Diphenyl Ethers in the Sediments of the Great Lakes. 3. Lakes Ontario and Erie", Song, W.; Ford, J. C.; Li, A.; Sturchio, N. C.; Rockne, K. J.; Buckley, D. R.; Mills, W. J.; Environmental Science and Technology; (Article); 2005; 39(15); 5600-5605.

"Polybrominated Diphenyl Ethers in the Sediments of the Great Lakes. 2. Lakes Michigan and Huron", Song, W.; Li, A.; Ford, J. C.; Sturchio, N. C.; Rockne, K. J.; Buckley, D. R.; Mills, W. J.; Environmental Science and Technology; (Article); 2005; 39(10); 3474-3479.

"Polybrominated Diphenyl Ethers in the Sediments of the Great Lakes. 4. Influencing Factors, Trends, and Implications", Li, A.; Rockne, K. J.; Sturchio, N.; Song, W.; Ford, J. C.; Buckley, D. R.; Mills, W. J.; Environmental Science and Technology; (Article); 2006; 40(24); 7528-7534.

"Soot and Organic Carbon Flux to Great Lakes Sediment: Links to Atmospheric Transport of Toxic Pollutants", Buckley, D.R.; (Master Thesis); 2003.

"Constructed Wetlands to Reduce Nutrients from Runoff in Croplands: The Implications for Urban Stormwater", Buckley, D.R.; Izzadmehr, M.; Kostel, J.; Rockne, K.; Stormwater Magazine; (Article); 2016, October.



YEARS EXPERIENCE: 10
YEARS WITH CBBEL: 10

EDUCATION

Master of Science, 2011
Civil Engineering
Southern Illinois
University, Carbondale

Bachelor of Science, 2009
Civil Engineering
Southern Illinois
University, Carbondale

PROFESSIONAL REGISTRATION

Professional Engineer, IL,
062.066808, 2014

CERTIFICATIONS

Certified Floodplain Manager
IAFSM, IL-13-00651

Certified Professional in
Stormwater Quality

Envirocert International
Designated Erosion Control
Inspector - Lake County

Enforcement Officer
Lake County

PROFESSIONAL DEVELOPMENT

IAFSM Conference,
2018, 2017, 2015, 2014,
2012

CE 370 Fluid Mechanics,
Laboratory Instructor,
Southern Illinois University,
Carbondale, 2011

ENGR 351 Numerical
Methods, Graduate Assistant,
Southern Illinois University,
Carbondale, 2010

PUBLICATIONS

"Use of Unsteady Modeling
to Predict Flooding by
Correlating Stream Gages:
A Case Study", Burke, M;
(Master's Thesis); 2011

PROFESSIONAL AFFILIATIONS

ASCE, Illinois Section of
EE&WR Technical Group

Illinois Association for
Floodplain and Stormwater
Management

Michael Burke, PE, CFM, CPSWQ

Water Resources Project Manager

Water Resources Project Manager responsible for water resources engineering project analysis and design. Duties include the following hydrologic and hydraulic engineering tasks: land use characterization, floodplain/floodway delineation, detention and compensatory storage determination, steady and unsteady hydraulic analyses, and design of conveyance systems. Proficient in 2D modeling of both urban and riverine drainage systems using XP-SWMM and HEC-RAS.

Computer Skills include: HEC-HMS, HEC-1, HEC-RAS, HEC-2, HY-8, Hydraflow, TR-20, XP-SWMM, InfoSWMM, ArcGIS, MicroStation.

Cypress Area Stormwater Improvements, Arlington Heights: Project Engineer responsible for XP-SWMM modeling of the stormwater improvement project in the area of Cypress Street. CBBEL previously completed a stormwater analysis which developed the conceptual improvements, which included construction of 3,500 LF of relief storm sewers and a new 30 ac-ft detention basin on Village-owned property. The Village expanded the scope of the project to include replacement of over 10,000 LF of watermain adjacent to the project area and the reconstruction of 3,000 LF of streets in the project area. The project included preparation of final contract documents, bidding, and ultimately construction engineering.

Lincolnwood Street Storage Program: Project Engineer responsible for the XP-SWMM modeling analysis of inlet restrictors and berms to temporarily store runoff on street surfaces to reduce peak flows into system. Modeling analysis completed using 2D XP-SWMM model with "rain on grid" feature to simulate rainfall runoff.

Deer Park Stormwater Master Plan: Lead Engineer responsible for performing a comprehensive assessment of all drainage problems throughout the Village. The problems were prioritized based on severity and number of properties. Twenty drainage improvement projects were developed at an estimated cost of \$2.3 Million to be completed over a 5 year period.

Assistant Village Engineer, Deer Park: In 2016, the Village hired CBBEL to perform Village engineering services including undertaking investigations of minor civil, drainage, and traffic engineering matters. Responsibilities include development, permit reviews and inspections, drainage investigations and improvement recommendations, preparing monthly status reports, and attending staff meetings, Village Board meetings, and Planning & Zoning Commission.

Pheasant Hills Pond Water Quality Improvement Project, Dyer, IN: Project Engineer responsible for preparing design plans for multifaceted water quality improvement project including 9 floating treatment wetlands, a native riparian shoreline, and a sediment collection forebank. Successfully obtained necessary permits from US Army Corps of Engineers and Indiana Department of Environmental Management.

Levee 37 Drainage Study, Mount Prospect: Project Engineer responsible for hydrologic and hydraulic analysis of drainage area behind Levee 37. Developed detailed XPSWMM 2D model to analyze local flooding in the area behind Levee 37 where the Des Plaines River reduces or eliminates gravity sewer flow. Developed several alternatives to help alleviate flooding problem. Prepared drainage study report, exhibits, and presentation.

Villa Park Comprehensive Flood Plan: Project Engineer responsible for analyzing flood and combined sewer issues in the Washington Street Corridor using XPSWMM. Developed several improvement alternatives to both reduce flooding and eliminate combined sewer overflow to Salt Creek.

IL Route 53 Pump Station, Lombard: Project Engineer responsible for analyzing impacts of the proposed IL 53 pump station discharging to the East Branch of the DuPage River. Analysis included incorporating study area XP-SWMM modeling with hydrologic and hydraulic models of the EBDP. Developed a pump operating rule to eliminate possible EBDP downstream impacts. Helped obtain project approval from DuPage County.

Stormwater Master Plan, Wheeling: Project Engineer responsible for hydrologic and hydraulic analysis of 11 study areas. Developed two XPSWMM models for critical study areas using advanced 2D hydraulic surface modeling to analyze flooding. Provided assistance to Village in developing new stormwater utility fee. Prepared stormwater master plan report and presentation.

ComEd Station 13, Crawford: Project Engineer responsible for proposed stormwater drainage design for new 4-acre substation in Chicago. Successfully obtained stormwater management permit from City of Chicago.

Comprehensive Sewer Study, Riverside: Project Engineer responsible for model development and preparation of final project report. Scope included development of an Info SWMM sewer model of the Village of Riverside's entire combined and storm sewer system.

Addison Creek Drainage Improvements, MWRDGC: Assisted with creation and evaluation of XPSWMM model for existing sewer systems in Melrose Park and Stone Park for purpose of developing alternatives to reduce flooding.

Elgin-O'Hare West Bypass, IDOT: Project Engineer. Prepared HEC-HMS hydrologic models and HY-8 hydraulic models to analyze minor waterway crossings as part of the LDS. Developed methodology for median ditch design in Microsoft Excel incorporating Rational Method and Manning's Equation to design proposed median ditches along proposed Elgin O'Hare corridor.

Chateau Woods Detention Analysis, Dyer, IN: Used XPSWMM modeling to analyze poorly drained dry-bottom detention pond. Developed several improvement alternatives and demonstrated the benefit of connecting existing detention outlet pipe to a proposed pump station.

Smith Ditch Culvert Replacement Project, Crown Point, IN: Project involved design of 3 new culvert crossings through Stillwater Subdivision using HEC-RAS hydraulic modeling software. The previous crossings were installed without permits. A floodway construction permit was obtained from Indiana DNR.

I-90 Roadway Widening Project, IDOT: Project Engineer. Performed minor waterway crossing analyses for Tyler Creek West Tributary and Tyler Creek East Tributary culvert crossings under I-90 near Gilberts. Tasks included development of HEC-HMS and HEC-RAS models to analyze existing culverts and develop proposed culvert design. Also determined required compensatory storage and performed detention analysis.

ComEd Station 16, Waukegan: Performed multiple engineering tasks for proposed 10-acre ComEd substation pad. Tasks included existing BFE determination through project site, development of project site grading plan, and storm water conveyance and detention design. Existing BFE determination was approved by LCSMC.

Amherst Drive Proposed Storm Sewer, Bartlett: Project involved design of proposed 30" storm to alleviate flooding at Bartlett Rd and Amherst Dr. Proposed sewer discharges to Country Creek in DuPage County. Performed TR-20 and HEC-RAS analysis of Country Creek for existing and proposed conditions to obtain stormwater management permit.

