PROPOSAL

TINLEY CREEK
STREAMBANK STABILIZATION

SUBMITTED TO	SUBMITTED ON	RFP #
Village of Orland Park	March 29, 2021	#21-015

POINT OF CONTACT

DERRICK MARTIN, P.E., CFM, CPESC
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SUBMITTED TO

JOHN MEHALEK
Village Clerk
Village of Orland Park, Illinois
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Orland Park, IL 60462
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Submitted Electronically via BidNet Direct

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March 26, 2021

John Mehalek, Village Clerk
Village of Orland Park
14700 S. Ravinia Avenue, Orland Park, IL 60462

Proposal: RFP #21-015 | Tinley Creek Streambank Stabilization

Dear Mr. Mehalek,

V3 Companies (V3) is pleased to submit our proposal for the Tinley Creek Streambank Stabilization project. The enclosed information illustrates our extensive qualifications and experience to deliver a final stabilization design that is practical, efficient and sustainable. Each streambank stabilization project is unique and in order to achieve a successful project, the solutions implemented need to respect the constraints and conditions present at the time of implementation. Our team of professional experts range from hydraulic and civil engineers to biologists, ecologists, and construction professionals who will evaluate each section of the improvements to ensure proper solutions.

Once erosion begins on an active stream, the condition will continue to change due to normal stream flows and be exacerbated from the effect of storm events. Therefore, it is critical to have a design that reflects conditions as close to the start of construction as possible. V3 has unique capabilities and expertise that will be engaged in the project to ensure success. A few capabilities to highlight are as follows:

- V3's team is comprised of multi-disciplined in-house experts in the fields of engineering, ecological science, construction and shoreline stability. This team engages collectively to formulate alternative solutions, prepare stabilization improvement plans and specifications, and obtain all permits in a practical and efficient manner.
- V3's construction group specializes in the construction of streambank stabilization projects. This expertise will be engaged throughout the design process to ensure accurate and comprehensive and constructable designs that are specific to each area of the streambank.
- Our in-house construction estimators evaluate constructability and prepare contractor-level cost estimates based on real project experience. This provides a confidence in the project budget that will be presented with the final design.

As indicated in our experience throughout this submittal, we have successfully demonstrated our design and construction expertise on several streambank stabilization and improvement projects. We appreciate the opportunity to present our proposal and are available to answer any questions or to further expand upon this submittal. Please contact myself or Derrick Martin at dmartin@v3co.com or at 630.546.6589.

We acknowledge receipt of Addendums No. 1, No. 2 and No. 3.

Sincerely,
V3 COMPANIES, LTD.

Gregory V. Wolterstorff
Vice President
Director of Natural Resources

SECTION 1

PROJECT UNDERSTANDING & APPROACH

STREAM RESTORATION OVERVIEW

V3 designed, permitted and constructed the streambank stabilization along two linear miles of the Skokie River in Lake Forest which included gabion walls, native vegetation, stone toe, bank reshaping, grading and drainage repairs.

V3 has relied on the engineering plan set prepared by Michael Baker Jr, Inc. for the basic components of the proposed design. However, due to the age of this design plan it is critical to obtain a new topographic survey and conduct an assessment of the current stream condition. The reality of streambank erosion is that once the banks start to deteriorate the condition will continue to be exacerbated by normal flows and worsen with each storm event. Providing accurate information as close to the start of construction is critical for a successful project.

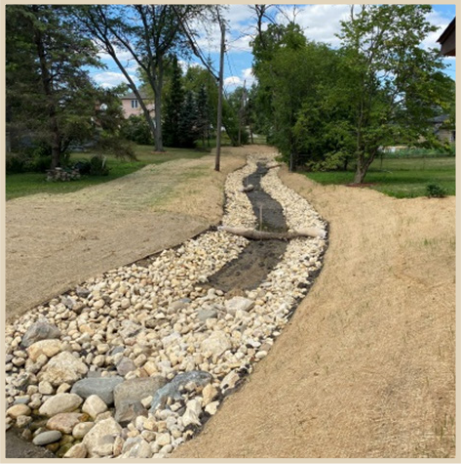
We have extensive experience in the design and installation of various stream stabilization features such as gabion walls, boulder/rock toe protection, large woody debris habitat structures, rock vanes, riffles and bank grading. Once additional flow characteristics of the system and/or other typical site constraints (access, utility conflicts, etc.) are observed, V3 will confirm the types and locations of the proposed stabilization measures that will maximize their effectiveness (this is often the case with the location of rock vanes or riffles). An important consideration when defining stabilization measures is the sustainability of each improvement and the cost of long-term maintenance. V3's proposed improvements will maximize the effectiveness of the work while minimizing long-term costs.

The primary tasks involved in the engineering design are:

1. Perform field visit and review previous plan documents to identify, categorize and prioritize specific erosion areas.
2. Identify and evaluate various stabilization methods for each erosion area. This will involve analysis that balances sustainable solutions with practical construction methods and long-term maintenance costs.
3. Identify access locations for each erosion area and determine required access easements.
4. Design the proposed streambank stabilization measures.
5. Obtain environmental permits required for improvements within the wetlands, waterway and floodplain/floodway associated with Tinley Creek.
6. Prepare Final Construction Specifications and Bid Documents.

Building off the provided plan set, V3 will develop final engineering documents that show the design intent and general limit of the proposed improvements that can be used for permitting purposes. The plan set will include a plan view, updated profile (if deemed necessary), erosion control and typical details of the selected stabilization and restoration measures. The plans will also show the best available information related to property limits and the surveyed limit of the wetland/waterway delineation for submittal to the applicable regulatory agencies.

Property easements will be critical for access, constructability and long-term maintenance. V3's survey will define property lines and indicate the required easement for each property along the stream corridor. The easement language will need to address both the limits needed for construction, but also the required space for access. This access area can be defined as usable space outside the stabilization measures; however it must also be clear that this area is to remain free for future access of maintenance activities.



St. Joseph Creek design/build project for Downers Grove included native vegetation slope with rip rap toe.

STREAM RESTORATION APPROACH

V3's approach to this project is for our technical experts and professional construction estimating staff to collaborate during the review/planning, preliminary design and final design phases to provide a streambank stabilization design that restores the natural aesthetics of the channel while also meeting all the requirements of the project. Our construction and estimating staff has worked on several streambank stabilization projects and will also review and contribute to the design to ensure that the final product is cost efficient. Collaboration with V3's construction group is particularly important to ensure the final product will meet budget constraints, is sustainable, and given the limited right-of-way and very limited access by construction equipment that the project is constructible.

PLANNING PHASE

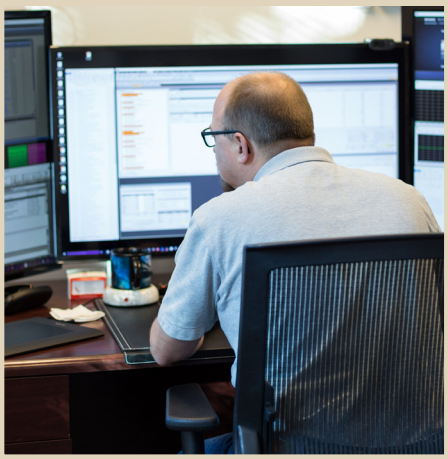
V3 will perform the following tasks to conform to the scope of services provided by the Village:

- V3 will perform field visits to inspect the full reach of Tinley Creek anticipated for stabilization and review all available data provided by the Village regarding the existing conditions and proposed improvements as defined by the Baker plans.
- V3 will prepare new conceptual design report that includes:
  - → An existing conditions analysis of all erosion areas
  - → Prioritization of erosion areas to identify the areas in most need of stabilization and help determine which areas should be included in the phased work
  - → Updated conceptual plans that outlines recommended stabilization alternatives for each erosion area
  - → A list of all required permits and an estimated timeline to obtain each permit
  - → Conceptual engineer's opinion of probable construction cost (prepared by V3's professional construction estimating staff) of the conceptual design improvement alternatives

PRELIMINARY DESIGN PHASE

V3 will perform the following tasks to conform to the scope of services provided by the Village:

- *Wetland Delineation* – V3 will complete a wetland delineation of the project area and meet with the USACE and/or County to determine the jurisdiction of the identified wetlands and waters within the project area.
- *Topographic Survey* – V3 will complete a topographic survey of all identified erosion areas and potential access areas. The survey will also identify any existing easements and right-of-way boundaries.
- *Preliminary Improvements Plans* – V3 will prepare a set of plans to be used for preliminary costs estimating a permit submittals to include:
  - → Bank stabilization locations and methods for each identified erosion area
  - → Typical cross sections
  - → Construction notes and quantities
  - → Construction details for each bank stabilization method
- *Temporary Construction Access Plan* – V3 will work with our construction group to prepare an exhibit that identifies all easements that will need to be required for performing work. These easements will include the actual construction area, construction staging areas and access locations.
- *Prepare and Submit All Permits* – V3 will prepare and submit all required permits on behalf of the District to perform the proposed improvements.
- *Preliminary Engineer's Opinion of Probable Construction Cost* (prepared by V3's professional construction estimating staff).



CONTRACT-LEVEL CONSTRUCTION ESTIMATES:

V3's professional construction estimators provide contractor-level cost estimates. Four key components of these estimates are:

1. HCSS heavy bid software
2. In-house professional estimators
3. Trade contractor pricing
4. Construction experience from self-performing similar projects

Our contract-level construction estimates are unique to V3 as we utilize our expertise in contractor bids for earthwork and underground utilities of similar projects.

Working with V3's cost estimators during engineering design provides real-world cost estimates for District planning purposes and allows the project to more closely match the project budget. This allows for proper identification of bid alternates to maximize any grant dollars and reduces the need for re-design or re-bidding after a project is let.

FINAL DESIGN PHASE

V3 will perform the following tasks to conform to the scope of services provided by the District:

- *Final Improvements Plans* – V3 will prepare a set of final engineering plans to be issued for bid and construction purposes to include:
- *Final Construction Specifications* – V3 will prepare final construction specifications for the proposed improvements.
- *Final Engineer's Opinion of Probable Construction Cost* (prepared by V3's professional construction estimating staff).
- *Permitting* – V3 will coordinate with permitting agencies to obtain all permits that were submitted under the preliminary design phase.

BID PHASE

- *Prepare Contract PS&E document and Notice for Advertisement* – V3 will assist the Village in preparing the Final Contract Proposal and Notice for Advertisement (for either the whole project or individual phases) to be distributed for potential bidders.
- *Bidder Questions* – V3 will respond to bid questions during the bid timeline to provide plan and specification clarifications as required by the qualified contractors.
- *Review Bids* – V3 will review bids line items and identify apparent low bidder for the Village to construct the project that was advertised.

PLANTING PLANS & PERFORMANCE STANDARDS

V3's Restoration Ecologist will evaluate and revise the proposed seed and plug mixes based on our experience with the successful establishment of native wetland, prairie and shoreline vegetation. The revised seed and plant mixes will also be based on meeting the required three-year performance standards for stream restoration projects.

V3 has extensive experience in maintenance of bank stabilization and lake shoreline projects with a mix of hearty wetland plants along the water/soil interface and deep-rooted prairie species on the banks and slopes. V3 has extensive knowledge and training of local area ecosystems; and how to achieve the maximum performance success on each project. Critical to achieving success is an extensive knowledge of native plant characteristics in order to design the most appropriate management plan for establishment and promotion of the desired species. Equal to understanding the native species is the understanding of invasive species and the various techniques that can be implemented to eradicate these species.

Rathje Park in Wheaton included two acres of native seeding and 3,000 native plant plugs. V3 is providing long-term native area maintenance for the site.

- ✓ IDNR-OWR Permit (Floodway Control Permit)
- ✗ FEMA Floodplain Mapping
- ✓ USACE (Individual Permit)
- ✓ Cook County SWCD
- ✓ IEPA NPDES Permit
- ✓ Cook County/MWRD
- ✓ Village of Orland Park

FIGURE 2: PERMIT ANALYSIS SUMMARY.
Based on our understanding of the project, V3 has determined that IDNR-OWR, USACE, SWCD, IEPA NPDES, MWRDGC and Village of Orland Park permits will be required.

The success of any native vegetation is the implementation of an adaptive management plan. Each site is unique and presents its own challenges. A management plan should be assembled that includes annual monitoring and planning of future maintenance activities. Future maintenance depends upon the performance observed from past efforts. V3 will work closely with the Village to develop and implement an Operations & Management (O&M) plan in order describe contractor responsibilities which result in performance objectives and a successful bank stabilization project for the long term.

PERMITTING

We anticipate the following permits to be required:

1. USACE Individual Permit
2. Cook County Watershed Management Ordinance (WMO) Permit – Metropolitain Water Reclimation Distrcit of Greater Chicago (MWRD) and Village of Orland Park
3. Soil Erosion and Sediment Control Review & Approval – Cook County SWCD
4. NPDES ILR 10 Permit/SWPPP Approval – Illinois EPA

FLOODWAY/FLOODPLAIN PERMITTING

The proposed improvements are located within mapped floodplain and floodway of Tinley Creek. Work within mapped floodway typically requires a Floodway Construction permit, which is usually issued by the Illinois Department of Natural Resources – Office of Water Resources (IDNR-OWR). Based on the Baker plans and extents of fill in the floodway for certain sections of bank stabilization and structural protection, V3 believes that hydraulic modeling will be required to support this Floodway Construction Permit.

For the purposes of this proposal, it is our understanding that the necessary hydraulic modeling of the proposed improvements will need to demonstrate “no adverse impact” but the modeling will not be used to remap the regulatory floodway and/or floodplain. Specifically, if the regulatory hydraulic model was used in the Baker design, it is expected that the model will be provided to V3 and minimal modifications will be required. The new stabilization section should also be within the same Tinley Creek model given the upstream section of the Baker design.



USACE PERMITTING

Tinley Creek is a Waters of the U.S. under USACE Chicago District jurisdiction. Based on the previous engineering plans for the project structural measures will exceed a total length of 500 linear feet, an Individual Permit will be required from both the USACE and Illinois EPA. An Individual Permit will require a Public Notice, may receive potential scrutiny from other federal and state agencies, and will take a minimum of 12 months.

VILLAGE OF ORLAND PARK STORMWATER MANAGEMENT PERMIT CERTIFICATION SUBMITTAL

It is anticipated that the Village will need a stormwater permit submittal for the project. The permit submittal will include the floodway/floodplain components described above but will also address stormwater requirements as well as wetland, waterway and buffer requirements. V3 will prepare a full Cook County Watershed Management Ordinance (WMO) submittal that the Village and MWRD can review internally or send to one of the selected review consultants.

NDPES ILR10 PERMIT/SWPPP PERMITTING

Since the project will disturb more than one acre, an ILR10 permit will be required from IEPA before construction can begin. The Notice of Intent (NOI) will be submitted after finalizing the design (depending on design modifications) and it typically takes 30 – 45 days to get approval. The SWPPP will also include the necessary erosion control plans, notes and details to obtain a permit from Cook County Soil and Water Conservation District as part of the USACE permitting.

PROPOSED PROJECT SCHEDULE

Tinley Creek Streambank Stabilization

Topographic Survey — June 2021

Stream Walk & Photo Documentation — June 2021

Wetland Delineation & Field Verification — June 2021

Complete Final Design Plans — December 2021

PROPERTY EASEMENT ACQUISITION

2022

Receive All Permits — January 31, 2023*

100% Bid Document Preparation — January 2023

Bid Phase — February/March 2023

BEGIN CONSTRUCTION

Summer 2023

Complete Construction — Spring 2024

Complete Dormant Seeding — Winter 2023

Complete Plant Plug Installation — May 2024

Begin Year one of M&M** — July 2024

Complete Year Three of M&M** — September 2026

Submit Final Monitoring Report — December 2026

OBTAIN AGENCY SIGN-OFF

May 2027

*USACE will take at least 1 year

**Management and monitoring

SECTION 2

SCOPE OF WORK

Project Details

BACKGROUND

The Tinley Creek in the Village limits is a private creek that is owned by private homeowners and Homeowners' Associations located along the creek. In 2012, the Village and the Metropolitan Water Reclamation District of Greater Chicago (MWRDGC) collaborated and initiated a project to stabilize Tinley Creek streambanks. The MWRDGC retained Michael Baker Jr., Inc. of Chicago to prepare the design, specifications and costs estimates (referred in this RFP as Baker's Plan). The Baker's Plan was completed in 2014 (98% complete). The Baker's Plan is attached with this RFP for proposer's review and use. The 2014 design was reviewed and approved by MWRDGC. However, at the time, most of the impacted property owners did not accept easement conditions needed to construct the project. This caused the project to stall for several years.