Plum Creek/Hart Ditch Early Warning System and Flood Forecasting, Lake County Surveyors Office, Dyer, IN: Created stream gage correlation between 2 USGS stream gages to predict flooding as part of Master's Thesis Project at Southern Illinois University, Carbondale. Stream gages used for correlation were located at Burrville Rd on Plum Creek and 213th St on Hart Ditch. Converted steady state model of Plum Creek/Hart Ditch to unsteady state model. Calibrated model to accurately simulate maximum stage heights at each gage for a particular storm event. Simulated 40 large storm events using unsteady model to create correlation between the two gages. Stream gage correlation is currently used to predict flooding in downstream Dyer during large storm events.

Lower Des Plaines River Detailed Watershed Plan, MWRDGC, Cook County: Project involved complete hydrologic and hydraulic analysis. Collected data within the watershed for modeling purposes. Delineated inundation areas throughout watershed to represent benefits provided by proposed improvements recommended in the study.

Flood Reduction Assessment (25-, 50-, and 100-year), Winnetka: Project Engineer responsibilities included XPSWMM modeling, exhibit and presentation preparation. Project included a Village-wide drainage study in response to July 2011 flood. Improvements were recommended for 3 levels of flood protection from the 25-, 50-, and 100-year storm events.



YEARS EXPERIENCE: 7
YEARS WITH CBBEL: 7

EDUCATION

Master of Science, 2014
Engineering
Purdue University

Bachelor of Science, 2013
Civil and Environmental
Engineering
University of Illinois at
Urbana-Champaign

PROFESSIONAL REGISTRATION

Professional Engineer, IL,
062.069919, 2017

CERTIFICATIONS

Certified Floodplain Manager,
IAFSM

PUBLICATIONS

Meier, A.R., A. Pizzo, M.
Malloy, J.K. Riegel, and J.B.
Dunning, Jr. 2015. "Breeding
Birds and Forest Management
in the Hardwood Ecosystem
Experiment and the Central
Hardwoods Region." Purdue
Extension FNR-501-W. Purdue
University. <https://extension.purdue.edu/extmedia/FNR/FNR-501-W.pdf>

PROFESSIONAL AFFILIATIONS

American Society of
Civil Engineers

Andrea Maertens-Pizzo, PE, CFM

Water Resources Engineer

Water Resources Engineer responsible for water resources engineering project analysis and design, in addition to securing project permits. Responsibilities include performing hydrologic and hydraulic engineering tasks, such as: land use characterization, floodplain/floodway delineation, detention and compensatory storage determination, steady and unsteady state hydraulic analysis, and design of conveyance systems. Performed reviews for the Town of Dyer, IN and the Lake County, IN Drainage Board in addition to performing reviews for numerous municipalities spanning several northeastern Illinois counties. Involved in the editing process of the MWRDGC Watershed Management Ordinance (WMO) and Technical Guidance Manual (TGM).

Software Experience: EPA SWMM, XP-SWMM, HY-8, Hydraflow Storm Sewers, Hydraulic Toolbox, TR-20, HEC-RAS, HEC-HMS, HEC-2, ArcGIS, Autodesk Inventor Pro, AutoCAD, Google SketchUp, eQUEST 3-64, Microsoft Office and Microsoft Publisher.

O'Hare International Airport, Chicago: Water Resources Engineer responsible for obtaining and maintaining environmental permit and regulatory compliance for airport projects; including coordinating with agencies such as the MWRDGC and IDNR and performing internal reviews for proposed projects. Also responsible for performing hydrologic and hydraulic modeling in various programs (TR-20, HEC-1, XP-SWMM, etc.) to analyze existing and future conditions for the airport property. Responsible for updating various OMP status reports—including for DuPage County and the Chicago Department of Water Management—and assisting in the compilation of a comprehensive, airport-wide surface waters report.

Commonwealth Edison (ComEd), Various Projects: Water Resources Engineer responsible for project analysis and design of numerous ComEd projects across the State of Illinois; including designing detention basins and conveyance systems for substations. Responsible for securing various environmental and site development permits for substations, transmission line work, and overhead/underground utility work. Also involved in performing reviews for stormwater impacts and regulatory compliance for projects adjacent to or leasing ComEd property. Additionally, serves as a representative of CBBEL at ComEd monthly safety meetings.

Stormwater Master Plan for Executive Plaza Drainage Area, Willowbrook: Water Resources Engineer responsible for data compilation, XP-SWMM hydrologic and hydraulic modeling, and analysis of alternative solutions for the Executive Plaza area in Willowbrook. The project involved collecting and organizing several decades of information to build a comprehensive model of the 200-acre tributary area to Executive Plaza, which experiences significant street flooding during heavy rain events. Proposed alternatives were developed to alleviate flooding in the Executive Plaza area, and the study information and results were compiled into a draft Stormwater Master Plan for use by the Village of Willowbrook.

135th Street Widening, WCDOT: Water Resources Engineer responsible for performing HEC-HMS hydrologic analysis and HEC-RAS hydraulic analysis. Performed inlet capacity and sewer system calculations for proposed improvements to the corridor. Wrote report detailing proposed project improvements and calculations, including creating exhibits.

Lincolnshire Downtown Development FEMA Floodway Violation: Water Resources Engineer responsible for performing HEC-RAS hydraulic analysis to demonstrate that floodway violation has no significant adverse impact on the flow of Indian Creek. Compiled FEMA application and obtained LOMR-F for the project site, resolving the floodway violation.

MS4 Compliance Activities for Various Municipalities: Water Resources Engineer responsible for performing field outfall evaluations and compiling Illicit Discharge Detection and Elimination reports and Annual Facility Inspection reports to demonstrate compliance with the EPA's Municipal Separate Storm Sewer (MS4) Program for various municipalities; including Buffalo Grove, Cary, Highwood, and Westchester.

Stormwater and Floodplain Reviews for Various Municipalities: Water Resources Engineer responsible for performing stormwater and floodplain reviews as well as field visits for various municipalities to ensure that proposed projects meet local and county-wide stormwater and floodplain regulations. Reviews include municipalities such as Bartlett, Cary, Crystal Lake, Hawthorn Woods, Huntley, and Vernon Hills, as well as several towns in Lake County, IN.

Cub Terminal Hydrologic and Hydraulic Studies, Forest View and McCook: Water Resources Engineer responsible for performing TR-20 hydrologic and HEC-RAS hydraulic analyses for Cub Terminal sites to determine required detention and volume control for the sites, as well as to size site storm sewers for future projects. Compiled permit applications to IDNR and MWRD for McCook site. Coordinated with permitting agencies to obtain IDNR and MWRD permits.

Sewer Separation Evaluation Study, Forest Park: Water Resources Engineer responsible for creating and analyzing 2D XP-SWMM models from ArcGIS data inputs. Study included creation of SWMM models to simulate the existing flooding conditions in the Village, analysis of several proposed alternatives for flood mitigation, and creation of exhibits to depict existing conditions and proposed alternatives. Also responsible for updating modeling analysis as proposed improvements for south area transition into phased final engineering design.

Hammel Creek Hydrologic and Hydraulic Modeling Updates, Shorewood: Water Resources Engineer responsible for performing HEC-HMS hydrologic and HEC-RAS hydraulic analyses and creating a report, exhibits, and spreadsheets, as well as filling out all appropriate MT-2 forms for LOMR submission. Project included modeling updates and analyses of Hammel Creek and Unnamed Tributary to Hammel Creek upstream of the Robin Hill Drive split flow along Hammel Creek and then submitting a LOMR request.

Illiana Corridor Study, IDOT: Water Resources Engineer responsible for performing hydraulic analyses for several water crossings to verify that they meet design standards; and then compiling the hydraulic reports for these water crossings. The Illiana Corridor Study consists of a new 4-lane IDOT roadway proposed to alleviate traffic on various inner-city Chicagoland highways. The Illiana Expressway is proposed to connect IL-55 near Wilmington, IL due east to IL-57 near Peotone, and continue due east until its terminus at I-65 near Crown Point, IN.

Professional Engineering Services, Orland Park: Water Resources Engineer responsible for performing drainage investigations for multiple properties, including performing hydrologic analyses for these properties, creating exhibits depicting existing conditions, and writing memorandums to communicate existing conditions and potential solutions for each property to the Village.

Plum Creek-Hart Ditch Early Warning System and Flood Forecasting, Town of Dyer, Lake, IN: Water Resources Engineer responsible for observing and documenting gage readings from a system of 4 USGS gages. Project included the development of flood forecasting through correlations of observed USGS gage data throughout the Plum Creek / Hart Ditch Watershed. Hydrologic and hydraulic modeling were utilized to predict flood heights and coordination with the National Weather Service and USGS. Utilizing measured precipitation data and NWS precipitation forecast data, a prediction of water surface elevation in downstream Dyer could be made using calibrated hydrologic and hydraulic models for the watershed. The information is used by downstream officials to activate an emergency management plan.

US 6 at IL 50 over Midlothian Creek, IDOT: Water Resources Engineer responsible for performing hydraulic analyses at particular water crossings and responsible for updating hydraulic report. Project started as a US 6 bridge replacement that would also replace upstream 6' diameter pipe to reduce upstream flooding, in addition to adding 3 pipes to the IL 50 (Cicero Ave) crossing to further reduce tailwater. Proposed intersection is to accommodate a SB right turn lane on IL 50 so that both US 6 structure and IL 50 structure need to be extended, leaving a small gap between the two structures. Preferred alternative is to replace both US 6 structure and IL 50 structure. Proposed structure is a 24' span three-sided structure that will extend from the upstream end of existing 6' diameter culvert south of US 6 to the east side of IL 50.

Burdick Street Drainage Investigation, Libertyville: Water Resources Engineer responsible for performing hydrologic and hydraulic modeling, creating and analyzing alternative solutions, and creating exhibits depicting existing versus proposed conditions. The project involves performing a drainage investigation of the storm sewer system draining Burdick St to determine if short term improvements can be constructed concurrently with the other utility work. In addition, the investigation shall determine what long-term improvements would be required to provide a reduction in the depth and frequency of street flooding in the area.

Technical Guidance Manual for the WMO, MWRDGC: Water Resources Engineer responsible for editing the WMO and TGM, including text, figures, tables, details, and etc. Also responsible for creating and updating educational pamphlets pertaining to the WMO. CBBEL is the prime consultant for engineering services in support of the MWRD's new WMO Implementation. CBBEL developed a TGM to be used as a technical reference for the stormwater management regulations contained in the WMO and worked with the City of Chicago, the Metropolitan Planning Council, and other stakeholders to develop guidance for the design of green infrastructure.



YEARS EXPERIENCE: 5
YEARS WITH CBBEL: 3

EDUCATION

Bachelor of Science, 2016
Civil Engineering
Purdue University

PROFESSIONAL REGISTRATION

Engineer Intern, IL,
061.039117, 2016

Stephanie Maier, EI

Water Resources Engineer

Water Resources Engineer responsible for water resources engineering project analysis and design. Duties include performing the following hydrologic and hydraulic engineering tasks: land use characterization, floodplain/floodway delineation, detention and compensatory storage determination, design of conveyance systems, and steady and unsteady hydraulic analyses .

Software experience: HEC-1, HEC-HMS, and TR-20 hydraulic models; HEC-2 and HEC-RAS hydraulic models; Hydraflow and XP-SWMM storm sewer models; HY-8 culvert design; and ArcMap, AutoCAD, MicroStation, and Microsoft Word, Excel, PowerPoint

O'Hare International Airport: Water Resources Engineer responsible for various tasks for the DuPage County Stormwater, O'Hare/DuPage Drainage Planning Report. Tasks included report exhibit, revisions per agency review, and project schedule outlines.

Northwest Industrial Area Drainage Study, Rolling Meadows: Water Resources Engineer responsible for analyzing the existing drainage system of the Northwest Industrial Area and developing proposed improvements to address the identified problem areas. An XP-SWMM hydrologic and hydraulic model was developed to analyze the existing and proposed conditions

Prairie Park Drainage Study, Naperville: Water Resources Engineer responsible for analyzing the existing drainage system of the subdivision adjacent to Prairie Park and developing proposed improvements to address the identified problem areas. An XP-SWMM hydrologic and hydraulic model was developed to analyze the existing and proposed conditions.

67th Street Drainage Improvements, Darien: Water Resources Engineer responsible for analyzing the existing drainage system along 67th Street and developing proposed improvements to address the conveyance along the street. An XP-SWMM hydrologic and hydraulic model was developed to analyze the existing and proposed conditions.

Onwentsia Club Drainage Study, Lake Forest: Water Resources Engineer responsible for analyzing the reoccurring flooding and poor drainage of the golf course and developing proposed improvements. An XP-SWMM hydrologic and hydraulic model was developed to analyze the existing and proposed conditions.

Blue Pearl Drainage Analysis, Northfield: Water Resources Engineer responsible for analyzing the existing and proposed drainage to address the concerns of the property owner, and permitting of the proposed improvements.

ComEd TSS74 Kewanee Substation Expansion: Water Resources Engineer responsible for analyzing the existing and proposed drainage for a 22-acre substation expansion. Designed proposed detention to meet county release rate requirements.

Giordano Court Drainage Analysis, Huntley: Water Resources Engineer responsible for analyzing the existing drainage and on-line detention basin and developing proposed improvements to address the concerns of the Village. An XP-SWMM hydrologic and hydraulic model was developed to analyze existing and proposed conditions.

Grand Reserve Creek, Algonquin: Water Resources Engineer responsible for delineating sub-basins, and modeling existing conditions. Developed and modeled proposed flood reduction alternatives to alleviate flooding associated with various residences and provided proposed alternatives.

Illinois Central College Constructed Wetland, The Wetlands Initiative: Water Resources Engineer responsible for modeling existing and proposed conditions for a constructed wetland. Developed and provided plan set showing both sets of conditions, complete with soil erosion and sediment control plan.

Lake Bluff Stormwater Master Plan: Water Resources Engineer responsible for performing a comprehensive assessment of drainage problems throughout the Village. The problems were prioritized based on severity, Village input, and resident surveys. Seven drainage improvement projects were developed and analyzed in XP-SWMM.

Sandy Ridge Drainage Study, Dyer, IN: Water Resources Engineer responsible for analyzing the existing drainage of the Sandy Ridge subdivision and developing proposed improvements to address the concerns of the Dyer Stormwater Management Board. An XP-SWMM hydrologic and hydraulic model was developed to analyze existing and proposed conditions. The study also included analysis of the existing pump station servicing the area.

Siems Park Drainage Investigation, Glendale Heights: Water Resources Engineer responsible for analyzing the existing drainage at the site and developing proposed improvements to address the concerns of the Village. An XP-SWMM hydrologic and hydraulic model was developed to analyze existing and proposed conditions.

Terrace Hill Golf Course Drainage Improvements, Algonquin: Water Resources Engineer responsible for analyzing the reoccurring flooding and poor drainage of a portion of the golf course. An XP-SWMM hydrologic and hydraulic model was developed to analyze existing conditions and proposed improvements.



YEARS EXPERIENCE: 19
YEARS WITH CBBEL: 19

EDUCATION

Bachelor of Science, 2002
Civil Engineering
University of Illinois at
Urbana-Champaign

PROFESSIONAL REGISTRATION

Professional Engineer, IL,
062.059552, 2006

CERTIFICATIONS

Documentation of Contract
Quantities, IDOT, 17-12354

Material Management of
Job Sites, IDOT

PROFESSIONAL DEVELOPMENT

IDOT QC/QA Courses:
Mixture Aggregate Technician
Course

Bituminous Concrete Level 1
Technician Course

Bituminous Concrete Level 2
Technician Course

Portland Cement Concrete
Level 1

Troxler Nuclear Gauge Safety
Training Class

STTP-S11 Hot Mix Asphalt
Field Inspection

STTP-S33 Soils Field Testing
and Inspection

TT – ADA/PROWAG

Kevin Wilson, PE

Assistant Department Head, Construction Engineering

Civil Engineer experienced in construction engineering serving as the Assistant Department Head of the Construction Department.. Responsibilities include construction observation, project reports, documentation of quantities, review of contractor pay estimates, coordination of materials testing and inspection, site surveys and interaction with the contractor and client. Observed activities include roadway, water main, sanitary sewer, storm sewer, streambank stabilization, and retaining wall construction. Civil design experience consists of resurfacing and reconstruction projects which have included water main, storm sewer, sanitary sewer, and combined sewer design.

CONSTRUCTION

North Shore Avenue Sewer Separation, Lincolnwood: Resident Engineer responsible for the construction engineering and observation of storm sewer installation ranging in size from 12" to 60"; the purpose was to install a large diameter storm sewer system in a combined sewer area to reduce flooding and resident sewer backups. The project included a 60" storm sewer outfall to North Shore Channel; 256 feet of 60" storm sewer jacked in place under McCormick Boulevard; HMA pavement removal and replacement; and removal and replacement of PCC curb, sidewalk, and driveways. The project was funded by an MWRD grant and local funds.

Transmission Main Project, Lincolnwood: Engineering Manager and Resident Engineer (2019) responsible for the construction engineering and observation of the installation of approximately 14,000 lineal feet of 20" ductile iron water main, 4,000 lineal feet of 8" water main, and 387 lineal feet of horizontal directional drilling of 24" HDPE water main. The purpose of the project was to connect to a new water source in the City of Evanston and discontinue purchasing water from City of Chicago. Additional improvements to complete the project included storm sewer repairs; cured-in-place pipe liner; pavement patching and resurfacing; miscellaneous curb, sidewalk, and driveway repairs; landscaping; and mechanical improvements at the Village reservoir. Coordination was required with the City of Evanston, Village of Skokie, CTA, MWRD, and other various stakeholders.

Sherman Avenue Improvements, Evanston: Resident Engineer for Sherman Ave Improvements from Church St to Davis St. This streetscape project included ductile iron water main replacement, replacement of brick paver sidewalk with concrete sidewalks and brick ribbon, curb replacement, roadway resurfacing, roadway and decorative lighting replacements in Downtown Evanston. Responsibilities included construction observation, material inspection, public relations with business owners and residents, and contract documentation.

FAU Route 2853 (Chicago Avenue/Sheridan Road), Evanston: Resident Engineer for construction of Chicago Ave through downtown Evanston and Sheridan Rd through the Northwestern University Campus to the Wilmette Village limit. Net length of improvements was 1.87 miles; Chicago Ave included HMA resurfacing, Sheridan Rd included 3 to 4 lanes of PCC reconstruction with new protected bike lanes. New items related to protected bike lane included bicycle traffic signals and radar detection. Additional work included new traffic signals, ADA improvements, water main replacement, and landscaping. Project was on an accelerated schedule in order to accommodate Northwestern University school calendar and was funded with Federal, ITEP, and Local funds.