Now, based on continued erosion of streambanks and risks to existing properties, the Village and MWRDGC are collaborating again to restart and complete the project. In late 2020, the Village organized an in-person public meeting to explain to the residents the erosion issues and Village's/MWRDGC's continued interest to complete the project. The MWRDGC representatives attended and participated in the meeting as well. The outcome of the public meeting shows that there is an overall interest by most residents to complete the project. Additionally, the project was presented to the Village Board of Trustees and the Village leadership is in support of restarting the project, if the impacted property owners accept the easement requirements and pay for the long-term maintenance of improvements.

One of the requirements that came out of the public meeting is that the property owners want to see the details of what will be done to their individual properties to stabilize the streambanks. Therefore, one of the deliverables of this RFP will include preparing separate exhibits that will be shared with each impacted property owner.

The selected consultant will be required to prepare permanent and temporary easement documents that can be used to execute easement agreements with individual property owners and Homeowners' Associations. The easement agreements will be prepared and executed by the Village. It is Village's opinion that a property acquisition consultant will not be needed for the project.

The selected consultant will also be required to identify properties that are not critical for the successful stabilization of streambanks. This possibility will only be utilized if some impacted property owners do not agree to easement conditions. In that case, those properties will be removed from the project.

The Village and MWRDGC are providing engineering and construction funding for this project with the Village leading the project including consulting and construction contracts and project management services. There are project elements that are paid through MWRDGC funds and other elements are entirely Village's responsibility. The selected consultant will be required to prepare cost estimates that separately show the two elements for the two government agencies (Village and MWRDGC).

It is required that the selected consultant performs a detail review of Baker's Plan. This will include review of 2014 design and specification documents, confirmation/update of topographic surveys, field observations to confirm if previously proposed improvements are still applicable, develop updated or new improvement details, and all other related work. It is important and advantageous for the consultants to use Baker's Plan, to the extent possible, to reduce design and engineering efforts and costs.

PROJECT LIMITS

The entire creek within the Village limits is included in this project. Refer to the attached Figure 1 as a guide. In general, the project limits of the Baker's Plan are from 151st Street at the northern end to 162nd Street and Laurel Drive at the southern end. The original Baker plan included approximately 0.9 miles of Tinley Creek. Now, the overall project limit is approximately 1.4 miles long, an additional 0.4 miles of Tinley Creek is added to the project for potential streambank stabilization improvements.

Incremental additions to the scope of services include the portion of Tinley Creek between Wheeler Drive and 86th Avenue and a portion from Crystal Creek Drive to 162nd Street south of 159th Street. It is Village's opinion that the Wheeler Drive to 86th Avenue may not threaten structures; it does impact the Orland Brook Condominium Association's property and the pool area. Additionally, the erosion in this area may be severe, continues to degrade streambanks, and impacting the quality of water in the creek. The Crystal Creek Drive area may also have areas with steep slopes and eroding banks.

SCOPE OF SERVICES

The following is the proposed V3 scope of services based on the Village's RFP.

1. Provide overall project management and coordination services. This includes review of ongoing activities, monitor schedule and budget, and communicate with the Village and where needed, with MWRDGC.

   V3 concurs with this scope item and will provide the project management and coordination tasks.

2. Lead and manage project kick off and coordinate meetings. This include conducting monthly (or bi-monthly meetings if recommended by the selected consultant) throughout the design to update on progress and to bring issues to the Village's attention for timely action.

   V3 will prepare for and attend up to seven (7) monthly project meetings through the duration of the project, which is anticipated to take approximately 6 months, not including the permitting review and response.

3. Review previously completed design documents prepared by Michael Baker Jr., Inc., of Chicago, Illinois (attached with the RFP). These design documents were 98% complete. These include but not limited to design plans, environmental, and geotechnical data.

   V3 will review and utilize to the extent possible, the Michael Baker Jr., Inc. plans for Tinley Creek Bank Stabilization. These 98% construction documents cover 0.9 miles of the 1.4 miles total anticipated project.

4. Meet with MWRDGC to understand and collect streambank stabilization design requirements and criteria. All designs and improvements (update/revise or new) must meet MWRDGC requirements or guidelines and streambank stabilization best practices.

   V3 has extensive experience with MWRDGC design requirements, permitting standards and construction guidelines. V3 has done multiple projects for MWRDGC in the past 5 years – both from a design and self-perform construction aspect. V3 will meet with the MWRDGC to confirm permitting, design/CAD standards, bid specifications, MWRDGC formatted cost estimating, and other special project requirements that may apply to this Tinley Creek Bank Stabilization project.

5. Perform visits to each impacted site where improvements were proposed in Baker's Plan. The intent of these visits is to review site features for consistency with the Baker's Plan.

   V3 will complete a full Tinley Creek walk down of the anticipated stabilization area to visually assess and photo document existing conditions in 2021. This walk down is critical to understand the modifications required for the Baker plans and identify critical design issues, such as at-risk structures, power poles, fences, sewer lines and other potentially failing public and private infrastructure. These critical areas will receive additional design attention, and potentially additional detailing, during the stabilization design process.

6. Update and/or replace existing topographic surveys as needed. It is Village's opinion that a significant update or complete replacement of topographic survey would be required due to the substantial increase in banks erosion and slope failures which the Baker's Plan may neither captured nor contemplated.

   V3 will complete a full topographic survey update of the Baker section (0.9 miles), along with completing new topography along the 0.4 mile new section identified as part of this project.

   Topographic survey includes all tree locations which are 6" in diameter and larger. However a tree survey (size, type, condition) is not included in this scope of services and can be provided as an additional service if required by the Village or a regulatory agency.

7. Develop a photographic record of the existing conditions of streambanks (both sides). This record will be used as a baseline and will be compared with any future, unauthorized changes to the banks by the residents, Homeowners' Associations, or other entities. It is consultants' choice how they collect and provide this information to the Village. All of the properties (with addresses) along the creek and photographs must correlate to each other.

   Given the timing of this design contract, V3 believes that tree leaf cover will cause visual impact for the ability to perform a drone flight of the Tinley Creek corridor. In addition, V3 engineers and scientists will be best suited to identify design constraints through a full creek walk. Therefore, V3 plans to achieve this photographic record by traditional means of field walk and photo documentation. The photos will be geospatially located in GIS to quickly and efficiently tag them to each of the property addresses along the creek and create photo exhibits. V3 has extensive experience in this documentation process for similar bank stabilization projects and GIS exhibit creation.

   Topographic survey will include location and size of trees equal to or larger than 6" diameter, but does not include individual tree survey for tree tagging, type and condition. This can be provided for an additional fee, if requested by the Village or a regulatory agency.

8. Update/revise streambank stabilization design included in Baker's Plan. Prepare new designs, if needed. The design elements should include extension of streambank, additional streambank treatment, and reduction or elimination of in-stream practices not focused on addressing or minimizing erosion.

   V3 concurs with this scope item and will update the Baker Plans accordingly.

9. Add missing creek section (identified in blue in Figure 1) and complete design of streambank stabilization.

   V3 will apply similar bank stabilization methods through the new 0.4 mile section of Tinley Creek.

10. Update/revise and/or develop new specifications including general notes and other related information. The specifications must meet MWRDGC requirements and design guidelines.

    V3 has extensive experience with MWRDGC design requirements, permitting standards and construction guidelines. V3 has done multiple projects for MWRDGC in the past 5 years – both from a design and self-perform construction aspect. We will update or develop new specifications as needed for this Tinley Creek Bank Stabilization project.

11. Submit design documents to the Village and MWRDGC at 30%, 60%, and 90% design stages for reviews. Incorporate comments as appropriate. The 60% and 90% documents should also include estimated construction costs. The cost estimates shall include separate bid items for project elements within MWRDGC scope (identified in red in Figure 1) and those that are entirely Village's responsibility (identified in blue in Figure 1).

    V3 will provide design plan review at the required stages and incorporate comments from both MWRDGC, the Village and permitting agencies. V3 is familiar with the MWRDGC format of cost estimating and will provide the required detail. We will also break out the bid line items between MWRDGC and Village within the estimate. V3's professional construction estimators provide contractor-level cost estimates. Our contract-level construction estimates are unique to V3 as we utilize our expertise in contractor bids for earthwork and underground utilities of similar projects. Working with V3's cost estimators during engineering design provides real-world cost estimates for Village's planning purposes and allows the project to more closely match the project budget. This allows for proper identification of bid alternates to maximize scarce public funding and any grant dollars and reduces the need for re-design or re-bidding after a project is let.

12. Prepare separate exhibits for impacted property owners. The exhibits must show details of improvements including permanent and temporary easement limits. These exhibits will be shared with the property owners, comments will be collected, and designs will be adjusted if needed and approved by the Village and MWRDGC.

    V3 will prepare separate exhibits for each impacted property owner along the Tinley Creek Bank Stabilization corridor. The exhibits will include easements and proposed bank stabilization improvements.

13. Prepare permanent and temporary easement documents that can be used to execute easement agreements with individual property owners and Homeowners' Associations. The easement agreements will be prepared and executed by the Village. It is Village's opinion that a property acquisition consultant will not be needed for the project.

    V3 will prepare one (1) survey document of the permanent and temporary easement per impacted property owner. It is our understanding that these documents do not include legal document preparation or involve any exhibit revisions for easement revisions that may be requested by the property owner or the Village during property owner negotiation.

14. Identify properties that are not critical for the successful stabilization of streambanks.

    V3 will identify properties within the corridor that are not critical for successful stabilization.

15. Prepare and attend one public meeting to share and discuss streambank stabilization improvements.

    V3 will prepare for and attend one (1) public meeting with the Village and community participants.

16. Prepare and attend meetings with individual property owners and Homeowners' Associations to discuss and share improvements and impacts to their properties.

    Based on the Village's response to Q&A 2, it is V3's understanding that five (5) individual property owner meetings are anticipated for this project. In addition, V3 has provided a per meeting price in the fee for any additional meetings requested.

17. Prepare estimated construction costs for improvements. The overall construction budget of this project is approximately $6million. If the cost estimate exceeds project budget, work with the Village and MWRDGC to implement Value Engineering (VE) elements to bring the costs within the available budget.

    V3 will prepare total project cost estimating to achieve the $6million budget. V3's professional construction estimators provide contractor-level cost estimates. V3's professional construction team and professional cost estimators will work directly with the MWRDGC and Village to implement Value Engineering (VE) if required to more closely match the project budget and the anticipated construction costs. V3 is unique in the industry to have this in-house expertise in self-perform bank stabilization to accomplish these VE tasks.

18. Prepare annual Operation and Maintenance (O&M) costs of the streambank improvements over a 20-year period.

    V3's Ecological Restoration group is annually involved with over 50 native area maintenance projects. The V3 Team is well versed in bank stabilization maintenance and vegetative control for similar projects and we will prepare the O&M requirements and cost estimate for this Tinley Creek Bank Stabilization project.

19. Prepare and present the project to the Village Board of Trustees, if requested by the Village.

    V3 will prepare for and attend one (1) public meeting with the Village Board of Trustees.

20. Update or submit new permit applications, and acquire all applicable permits from various government agencies including MWRDGC and Army Corps of Engineers.

    V3's permitting approach is discussed in detail within the Project Understanding section. We will assist the Village and MWRDGC in obtaining permits from the IDNR-OWR, MWRDGC, USACE, SWCD, Village of Orland Park and IEPA for this bank stabilization project. It should be noted that the USACE permit will be an Individual Permit, based on the length of hard armor protection and amount of stream impacts associated with this project. Individual Permits through the USACE Chicago District have been taking approximately 12-15 months, and will likely be the critical path for the approvals and construction start of this project.

21. Prepare a complete PS&E document that will be used by the Village to solicit bids from qualified contractors.

    V3 will prepare the PS&E document for soliciting bids from qualified contractors.

22. Assist the Village staff in developing the Invitation for Bids including developing criteria for contractors' qualifications and selection.

    V3 will prepare the Invitation to Bids and develop contractor qualification criteria for this specific bank stabilization project.

23. Prepare an estimated construction schedule for improvements. Include Gantt charts for graphical presentation.

    V3 will prepare a construction schedule in Gantt chart format.

24. Include other scope of services needed to complete the project and deliver all of the required deliverables.

    Hydraulic Modeling: V3 understands that sections of the Baker Plans include fill associated with hard armoring and structural walls where the typical acceptable fill associated with IDNR-OWR floodway construction permitting (1 CY per running foot) is likely violated. This additional fill to accomplish wall construction and handle critical infrastructure/structure protection will need to be modeled in HEC-RAS. V3 will obtain prior hydraulic modeling from the MWRD or Village and update based on new topography. V3 will use this updated hydraulic modeling to accomplish the regulatory floodway construction model that is required for IDNR-OWR and MWRD floodway/ floodplain permitting.

    Wetland Delineation & Verification: V3 understands that the entire stream corridor requires a new wetland delineation in order to update the prior wetland boundary which has expired. V3 will complete the field data, establish wetland and Water's delineation boundary and write the Delineation Report. V3 will coordinate with USACE and MWRD to obtain wetland & Water's boundary verification for Tinley Creek streambank stabilization project area. This wetland delineation has been included in our services fee. Tree identification survey and archeology survey are specifically excluded from this scope of services and not anticipated to be required for the project. V3 can provide these services if required by the Village or regulatory agency.

    Geotechnical Borings: Based on the proposed structural walls within the Baker section, V3 will confirm that sufficient geotechnical boing data is available to design these walls and foundations. V3 will also include an allowance for geotechnical borings for the newly added section of Tinley Creek stabilization. We do not anticipate requiring geotechnical borings through this new section, so this fee is a placeholder in case it becomes apparent through the preliminary design process that a structural wall is necessary.

CCDD Testing: Given the required bank reshaping and stabilization methods identified on the Baker plans, V3 believes that some soil material may be required to be exported from the project site. To minimize the costs of that material export, a Clean Construction Demolition Debris (CCDD) environmental form as required by Illinois EPA (either 662 or 663) should be completed for contractors to bid the soil export in this more cost-efficient manner. V3 has included hours to accomplish the CCDD testing and laboratory costs for the soil sample analysis.

CCDD testing assumes hand auger sampling (no drill rig) for a maximum of 5 samples within the project area. Analysis will include testing for VOC's, PNA's, RCRA 8 Metals and pH which are standard for most CCDD facilities in the area.

25. Develop a proposed scope of services (without professional fees) for construction engineering or construction observation services to implement the improvements. The Village may use this scope of services to solicit proposals from qualified consultants for construction engineering or construction observation services. The selected consultant for design services will be allowed to propose on the construction engineering/observation services.

    V3 will develop and deliver a construction engineering scope of services for the Village to solicit proposals for these construction observation tasks.

26. Assist the Village in reviewing bids collected by the Village for the construction of the project. The bidding process will be led and managed by the Village staff.

    V3 will provide a bid evaluation for the Village based on bid line item responses provided by qualified contractors. We understand that bid confirmation, reference checks, qualification verification and other responsive bid identification will be completed by the Village staff.

Special Conditions

A general design concern with the Baker's plan set is the stabilization areas that only call for regrading and blanket/seeding, but does not include toe scour protection such as riprap, coir fabric rolls, or staking. It is Village's opinion that in urban waterways, such as Tinley Creek, water velocities could reach up to 4 to 5 ft./sec. or higher multiple times a year, making it difficult for vegetation/seeds to establish in the streambanks. Also, the water quality in urban waterways is degraded due to the amount of impervious surface runoff and chlorides/road salt, as well as other pollutants, again adding to the difficulty of vegetation/seed establishing and providing a long-term erosion protection and stabilization. The selected consultant is expected to develop, recommend, and implement (if accepted by the Village and MWRDGC) structural scour protection or a combined structural and/or vegetative toe scour protection to all areas where stabilization is being proposed.