Twin Lakes Subdivision Sidewalk Improvements, Villa Park: Resident Engineer for construction of a new sidewalk in a subdivision with an existing rural ditch typical section. Sidewalk construction included approx. 74,000 SF of new PCC Sidewalk with ADA accessible crossings. Additional improvements included installation of pipe culverts, driveway replacements, and ditch regrading to accommodate new drainage patterns. A retaining wall was installed adjacent to the sidewalk in front of Target due to ROW space restrictions. Project was funded with Federal and Local Funds.

2016 Road Program, Wilmette: Resident Engineer responsible for construction engineering and observation for resurfacing or rehabilitation of 5,050 LF of roadways throughout the Village. Roadway construction included approx. 14,000 SY of HMA partial depth resurfacing, and approx. 1,300 SY of brick pavement reusing existing brick pavers. Additional improvements included reconstruction of sidewalks, curb and gutter, and additional drainage improvements as necessary. Project was funded with MFT and Local Funds.

FAP Route 326 (IL 47), IDOT, Yorkville: Providing Phase III assistance to IDOT Resident Engineer and Inspectors from 2012-2015. Serving as Assistant Resident Engineer responsible for construction documentation and observation; managed CBBEL and subconsultant staff that assisted with documentation and observation. Project included 5.04 km of pavement reconstruction, lane additions, storm sewer, traffic signals, and other work along IL Route 47 from just north of IL Route 71 continuing northerly to just north of US Route 34.

ADA Ramp Program, CDOT: Resident Engineer responsible for construction engineering and observation of replacement of previously constructed ADA ramp locations not meeting CDOT ADA requirements. Far South Area included 12 ramp locations and South Area included 40 locations. CDOT QC/QA requirements for ADA ramp replacements were followed. Engineering responsibilities included submittal review, daily observation, measurement

of quantities, pay estimates, coordination of material inspection, and documentation on CDOT's online web system.

Book Road LAPP Resurfacing, Naperville: Resident Engineer responsible for construction engineering and observation for resurfacing of Book Rd from 111th St to 87th St Roadway construction included 3.07 miles of partial-depth asphalt pavement. Resurfacing required approx. 2,700 tons of Polymer HMA N50 Leveling Binder and 6,300 tons of Polymer HMA N90 Surface Course "F" Mix. Additional roadway improvements included curb and gutter spot repairs, utility structure adjustments, and thermoplastic pavement markings. Sidewalk improvements were completed where necessary, including new sidewalk ramps meeting ADA standards at all roadway crossings within the project limits.

Road and Relief Sewer Project, Wilmette: Project Engineer and Resident Engineer responsible for construction engineering and observation including: verifying that contractor was in conformance with plans and specifications, preparing pay estimates and change orders. Project consisted of partial depth resurfacing of over 1.1 total miles of various residential roadway improvements. Utility construction included 600' of 18" sanitary sewer removal and replacement, 396' of 18" Relief Sewer, 768' of 24" Relief Sewer, 984' of 42" Relief Sewer, 14 Relief Sewer manholes and a 10' diameter junction chamber. Project was funded using MFT and Local Funds.

Conway Park Sidewalk Improvements, Conway Park Owners Association, Lake Forest: Resident Engineer responsible for construction engineering and observation including: verifying that contractor was in conformance with plans and specifications, preparing pay estimates and change orders. Project consisted of constructing a 36,000 SF sidewalk to provide a continuous walking path throughout the Conway Park office park corridor. Additional improvements included removing and replacing curb and gutter, improving handicap accessibility, pavement markings, and landscaping regarding and restoration.

Glenview Road Resurfacing, Wilmette: Resident Engineer responsible for construction engineering and observation including: verifying that contractor was in conformance with plans and specifications, preparing pay estimates and change orders. Project consisted of resurfacing over 0.5 miles asphalt pavement. Additional improvements included curb and gutter spot repairs, sidewalk replacement, and PCC Driveway replacement. Detector loop replacement was coordinated with CCHD. Project was funded using ERP funds.

95th Street LAPP Resurfacing, Naperville: Resident Engineer responsible for construction engineering and observation for resurfacing of 95th St from Plainfield-Naperville Rd to IL Route 59. Roadway construction included approx. 67,100 SY of partial-depth asphalt pavement. Resurfacing required approx. 3,600 tons of Polymer HMA N50 Leveling Binder, and 6,200 tons of Polymer HMA N90 Surface Course "F" Mix. Additional roadway improvements included curb and gutter spot repairs, utility structure adjustments, and thermoplastic pavement markings. Sidewalk improvements were completed where necessary, including new ramps meeting ADA standards.

2010 Road Program, Wilmette: Resident Engineer responsible for construction engineering, layout, and observation for reconstruction and resurfacing of various streets. Roadway construction included approx. 1.03 total miles of various residential roadway improvements. Utility construction included 845 LF of combination sewer removal and replacement, reconnecting existing sewer services, and manhole removal and replacement. Roadway improvements included curb and gutter removal and replacement, driveway removal and replacement, landscaping and pavement markings.

10th Street/Wilmette Avenue ARA Resurfacing, Wilmette: Resident Engineer responsible for construction engineering and observation for resurfacing of 10th St and Wilmette Ave. Roadway construction included approx. 12,000 SY of HMA resurfacing, curb and gutter spot repairs, sidewalk improvements with new ramps meeting ADA standards, and various other roadway improvements.

Arrowhead Subdivision Roadway Improvements, Algonquin: Resident Engineer responsible for construction engineering and observation. Roadway construction included approx. 18,000 SY of full-depth asphalt pavement, curb and gutter construction, and various other roadway improvements. Utility construction included approx. 6,000 LF of storm sewer, 2,500 LF of water main, and additional drainage improvements where necessary.

Huntington Drive North Resurfacing (ARRA), Algonquin: Resident Engineer responsible for construction engineering and observation. Roadway construction included approx. 15,500 SY of partial depth resurfacing, and approx. 1,900 SY of HMA pavement patching. Additional improvements included reconstruction of sidewalks, curb and gutter, and additional drainage improvements as necessary.

2009 LAPP Program (Various Streets), Algonquin: Resident Engineer responsible for construction engineering and observation for resurfacing and reconstruction of various streets throughout the Village. Roadway construction included approx. 64,000 SY of partial depth resurfacing, 6,400 SY of full-depth reconstruction, and HMA pavement patching. Additional improvements included reconstruction of driveways, sidewalks, curb and gutter, and detector loop installation. Reconstruction of Bunker Hill Dr was completed at night in order to minimize impact to the traveling public.

Randall Road and Huntington Drive Traffic Signal Modernization, Algonquin: Resident Engineer responsible for construction engineering and observation for installation of timed pedestrian signals and crosswalk improvements at the intersection of Randall Rd and Huntington Dr. Project was located within McHenry County ROW and required coordination between the Village and the County.

2009 MFT Street Program, Algonquin: Resident Engineer responsible for construction engineering and observation for resurfacing of Butterfield Dr and Providence Dr. Roadway construction included HMA pavement patching, and approx. 4,700 SY of hot-in-place heater scarifying of existing pavement before HMA surface course placement.



YEARS EXPERIENCE: 8
YEARS WITH CBBEL: 8

EDUCATION

Bachelor of Science, 2012
Civil Engineering
Purdue University

PROFESSIONAL REGISTRATION

Professional Engineer, IL,
062.070592, 2018

CERTIFICATIONS

Documentation of Contract
Quantities, IDOT, 19-15836

PACP, MACP, LACP
National Association of
Sewer Service Companies
(NASSCO)

PROFESSIONAL AFFILIATIONS

American Society of
Civil Engineers

ASCE Younger Members
Group, Director 2020-2021

John LaPaglia, PE

Project Manager

Project Manager in the Civil Engineering Design Department assisting Project Engineers and Project Managers on various design projects, including storm water management systems, roadway construction, utility replacement and rehabilitation, water mains, and sanitary sewer systems. Familiar with IDOT Standards and Specifications, John's responsibilities include preparation of construction plans and specifications, construction cost estimates, and bid tabulations.

Substation Construction/Expansion, ComEd (General): Project Engineer for design of various ComEd Substations. These projects included new substation and substation expansion study areas. Projects entailed stormwater, floodplain, and wetland permitting, as well as the preparation of engineering plans, specifications, and engineer's estimates of costs. Coordination was required for transmission lines and remediation of the site. Projects included the Waukegan Tannery, SVC TSS117 Substation in Prospect Heights, TDC 480 Transmission Line and Substation in Lockport, TSS103 Substation Expansion in Lisle, TSS184 Substation in Elk Grove, Glidden TSS83 Substation in DeKalb, TSS101 Substation in Itasca, TSS187 Schauff Road in Whiteside County, and TDC260 Dundee Substation in Cook County.