V3 acknowledges the Village's concerns related to flashy urban runoff and high velocity scour which is prevalent in so many similar stream systems across the Chicagoland area. Stone toe stabilization provides a more resilient and sustainable stabilization approach and will be incorporated into as much of the project as possible. However, in VE phases of this project, V3 may also identify the lower velocity zones (less than 4 feet per second) of Tinley Creek which may be able to be stabilized with less costly vegetated stabilization approaches (wrapped/vegetated soil lifts, bank regrading, flood plain terrace/shelf, etc.)

The selected consultant should review and consider including in the design documents brush clearing wherever non-native shrub species are present within the entire creek corridor. It is Village's opinion that the existing brush is non-native and is causing shade suppression to the banks which promotes accelerated bank erosion.

V3 acknowledges the persistent concerns associated with tree canopy and non-native/invasive trees and shrubs which act to shade the understory and banks of a stream and minimize native grass and forb species growth. Removal of these problem trees and bushes will be incorporated into the design and vegetation control aspects of the O&M Plan.

The estimated proposed budget for improvements is $6 million. The selected consultant should consider this budget when developing and proposing streambank stabilization solutions.

V3 has extensive experience in bank stabilization and stream restoration construction. We self-perform earthwork, native vegetation installation, storm sewer installation and native vegetation maintenance. V3 is also engaged annually by the Village of Orland Park to provide restoration and maintenance on approximately 25 stormwater basins throughout the Village. We have a contractor-level understanding of the means, methods, access, equipment and costs associated with the Tinley Creek Bank Stabilization project. The Village will benefit from the involvement of our construction professionals throughout the design process to obtain a $6miillion dollar construction project.

The consultants are encouraged, not required, to make a good faith effort to use qualified Minority Business Enterprise (MBE), Women Business Enterprise (WBE), Small Business Enterprise (SBE) and Veteran Business Enterprise (VBE). If these business enterprises are used, please identify in your proposals names and percentages of their share in the project. This element will not be used as a decision making factor in the proposal evaluations.

V3 is self-performing all aspects of this Tinley Creek Bank Stabilization project.

SECTION 3

FIRM OPERATING HISTORY

OPERATING HISTORY

VISIO, VERTERE, VIRTUTE ... THE VISION TO TRANSFORM WITH EXCELLENCE

Launched in 1983, V3 Companies strongly adheres to our original vision to provide our clients with technical excellence and high-caliber project performance. Our name is indicative of that mindset, representing three Latin "V" words – "Visio," "Vertere," "Virtute" or "The Vision to Transform with Excellence."

Our focus on client service is designed to facilitate communication, encourage long-term relationships and allow us to better deliver the projects you expect. The key is for us to provide seamless, coordinated execution on our end, marshalling and deploying the right talent through a single point of contact so you can always get the information you need, when you need it.

Being employee owned, we view our obligation to excel on your project from a very personal viewpoint. This ownership structure provides all of our team members with the opportunity to serve you — and your transportation and infrastructure, site development and environment, water and natural resource project needs — with the care and concern of an owner.

QUICK FACTS

- *Founded in 1983*
- *240 Employees*
- *Corporation*
- *www.v3co.com*

SERVICES

- *Construction Engineering*
- *Highways & Traffic*
- *Railroads*
- *Structural*
- *Water Resources*
- *Wetlands & Ecology*
- *Geosciences*
- *Environmental*
- *Land Development*
- *Municipal Consulting*
- *Landscape Architecture*
- *Green Infrastructure*
- *Planning*
- *Surveying*
- *Contracting & Construction Management*

PROJECT OFFICE

7325 Janes Avenue
Woodridge, IL 60517
630.724.9200

CONTACT

Derrick Martin, P.E., CFM, CPESC
Project Manager
P: 630.546.6589
E: dmartin@v3co.com

SECTION 4

SIMILAR PROJECT EXPERIENCE

TINLEY CREEK STREAMBANK STABILIZATION DESIGN

CRESTWOOD, ILLINOIS

- V3 was contacted by Elim Christian Services when a section of their access drive was undermined by Tinley Creek during a significant storm event. V3 performed emergency bank assessment and provided guidance on how to limit additional damages and approach bank stabilization permitting for the remainder of the eroding creek banks.
- V3 identified five primary areas of concern along Tinley Creek within the Elim Campus including: two building structures, a sanitary lift station, a parking lot and the already impacted access road. These areas of concern were at risk to potential structural damage if additional bank erosion occurred in the vicinity.
- The estimated cost of bank erosion repair was almost $500,000.
- V3 contacted the Metropolitan Water Reclamation District of Greater Chicago to discuss bank stabilization options, and facilitated the meeting which led to the assistance of the District's bank repair team to accomplish the stabilization at no labor or equipment cost to the Elim Christian Services, as long as permits were obtained and suitable rock material could be delivered to the site.
- V3 successfully obtained permits from the IDNR-OWR and USACE for bank stabilization activities.
- At the same time, V3 was on a nearby project that had an excess of broken concrete and rip-rap material that needed to be exported from the site. The rock volume exceeded what was necessary for the Elim Campus stabilization project, so V3 delivered this free resource to Elim to save all material costs for the project.
- Through these coordination efforts, V3 was able to turn this $500,000 unfunded construction project into a $25,000 engineering services project that was feasible for Elim to fund and protected the vulnerable structures from further impact.

CLIENT

Elim Christian Services

CONTACT

Scot Achterhof

13020 South Central Avenue
Palos Heights, IL 60463

P: 708.389.0555

E: andrew.achterhof@elimcs.onmicrosoft.com

SCHEDULE

September 2015 – August 2017

SERVICES

- *Constructability Reviews*
- *Construction Cost Estimating*
- *IDNR-OWR Floodway Permitting Assistance*
- *MWRDGC Permitting Assistance*
- *Natural Area Planting Design, Specification, Construction & Monitoring*
- *Stream Restoration & Bank Stabilization Design/Build & Management*
- *USACE Wetland Permitting Assistance*
- *Wetland Delineation & Assessment*

TINLEY CREEK STREAMBANK STABILIZATION CONSTRUCTION

CRESTWOOD, ILLINOIS

- V3 Companies and Industria partnered to complete this flood control/ streambank stabilization project on Tinley Creek for the Metropolitan Water Reclamation District of Greater Chicago.
- Approximately 2,600 linear feet of Tinley Creek was improved with three distinct stabilization styles:
  - → Area one included extensive widening of the existing creek corridor creating bankfull benches that were planted with native trees, shrubs and plantings. Area one also included the installation of nine pool and riffle structures.
  - → Area two involved resloping of the creek banks and the subsequent armoring of the banks with approximately 2,000 ton of RR-5 Rip Rap; native trees, shrubs and seed were installed on the banks above the rip rap.
  - → Area three involved the armoring of the banks with approximately 1,200 linear feet of nine-foot-tall Gabion basket walls.

CLIENT

Metropolitan Water Reclamation District of Greater Chicago & Industria

CONTACT

Justin Kirk

100 East Erie Street
Chicago, IL 60611

P: 312.751.3171

E: Justin.Kirk@mwrd.org

SCHEDULE

September 2015 – August 2017

VALUE

Construction Cost: $3,000,000

ROLE

Contractor

SERVICES

- *Dewatering*
- *Excavation*
- *Shoreline Stabilization*
- *Boulder/Stone Placement*
- *Erosion Control Installations*
- *Storm Sewer Installation*
- *Water Main Installation*
- *Construction Layout*

ADDISON CREEK STABILIZATION

NORTHLAKE & NORTH RIVERSIDE, ILLINOIS

- V3 along with our partner Industria provided construction contracting services for this $1.6-million streambank stabilization of two locations on Addison Creek.
- The work included bank grading, rip rap installation, erosion control and rock toe.
- Implementation of the improvements required a detailed in-stream work plan that included coffer dam installation and bypass pumping of active flow. Detailed include:
  - → 1,100 lineal feet of creek and 2,200 lineal feet of streambank near West Fullerton Avenue at King Arthur Drive in Northlake, Illinois.
  - → 560 lineal feet of creek and 1,120 lineal feet of streambank south of Cermak Road along South 19th Avenue in North Riverside, Illinois.
  - → 400 linear feet of A-Jacks shoreline protection.
  - → 1,850 linear feet of dual rock toe installation.
  - → 2,400 linear feet of vegetated geogrid.
  - → One acre of turf reinforcement mat.

CLIENT

Metropolitan Water Reclamation District of Greater Chicago

CONTACT

Lee Welsh

100 East Erie Street
Chicago, IL 60611

P: 312.751.3172

E: WelshL@mwrd.org

SCHEDULE

February 2019 – February 2021

VALUE

Construction Cost: $1,600,000

ROLE

Contractor

SERVICES

- *Drainage Structure Installation*
- *Earthwork*
- *Erosion Control Installations*
- *Stone Shoreline Stabilization*
- *Native Vegetation Installation & Maintenance*

SKOKIE RIVER STREAMBANK STABILIZATION (DESIGN & PERMITTING)

LAKE FOREST, ILLINOIS

- This project involved the stabilization of severely eroding streambanks along one mile of the Skokie River in Lake Forest.
- The purpose of the project was to protect private properties and infrastructure from damage due to erosion by proposing streambank stabilization of 10,266 linear feet along the east and west banks of the Skokie River.
- As part of the design process, V3 conducted a topographic survey, tree survey, wetland delineation and walked the entire stream corridor to document the extent and severity of the erosion.
- Based on the severity of existing erosion, V3 provided stabilization designs using the following approaches: 3,986 linear feet of gabions, 5,344 linear feet of natural or stone toe protection and 936 linear feet of bank reshaping.
- The proposed stabilization measures were designed to address the specific needs of each stretch of the river based on a detailed analysis of the severity and height of the erosion, the proximity to residential structures and fences and flow velocities in the river. Selective tree removal will occur where required to install the stabilization features. Tree replacements and the planting of native vegetation will occur where feasible.
- Design and permitting strategy incorporated constructability discussions with V3 construction professionals related to access, construction timing, equipment size, temporary erosion control and limiting impacts to stream and riparian habitat.
- To obtain site access and best utilize the scarce budget dollars available for this type of work, V3 provided construction phasing to stagger the $3-million project. In addition, V3 provided grant evaluation and consulting, and grant funds were successfully obtained for the project.
- V3 experts participated in multiple public and stakeholder meetings to provide a technical understanding of the project and education to the adjacent residents and local associations. Two public information meetings have been held to inform local residents about the erosion problem and the proposed project design as well as construction logistics due to limited access to the river.
- V3 provided permit strategy assessment to most efficiently navigate the various regulatory agencies and obtained permits from the USACE, Illinois EPA, IDNR-Office of Water Resources, Lake County Stormwater Management Commission and City of Lake Forest.

CLIENT

East Skokie Drainage District

CONTACT

Bryan Winter

9 North County Street, Suite 200
Waukegan, IL 60085

P: 847.244.0770

E: bwinter@fuquawinter.com

SCHEDULE

May 2018 – June 2020

SERVICES

- *Bank Stabilization Design*
- *Constructibility Reviews*
- *Construction Cost Estimating*
- *County Permitting Assistance*
- *Erosion & Sediment Control Design, Inspection & Management*
- *Hydrologic & Hydraulic Analysis*
- *IDNR-OWR Floodway Permitting Assistance*
- *Illinois EPA Permitting Assistance*
- *Natural Area Planting Design, Specification, Construction & Monitoring*
- *Project Presentations to Local Residents*
- *Schedule Preparation & Analysis*
- *Stream Restoration & Bank Stabilization Design/Build & Management*
- *Threatened & Endangered Species Studies*
- *Topographic Mapping & Tree Survey*
- *USACE Wetland Permitting Assistance*
- *Wetland Delineation & Assessment*

SKOKIE RIVER STREAMBANK STABILIZATION (CONSTRUCTION)

LAKE FOREST, ILLINOIS

- This project included stabilization of more than 10,000 linear feet of streambank on both sides of a one-mile, severely eroded stretch of the Skokie River.
- Scope of work included:
  - → 4,000 linear feet of gabion walls
  - → 5,350 linear feet of native vegetation and stone toe protection
  - → 1,000 linear feet of bank reshaping and grading
  - → Isolated drainage repairs
- Access was severely limited through the residential area surrounding this section of the Skokie River.
- Bypassing the stream flow and managing the discharge was critical to the success of this project.
- Resident coordination was conducted on a daily basis as the work was being performed on sections of private backyard property.
- V3 provided design, permitting and construction contracting services for this $2.1-million project.

CLIENT

East Skokie Drainage District

CONTACT

Bryan Winter

9 North County Street, Suite 200
Waukegan, IL 60085

P: 847.244.0770

E: bwinter@fuquawinter.com

SCHEDULE

May 2018 – On-going

SERVICES

- *Dewatering*
- *Tree Removal*
- *Stream Bypass Pumping*
- *Shoreline Excavation & Stabilization*
- *Gabion Basket Construction (Four-Foot, Six-Foot, Nine-Foot)*
- *Rip Rap & Boulder Placement*
- *Erosion Control Installation & Maintenance*
- *Construction Layout*
- *As-Built Record Drawings*

ST. JOSEPH CREEK RESTORATION

DOWNERS GROVE, ILLINOIS

- V3 was awarded the design/build contract for the St. Joseph Creek Stream Restoration Project. The proposed improvements were designed to function in a complementary fashion to improve the overall water quality of St. Joseph Creek, Barth Pond and the receiving waters of the East Branch DuPage River. The project design involved the following features:
  - → Remeandering of 1,066 linear feet of the existing creek channel.
  - → Reestablishment of 496 linear feet of natural channel through a downstream wetland area.
  - → Placement of 1,118 linear feet of stone toe to repair existing erosion.
  - → Placement of seven riffles in the creek channel.
  - → Planting of 1,865 linear feet of shoreline plugs.
  - → Removal of non-native invasive species along the creek banks.
  - → Establishment of 0.88 acres of wet prairie where overbank areas will be flattened to increase the residence time of stormwater runoff and to create additional riparian habitat.
  - → Establishment of 0.82 acres of low profile prairie along the creek corridor. Both the wet prairie and prairie will also provide a transition zone between the creek and residential areas.
  - → Replacement of culverts under Lyman Avenue and Fairmount Avenue. The culvert replacements are required to match the restored stream profiles and hydrology of the restored creek channel. Additionally, the proposed culverts have a higher conveyance capacity which will help alleviate flooding in the upstream corridor.
- The USACE issued Regional Permit 5, Aquatic Habitat Restoration, for the project. Hydrologic and hydraulic modeling was conducted to evaluate floodplain conditions as part of the Village of Downers Grove stormwater permit. A letter of map revision will be required upon completion of the project.

CLIENT

Village of Downers Grove

CONTACT

John Welch

801 Burlington Avenue
Downers Grove IL 60515

P: 630.434.5494

E: jwelch@downers.us

SCHEDULE

October 2019 – On-going

SERVICES

- *County Permitting Assistance*
- *Erosion & Sediment Control Design, Inspection & Management*
- *FEMA Floodplain Permitting Assistance*
- *Hydrologic & Hydraulic Analysis*
- *IDNR-OWR Floodway Permitting Assistance*
- *Natural Area Planting Design, Specification, Construction & Monitoring*
- *Stormwater Management Design & Permitting Assistance*
- *Stormwater Pollution Prevention Plan Reporting*
- *Stream Restoration & Bank Stabilization Design/Build & Management*
- *Threatened & Endangered Species Studies*
- *Topographic Mapping*
- *USACE Wetland Permitting Assistance*
- *Wetland Delineation & Assessment*

WESTWOOD CREEK STREAMBANK STABILIZATION

ADDISON, ILLINOIS

- This $683,500 project consisted of bank stabilization for approximately 1,200 lineal feet of Westwood Creek.
- The stabilization included:
  - → 1,120 lineal feet of gabion basket walls ranging from 4.5 to 7.5 foot tall.
  - → 2,200 lineal feet of RR-5 Riprap toe protection.
  - → 1,500 cubic yards of creek bank excavation and off-site disposal.
  - → A half acre of native seed and blanket installation.
  - → Installation of approximately 1,000 emergent wetland plugs.
- An extensive in-stream work plan was devised and implemented by V3 including by-pass pumping of the existing creek flows and work zone dewatering utilizing polyacrylamide for turbidity reduction and sediment control.

CLIENT

Village of Addison

CONTACT

Rick Federighi

1491 Jeffrey Drive
Addison, IL 60101

P: 630.620.2020

E: rfederighi@addison-il.org

SCHEDULE

May 2014 – August 2015

VALUE

Construction Cost: $683,500

ROLE

Prime Contractor

SERVICES

- *Dewatering*
- *Excavation*
- *Shoreline Stabilization*
- *Boulder/Stone Placement*
- *Erosion Control Installations*
- *Native Seeding*
- *Native Plug Planting*
- *Tree Clearing*
- *Construction Layout*

SIMILAR PROJECT EXPERIENCE

ADDITIONAL BANK STABILIZATION PROJECTS SINCE 2011

BANK STABILIZATION SANGAMON RIVER
Client: ComEd

BROOK PRAIRIE RETAINING WALL
Client: Naperville Park District

CRABTREE CREEK BANK STABILIZATION
Client: Village of Woodridge

FOREST PRESERVE IMPROVEMENTS AT VARIOUS LOCATIONS
Client: Forest Preserves of Cook County

FOSS PARK STREAMBANK STABILIZATION
Client: East Skokie Drainage District

FOX VALLEY PARK STREAMBANK STABILIZATION
Client: Fox Valley Park District

GREAT RIVERS GREENWAY DESIGN GUIDELINES
Client: SWT Design & Great Rivers Greenway

HIGGINS & MCDONALD CREEK STABILIZATION
Client: Industria & Metropolitan Water Reclamation District of Greater Chicago

INDIAN CREEK & SELMARTEN CREEK ALTERNATIVES ANALYSIS
Client: Kane County

LACEY CREEK EMERGENCY BANK STABILIZATION
Client: Downers Grove Sanitary District

LACEY CREEK STREAMBANK STABILIZATION
Client: Downers Grove Sanitary District

LANCER CREEK BANK STABILIZATION
Client: Schaumburg Park District

LINCOLN GREENWAY FEASIBILITY & SHORELINE RESTORATION
Client: Naperville Park District

MALLARD LAKE FOREST PRESERVATION CHANNEL RESTORATION & STABILIZATION
Client: Forest Preserve District of DuPage County

PRENTISS CREEK RESTORATION
Client: Village of Downers Grove

STATEWIDE DAM REMOVAL PERMITTING & CONSTRUCTION MANAGEMENT
Client: Illinois Department of Natural Resources Office of Water Resources

STONEY CREEK LARE FEASIBILITY STUDY
Client: Delaware County Soil & Water Conservative District

THORNE CREEK STREAMBANK STABILIZATION
Client: Joseph J. Henderson & Son Inc

WEST DUNDEE BANK STABILIZATION
Client: Village of West Dundee

WEST FORK STREAMBANK STABILIZATION
Client: Union Drainage District No. 1

WESTWOOD CREEK STREAMBANK STABILIZATION
Client: Village of Addison

WOODSIDE HOLE #2 STREAMBANK STABILIZATION & FAIRWAY GRADING
Client: Cantigny Golf Course

SECTION 5

PROJECT TEAM QUALIFICATIONS

ORGANIZATIONAL CHART

Tinley Creek Streambank Stabilization

PROJECT MANAGER
Derrick Martin, P.E., CFM, CPESC

QA/QC
Greg Wolterstorff, P.E.

PROJECT ENGINEER
Dave Vogel, P.E.

PERMITTING
Tom Slowinski, PWS

DESIGN ENGINEER
Spencer Veltema, EIT

PROJECT ECOLOGIST
Andrea Pini

CONSTRUCTIBILITY & COST ESTIMATING
Mike Famiglietti, P.E.

SOIL SCIENTIST & WETLAND DELINEATION
Alicia Metzger, CPSC, PWS

STREAMBANK DESIGN CONSTRUCTIBILITY
Dianna Johnson

DERRICK MARTIN, P.E., CFM, CPESC | PROJECT MANAGER

23 Years of Experience

Derrick is V3's Water Resources Group Leader and manages projects involving hydrologic and hydraulic analysis and design for stream and lake restoration, bank and shoreline stabilization, dam removal, roadway and site development floodplain and stormwater management, watershed studies and existing drainage assessment and remediation. He has a comprehensive understanding of federal, state and local stormwater regulations and remains current as a Certified Floodplain Manager and a Certified Professional in Erosion and Sediment Control. His hands-on field experience includes shoreline and streambank stabilization/restoration projects as well as erosion and sediment control issues.

Projects: Tinley Creek Streambank Stabilization, Skokie River Stream Bank Stabilization, St. Joseph Creek Restoration.

GREG WOLTERSTORFF, P.E. | QA/QC

25 Years of Experience

Greg is the Director of V3's Natural Resources group. His experience in complex water resource projects includes public involvement and input processes, selection of bank stabilization alternatives and development of creative, feasible and cost effective solutions. Greg is passionate about meeting V3 client needs with creativity, sustainability and practical solutions. His experience includes project entitlements, hydrologic and hydraulic studies, FEMA permitting, dam modification/removal, urban drainage remediation, bank stabilization and identification and remediation of water quality and erosion control problems.

Projects: Tinley Creek Streambank Stabilization, Skokie River Stream Bank Stabilization, St. Joseph Creek Restoration.

DAVE VOGEL, P.E., CFM, CPSWQ | PROJECT ENGINEER

17 Years of Experience

Dave has extensive experience in water resources engineering and drainage remediation, which makes him a valuable addition to any watershed improvement project. He has experience in obtaining project funding through FEMA grant applications as well as leading the public involvement process. Dave is trained in a variety of related software applications including ArcGIS, HEC-RAS, XPSWMM, HEC-HMS and HydraFlow.

Projects: Dave has significant experience with hydraulic and hydrologic modeling. See resume for more details.

TOM SLOWINSKI, PWS | PERMITTING

44 Years of Experience

Tom is a Certified Professional Wetland Scientist, a Certified Wetland Specialist and a Qualified Wetland Review Specialist with experience in wetland delineations, federal and county wetland permitting and wetland mitigation design and implementation. Before entering consulting in 1989, Tom was Chief, Regulatory Branch, Chicago District, USACE. Tom serves as V3's Project Manager for large scale wetland and ecological restoration design projects. He also provides technical oversight and quality control for all aspects of wetland and ecological restoration design for public and private sector projects including: wetland delineations and assessments; wetland restoration design, development of permitting strategies to obtain permits in a timely manner; preparation, submittal, and coordination of permit applications submitted to USACE, IDEM, IDNR county and local agencies; and preparation and implementation of wetland and wetland buffer mitigation plans and designs including annual monitoring and ecological management.

Projects: Tinley Creek Streambank Stabilization, Skokie River Stream Bank Stabilization, St. Joseph Creek Restoration.

SPENCER VELTEMA, EIT | DESIGN ENGINEER

3 Years of Experience

Spencer's experience includes sanitary sewer, storm sewer, water distribution systems, hydraulic analysis and design. His primary responsibilities include stormwater engineering, erosion control design and inspection, hydrologic and hydraulic modeling, technical writing, project permitting and construction inspection. He is experienced in several engineering and design platforms including ArcGIS, AutoCAD, XP-SWMM, HEC-HMS and HEC-RAS.

Projects: Skokie River Stream Bank Stabilization.

ANDREA PINI | PROJECT ECOLOGIST

11 Years of Experience

Andrea's experience is in performing all activities related to native area creation and maintenance including chemical and mechanical weed control, native plantings, soil preparations and seeding, select tree clearing as well as installation of erosion control measures. Her combined technical and practical understanding related to design and construction for native plant community establishment and long-term stewardship has given her a comprehensive understanding of project implementation and project design. Andrea is responsible for preparing and reviewing designs for creation, restoration, and native landscaping projects with best management practice components, such as bioswales, naturalized detention basin, vegetated swales and native landscaping.

Projects: Tinley Creek Streambank Stabilization, Westwood Creek Streambank Stabilization.

ALICIA METZGER, CPSC, PWS | SOIL SCIENTIST & WETLAND DELINEATION

9 Years of Experience

Alicia is a Certified Professional Soil Classifier and Professional Wetland Scientist responsible for conducting wetland delineations, including farmed wetland determinations, assisting with wetland mitigation design and managing GIS data. She performs all aspects of soil mapping and classification including color, texture and structure as well as identification of hydric indicators to assist in defining wetland boundaries. Alicia has also conducted soil analyses for top soil depth, organic carbon content, soil profile classification and water table depth for urban, agricultural and recreational developments. She uses her advanced cartography skills to produce descriptive maps that characterize and classify features in ArcGIS and CAD programs.

Projects: Tinley Creek Streambank Stabilization, Skokie River Stream Bank Stabilization, St. Joseph Creek Restoration.

MIKE FAMIGLIETTI, P.E. | CONSTRUCTIBILITY & COST ESTIMATING

29 Years of Experience

As the Director of Construction and Ecological Restoration at V3, Mike will provide constructibility reviews and cost estimating for this project and interact with team members to deliver the project in accordance with the project commitments. He will offer technical insight and reviews of the project procedures, logistics, bidding, constructability reviews, staging, budget and scheduling. Mike's experience in the construction industry includes expertise in the management and execution of ecological, site development, infrastructure and building projects.

Projects: Tinley Creek Streambank Stabilization, Addison Creek Stabilization, Skokie River Stream Bank Stabilization, Westwood Creek Streambank Stabilization.

DIANNA JOHNSON, P.E. | STREAMBANK DESIGN CONSTRUCTIBILITY

19 Years of Experience

Diana has been managing construction projects for nearly 20 years and has specifically focused her efforts towards ecologic restoration. Her experience in both design and construction facilitate expedient resolution of constructability and design conflicts. Her project experience includes working with municipalities and Forest Preserves on a variety of projects including stream bank stabilization, multi-purpose trail construction and park developments. She has recently completed projects like Hidden Lakes Forest Preserve for the Forest Preserve of DuPage County, McDowell Grove Dam Modifications for DuPage County and the Fort Sheridan Forest Preserve for the Lake County Forest Preserves.

Projects: Diana has extensive experience with bank stabilization and native restoration projects. See resume for more details.

DERRICK MARTIN, P.E., CFM, CPESC

PROJECT MANAGER

Derrick is V3's Water Resources Group Leader managing projects involving hydrologic and hydraulic analysis as well as design for roadway and site development floodplain and stormwater management, watershed studies, stream and lake restoration, bank and shoreline stabilization, existing drainage assessment and remediation. He has a comprehensive understanding of pertinent federal, state and local stormwater regulations and has extensive experience working hand in hand with municipalities in the greater Chicago Area. His hands-on field experience includes shoreline and streambank stabilization/restoration projects as well as erosion and sediment control issues.

YEARS OF EXPERIENCE

V3: 22 | Total: 24

EDUCATION

Bachelor of Science, Civil Engineering, Washington University

Bachelor of Arts, Mathematics & German, North Central College

REGISTRATIONS

Professional Engineer: Illinois, #062-056276, 2003

Certified Floodplain Manager: #IL-04-00138, 2004

Certified Professional in Erosion & Sediment Control: Illinois, #3519, 2006

ASSOCIATIONS

Illinois Association for Floodplain & Stormwater Management

VOLUNTEER WORK

The Conservation Foundation

Tinley Creek Streambank Stabilization, Elim Christian Services – *Crestwood, Illinois* | Quality Assurance and Quality Control for emergency bank assessment and restoration design/build services after a significant rain event caused a section of drive to be undermined by Tinley Creek. V3 identified five primary areas of concern and facilitated meetings with MWRDGC who agreed to assist stabilization efforts using the District's bank repair team to accomplish the stabilization at no labor or equipment cost. Permits were obtained from the Illinois DNR-OWR and USACE and delivered an excess of broken concrete and rip-rap material from a nearby site. Through these coordination efforts, V3 was able to turn this $500,000 unfunded construction project into a $25,000 engineering services project.

Skokie River Stream Bank Stabilization, East Skokie Drainage District – *Lake Forest, Illinois* | Quality Assurance and Quality Control for prioritizing required stabilization needs of one linear mile of eroding streambanks on the Skokie River. Project included bank erosion assessment, survey and wetland delineation and V3 also provided stabilization designs, permit strategy assessment, construction staging limits, grant assistance and extensive stakeholder involvement.

St. Joseph Creek Restoration, Village of Downers Grove – *Downers Grove, Illinois* | Project Engineer for the design/build of proposed improvements to improve the overall water quality of St. Joseph Creek, Barth Pond and the receiving waters of the East Branch DuPage River. The project design included remeadering the existing creek, reestablishing a natural channel through a downstream wetland, various stabilization techniques and establishment of a wet prairie as well as low profile prairie along the creek corridor. The USACE issued Regional Permit 5, Aquatic Habitat Restoration, for the project. Hydrologic and hydraulic modeling was conducted to evaluate floodplain conditions as part of the Village stormwater permit.

Carpentersville Dam Removal, Forest Preserve District of Kane County – *Carpentersville, Illinois* | Project Manager for dam removal design and permitting services of a 10-foot-high, low-head, concrete dam within the Fox River. V3 determined ways to use the existing, historic mill races to bypass water during construction. Services included conducting a bathymetric survey, sampling and testing for environmental concerns, hydraulic modeling, wetland delineation upstream and downstream as well as water management, cost estimating and feasibility review. A riffle or rock feature will be incorporated into V3's restoration design to preserve the site

as a valuable destination and sense of place for the community.

Black Partridge Bank Stabilization, Village of Woodridge – *Woodridge, Illinois* | Project Manager for this bank stabilization to eliminate safety hazards adjacent to an existing multi-use path. V3 evaluated structural and non-structural stabilization techniques and identified the most cost-effective and permit-able solution. Derrick coordinated Phase III work with V3's construction engineering practice area.

Spring Brook Creek No.1 at St. James Farm Forest Preserve, Forest Preserve District of DuPage County – *Warrenville, Illinois* | Drainage Engineer for this $3.6-million, two-mile restoration of Spring Brook Creek to its historic floodplain condition. Project included a new meandering creek channel using multiple stabilization methods and restoration with native seeding, wetland plugs and plantings of shrubs and trees. Derrick provided design and permitting assistance for the in-stream water management system.

Dam Removal Design Services, IDNR – *Illinois* | Quality Assurance for a two-year, design services contract for dam removal projects. This project is estimated to is estimated to include up to 12 existing dam structures as part of the Governor's dam removal initiative. V3 is providing environmental permitting services, erosion control design, native planting design, bank stabilization design, constructability reviews and construction cost estimating for this design team.

Chevy Chase Bank Erosion Investigation & Assessment, Wheeling Park District – *Wheeling, Illinois* | Project Manager for bank evaluation and assessment of existing water features on the Chevy Chase Golf Course. Project included GPS survey to quantify erosion severity, specifically as it related to cart path and pedestrian safety. Derrick performed the field investigations and survey as well as bank stabilization design recommendations and associated cost estimates.

East Branch DuPage River Resiliency Project, DuPage County – *Lisle, Illinois* | Project Manager for evaluation of stormwater resiliency projects along the East Branch DuPage River corridor. Projects will help prepare for future extreme weather events and improve the quality of life in the community. Alternatives include buy outs, levee repairs and modifications, lot specific flood proofing incentive programs, infrastructure modifications and storage creation using HEC/FEQ floodplain modeling.

River City Flood Hazard Mitigation, River City Facilities Management Company – *Chicago, Illinois* | Project Manager for flood mitigation improvements. A flood event had resulted in $8 million worth of damage and required the evacuation and temporary displacement of several businesses and almost 700 residents. Derrick provided technical flood proofing expertise as well as extensive coordination between the client and several regulatory agencies to assist in the preparation, submittal and procurement of funding through FEMA's Hazard Mitigation Grant Program.