West Side Neighborhood Storage Project (Hibbard Park), Wilmette: Project Engineer for design of stormwater improvements consisting of a new relief storm sewer system and underground concrete storage vault. Responsibilities consisted of preparing plans, specifications, and estimates, and attending numerous meetings with Village Staff and Public Works Personnel, attending a public meeting with the affected residents to discuss the improvements. Plans included approximately 6,500 LF of storm sewer installation ranging from 12" to 60" in size (including 19"x30" RCEP), 700' of 8" water main, pavement reconstruction, driveway replacement, and bioretention, 315 LF of 36" diameter storm sewer jacked-in-place in a 48" steel casing to avoid disturbance to several mature trees on park district property. Extensive coordination with our Geotechnical Subconsultant was required due to the high groundwater present in the area of the proposed deep excavation, as well as utility coordination due to the numerous private facilities within the ROW requiring relocation in order to properly construct the proposed storm sewer system. CBBEL was also responsible for designing a new pump station, mass site grading, and an intricate underdrain system.

North Shore Stormwater/Wetland Improvements, Crystal Lake: Project Engineer for design of stormwater improvements consisting of three detention basins and a new storm sewer system. Responsibilities consisted of preparing plans, specifications and estimates, and attending numerous meetings with Village Staff and Public Works Personnel, as well as attending a public meeting with the affected residents to discuss the improvements. Also responsible for receiving Village and USACE permits for improvements to wetland areas. Plans included 6,500 CY of excavation for BMP basins, 4,000 LF of 12" and 15" storm sewer, and detailed soil erosion measures due to the storm sewer outfalls into Crystal Lake. Extensive coordination with our Geotechnical Subconsultant was required due to the extremely sandy soils present in the area, as well as utility coordination due to the gas line relocation necessary in order to properly construct the additional storm sewer system. Linear sediment basins were designed at the outfalls in order to ensure the stormwater was uncontaminated prior to outletting into Crystal Lake.

Cove Pond Outlet Enhancements, Crystal Lake: Project Engineer for design of stormwater improvements consisting of a new storm sewer connection to alleviate roadway flooding. Responsibilities consisted of preparing plans, specifications and estimates, attending numerous meetings with Village Staff and Public Works Personnel, and receiving Village and USACE permits for improvements to a wetland area. Plans included 6,500 CY of excavation for BMP basins, 60 LF of 12" storm sewer, and detailed soil erosion measures due to the bypass pumping of the existing box culvert and channel required to construct the proposed storm sewer.

Lincoln Avenue/W Sheridan Place Storm Sewer Improvements, Lake Bluff: Project Engineer for design of storm sewer improvements, both open-cut and trenchless. Responsibilities consisted of preparing plans, specifications and estimates, attending numerous meetings with Village Staff, and for receiving an IDOT permit for construction in State Right-of-Way. Plans included 140 LF of 24" RCP storm sewer pushed in a 36" bored and jacked steel casing, 2,000 LF of storm sewer installation ranging from 6" to 24" in size, pavement resurfacing, driveway replacement, and tree plantings, as well as utility coordination. Additional coordination was necessary with the Village and residents due to a proposed drainage easement required for the storm sewer improvements to drain an existing low-lying area that was flooding the adjacent homes.

FEMA Flood Control Project, Bartlett: Project Engineer. A Watershed Plan was developed and approved that identified conveyance improvements and flood storage that would provide a 100-year level of protection to approx. 100 homes by regrading the Geller Parcel and Hearthwood Ponds. Project included 98 and 15.6 acre-ft flood storage basins at Geller Parcel and Hearthwood Ponds, 1,125 LF of 12", 24", and 36" diameter storm sewer, as well as 145 LF of 48" diameter storm sewer jacked-in-place to avoid a utility conflict with Kinder Morgan. The plans and specifications for improvements were designed according to applicable Federal, State and Local

requirements. Design coordination with Village, DuPage County, FPDDC and Bartlett Park District. Permitting included DuPage County, IDNR-OWR Dam Safety, USACE, IDOT, DCDOT, KDSWCD and IEPA.

41st Avenue Drainage Improvements, Calumet Township, IN: Civil Designer responsible for developing design engineering plans, specifications and cost estimates. Improvements included construction of relief storm sewers and lateral sewers, inlets, and catch basins will be located along with main relief sewer. Existing roadways will also be patched.

Graue Mill Flood Protection Improvements, Hinsdale: APWA Award Winning Project. Project Engineer for the proposed FEMA HMGP improvements included Floodwall and Floodbreak installation, berm construction, storm sewer improvements, new pump stations, site grading, and compensatory storage grading. The design improvements created a flood-protected "island" around the subdivision to protect all homes to an elevation 1-foot above the 100-Year Floodplain. Coordinated with utility companies during design, specifically ComEd and Nicor due to conflicts with their existing facilities. CBEL developed design engineering plans, specifications, and cost estimates for 5 different phases constructed over 4 construction seasons.

Surrey Lane Stormwater, Algonquin: Project Engineer. The improvements include constructing a 36" bypass storm sewer and stilling basin, extending storm sewers in existing areas outside current easements to appropriate outfalls to eliminate eroding of the ravines, creek restoration behind the homes along Surrey Ln, and excavating the existing detention basin to provide the originally designed storage. CBEL developed design engineering plans, specifications and cost estimates.

Walnut/Myrtle/Evergreen Study Area, Elmhurst: APWA Award Winning Project. Project Engineer responsible for design of storm sewer improvements identified in CBEL's 2014 Addendum to the Comprehensive Flood Plan for the City. Improvements included 4,000 LF of storm sewer ranging in size from 60" to 72" in diameter, 800 LF of water main, and 1,200 LF of sanitary sewer. Also included were special design for the 72" storm sewer outfall into the quarry and intricate coordination with a Blasting Firm to properly install the pipe within bedrock.

K Complex Drainage, Abbot Park: Project Engineer. The flood proofing improvements consisted of two projects: (1) the reconstruction of existing flood control berm/access road located along the eastern property boundary, (2) elevating and sealing the sanitary manholes located along the access road and providing compensatory storage. CBEL developed design engineering plans and cost estimates.

Abbott Laboratories: Worked on 2 projects as both an Engineer Intern and Civil Engineer. Completed cost estimate for the K-Complex Flood Proof Study which included removing all the existing HMA and replacing it with 2½" of HMA Binder Course and 1½" of HMA Surface Course, as well as proof rolling the existing subgrade. Prepared plans and cost estimate for the K2 Storm Sewer and Roof Drainage Improvements project which involved replacing the existing storm sewer system, and replacing a timber retaining wall.

Greenwood-Forest Glen Stormwater Design, Winnetka: Project Engineer for design of stormwater improvements. Responsibilities consisted of preparing plans, specifications and estimates, and attending numerous meetings with Village Staff and Village Board. Also responsible for receiving Village permits and IEPA permits for water and sewer. Plans included paving, grading, structural, architectural, lighting, and landscaping plans, as well as installation of storm sewers, municipal water main, and municipal sanitary sewers, and utility coordination. New outlet to lagoon on CCFPD property required approval from CCFPD and USACE.

Chestnut Alley Improvements, Clarendon Hills: Project Engineer for design of alley reconstruction improvements. Responsibilities consisted of preparing plans, specifications and estimates, and attending numerous meetings with Village Staff and coordination with DuPage County Stormwater Management as the Village received a Water Quality Improvement Program (WQIP) grant for these improvements. Also responsible for receiving Village and County permits for stormwater, as well as County approval for the WQIP grant funds. Plans included 1,500 SY of pavement removal and replacement with a 6'4"-wide centerline of permeable pavers and 4'10"-wide high early strength concrete edging to protect the pavement from rutting under repeated loading of garbage trucks. Improvements also consisted of over 100 CY bioswale soil mix and plantings as part of the WQIP requirements, installation of an underdrain system, asphalt parking lot resurfacing, and complete pump station upgrades to handle all overland flow and stormwater. A technical memorandum with several pump station and alley improvement options was prepared prior to engineering plans in order for the Village to determine how to proceed.

Locust Road Reconstruction, Wilmette: Project Engineer for design of roadway improvements. Responsibilities consisted of preparing plans, specifications and estimates, and attending numerous meetings with Village Staff and School District personnel. Also responsible for receiving Village, MWRD, and IEPA permits for water and sewer, as well as IDOT approval for STP Federal Funds. Plans included 2,600 LF of full roadway reconstruction, grading, drainage improvements, 3,200 LF of 8" water main installation, lighting, and full maintenance of traffic plans, as well as utility coordination. Due to school locations and construction time-frame, an in-depth maintenance of traffic and detour route was designed in 3 stages to allow for the most efficient traffic flows in and out of the schools.

Houston Street Utility Replacement and Streetscape, Batavia: Project Engineer to enhance the downtown streetscape by widening the existing roadway, sidewalks, lighting, landscaping, and related infrastructure; a distance of approx. 1,100'. Project limits were from IL 31 to Island Ave. Project included angled parking, two 11' lanes, multi-use path construction, brick pavers, decorative crosswalks, and storm sewer improvements. Project was funded using local funds.

Street and Sewer Program, Wilmette: Project Engineer. Responsibilities included overseeing preparation of engineering plans, specifications and estimate. Program consisted of resurfacing and/or reconstruction of 1-2 miles of roadway, various relief sewer and combination sewer repairs, reconnecting existing services, manhole removal and replacement, full curb and gutter removal and replacement, sidewalk removal and replacement, landscaping and pavement markings where necessary.