North Mill Creek Channel Restoration, Lake County Forest Preserve District – *Antioch, Illinois* | Project Manager for engineering design services and permitting for removal of the Lake Rassmussen Dam and associated channel restoration improvements. The 51-acre restoration included aquatic/stream channel habitat, adjacent wetland habitat, riparian floodplain habitat within the historic dam impoundment area and native prairie habitat on the surrounding hills and slopes. Derrick provided a creative water management alternative which avoided wet dredging and simplified the permitting process.

Fawell Dam Modifications, DuPage River Salt Creek Workgroup – *Naperville, Illinois* | Project Manager overseeing proposed modifications to the dam in an effort to promote fish passage. Derrick is responsible for the floodway and floodplain permitting through the County and IDNR-OWR, dam modification permitting through IDNR-OWR, and wetland and Waters of the U.S. permitting assistance through the County and USACE.

Manhattan Creek Restoration & Stabilization, The Conservation Foundation – *Manhattan, Illinois* | Project Manager for the restoration of approximately 5,200 linear feet of Manhattan Creek. Project included floodplain/floodway analyses, geomorphology analysis and design and was permitted through the USACE and IDNR. Derrick was responsible for final engineering plans and specifications.

GREG WOLTERSTORFF, P.E.

QUALITY ASSURANCE & QUALITY CONTROL

Greg is responsible for directing the day-to-day operations of V3's Natural Resources Practice Area throughout the Great Lakes region and Haiti. Services range from ecological restoration of natural areas to environmental studies to surface water modeling. He also performs direct supervision of complex water resources projects. Greg is passionate about meeting V3 client needs with creativity, sustainability and practical solutions. His experience includes project alternatives, hydrologic and hydraulic studies, FEMA permitting, dam modification/removal, urban drainage remediation, bank stabilization and identification and remediation of water quality and erosion control problems.

YEARS OF EXPERIENCE

V3: 25 | Total: 25

EDUCATION

Masters of Business Administration, DePaul University Kellstadt Graduate School of Business

Bachelor of Science, Civil Engineering, Calvin College

REGISTRATIONS

Professional Engineer:

- *Arizona, #41728, 2004*
- *Colorado, #PE005637, 2019*
- *Illinois, #062-054603, 2001*
- *Michigan, #6201061659, 2014*

ASSOCIATIONS

American Council of Engineering Consultants, Illinois Branch

Illinois Association of Stormwater & Floodplain Managers

PRESENTATIONS

Flood Resiliency Program: Exelon Innovation Expo (July 2020)

Green Infrastructure: Lessons from the Field (March 2019)

Stormwater Solutions: Flood Forecasting Technologies (November 2018)

Technology for Response: ComEd Flood Mitigation & V3 Flood Forecasting for Resiliency (March 2017)

Tinley Creek Streambank Stabilization, Elim Christian Services – *Crestwood, Illinois* | Quality Assurance and Quality Control for emergency bank assessment and restoration design/build services after a significant rain event caused a section of drive to be undermined by Tinley Creek. V3 identified five primary areas of concern and facilitated meetings with MWRDGC who agreed to assist stabilization efforts using the District's bank repair team to accomplish the stabilization at no labor or equipment cost. Permits were obtained from the Illinois DNR-OWR and USACE and delivered an excess of broken concrete and rip-rap material from a nearby site. Through these coordination efforts, V3 was able to turn this $500,000 unfunded construction project into a $25,000 engineering services project.

Skokie River Stream Bank Stabilization, East Skokie Drainage District – *Lake Forest, Illinois* | Project Director for prioritizing required stabilization needs of one linear mile of eroding streambanks on the Skokie River. Project included bank erosion assessment, survey and wetland delineation and V3 also provided stabilization designs, permit strategy assessment, construction staging limits, grant assistance and extensive stakeholder involvement.

St. Joseph Creek Restoration, Village of Downers Grove – *Downers Grove, Illinois* | Project Director for the design/build of proposed improvements to improve the overall water quality of St. Joseph Creek, Barth Pond and the receiving waters of the East Branch DuPage River. The project design included remeadering the existing creek, reestablishing a natural channel through a downstream wetland, various stabilization techniques and establishment of a wet prairie as well as low profile prairie along the creek corridor. The USACE issued Regional Permit 5, Aquatic Habitat Restoration, for the project. Hydrologic and hydraulic modeling was conducted to evaluate floodplain conditions as part of the Village stormwater permit.

Carpentersville Dam Removal, State of Illinois & Forest Preserve District of Kane County – *Carpentersville, Illinois* | Project Director for dam removal design and permitting services of a 10-foot-high, low-head, concrete dam within the Fox River. V3 determined ways to use the existing, historic mill races to bypass water during construction. Services included conducting a bathymetric survey, sampling and testing for environmental concerns, hydraulic modeling, wetland delineation upstream and downstream as well as water management, cost estimating and feasibility review. A riffle or rock feature will be incorporated into V3's

restoration design to preserve the site as a valuable destination and sense of place for the community.

Lake Michigan Shoreline Stabilization Feasibility Study & Analysis, ComEd – *Hammond, Indiana* | Project Manager for this feasibility assessment and shoreline stabilization for a new security fence at a substation located along Lake Michigan. Three-foot diameter rocks were being dislodged and forced through the existing chainlink fence and wave and ice impacts were causing extensive damage. V3 performed research and evaluation of similar protection and retaining features along Lake Michigan shoreline and also determined risks associated with the new fence location and type in order to provide recommendations for alternatives to bolster existing shoreline stabilization and fence protection features.

I&M Canal Trail & Culvert Restoration, Capital Development Board – *Utica, Illinois* | Project Manager for culvert replacement and restoration to address flooding of the Higbee Run tributary at the Illinois Michigan (I&M) Canal Trail. Because the existing culverts were not sized to handle the 100-year storm event, overtopping of this historic path downcut the trail and embankments. V3 evaluated the 1.73-square-mile tributary drainage area, developed hydrologic and hydraulic modeling and designed the proposed installation of culverts as well as restoration of the trail embankments and surface. V3 obtained permits from IDNR-OWR, USACE and LaSalle County and participated in coordination with State Historic Preservation Office for the restoration and protective railings aesthetics.

East Branch DuPage River Resilience Project, DuPage County – *Wheaton, Illinois* | Project Director responsible for the identification and evaluation of stormwater resiliency projects along the East Branch DuPage River corridor. The project scope included identifying cost-effective alternatives for reducing flooding. These alternatives included any combination of buy outs, levee repairs and/or modifications, lot-specific flood proofing incentive programs, infrastructure modifications and storage creation. Greg provided QA/QC of complex floodway/floodplain modeling (FEQ and regulatory), wetland delineation, alternative site development concepts illustrating land use opportunities, trail system connections, flood mitigation improvements and natural area restoration/enhancements.

Orland Grassland South Wetland Mitigation Project, Illinois Tollway – *Orland Park, Illinois* | Project Engineer for the planning, design and permitting of a wetland mitigation site needed to offset the wetland impacts associated with the expansion of the Jane Addams Tollway (I-90). The final design of the 160-acre preserve included more than 65 acres of wetland mitigation credits through the re-establishment of historic wetlands, the enhancement of existing wetlands and a prairie buffer establishment. As part of the effort to enhance the existing wetlands, V3 evaluated the existing wetland and soil conditions to determine the feasibility of restoring the historic hydrology to the hydric soils on the preserve.

Hadley Valley Preserve Wetland Mitigation, Forest Preserve District of Will County – *New Lenox, Illinois* | Project Director for the 1,900-acre Spring Creek Greenway. Project involved the design and construction along a three-mile corridor of Spring Creek and the restoration of 480 acres of wetlands and uplands. The project received a 2008 Conservation & Native Landscaping Award from the USEPA and Chicago Wilderness.

Fordam Dam Modifications, ComEd – *Rockford, Illinois* | Project Manager for the assessment, design and construction oversite of dam modifications associated with the gates on the Fordam Dam. In 2016, an ice event caused flooding at and up stream of the dam. The gate structures were identified as in need of repair or replacement. V3 completed a feasibility study, alternative designs, final recommended construction documents and dam modifications permitting for this unique project. Electric hoist motors and gantries were air lifted to the face of the dam in order to replace the failed hydraulic gate structures. In 2019, V3 also installed flood forecast alerts to proactively identify gate movements required at the dam.

Chicago Premium Outlets Indiana Creek Channel Restoration, Simon | Premium Outlets – *Aurora, Illinois* | Project Manager for restoring 3,500 linear feet of existing degraded and straightened Indian Creek channel to a meandering natural channel of approximately 4,300 feet. Detailed habitat assessment and macroinvertebrate community evaluations were also performed to quantify the condition and quality of the in stream and riparian habitats and to provide benchmark data for post-restoration evaluations. Greg was responsible for the design of the creek restoration of Indian Creek.

DAVID VOGEL, P.E., CFM, CPSWQ®

PROJECT ENGINEER

Dave is a Project Manager with extensive water resources engineering experience that makes him a valuable addition to any stormwater project. He has experience in municipal drainage design and flood remediation as well as obtaining project funding through federal and local grant applications. Dave is trained in a variety of related software applications including ArcGIS, XP-SWMM, HEC-RAS, HEC-HMS and Hydraflow.

YEARS OF EXPERIENCE

V3: 3 | Total: 17

EDUCATION

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

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

REGISTRATIONS

Professional Engineer: Illinois, #062-062248, 2009

Certified Floodplain Manager: Illinois, #IL-08-00372, 2008

Certified Professional in Stormwater Quality™: #1049, 2016

Pedestrian Bridge over Tinley Creek Replacement, Elim Christian Services – *Crestwood, Illinois* | Drainage Engineer for the removal and replacement of this pedestrian bridge that was destroyed during a heavy rain event in early 2020. V3 removed the old bridge and worked with a truss bridge fabricator to design the new structure according to IDNR-Office of Water Resources and Metropolitan Water Reclamation District of Greater Chicago standards. An important design goal was to maintain the historic aesthetic of the bridge while still obtaining the necessary regulatory permits.

Carpentersville Dam Removal, Forest Preserve District of Kane County – *Carpentersville, Illinois* | Project Engineer for the removal of a low-head dam on the Fox River. V3 performed a sediment transport analysis and hydraulic modeling to demonstrate compliance with regulatory requirements. An evaluation of historical flow rates in the Fox River was completed to determine an optimal construction window for dam removal. Permits were obtained from Illinois Department of Natural Resources-Office of Water Resources, Kane County and USACE.

Prince Pond Dredging & Park Improvements, Downers Grove Park District & Village of Downers Grove – *Downers Grove, Illinois* | Project Manager for improvements to Prince Pond Park. Project included dredging to remove accumulated sediment, installation of ADA compliant access paths and shoreline restoration. V3 performed bathymetric survey and sediment disposal evaluation to calculate volumes and determine appropriate disposal methods.

Cedar Road Phase II Engineering, Will County DOT – *New Lenox, Illinois* | Project Manager for replacement of a culvert crossing as part of this roadway reconstruction and widening project. Project included hydrologic and hydraulic analysis of the upstream watershed to calculate peak runoff rates and designed a new culvert crossing that met freeboard requirements. Permits were obtained from Will County, IDNR-Office of Water Resources and USACE.

**Work performed at previous firm*

DAVID VOGEL, P.E., CFM, CPSWQ®

PROJECT ENGINEER

Burlington Highlands Site #2, Village of Downers Grove – *Downers Grove, Illinois* | Project Manager for stormwater management improvements to a 40-acre study area. Due to the sensitive nature of the receiving waterway, V3 strategically designed upstream drainage improvements to create no adverse impact to downstream areas while providing maximum hydraulic benefits to flooded properties upstream. The project is currently scheduled for Spring 2021 construction.

Elm & Earlston Drainage Improvements, Village of Downers Grove – *Downers Grove, Illinois* | Project Manager for drainage improvement design and construction document preparation for a four-acre study area. V3's creative approach to drainage design resulted in cost-savings for the Village as well as much needed relief to flooded residences without impacting traffic flow on Ogden Avenue during the construction process. Permitting and close coordination of storm sewer layout with IDOT was completed for storm sewer installation and repurposing within the Ogden Avenue right-of-way.

Fairmont Community Drainage Improvements, Will County Land Use Department – *Lockport, Illinois* | Project Manager for drainage improvement design and construction document preparation for the approximately 100-acre Fairmont South study area. Drainage improvements are part of the planned economic revitalization of the area. Project required coordination and buy-in from several entities including Joliet Housing Authority, Lockport Township Highway Department and the Forest Preserve District of Will County.

Lacon Mine Redevelopment, Ozinga Materials & Logistics – *Lacon, Illinois* | Project Engineer for redevelopment of a historic sand and gravel mine along the Illinois River into a clean construction demolition and debris fill site. V3 developed the permit strategy to efficiently obtain authorization of the project through USACE, IDNR-OWR, IEPA and City of Lacon. A unique challenge included permitting and design of offsite wetland mitigation and floodplain compensatory storage on a separate Ozinga site, approximately five miles up stream.

Stormwater Program Manager, Metropolitan Water Reclamation District of Greater Chicago – *Cook County, Illinois* | Project Engineer for a new, multi-year stormwater master planning program which included preparation of individual study profiles (ISPs) for incorporation into the Cook County Stormwater Master Plan. Each ISP focuses on holistic solutions to stormwater management issues while also addressing other community needs such as economic and infrastructure improvement. ISPs were prepared for nine study areas identified by the Metropolitan Water Reclamation District of Greater Chicago and V3.

Brookmont Boulevard Viaduct, City of Kankakee – *Kankakee, Illinois* | Project Engineer for Phase II drainage design for the replacement of a bridge that carries CN Railroad tracks over Brookmont Boulevard. Improvements were developed to safely store and convey stormwater runoff from more than 200 acres of upstream developed area to Soldier Creek. V3 designed a 100-cubic-foot-squared pump station per IDOT Drainage Manual criteria as well as several stormwater storage basins and conveyance sewer lines.

Prairie Stone Stormwater Master Plan Revisions, Village of Hoffman Estates – *Hoffman Estates, Illinois* | Project Manager responsible for overseeing hydrologic modeling of the Prairie Stone Business Park to determine future stormwater management needs and update an existing Metropolitan Water Reclamation District of Greater Chicago (MWRDGC) permit. Project included advising the Village of the best way to transition the park from a MWRDGC Sewer Permit Ordinance permit to current Watershed Management Ordinance stormwater management criteria. V3 obtained a permit revision from MWRDGC based on the analysis performed.

Kawachinagano Japanese Gardens Expansion, City of Carmel – *Carmel, Indiana* | Project Engineer for this park expansion to incorporate stormwater management from an adjacent large impervious parcel with vacant industrial bulidings. The park adds to the recreational amenities for the adjacent community and serves as a gateway to City Hall, the Center for Performing Arts, City Center and a mixed use development. Dave supervised XP-SWMM hydrology and hydraulics analysis.

Williston Basin Tributary Area Drainage Analysis, City of Wheaton – *Wheaton, Illinois* | Project Manager supervising XP-SWMM drainage analysis of a watershed with significant depressional storage areas. The focus of the analysis was to determine the area of inundation for several storm events and to identify which existing residential structures are at risk for flooding. Dave designed improvement projects to reduce the risk of future flooding.

**Work performed at previous firm*

TOM SLOWINSKI, PWS

PERMITTING

Tom is a Certified Professional Wetland Scientist with wetland, ecological restoration and environmental impact assessment experience. He provides technical oversight and quality control for all aspects of wetland and ecological restoration. Tom has extensive experience with project management related to large-scale ecological restoration for public and private entities. He also provides consultation on environmental and regulatory issues and provides expert testimony regarding wetland and other environmental issues. Prior to joining V3, Tom was Chief, Regulatory Branch of the Chicago District for USACE. He currently serves on the Kane County Stormwater Technical Advisory Committee.