Prospect Avenue Water Main, Park Ridge: Project Manager and Engineer for design of water main improvements. Responsibilities consisted of preparing plans, specifications and estimates, and coordinating with City Staff. Also responsible for receiving Village and IEPA permits for water main construction, as well as all utility coordination. Plans included 2,250 LF of 6", 8", and 12" water main installation, water main quality storm sewer construction, pavement patching, and restoration.

Oak Park Avenue Water Main Replacement, Harwood Heights: Project Engineer. Project required approx. 3,700 LF new 10" ductile iron water main, PCC sidewalk removal, new water service connections, fire hydrants, valves, and vaults. Responsibilities included preparation of plans and specifications and coordination with Village Public Works, IEPA, and DECO; IEPA and IDOT Permits for work within the ROW; and bid advertisement and award recommendation. Performed Phase II services utilizing SRF, DECO, and local funds.



YEARS EXPERIENCE: 3
YEARS WITH CBBEL: 3

EDUCATION

Bachelor of Science, 2018
Civil Engineering
Michigan State University

CERTIFICATIONS

PACP, MACP, LACP
National Association of
Sewer Service Companies
(NASSCO)

Joseph DeFrenza

Civil Engineer

Civil Engineer in the Civil Engineering Design Department assisting Project Engineers on various design projects, including roadway construction, utility replacement and rehabilitation, water mains, sanitary sewer systems, and storm water management systems. His responsibilities include preparation of construction plans and specifications, construction cost estimates, and bidding assistance.

Software Experience: MicroStation, Power GEOPAK, AutoCAD Civil 3D, Surveying Tools (Auto Level, EDM Total Station, GPS), Microsoft Office.

Addison Creek Fitness Park, Northlake: Civil Engineer/Project Engineer responsible for developing plans, specifications, and a cost estimate. Project includes installation of a synthetic poured-in-place safety surface, concrete pergola foundations, concrete curb and gutter, perforated underdrain, PCC Sidewalk and Fitness Equipment installation.

Diversey Avenue Stormwater Storage Project, Northlake: Civil Engineer/Project Engineer responsible for developing plans, specifications, and a cost estimate. Project includes design and construction of a stormwater storage swale and basin, including installation of new 12" ductile iron storm sewer connecting to an existing pump station.

Plum Grove Road at Remington Road, Schaumburg: Civil Engineer. Developed a Signage Plan for proposed roundabout. Project included the design of a roundabout at the intersection of Plum Grove Road and Remington Road, including full depth HMA pavement, concrete medians, concrete truck aprons, storm sewer, retaining walls, lighting, etc.

Roy Avenue Resurfacing, Northlake: Civil Engineer. Partial development of plans, specifications, and cost estimate for resurfacing Roy Avenue from North Ave to Winters Dr. Correspondence and coordination with IDOT was important to make sure all standards and specifications were correct and applicable for this STP funded project. Project also included ADA corner improvements as well as spot curb and gutter repair.



YEARS EXPERIENCE: 17
YEARS WITH CBBEL: 17

EDUCATION

Bachelor of Science, 2004
Civil Engineering
Purdue University

PROFESSIONAL REGISTRATION

Professional Engineer, IL,
062.063231, 2011

CERTIFICATIONS

Certified Floodplain Manager
ASFPM

Certified Professional in
Erosion and Sediment Control

PROFESSIONAL DEVELOPMENT

Ethics in City Government,
Ethics Training for CDA/OMP
Contractors, Vendors
and Employees

PROFESSIONAL AFFILIATIONS

Illinois Association for
Floodplain and Stormwater
Management

Luke Sherry, PE, CFM, CPESC

Water Resources Project Manager

Water Resources Project Manager responsible for water resources engineering project analysis and design. Duties include performing the following hydrologic and hydraulic engineering tasks: floodplain/floodway delineation, detention and compensatory storage determination, steady and unsteady hydraulic analyses, and design of conveyance systems.

Computer skills include ArcMap, HEC-1, HEC-2, HEC-GeoRAS, HEC-HMS, HEC-RAS, HY-8, Hydraflow, SWMM, TR-20, WSP-2, XP-SWMM, and InfoSWMM.

SEWER MODELING AND FLOOD REDUCTION STUDIES

Comprehensive Flood Plan, Elmhurst: Project involved a comprehensive stormwater study that included a complete hydrologic and hydraulic analysis of storm sewer networks within 10 flood problem areas, compensatory storage analysis, flood proofing options, and review of the City's current stormwater regulations. Existing storm sewer networks and proposed drainage improvements were modeled using XP-SWMM computer software. An FEQ hydraulic analysis was performed for those drainage improvements that resulted in increased flows to Salt Creek. Cost estimates were developed for proposed drainage improvements and a comparison was made to the cost of individual house flood proofing. Project also included a review of current stormwater practices required by the City and recommended revisions to City Ordinance were provided.

Walnut/Evergreen/Myrtle Stormwater Improvement Project, Elmhurst: CBBEL provided design and construction services for installation of approx. 3,400 LF of 60" and 72" diameter storm sewer that drains to the Elmhurst Quarry. Proposed drainage improvements provide a 100-year level of flood protection for many flood-prone properties located throughout the study area. Construction began in early 2016 and was completed in November 2016. With approval of downstream Salt Creek communities, the City entered into an Intergovernmental Agreement with DuPage County to allow 20 acre-feet of stormwater volume to be diverted from the flood-problem area to the Elmhurst Quarry.

Crescent Ave/Cambridge Ave Stormwater Improvement Project, Elmhurst: CBBEL provided design and construction services for installation of approx. 2,000 LF of 48" diameter storm sewer in conjunction with 11 acre-feet of flood storage created at York Commons Park. The City partnered with Elmhurst Park District and entered into an Intergovernmental Agreement with that agency to use the land for stormwater storage. In addition to working with the Park District, project involved the securing of temporary and permanent easements to construct a portion of the 48" diameter storm sewer through residential properties. Proposed drainage improvements provide a 100-year level of flood protection for 38 properties located throughout the study area. Construction began in Fall 2016 and was completed in July 2017.

Madison School Stormwater Improvement Project, Elmhurst: CBBEL provided design and construction services for installation of approx. 1,100 LF of 42" and 48" diameter storm sewer in conjunction with 6 acre-feet of flood storage created at the Madison School Property. Proposed drainage improvements provide valuable flood-reduction benefits for many properties located throughout Southwest Elmhurst. Construction began in Fall 2016 and was completed in July 2017. The City partnered with Elmhurst Community Unit School District 205 and entered into an Intergovernmental Agreement with District 205 to use the land for stormwater storage.

Westwood Drive, Orland Park: Project included analysis of an existing storm sewer system and detention basins to develop alternatives for drainage improvements. The existing storm sewer network and detention storage basin in the subdivision were modeled using XP-SWMM computer software to determine flooding areas. Recommendations were made for proposed storm sewer improvements to alleviate the flooding.

Preserve of Palatine Condominiums, Palatine: Project included an analysis of a proposed storm sewer system tying into an existing storm sewer system. The storm sewer network was modeled using XP-SWMM computer software to determine the effects of the proposed storm sewer system. This project included coordination with MWRDGC.

Skokie River Drain Tile Replacement Study, Lake County: Project involved a complete hydrologic and hydraulic analysis of drain tiles located at the headwaters of the Skokie River. The existing drain tile system was analyzed along with several drain tile replacement alternatives that included larger drain tile sizes and potential flood storage sites. The hydrologic analysis was completed using HEC-1 computer software and the hydraulic analysis was completed using HEC-2, HY-8, and Hydraflow computer software. Project included coordination with LCSMC and the East Skokie Drainage District.

Lake Bluff Flood Storage Feasibility Study, Lake County: Project involved a complete hydrologic and hydraulic analysis of a potential flood storage site along the Skokie River. A total of 5 reservoir sizes were analyzed, ranging from a wetland, gravity-drained reservoir to a large, pump-evacuated reservoir. Flood profiles of the

Skokie River were developed for proposed reservoir sizes and were compared to existing flood profile to determine the effectiveness of each reservoir size. The hydrologic analysis was completed using HEC-1 computer software and the hydraulic analysis was completed using HEC-2 computer software. Project included coordination with LCSMC and the East Skokie Drainage District.

Lower Des Plaines River Detailed Watershed Study, Cook County:

Project involved a complete hydrologic and hydraulic analysis. The hydrology of the watershed was modeled using HEC-HMS computer software and included digital output to be used as input in the hydraulic model. An unsteady HEC-RAS hydraulic model was developed to determine the limits of the 2-, 5-, 10-, 25-, 50-, 100-, 500-year inundation areas. HEC-GeoRAS computer software was used to develop the cross-section geometry for input into the hydraulic model. Project included coordination with MWRDGC.

ORDINANCE DEVELOPMENT

Technical Guidance Manual for the Watershed Management Ordinance, MWRD, Cook County:

Senior Water Resource Engineer responsible for development of the Technical Guidance Manual (TGM) to accompany the Watershed Management Ordinance (WMO), in collaboration with MWRD. Project involved the creation of technical guidance for stormwater management, floodplain/floodway, riparian environment, and wetland submittals under the WMO, and also included the development of all permit forms, checklists, template hydrologic models and other resources. Additionally, the project also involved numerous public training seminars that covered the WMO, TGM, and HEC-HMS hydrologic modeling.