YEARS OF EXPERIENCE

V3: 32 | Total: 44

EDUCATION

Bachelor of Science, Biology, Marquette University

Master of Arts, Environmental Science, Governors State University

CERTIFICATIONS

Professional Wetland Scientist

Lake County Certified Wetland Specialist

Kane County Qualified Wetland Review Specialist

McHenry County Certified Wetland Review Specialist

ASSOCIATIONS

Society of Wetland Scientists

Society for Ecological Restoration

Association of State Wetland Managers

Chicago Wilderness Corporate Council

OFFICES HELD

Kane County Stormwater Technical Advisory Committee Member

Tinley Creek Streambank Stabilization, Elim Christian Services – *Crestwood, Illinois* | Permitting Specialist for emergency bank assessment and restoration design/build services after a significant rain event caused a section of drive to be undermined by Tinley Creek. V3 identified five primary areas of concern and facilitated meetings with MWRDGC who agreed to assist stabilization efforts using the District's bank repair team to accomplish the stabilization at no labor or equipment cost. Permits were obtained from the Illinois DNR-OWR and USACE and delivered an excess of broken concrete and rip-rap material from a nearby site. Through these coordination efforts, V3 was able to turn this $500,000 unfunded construction project into a $25,000 engineering services project.

Lake Forest Bank Stabilization, East Skokie Drainage District – *Lake Forest, Illinois* |Permitting Specialist for prioritizing required stabilization needs of one linear mile of eroding streambanks on the Skokie River. Project included bank erosion assessment, survey and wetland delineation and V3 also provided stabilization designs, permit strategy assessment, construction staging limits, grant assistance and extensive stakeholder involvement.

St. Joseph Creek Restoration, Village of Downers Grove – *Downers Grove, Illinois* | Project Manager for the design/build of proposed improvements to improve the overall water quality of St. Joseph Creek, Barth Pond and the receiving waters of the East Branch DuPage River. The project design included remeadering the existing creek, reestablishing a natural channel through a downstream wetland, various stabilization techniques and establishment of a wet prairie as well as low profile prairie along the creek corridor. The USACE issued Regional Permit 5, Aquatic Habitat Restoration, for the project. Hydrologic and hydraulic modeling was conducted to evaluate floodplain conditions as part of the Village stormwater permit.

Muirhead Springs Wetland & Stream Mitigation Bank, Forest Preserve District of Kane County – *Kane County, Illinois* | Project Manager for design and approval of this project to provide 150 acres of wetland mitigation credits and 6,000 linear feet of stream mitigation with the Muirhead Springs Forest Preserve. The approval process included submittal to a federal interagency team which included the USACE, US Fish and Wildlife and USEPA. Mitigation bank documents will be prepared once approval has been obtained.

**Work performed at previous firm*

TOM SLOWINSKI, PWS

PERMITTING

North Mill Creek Channel Restoration, Lake County Forest Preserves – *Antioch, Illinois* | Permitting Specialist for removal of the Lake Rassmussen Dam and associated channel restoration improvements. The 51-acre restoration included aquatic/stream channel habitat, adjacent wetland habitat, riparian floodplain habitat within the historic dam impoundment area and native prairie habitat on the surrounding hills and slopes. Tom prepared, submitted and obtained USACE permits.

Lincoln Greenway Shoreline Restoration, Naperville Park District – *Naperville, Illinois* | Permitting Specialist for design and permitting of this approximately 2,000-linear-foot shoreline restoration along the West Branch of the DuPage River. V3 conducted a bank erosion assessment, topographic survey, wetland delineation, and shoreline restoration design and permitting.

Cheney Run Stormwater Treatment Park, Michigan City Sanitary District – *Michigan City, Indiana* | Permitting Specialist for the comprehensive design of improvements to treat stormwater flow from Cheney Run. Design includes wetland enhancement and creation and stormwater redirection into existing and expanded wetlands as well as upsteam control of solids and floatables. Site access challenges were solved by building relationships with key stakeholders, coordinating with adjacent construction activities and creating an innovative stream crossing at Trail Creek. Tom prepared and submitted USACE permits.

Orland Grassland South Addition Mitigation Project, Illinois Tollway – *Orland Park, Illinois* | Project Manager for the planning, design and permitting of a wetland mitigation site needed to offset the wetland impacts associated with the expansion of the Jane Addams Tollway (I-90). The final design of the 160-acre preserve included more than 65 acres of wetland mitigation credits through the re-establishment of historic wetlands, the enhancement of existing wetlands and a prairie buffer establishment. As part of the effort to enhance the existing wetlands, V3 evaluated the existing wetland and soil conditions to determine the feasibility of restoring the historic hydrology to the hydric soils on the preserve.

Chicago Premium Outlets, Simon Property Group – *Aurora, Illinois* | Project Manager for the wetland permitting and wetland mitigation design for this 143-acre retail development which proposed unavoidable impacts to 21.3 acres of wetland and portions of Indian Creek. On-site wetland mitigation consisted of an 80-acre complex of wetland, 4,300 feet of restored creek channel, upland buffer, detailed habitat assessment and in-stream habitat structures such as riffles, pools, root ball revetments, boulder clusters, rock deflectors and gravel bars. Off-site mitigation included the enhancement of 16.7 acres of a flatwoods/mesic woods complex, three acres of wetland and 3.9 acres of prairie within the Arlene Shoemaker Forest Preserve.

Churchill Woods Forest Preserve Dam Modification & Wetland Restoration, DuPage County Stormwater Management – *Lombard, Illinois* | Wetland Scientist for the proposed removal of a low head dam and the restoration of 33 acres of emergent wetlands along the one mile of upstream channel of the East Branch of the DuPage River. The goal of the project was to restore a healthy stream system and improve dissolved oxygen concentrations in the East Branch of the DuPage River, thus avoiding possible indirect adverse effects to the existing low-quality riparian wetlands along the former impoundment. Tom was responsible for the USACE Section 404 permitting and the DuPage County wetland and wetland buffer permitting.

Barrington Road Wetland Restoration – *South Barrington, Illinois* | Project Manager for this after-the-fact wetland delineation when a roadway contractor inadvertently disturbed and placed fill material within wetlands adjacent to a large interstate roadway project along a small tributary stream. V3 conducted coordination with the USACE, the roadway agency, the local municipality and the property owner's consultant to obtain approval. V3 is conducting the wetland restoration including the installation of native wetland and buffer plantings as well as three years of ecological management and monitoring to meet the required performance standards.

**Work performed at previous firm*

SPENCER VELTEMA, EIT

ENGINEER II

Spencer is a Design Engineer specializing in natural resources and environmental engineering. His experience includes sanitary sewer, storm sewer, water distribution systems, hydraulic analysis and design. Spencer has also performed erosion control and construction inspections. He is responsible for submitting permits to IDNR and Metropolitan Water Reclamation District of Greater Chicago. Spencer is proficient in AutoCAD, XP-SWMM, EPA-SWMM, HEC-HMS, HEC-RAS and ArcGIS.

YEARS OF EXPERIENCE

V3: 3 | Total: 3

EDUCATION

Bachelor of Science, Calvin University, Civil & Environmental Engineering

REGISTRATIONS

Engineer-in-Training: California, #163550, 2016

Skokie River Stream Bank Stabilization, East Skokie Drainage District – *Lake Forest, Illinois* | Design Engineer for prioritizing required stabilization needs of one linear mile of eroding streambanks on the Skokie River. Project included bank erosion assessment, survey and wetland delineation and V3 also provided stabilization designs, permit strategy assessment, construction staging limits, grant assistance and extensive stakeholder involvement. Spencer conducted weekly erosion control inspections and assisted with preparation of final designs and construction plans in AutoCAD.

Park Drainage Final Engineering, Elmhurst Park District – *Elmhurst, Illinois* | Design Engineer providing drainage evaluation and design of various improvements for seven parks within the District that were all experiencing drainage issues. V3 presented design alternatives and cost estimates for each park. Spencer was responsible for preparing final designs and construction plans in AutoCAD.

Everglade Drainage Improvements, Village of Woodridge – *Woodridge, Illinois* | Design Engineer for drainage improvements to this residential area which had experienced localized flooding. Spencer was responsible for preparing AutoCAD drawings of the flooding issues which showed that the current ditch did not have proper capacity to convey stormwater downstream.

Ravenna East Drainage Evaluation, Ravenna East Homeowners Association – *Long Grove, Illinois* | Design Engineer for the evaluation of a flood prone drainage route through a residential subdivision. Spencer was responsible for hydraulic modeling of the surrounding area to determine a probable cause of flooding as well as potential solutions.

St. Procopius Creek Letter of Map Revision, Village of Lisle – *Lisle, Illinois* | Design Engineer for Letter of Map Revision (LOMR) submittal to FEMA. The intent of the project was to address inaccurate floodplain areas along St. Procopius Creek that were encroaching on residential properties. Spencer was responsible hydraulic modeling and preparing the LOMR submittal.

Russo Salt Supply Facility, Russo Power – *Lemont, Illinois* | Project Manager for site design and stormwater permitting for this 2.5-acre salt transfer facility located on the Illinois & Michigan Canal. V3 designed a brine containment system in lieu of typical Metropolitan Water Reclamation District of Greater Chicago water quality requirements. Spencer assisted in design of stormwater management systems as well as permit submittals and meetings.

**Work performed at previous firm*

Spaulding to South Sutton Double Track Design & Permitting, Canadian National Railway – *Cook County, Illinois* | Design Engineer for the addition of a second rail track along a five mile span of railway in order to ease track congestion in the area. V3 provided wetland delineation and permitting as well as stormwater permitting through Metropolitan Water Reclamation District of Greater Chicago and IDNR. Spencer assisted in hydraulic modeling of Poplar Creek and an additional tributary which the new track crossed over. He also assisted with permitting submittals.

White Eagle Short Course Improvements, White Eagle Club Golf Club – *Naperville, Illinois* | Design Engineer for civil, stormwater and wetland aspects of this short course renovation for the White Eagle Golf Club. Improvements included tee and green modifications to enhance practice areas and short course play. Spencer was responsible for grading calculations and impervious area calculations in AutoCAD as well as creating exhibits and assembling the stormwater report.

Various Residential Development Projects, 4 Creeks, Inc. – *Visalia, California* | Assistant Engineering Designer working with a land development team for residential subdivision projects. Spencer prepared FEMA documents for designing inside of flood zones and also contributed towards civil improvement plans for different sites.*

Substation Flood Proofing, ComEd – *Illinois* | Design Engineer for flood proofing modifications to substations located within floodway/floodplains. Designs include precast and cast-in-place concrete walls, ingress/egress openings equipped with a removable flood plank system and a pump station to handle interior drainage. Spencer is responsible for reviewing historic plans to identify existing utilities and assembling exhibits for proposed flood mitigation improvements. Spencer's list of projects include:

- *TSS 85 Skokie Drainage & Stormwater Pollution Prevention Plan*
- *TSS 75 Crystal Lake Containment Drainage*
- *TSS 110 Devon in Lincolnwood*
- *TSS 64 Bellwood Flood Mitigation*
- *TSS 159 Trough Drainage Design*
- *TSS 46 Des Plaines Flood Mitigation*
- *SS 280 Lake Bluff Drainage Improvement*
- *STA 3 Powerton*
- *TDC 580 Downers Grove*
- *TDC 453 Wood Hill*
- *TDC 474 Briggs Stormwater Management*
- *TSS 159 Northbrook Drainage*
- *TSS 36 Madison*

**Work performed at previous firm*

ANDREA PINI

PROJECT ECOLOGIST

Andrea is a Project Manager responsible for performing all activities related to native area planning and creation. Her expertise includes annual restoration plan creation and floristic site design, as well as planning of maintenance, design, site monitoring and project management. Andrea directs restoration activities, communicating directly with clients and assisting with the planning, direction and implementation of ecological management activities. Her restoration experience includes restoration and improvements to streams, wetlands, woodlands and prairies

YEARS OF EXPERIENCE

V3: 11 | Total: 11

EDUCATION

Masters of Science, Biology, Northeastern Illinois University

Bachelor of Science, Biology, Elmhurst College

CONTINUING EDUCATION

Fire Training:

- *S-100 Introduction to Incident Command Systems*
- *S-130/S-190 Basic Wildland Firefighting*

REGISTRATIONS

Certified Arborist: Illinois, #IL-9635A, 2018

PUBLICATIONS

Fungi Are Capable of Mycoremediation of River Water Contaminated by E. coli: February 2020, Water Air Soil Pollution

Tinley Creek Streambank Stabilization, Industria & Metropolitan Water Reclamation District of Greater Chicago – *Crestwood, Illinois* | Project Ecologist for restoration activities for this $3.1-million, flood control and streambank stabilization project. Project included improving 2,600 linear feet of Tinley Creek utilizing three distinct stabilization styles: bankfull benches with native plantings; pool and riffle structures and; RR-5 rip rap or nine-foot-tall gabion basket walls to reslope and armor creek banks. Andrea was responsible for overseeing installation of native seed, plants, trees and shrubs, erosion control blanket and hydromulch installation and weed control conducted by field ecologists.

Westwood Creek Streambank Stabilization, Village of Addison – *Addison, Illinois* | Project Ecologist for this $683,500 stabilization of 1,200 liner feet of creek. An extensive in-stream work plan was devised and implemented by V3 including bypass pumping of the existing creek flows and work zone dewatering utilizing polyacrylamide for turbidity reduction and sediment control. Andrea oversaw installation of a half-acre of native seed and blanket as well as nearly 1,000 wetland plugs.

Prentiss Creek Management, Village of Downers Grove – *Downers Grove, Illinois* | Project Manager responsible for maintenance efforts along the creek including weed control and invasive tree clearing. Beavers periodically reenter the site and build dams causing flooding along the northern reach of the project however, long-term bank erosion has been avoided though site monitoring and prompt client notification. Andrea creates annual restoration monitoring plans based on site conditions and florisitic observations as well as conducting monitoring and overseeing field staff.

Lakewood Creek West, Lakewood Creek West Homeowners Association – *Montgomery, Illinois* | Project Manager and Project Ecologist for this long term site monitoring and management project. V3 started management in 2006 and has continually improved the species quality and quantity onsite through seeding, weed control and prescribed burn efforts. Andrea develops the yearly restoration plan and oversees field crews during management efforts.

ANDREA PINI

PROJECT ECOLOGIST

Du-Comm Mitigation, Wight Construction Services, Inc. – *Wheaton, Illinois* | Project Ecologist for this $1.2-million, wetland restoration project to provide additional flood storage through construction of basins and a flood control berm located between the campus building and Winfield Creek. Project included a total of 4.4 acres of native wetland, wet prairie and mesic prairie seeding and 11.8 acres woodland native inter-seeding as well as installation of 150 trees and 90 shrubs. Additional improvements included 2,500 linear feet of HMA trail, 1,915 square feet of PCC sidewalk, drainage utilities and fencing near the creek to protect trees and shrub from beavers. Andrea conducts site monitoring, prepares adaptive management plans and designs, oversees field staff and submits to regulatory agencies. When the wet prairie community began to hold a higher of water during spring than originally planned, Andrea adjusted the seed mix, resulting in better native vegetation coverage.

Spring Brook Creek No.1 at St. James Farm Forest Preserve, Forest Preserve District of DuPage County – *Warrenville, Illinois* | Assistant Project Ecologist and Field Ecologist for this $3.6-million, two-mile restoration of Spring Brook Creek to its historic floodplain condition. Project included a new meandering creek channel using multiple stabilization methods and restoration with native seeding, wetland plugs and plantings of shrubs and trees. Andrea used GPS to form maintenance and existing condition maps, conducted tree and shrub surveys, communicated with client during selective woodland clearing and oversaw subcontractor clearing work and conduct quality control and helped determine site needs to establish a maintenance plan.

Hadley Valley West Preserve Forest Preserve District of Will County & IDOT – *New Lenox, Illinois* | Field Ecologist for this 300-acre wetland and upland restoration. All construction and ecological environment creation activities, including a 7,000-foot stream remeander, were conducted by V3's ecological and construction management teams. Andrea assisted in floristic and well monitoring, weed control, and was in direct contact with senior ecology staff regarding site conditions for further invasive species control needs.

Hadley Valley Central Restoration, Forest Preserve District of Will County – *New Lenox, Illinois* | Field Ecologist for this 180-acre wetland mitigation and restoration project of emergent, sedge meadow, wet prairie, prairie and savanna communities. This project included native prairie and wetland seeding, installation of 180,000 wetland plugs, installation of native trees and shrubs, invasive species management, prescribed burning and ecological monitoring and reporting. Andrea assisted in floristic and well monitoring, weed control, plant and shrub installation, and was in direct contact with senior ecology staff regarding site conditions for further invasive species control needs.

Prentiss Creek Restoration, Village of Downers Grove – *Downers Grove, Illinois* | Assistant Project Ecologist for this bank stabilization and on-line pond restoration. Efforts included dredging, dam removal, construction of a 10-foot gabion wall and installation of more than 11,000 wetland, shoreline and emergent native plants. Andrea assisted with conducting floristic quality index and site monitoring, site plan implementation, leading field crews in restoration work, assisting in site floristic design and quality control.

Blackberry Creek Headwaters Wetland Mitigation Bank, Campton Township – *Campton Township, Illinois* | Field Ecologist for the 220-acre wetland mitigation bank. This project designated 90 acres of wetland restoration in a historically drained farm field through tile disablement and revegetation using native plant plugs and seed. Andrea assisted with initial plantings, prescribed burns, weed control and well data collection. Chicago Premium Outlets, Simon | Premium Outlets – Aurora, Illinois | Field Ecologist for the 140-acre retail development which included restoration of a channelized farm ditch that crossed the property. An 80-acre wetland/floodplain corridor was designed with five appropriate native plant communities and best management practices wildlife habitat. Andrea assisted in the re-meander efforts, seeding and installation.

West Branch Forest Preserve Wetland, Fen & River Restoration, Forest Preserve District of DuPage County – *Carol Stream, Illinois* | Field Ecologist for this complex, multi-year project which involves the restoration of a 350-acre preserve including a one-mile section of the West Branch of the DuPage River, 90 acres of wetlands, a 34-acre fen and adjacent prairies environments. The river restoration posed a daunting challenge requiring a solution that involved diverting the existing river while accommodating the 100-year storm event volumes. Andrea assisted with stump treatment, blanketing and plant installation.

ALICIA METZGER, CPSC, PWS

SOIL SCIENTIST & WETLAND DELINEATION

Alicia is a Project Scientist responsible for conducting wetland delineations, including farmed wetland determinations, assisting with wetland mitigation design and managing GIS data. She performs all aspects of soil classification including color, texture and structure as well as identification of hydric indicators to assist in defining wetland boundaries. Alicia has also conducted soil analyses for top soil depth, organic carbon content, soil profile classification and water table depth for urban, agricultural and recreational developments. She uses her advanced cartography skills to produce descriptive maps that characterize and classify features in ArcGIS and CAD programs.

YEARS OF EXPERIENCE

V3: 10 | Total: 10

EDUCATION

Bachelor of Science, Geography, Northern Illinois University

Master of Science, Geography-Soil Science, Northern Illinois University

CONTINUING EDUCATION

GIS Certificate, Northern Illinois University

REGISTRATIONS

Certified Professional Soil Classifier

Professional Wetland Scientist

Lake County Certified Wetland Specialist: #C-154

Kane County Certified Wetland Specialist: #W-099

McHenry County Certified Wetland Specialist

ASSOCIATIONS

Illinois Soil Classifiers Association

Association of American Geographers

Association for Women Soil Scientists

Soil Science Society of America

Society of Wetland Scientists

OFFICES HELD

President: Illinois Soil Classifiers Association

Tinley Creek Streambank Stabilization, Elim Christian Services – *Crestwood, Illinois* | Scientist for emergency bank assessment and restoration design/build services after a significant rain event caused a section of drive to be undermined by Tinley Creek. V3 identified five primary areas of concern and facilitated meetings with MWRDGC who agreed to assist stabilization efforts using the District's bank repair team to accomplish the stabilization at no labor or equipment cost. Alicia assisted with the wetland delineation and assessment as well as permitting.

Skokie River Stream Bank Stabilization, East Skokie Drainage District – *Lake Forest, Illinois* | Scientist for stabilization along one linear mile of eroding streambanks on the Skokie River. Project included bank erosion assessment, survey and wetland delineation and V3 also provided stabilization designs, permit strategy assessment, construction staging limits, grant assistance and extensive stakeholder involvement. Alicia conducted the wetland delineation, assisted with regulatory permitting and prepared necessary reports and figures.

St. Joseph Creek Restoration, Village of Downers Grove – *Downers Grove, Illinois* | Scientist for the design/build of proposed improvements to improve the overall water quality of St. Joseph Creek, Barth Pond and the receiving waters of the East Branch DuPage River. The project design included remeadering the existing creek, reestablishing a natural channel through a downstream wetland, various stabilization techniques and establishment of a wet prairie as well as low profile prairie along the creek corridor. Alicia conducted the wetland delineation and assessment, assisted with regulatory permitting and prepared necessary figures in GIS.

Orland Grassland South Wetland Mitigation Project, Illinois Tollway – *Chicago, Illinois* | Scientist for the design of this wetland mitigation site needed to offset wetland impacts associated with the Jane Addams Tollway (I-90) expansion. Project included wetland restoration planning, design and permitting of 160 acres of preserve area and the final design includes more than 65 acres of wetland mitigation credits through re-establishment of historic wetlands, enhancement of existing wetlands and prairie buffer establishment. Alicia designed the mitigation bank, conducted the delineation and managed all GIS data.

Muirhead Springs Wetland & Stream Mitigation Bank, Forest Preserve District of Kane County – *Kane County, Illinois* | Scientist for design and approval of this project to provide 150 acres of wetland mitigation credits and 6,000 linear feet of stream mitigation with the Muirhead Springs Forest Preserve. The approval process included submittal to a federal inter-agency team which included the USACE, U.S. Fish and Wildlife and USEPA. Mitigation bank documents will be prepared once approval has been obtained.

Blackberry Creek Headwaters Wetland Mitigation Bank, Campton Township – *Kane County, Illinois* | Scientist for the design and USACE approval of the 110-acre wetland mitigation bank, which provides 87 acres of wetland mitigation credit in the Fox River Basin. V3 financed, designed, permitted, constructed, installed all native vegetation and conducted the annual ecological management and monitoring under an agreement with Campton Township. Alicia was responsible for maintaining and collecting data as well as managing the GIS database.

Messenger Woods Nature Preserve, Openlands & Forest Preserve District of Will County – *Will County, Illinois* | Scientist for wetland mitigation design and USACE permitting within 115 acres of the Messenger Woods Nature Preserve dedicated buffer. The wetland mitigation site, one of five sites which provided mitigation for the O'Hare Airport Modernization Program, provided a total of 31 wetland mitigation credits through the restoration and enhancement of 32 acres of wetland and 53 acres of prairie. Alicia performed the wetland delineation.

Eakin Creek Property, Horizon Group Properties – *Huntley, Illinois* | Scientist for this wetland delineation on a 215-acre property consisting of agricultural areas, a stream complex, sedge meadow, wet meadow, marsh and woodland. As part of the delineation, Alicia collected and analyzed 52 soil samples for proposed mitigation/ restoration activities. She was also responsible for managing all GIS data for the delineation and for coordinating information with federal regulatory agencies.

Fawell Dam Modifications, DuPage River Salt Creek Workgroup – *Naperville, Illinois* | Scientist for a wetland delineation on 127-acres upstream of the Fawell Dam along the West Branch DuPage River and adjacent wetlands. Alicia conducted the wetland delineation and analyzed soil samples for hydric soil indicators to determine wetland boundaries. She collected field data and managed GIS data.

Vermillion Rise Mega Park Wetland Mitigation Bank, Newport Chemical Depot Reuse Authority – *Clinton, Indiana* | Scientist for a wetland mitigation bank located on 600 acres within the 1,700-acre, Indiana Department of Natural Resources conservation area within the 7,000-acre Vermillion Rise Mega Park. The mitigation bank proposed the restoration of 95.5 acres of wetland located at the headwaters of the Little Vermillion River and 27.5 acres of upland prairie buffer, which will provide a total of 105 acres of wetland mitigation credit within the Wabash River watershed. Alicia conducted the wetland delineation and soil analysis and was also responsible for organizing and maintaining an ArcGIS database.

Hadley Valley Central Restoration, Forest Preserve District of Will County – *New Lenox, Illinois* | Scientist for wetland mitigation design, USACE permitting, project construction, native plant installation and five-year ecological management and monitoring. The 180-acre wetland mitigation site, one of five sites which provided mitigation for the O'Hare Airport Modernization Program, provided 60 acres of wetland mitigation credits. Alicia conducted the delineation, which included collecting multiple soil samples within the 70 acres of restored and enhanced wetlands.

Gray Willows Wetland Mitigation Bank, Campton Township – *Campton Hills, Illinois* | Scientist for the design, approval and implementation of a wetland mitigation bank on a 200-acre property. A total of 50 mitigation credits will be provided from 32 acres of wetland re-establishment, 18 acres of wetland rehabilitation, and 50 acres of upland buffer which includes savanna and prairie establishment. Alicia collected and analyzed 30 soil samples on the property, assisted with wetland mitigation design, managed GIS data for the delineation and proposed restoration and management measures.

Big Marsh Wetland Delineation & Vegetation Mapping, ARAMARK Facility Services – *Chicago, Illinois* | Scientist for the site civil design for this project which involved wetland delineation and vegetation mapping of 300 acres acquired by the Chicago Park District. V3 provided species selection and habitat design for the native restoration with the dual goal of restoring native plant communities and improving ecosystem quality via phytoremediation. Alicia was responsible for the delineation which included collecting more than 30 soil samples to delineate 188 acres of wetland and Waters of the U.S.

MIKE FAMIGLIETTI, P.E.

CONSTRUCTIBILITY & COST ESTIMATING

Mike is the Director of V3's Construction and Ecological Restoration Groups providing contracting for site infrastructure development and improvement projects. Mike's expertise includes prime contracting with earthwork and ecological restoration services, general contracting, construction management and design/build for new greenfield developments projects to shoreline and waterway restorations, wetland mitigations and enhancement and long term maintenance. He is currently responsible for the overall construction operations and business development for V3's contracting services.

YEARS OF EXPERIENCE

V3: 24 | Total: 29

EDUCATION

Bachelor of Science, Civil Engineering, Purdue University

CONTINUING EDUCATION

OSHA 40-Hour HAZWOPER

University of Wisconsin:

- *Successful Construction Management Techniques & Procedures*
- *Maintaining Asphalt Pavements*
- *Construction Management Materials Testing*
- *Geotechnical Engineering*

REGISTRATIONS

Professional Engineer: Illinois, #062-054914, 2001

ASSOCIATIONS

American Concrete Institute

American Society of Civil Engineers

Tinley Creek Streambank Stabilization, Metropolitan Water Reclamation District of Greater Chicago & Industria – *Crestwood, Illinois* | Project Director for this flood control and streambank stabilization project. Project included improving 2,600 linear feet of Tinley Creek utilizing three distinct stabilization styles: creating bankfull benches with native plantings, installation of pool and riffle structures and resloping and armoring creek banks with RR-5 Rip Rap or nine-foot-tall Gabion basket walls.

Skokie River Stream Bank Stabilization, East Skokie Drainage District – *Lake Forest, Illinois* | Project Director stabilization of severely eroding streambanks along one mile of the Skokie River. Stabilization activities included 3,986 linear feet of gabions, 5,344 linear feet of natural or stone toe protection and 936 linear feet of bank reshaping. As part of the design process, V3 conducted a topographic survey, tree survey, wetland delineation and walked the entire stream corridor to document the extent and severity of the erosion. Project also included two public information meetings, permitting with the USACE, Illinois Office of Water Resources and Lake County Stormwater Management Commission.

Addison Creek Stabilization, Metropolitan Water Reclamation District of Greater Chicago – *Northlake & North Riverside, Illinois* | Project Director for this $1.6-million streambank stabilization of two locations on Addison Creek. Project included bank grading, rip rap installation, erosion control and rock toe. Implementation of the improvements required a detailed in-stream work plan that included coffer dam installation and bypass pumping of active flow.

Westwood Creek Streambank Stabilization, Village of Addison – *Addison, Illinois* | Project Director for this $683,500 stabilization of 1,200 liner feet of creek. An extensive in-stream work plan was devised and implemented by V3 including bypass pumping of the existing creek flows and work zone dewatering utilizing polyacrylamide for turbidity reduction and sediment control. V3 developed an extensive in-stream work plan which included by-pass pumping of the existing creek flows and work-zone dewatering utilizing polyacrylamide for turbidity reduction and sediment control.

MIKE FAMIGLIETTI, P.E.

CONSTRUCTIBILITY & COST ESTIMATING

West Branch Forest Preserve Wetland, Fen & River Restoration, DuPage County Department of Stormwater Management – *Carol Stream, Illinois* | Project Director for this complex, multi-year project which involves the restoration of a 350-acre preserve including a one-mile section of the West Branch of the DuPage River, 90 acres of wetlands, a 34-acre fen and adjacent prairies environments. The river restoration posed a daunting challenge requiring a solution that involved diverting the existing river while accommodating the 100-year storm event volumes. V3 restored the river in phases, building three 40-foot-wide by 20-foot-deep lined diversion channels.

McDowell Grove Dam Modifications, DuPage County Division of Stormwater Management – *Naperville, Illinois* | Project Director for this $1.4-million dam modification. Scope of work included by-pass pumping of 700 linear feet of the West Branch DuPage River so that modifications could be made to the existing dam and also allow for sediment behind the dam and within the construction area to be removed. Channel bank loading material was placed in the construction area along with boulders, mushroom caps, root wads and plant vegetation to improve aquatic habitat in the river bed.

St. Charles Road Bridge Over Salt Creek Emergency Repairs, Village of Villa Park – *Villa Park, Illinois* | Project Manager for these design-build emergency repairs to keep this bridge open after a load rating inspection by IDOT found severe deterioration. Project included developing conceptual repairs for shoring two precast deck beams and gaining IDOT approval. Emergency repairs were completed and all lanes were opened to traffic seven weeks after the initial IDOT notification.

Saganashkee Slough Embankment Repairs, Forest Preserve District of Cook County – *Palos Township, Illinois* | Project Director providing earthwork services for this emergency embankment repair. Project involved maintaining the earth levee separating the slough from the Calumet Sag Channel through construction of a slurry wall. Two separate repair projects were executed to complete a 400-foot-long repair along the northern slope of the levee.

John Humphrey Sports Complex Renovation, Village of Orland Park – *Orland Park, Illinois* | Project Manager for design/build renovation of a 12-acre sports complex adjacent to the Village Hall. Project included redesign and reconstruction of five baseball fields and two football fields as well as construction management and in-house construction earthwork and underground utilities services. V3 completed construction in fall of 2019 in order to hit the seeding window for a fall 2020 park reopening.

Butterfield Pond Dredging, Village of Orland Park – *Orland Park, Illinois* | Project Principal for the design/build of an on-line, 1.5-acre detention basin that had accumulated significant sediment which negatively impacted the habitat and aesthetic value of the pond. Because budget constraints limited the amount of material removed from the pond, V3's solution balanced open water, suitable depth for fish habitat and native restoration on shallow ledges and slopes. V3 is providing three years of management and monitoring to ensure suitable establishment of vegetation.

LaGrange Road Corridor Improvements, Village of Orland Park – *Orland Park, Illinois* | Project Manager for this 6.5-mile, $12-million streetscape project through the major retail corridor of Orland Park which was completed in conjunction with an IDOT road widening project. Features included widened/decorative sidewalks, raised brick median walls, monument signage, electrical provisions for holiday lighting and all associated irrigation and landscape improvements. Precise coordination was needed to not interrupt IDOT contract work.

Campus Redevelopment, Cantigny Foundation – *Wheaton, Illinois* | Project Principal for the complete campus redevelopment known as "Project New Leaf" to enhance visitor experience throughout the entire 500-acre park campus. V3 has completed the first phase of construction which has included demolition, earthwork, detailed path and garden grading, underground utility installations and native landscape installations. The campus is remaining open during all phases of construction and scheduled to complete in 2021.