DuPage County Stormwater Ordinance: Worked on complete overhaul of County Stormwater Ordinance to reflect the current and future development conditions in DuPage County. The revised ordinance was developed with input from the Steering Committee made up of municipal engineers and County staff.

HYDROLOGIC AND HYDRAULIC ANALYSES

Las Fuentes Development, Richton Park: Performed hydrologic and hydraulic analyses to determine floodplain, detention requirements, and compensatory storage requirements of project site. TR-20 hydrologic modeling and HEC-RAS hydraulic modeling was used.

Sequoit Creek Watershed, Lake County: Project involved updating a steady-state HEC-RAS hydraulic model into an unsteady HEC-RAS hydraulic model for the entire watershed. Project included coordination with LCSMC.

Eagle Creek, Round Lake Drain, and Long Lake Watershed Study:

Project included a complete hydrologic and hydraulic analysis for the entire watershed. The hydrology of watershed was modeled using HEC-1 computer software and included digital output to be used as input in the hydraulic model. An unsteady HEC-RAS hydraulic model was developed to determine the limits of the 100-year and 500-year floodplain and the 100-year floodway. HEC-GeoRAS computer software was used to develop the cross-section geometry for input into the hydraulic model. Project included coordination with LCSMC.

Downtown Redevelopment, Lake Zurich: Project involved a stormwater detention analysis for the redevelopment of downtown Lake Zurich. A TR-20 hydrologic model was developed to determine the required detention volume based on Lake County Watershed Development Ordinance and Village of Lake Zurich Ordinance.

TCB Development, Joliet: Project included an existing Base Flood Elevation Analysis for Cedar Creek. A TR-20 hydrologic model was developed to determine the detention volume required under the Will County Stormwater Ordinance. Incremental compensatory storage for floodplain fill on the project site was also determined. Project included coordination with the City of Joliet.

STORMWATER ENGINEERING REVIEWS

City of Wood Dale (2016-Present): Responsibilities include review of development plans for compliance with the City's Unified Development Ordinance and the DuPage County Countywide Stormwater and Flood Plain Ordinance. We have reviewed numerous single family, multi-family, commercial and various public improvements projects for compliance with these regulations. Because the City is a full-waiver community in DuPage County, CBBEL is also responsible for reviewing any wetland, floodplain, and riparian environments impacts associated with these developments. Other responsibilities include inspection services for public and private developments and attending City Council and Plan Commission meetings when requested.

McHenry County Division of Transportation: Performed stormwater permit application reviews for compliance with the McHenry County Stormwater Ordinance. Also provided technical assistance regarding floodway and floodplain with IDNR-OWR and FEMA regulations.

PERMITTING

Howard Street Improvements, Niles: Prepared a Metropolitan Water Reclamation District of Greater Chicago (MWRD) Watershed Management Permit submittal for the proposed rehabilitation of Howard Street. This federally funded project included an addendum to the Phase I report. The purpose of the addendum was to better separate pedestrians and bicyclists and reduce the number of parcels that would be affected by land acquisition. The addendum also included the addition of a road diet. Other improvements include pavement patching and resurfacing, modernization of traffic signals, roadway lighting and construction of on-street and off-street bicycle facilities. Construction is scheduled for 2020 at an estimated cost of \$6.3 million.

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Increase operational efficiency up to 86%
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Reduce site visits up to 94%
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Reduce urban flooding and sewage overflows up to 99%
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Track the presence and extent of storm & sea level rise-related back flow
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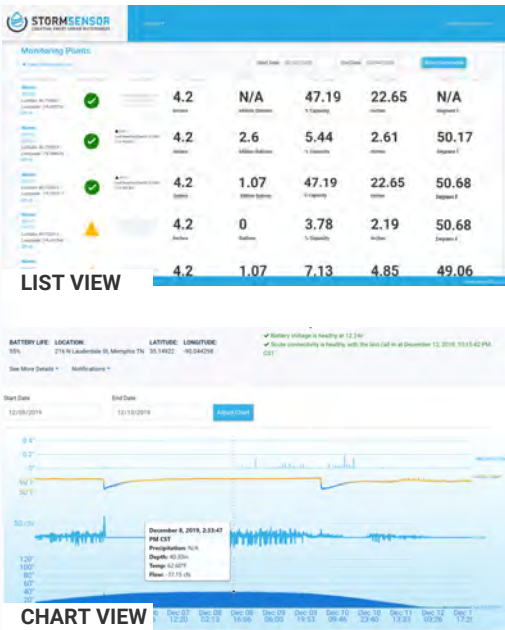
Streamline efforts across teams
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APPLICATIONS



Model Validation



Green Infrastructure



Urban Flooding



Illicit Discharges



Combined Sewage Overflows



Climate Change

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TAB 7

PROJECT REFERENCES



REFERENCES

1. Project Location: Forest Park, Illinois Project Owner: Village of Forest Park
Project Description: Sewer Separation Evaluation Project
Owner's Representative: Tim Gillian, Village Administrator Phone: 708.615.6201
Awarded Contract Cost \$ Final Project Cost \$
2. Project Location: Wilmette, Illinois Project Owner: Village of Wilmette
Project Description: Separate Storm Sewer Study
Owner's Representative: Brigitte Berger-Raish, Director of Engineering/Public Works Phone: 847.853.7627
Awarded Contract Cost \$ Final Project Cost \$
3. Project Location: Dyer, Indiana Project Owner: Town of Dyer
Project Description: Comprehensive and Collaborative Program
Owner's Representative: Ron Hunter Phone: 219.865.4223
Awarded Contract Cost \$ Final Project Cost \$
4. Project Location: Park Ridge, Illinois Project Owner: City of Park Ridge
Project Description: Stormwater Planning
Owner's Representative: Wayne Zingsheim, Director of Public Works Phone: 847.318.5247
Awarded Contract Cost \$ Final Project Cost \$
5. Project Location: Deerfield, Illinois Project Owner: Village of Deerfield
Project Description: Deerfield Stormwater Master Plan
Owner's Representative: Robert Phillips, Director of Public Works/Engineering Phone: 847.719.7464
Awarded Contract Cost \$ Final Project Cost \$

TAB 8
NOT-TO-EXCEED FEE PROPOSAL



TAB 9 COMPLETED FORMS



EQUAL EMPLOYMENT OPPORTUNITY COMPLIANCE CERTIFICATE

As used in this certificate the term "subcontract" includes the term "purchase order" and all other agreements effectuating purchase of supplies or services. If this certificate is submitted as part of a bid or proposal the term "Seller" shall be deemed to refer to the Bidder or Offeror, or Subcontractor or Supplier. This certificate shall be renewed annually. Notwithstanding the foregoing, the certifications made herein shall remain applicable until completion of all nonexempt contracts/subcontracts awarded while this certificate is in effect. The undersigned Seller certifies the following to the Village of RIVER FOREST hereinafter referred to as Buyer:

- A. **REPORTS**: Within thirty (30) days after Buyer's award to Seller of any contract/subcontract and prior to each March 31 thereafter during the performance of work under said subcontract, the Seller shall file Standard Form 100, entitled "Equal Employment Opportunity Employer Information Report EEO-1" in accordance with instructions contained therein unless Seller has either filed such report within 12 months preceding the date of the award or is not otherwise required by law or regulation to file such report.
- B. **PRIOR REPORTS**: Seller, if it has participated in previous contract or subcontract subject to the Equal Opportunity Clause (41 C.F.R. Sec. 60-1.4 (a) (1) through (7), or the clause originally contained in Section 301 of Executive Order No. 10925, or the clause contained in section 201 of Executive Order No. 11114, has filed all required compliance reports. Seller shall obtain similar representations indicating submission of all required compliance reports, signed by proposed subcontractors, prior to awarding subcontracts not exempt from Equal Opportunity Clause.
- C. **CERTIFICATION OF NON SEGREGATED FACILITIES**: Seller certifies that it does not maintain or provide for its employees any segregated facilities at any of its establishments, and that it does not permit its employees to perform their services at any location, under its control where segregated facilities are maintained. Proposer certifies further that it will not maintain or provide for its employees any segregated facilities at any of its establishments and that it will not permit its employees to perform their services at any location, under its control where segregated facilities are maintained. Seller agrees that a breach of this certification is a violation of the Equal Opportunity Clause in this certificate. As used in this certification, the term "segregated facilities" means any waiting rooms, work area, rest rooms, wash rooms, restaurants and other eating areas, time clocks, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive or are in fact segregated on the basis of race, color, religion, or national origin, because of habit, local custom or otherwise.

C. CERTIFICATION OF NONSEGREGATED FACILITIES: (Cont'd.)

Proposer further agrees that (except where it has obtained identical certifications from proposed subcontractors for specific time periods) it will obtain identical certifications from proposed subcontractors prior to the award of subcontracts exceeding \$10,000 which are not exempt from the provisions of the Equal Opportunity Clause; that it will retain such certifications in its files; and that it will forward the following notice to such proposed subcontractors (except where the proposed subcontractors have submitted identical certifications for specific time periods): NOTICE TO PROSPECTIVE SUBCONTRACTORS OF REQUIREMENT FOR CERTIFICATIONS OF NONSEGREGATED FACILITIES. A certification on Nonsegregated Facilities, as required by Section 60-1.8 of Title 41 of the Code of Federal Regulations, must be submitted prior to the award of a subcontract exceeding \$10,000 which is not exempt from the provisions of the Equal Opportunity Clause. (Note: The penalty for making false statements in offers is prescribed in 18 U.S.C. 1001).

D. AFFIRMATIVE ACTION COMPLIANCE PROGRAM: Prior to 120 days after receipt of any subcontract in the amount of \$50,000 or more from Buyer, if it has 50 or more employees and it is not otherwise exempt under 41 C.F.R. Part 60-1, shall have developed for each of his establishments a written affirmative action compliance program as called for in 41 C.F.R. Sec. 60-1.40. Seller will also require its lower-tier subcontractors who have 50 or more employees and receive a subcontract of \$50,000 or more and who are not otherwise exempt under 41 C.F.R. Part 60-1 to establish written affirmative action compliance programs in accordance with 41 C.F.R. Sec. 60-1.40.

E. Seller certifies that it is not currently in receipt of any outstanding letters of deficiencies, show cause, probable cause, or other such notification of noncompliance with EEO regulations.

Executed this 9th day of March 2021 by:

Christopher B. Burke Engineering, Ltd.

Firm name

By: 

Executive Vice President/Head, Water Resources Department

Title

(Seller)

STATE OF ILLINOIS
DRUG FREE WORKPLACE CERTIFICATION

This certification is required by the Drug Free Workplace Act (30 ILCS 580/1 et seq.). The Drug Free Workplace Act, effective January 1, 1992, requires that no grantee or proposer shall receive a grant or be considered for the purposes of being awarded a contract for the procurement of any property or services from the State unless that grantee or proposer has certified to the State that the grantee or proposer will provide a drug free workplace. False certification or violation of the certification may result in sanctions including, but not limited to, suspension of contract or grant payments, termination of the contract or grant and debarment of contracting or grant opportunities with the State for at least one (1) year but not more than five (5) years.

For the purpose of this certification, "grantee" or "proposer" means a corporation, partnership, or other entity with twenty-five (25) or more employees at the time of issuing the grant, or a department, division, or other unit thereof, directly responsible for the specific performance under a contract or grant of \$5,000 or more from the State.

The proposer/grantee certifies and agrees that it will provide a drug free workplace by:

(a) Publishing a statement:

- (1) notifying employees that the unlawful manufacture, distribution, dispensing, possession or use of a controlled substance, including cannabis, is prohibited in the grantee's or proposer's workplace.
- (2) specifying the actions that will be taken against employees for violations of such prohibition.
- (3) notifying the employee that, as a condition of employment on such contract or grant, the employee will:
 - (A) abide by the terms of the statement; and
 - (B) notify the employer of any criminal drug statute conviction for a violation occurring in the workplace no later than five (5) days after such conviction.

(b) Establishing a drug free awareness program to inform employees about:

- (1) the dangers of drug abuse in the workplace;
- (2) the grantee's or proposer's policy of maintaining a drug free workplace;
- (3) any available drug counseling, rehabilitation, and employee assistance programs;
and
- (4) the penalties that may be imposed upon an employee for drug violations.

(c) Providing a copy of the statement required by subparagraph (a) to each employee engaged

in the performance of the contract or grant and to post the statement in a prominent place in the workplace.

- (d) Notifying the contracting or granting agency within ten (10) days after receiving notice under part (B) of paragraph (3) of subsection (a) above from an employee or otherwise receiving actual notice of such conviction.
- (e) Imposing a sanction on, or requiring the satisfactory participation in a drug abuse assistance or rehabilitation program by, any employee who is so convicted, as required by section 5 of the Drug Free Workplace Act.
- (f) Assisting employees in selecting a course of action in the event drug counseling, treatment, and rehabilitation is required and indicating that a trained referral team is in place.
- (g) Making a good faith effort to continue to maintain a drug free workplace through implementation of the Drug Free Workplace Act.

THE UNDERSIGNED AFFIRMS, UNDER PENALTIES OF PERJURY, THAT HE OR SHE IS AUTHORIZED TO EXECUTE THIS CERTIFICATION ON BEHALF OF THE DESIGNATED ORGANIZATION.

Christopher B. Burke Engineering, Ltd.

Printed Name of Organization



Signature of Authorized Representative

Thomas T. Burke, Jr., PhD, PE
Executive Vice President, Head, Water Resources Department

3/9/2021

Printed Name and Title

Date

Requisition/Contract/Grant ID Number

**CERTIFICATION THAT PROPOSER IS NOT BARRED FROM
PUBLIC CONTRACTING DUE TO BID-RIGGING OR
BID ROTATING CONVICTIONS**

WHEREAS, a conviction for the offense of bid-rigging or bid rotating bars a person or entity from bidding on public contracts (720 ILCS 5/33E-3 and 33E-4), and

WHEREAS, Section 33E-11 of the Criminal Code (720 ILCS 5/33E-11) requires bidders and proposers to certify on a form provided by the unit of local government or school district that they are not barred from public contracting due to bid-rigging or bid rotating convictions.

NOW THEREFORE, IT IS HEREBY CERTIFIED THAT the undersigned,

Christopher B. Burke Engineering, Ltd.

(individual, firm, corporation or other entity)

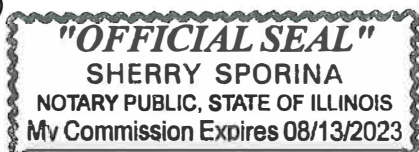
is not barred from bidding on or entering into public contracts due to having been convicted of bid-rigging or bid rotating under paragraphs 33E-3 or 33E-4 of the Illinois Criminal Code. The undersigned also certifies that no officers or employees of the bidder or the proposer have been so convicted and that the bidder or proposer is not the successor company or a new company created by the officers or owners of one so convicted. It is further certified that any such conviction occurring after the date of this certification will be reported to the above public body in writing, within seven (7) days of such conviction, if it occurs during any bidding process, contract term or otherwise prior to the entering into any contract therewith.

DATE: 3/9/2021 _____

By: _____

ATTEST: _____

(SEAL)



PROPOSER CERTIFICATION
SEXUAL HARASSMENT POLICY

Christopher B. Burke Engineering, Ltd.
_____, ("Proposer"), having submitted a proposal to the Village of River
Forest, hereby certifies that said Proposer has a written sexual harassment policy in place in full
compliance with 775 ILCS 5/2-105 (A) (4).

(Corporate Seal)

Signed by: _____

Title: _____ Executive Vice President, Head, Water Resources Department

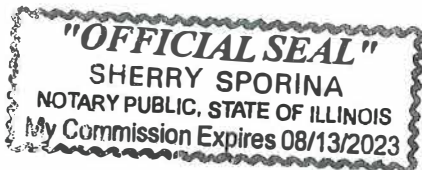
Christopher B. Burke Engineering, Ltd.
9575 W. Higgins Road, Suite 600,
Name & Address: _____ Rosemont, IL 60018

of Submitter or Vendor: _____

Subscribed and sworn to before me

this 9th day of March, 2021

Sherry Sporina
Notary Public



Item Description	Budgeted Labor Hours						Topographic Surveying (Lump Sum)	Flow Monitoring (Subconsultant Cost)	
	CBBEL Eng. VI	CBBEL Eng. V	CBBEL Eng. IV	CBBEL Eng. III	CBBEL Eng I/II	Total Labor Hours			
Hourly Rate	\$ 239.00	\$ 197.00	\$ 160.00	\$ 144.00	\$ 113.00				
Tasks									Total Cost
Meetings and Data Collection									
1.1 Kickoff Meeting	2	2				4			\$ 872.00
1.2 Progress Meetings						0			\$ -
1.3 Review Available Data						0			\$ -
1.4 Field Investigation and Surveying				24		24	\$ 8,000		\$ 11,456.00
1.5 Public Outreach Meetings	6	6		6		18			\$ 3,480.00
1.6 Village Board Presentation (see Task 9)						0			\$ -
1.7 Flood Questionnaire					32	32			\$ 3,616.00
Sewer System Analysis									
2. Sewer Modeling	12	24		48	140	224			\$ 30,328.00
3. Flow Monitoring		8				8		\$ 23,100	\$ 24,676.00
4. Calibration		24		64	40	128			\$ 18,464.00
5. System Evaluation		4		32	16	52			\$ 7,204.00
Capital Improvement Plan									
6.1 Capital Improvement Plan (CIP) Projects	12	24		48	120	204			\$ 28,068.00
6.2 Green Infrastructure Evaluation		12		24		36			\$ 5,820.00
6.3 Conceptual Cost Estimates				16		16			\$ 2,304.00
6.4 Project Prioritization		16		16		32			\$ 5,456.00
6.5 Analysis of Benefits		12		24		36			\$ 5,820.00
6.6 Review of Sewer Lining and Backflow Prevention Programs		8		8		16			\$ 2,728.00
Stormwater Master Plan & Presentation									
7. Staffing Level Analysis		6		4		10			\$ 1,758.00
8. Stormwater Master Plan Report	2	8		40		50			\$ 7,814.00
9. Village Board Presentation	4	8		32		44			\$ 7,140.00
						0			
Total Labor	38	162	0	386	348	934			\$ 167,004.00
Other Costs									
Direct Reimbursable Expenses									\$ 1,500.00
TOTAL NOT-TO-EXCEED COST									\$ 168,504.00