Brookbank Drive Design/Build, Village of Downers Grove – *Downers Grove, Illinois* | Project Director providing design-build services for this 850-foot long, $600,000 road construction and storm water basin project. Project challenges included property limits impeding stormwater detention, necessary removal of soft material for the roadway design and downstream obstructions impeding pond drainage. Solutions included extending large aggregate base under the roadway adding additional detention volume, constructing outfall pipes below the high water elevation, use of geotextile fabric and aggregate and improving pond hydrology through native seed and plant design and installation.

DIANNA JOHNSON

STREAMBANK DESIGN CONSTRUCTIBILITY

Dianna is a Senior Project Manager with construction management experience delivering projects to both municipal and commercial clients. Dianna has managed projects such as multi-use trails, streambank stabilizations, park developments and site developments. She is responsible for coordinating the project progress and interacting with the owner and engineer. Dianna also monitors the self-performing component of projects as well as scheduling subcontractor work.

YEARS OF EXPERIENCE

V3: 19 | Total: 34

EDUCATION

Master of Business Administration, Regent University

CONTINUING EDUCATION

OSHA 10-Hour

Triangle Park Restoration Project, Woodridge Park District – *Woodridge, Illinois* | Project Manager for improvements to the park's overall storm water management functions and preservation of park land using best management practices. This project includes approximately two acres of land with newly created storm water basins for flood storage and 700 linear feet of remeandering for stream alignment with in-stream rock features. Other work included earth excavation, native seeding and native plant installation.

Mallard Lake Forest Preservation Channel Restoration, Forest Preserve District of DuPage County – *Hanover Park, Illinois* | Project Manager for this project to stabilize banks of the West Branch DuPage River near the Mallard Lake North Landfill. Project included realigning 1,040 linear feet of the channel and 1,850 linear feet of rock bank stabilization Native restoration consisted of 20 acres of seeding with hydromulch and erosion control blanket, 91,000 plant plugs, 19 trees and shrubs and five years of maintenance and monitoring.

Spring Brook Creek No.1 at St. James Farm Forest Preserve, Forest Preserve District of DuPage County – *Warrenville, Illinois* | Project Manager ffor this $3.6-million, two-mile restoration of Spring Brook Creek to its historic floodplain condition. Project included a new meandering creek channel using multiple stabilization methods and restoration with native seeding, wetland plugs and plantings of shrubs and trees.

Du-Comm Mitigation - West Campus Improvements, Wight Construction Services, Inc. – *Wheaton, Illinois* | Project Manager for this $1.2-million, wetland restoration project to provide additional flood storage through construction of basins and a flood control berm located between the campus building and Winfield Creek. Project included a total of 4.4 acres of native wetland, wet prairie and mesic prairie seeding and 11.8 acres woodland native inter-seeding as well as installation of 150 trees and 90 shrubs. Additional improvements included 2,500 linear feet of HMA trail, 1,915 square feet of PCC sidewalk, drainage utilities and fencing near the creek to protect trees and shrub from beavers.

Dead Dog Creek Restoration Phase II, Lake County Stormwater Management Commission – *Winthrop Harbor, Illinois* | Project Manager for this $600,000 restoration of a 2,875-linear-foot creek. Project scope included 17 rock riffles, native seed, erosion control blanket, native plugs and a three-year maintenance and monitoring period.

Kellogg Creek Streambank Stabilization, Lake County Stormwater Management Commission – *Zion, Illinois* | Project Manager for this $228,000 project to restore a section of streambank which was beginning to impact an adjacent building foundation. Scope of work included grading, gabion basket stabilization, rock toe, modular block retaining wall, storm manholes and reinforced concrete pipe, concrete flatwork, guardrail replacement, privacy fence and split rail fence. Restoration work included native seeding and erosion control blanket, turf seeding and hydro mulch and plant plugs.

Fort Sheridan Restoration, Lake County Forest Preserves & USACE – *Fort Sheridan, Illinois* | Project Manager for this $3.4-million restoration of two major ravines on this 250-acre forest preserve. Repairs included restoring native habitat, construction of a diversion channel, prairie and wetland seedings and processing of approximately 230,000 cubic yards of soil.

Central Park Ice Rink, Wheaton Park District – *Wheaton, Illinois* | Project Manager for this $408,000 seasonal installation of an outdoor skating rink. Scope of work included excavation for detention basin and parking lot demolition, 19,220-square-foot ice rink paver pad, 6,700-square-foot paver parking lot, underdrain and concrete curb as well as native seeding and erosion control blanket for new basin and turf restoration.

Everett Road & Captain Daniel Wright Woods Forest Preserve Trail Connections, Lake County Forest Preserves – *Mettawa, Illinois* | Project Manager for the construction of a new trail along Everett Road and thru Captain Daniel Wright Woods Forest Preserve to connect existing trails. The scope of work included excavation and aggregate placement for 1,200 liner feet of 10-foot-wide porous pave surface trail, 2,360 liner feet of 10-foot-wide asphalt trail, tree clearing, drainage culverts, shoulder widening on Everett Road, topsoil placement and grading as well as three acres of seeding and hydromulch.

Fort Sheridan Public Access Improvements, Lake County Forest Preserves & USACE – *Fort Sheridan, Illinois* | Project Manager for this $1.8-million restoration to improve park access. Scope of work included excavation for pond expansion, grass and hot mix asphalt trails, new 50-stall parking lot and entrance drive, four timber boardwalk, two trail head locations with evaporator toilets, benches and bike racks, four trail overlook locations as well as 19.3 acres of seeding with 13 acres of hydromulch and six acres of erosion control blanket.

Rathje Park Improvements, Wheaton Park District – *Wheaton, Illinois* | Project Manager for this $560,000 project which included dredging of two existing ponds, stone outcropping and rock toe along the shoreline and removal and replacement of a boardwalk pedestrian bridge. The existing parking lot was also replaced with permeable paver pavement along with new paver drive lane along preschool building, curb, gutter and sidewalk. Native planting elements included a rain barrel and sidewalk runnel draining to a rain garden, turf seeding, erosion control blanket, native seeding and plug plantings as well as a five years maintenance plan.

Oldfield Oaks Forest Preserve Off-Leash Dog Area, Forest Preserve District of DuPage County – *Darien, Illinois* | Project Manager for this $575,000 project to create an off-leash dog area at an established forest preserve. Scope of work included excavation for basins, new car asphalt parking lot with curb, concrete paved plaza entrance, limestone trail, installation of a new water service and drinking fountain, site storm water, fence with gates and entrance swing gate, tree clearing, native seeding, erosion control blanket and hydro mulch as well as a three-years maintenance on native restoration.

The Morton Arboretum Site Improvements, Morton Arboretum – *Lisle, Illinois* | Project Manager for this $1.2 million project to improve two sites at this major urban arboretum. Scope of work included earthwork and aggregate base operations, including site demolition, excavation for building footings, pad gradings, topsoil respread, aggregate placement and fine grading for parking lots and flatwork areas.

Upper Salt Creek Flood Control, Metropolitan Water Reclamation District of Greater Chicago – *Palatine, Illinois* | Project Manager for this $430,000 flood control project located on the Palatine Hills Golf Course. Scope of work included earth excavation to disposal, 1,081 linear feet of storm pipe with manholes and 42-inch headwall, two 18-inch headwalls with TideFlex check valves; topsoil import for respread and restoration.

SECTION 6

PROPOSED FEE

Village of Orland Park
TINLEY CREEK BANK STABILIIZATION PROJECT
March 29, 2021

	V3 Companies														SUMMARY
Classification: TASK	**Director**	**Senior PM**	**Project Manager I**	**Senior Estimator**	**Project Eng/Scientist**	**Design Engineer III**	**Design Engineer I/II**	**Scientist III**	**Scientist I/II**	**Project Coordinator**	**Technician III**	**Technician I/II**	**Project Surveyor**	**Survey Crew**	**TASK SUBTOTALS**
Rate:	**$210.00**	**$205.00**	**$155.00**	**$200.00**	**$135.00**	**$110.00**	**$100.00**	**$105.00**	**$90.00**	**$60.00**	**$110.00**	**$80.00**	**$110.00**	**$195.00**	
1. Project Management & Coordination															
Project Management		30	60												90
Project Meetings (7 monthly)		14													14
Review Baker 98% Plans		4	24			24									52
MWRD Coordination		4													4
Site Visits / Tinley Creek Photo Documentation			4		40	40						16			100
Public Meetings (2 Total)		8	8								8				24
Individual Homeowner Meetings (5 Total)		10									10				20
Hours	**0**	**70**	**96**	**0**	**40**	**64**	**0**	**0**	**0**	**0**	**18**	**16**	**0**	**0**	**304**
Fee	**$0.00**	**$14,350.00**	**$14,880.00**	**$0.00**	**$5,400.00**	**$7,040.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$1,980.00**	**$1,280.00**	**$0.00**	**$0.00**	**$44,930.00**
2. Topographic Survey															
Topographic Survey	1	24											80	160	265
Individual Lot Exhibits (77 total)	2	60											300		362
Hours	**3**	**84**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**380**	**160**	**627**
Fee	**$630.00**	**$17,220.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$41,800.00**	**$31,200.00**	**$90,850.00**
3. Hydraulic Modeling															
HEC-RAS Update		4	24			60									88
Updated Preliminary Design Technical Memorandum		1	8			8									17
QA/QC	2														2
Hours	**2**	**5**	**32**	**0**	**0**	**68**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**107**
Fee	**$420.00**	**$1,025.00**	**$4,960.00**	**$0.00**	**$0.00**	**$7,480.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$13,885.00**
4. Wetland/Waters Delineation															
Wetland Delineation (Report & Field Work)		4			16			8							28
Field Verification		4			32			8							44
Native Planting Design and O&M Plan		2			4			24							30
Hours	**0**	**10**	**0**	**0**	**52**	**0**	**0**	**40**	**0**	**0**	**0**	**0**	**0**	**0**	**102**
Fee	**$0.00**	**$2,050.00**	**$0.00**	**$0.00**	**$7,020.00**	**$0.00**	**$0.00**	**$4,200.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$13,270.00**
5. CCDD Assessment & Documentation															
Soil Testing Report & Field Work					28										28
Prepare 663 Form					2					2					4
Hours	**0**	**0**	**0**	**0**	**30**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**32**
Fee	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$4,050.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$120.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$4,170.00**
6. Engineering Plans/Specifications & Estimate															
Plan Preparation (30%, 60%, 90%, 100%)	8	48	48		120	200	200				200				824
Cost Estimates	1	1		16							16				34
Funding Analysis		2	2												4
Contract Documents & Special Provisions		8	16		16		8								48
QA/QC	4	16													20
Hours	**13**	**75**	**66**	**16**	**136**	**200**	**208**	**0**	**0**	**0**	**216**	**0**	**0**	**0**	**930**
Fee	**$2,730.00**	**$15,375.00**	**$10,230.00**	**$3,200.00**	**$18,360.00**	**$22,000.00**	**$20,800.00**	**$0.00**	**$0.00**	**$0.00**	**$23,760.00**	**$0.00**	**$0.00**	**$0.00**	**$116,455.00**
6. Permitting															
Cook County WMO Permit	1	4	10				20			4	8				47
Village of Orland Park Permit	1	4	10				20			4	8				47
USACE Individual Permit	4	40			80			80	120	4					328
IDNR-OWR Floodway Construction Permit	4	16	40		40		40			4	8				152
Will South Cook SWCD/IEPA NOI Application	1	2				24									27
Hours	**11**	**66**	**60**	**0**	**120**	**24**	**80**	**80**	**120**	**16**	**24**	**0**	**0**	**0**	**601**
Fee	**$2,310.00**	**$13,530.00**	**$9,300.00**	**$0.00**	**$16,200.00**	**$2,640.00**	**$8,000.00**	**$8,400.00**	**$10,800.00**	**$960.00**	**$2,640.00**	**$0.00**	**$0.00**	**$0.00**	**$74,780.00**
6. Bid Phase Services															
Attend Pre-Bid Meeting		4			4										8
Respond to Contractor RFI's		4			4					2	8				18
Bid Evaluation		1		4							4				9
Hours	**0**	**9**	**0**	**4**	**8**	**0**	**0**	**0**	**0**	**2**	**12**	**0**	**0**	**0**	**35**
Fee	**$0.00**	**$1,845.00**	**$0.00**	**$800.00**	**$1,080.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$120.00**	**$1,320.00**	**$0.00**	**$0.00**	**$0.00**	**$5,165.00**
BASE PROPOSAL TOTALS	**29**	**319**	**254**	**20**	**386**	**356**	**288**	**120**	**120**	**20**	**270**	**16**	**380**	**160**	**2738**
							$363,505.00								
CCDD (Lab Costs/Field Equipment/Records Search)															**$3,000.00**
Reimbursables															**$450.00**
														TOTAL	**$366,955.00**
Geotechnical Borings (Allowance)															**$10,000**

SECTION 7

REQUIRED FORMS

PROPOSAL SUMMARY SHEET

RFP 21-015

Tinley Creek Streambank Stabilization

Business Name: V3 Companies, Ltd.

Street Address: 7325 Janes Avenue

City, State, Zip: Woodridge, IL 60517

Contact Name: Derrick Martin

Title: Project Manager

Phone: 630.729.6150 Fax: 630.724.9202

E-Mail address: dmartin@v3co.com

Price Proposal

PROPOSAL TOTAL
(On an hourly, not to exceed fee basis)

$ 366,955.00

AUTHORIZATION & SIGNATURE

Name of Authorized Signee: Gregory V. Wolterstorff

Signature of Authorized Signee:

Title: Vice President Date: March 26, 2021

ORLAND PARK

CERTIFICATE OF COMPLIANCE

The undersigned Gregory V. Wolterstorff, as Vice President
(Enter Name of Person Making Certification) *(Enter Title of Person Making Certification)*

and on behalf of V3 Companies, Ltd., certifies that:
(Enter Name of Business Organization)

1) BUSINESS ORGANIZATION:

The Proposer is authorized to do business in Illinois: Yes [x] No [ ]

Federal Employer I.D.#: 36-3252440
(or Social Security # if a sole proprietor or individual)

The form of business organization of the Proposer is (*check one*):

___ Sole Proprietor
___ Independent Contractor *(Individual)*
___ Partnership
___ LLC
x Corporation Illinois *(State of Incorporation)* October 1, 1983 *(Date of Incorporation)*

2) ELIGIBILITY TO ENTER INTO PUBLIC CONTRACTS: Yes [x] No [ ]

The Proposer is eligible to enter into public contracts, and is not barred from contracting with any unit of state or local government as a result of a violation of either Section 33E-3, or 33E-4 of the Illinois Criminal Code, or of any similar offense of "Bid-rigging" or "Bid-rotating" of any state or of the United States.

3) SEXUAL HARRASSMENT POLICY: Yes [x] No [ ]

Please be advised that Public Act 87-1257, effective July 1, 1993, 775 ILCS 5/2-105 (A) has been amended to provide that every party to a public contract must have a written sexual harassment policy in place in full compliance with 775 ILCS 5/2-105 (A) (4) and includes, at a minimum, the following information: (I) the illegality of sexual harassment; (II) the definition of sexual harassment under State law; (III) a description of sexual harassment, utilizing examples; (IV) the vendor's internal complaint process including penalties; (V) the legal recourse, investigative and complaint process available through the Department of Human Rights (the "Department") and the Human Rights Commission (the "Commission"); (VI) directions on how to contact the Department and Commission; and (VII) protection against retaliation as provided by Section 6-101 of the Act. (Illinois Human Rights Act). (emphasis added). Pursuant to 775 ILCS 5/1-103 (M) (2002), a "public contract" includes "...every contract to which the State, any of its political subdivisions or any municipal corporation is a party."

4) EQUAL EMPLOYMENT OPPORTUNITY COMPLIANCE: Yes [x] No [ ]

During the performance of this Project, Proposer agrees to comply with the "Illinois Human Rights Act", 775 ILCS Title 5 and the Rules and Regulations of the Illinois Department of Human Rights published at 44 Illinois Administrative Code Section 750, et seq. The

Proposer shall: (I) not discriminate against any employee or applicant for employment because of race, color, religion, sex, marital status, national origin or ancestry, age, or physical or mental handicap unrelated to ability, or an unfavorable discharge from military service; (II) examine all job classifications to determine if minority persons or women are underutilized and will take appropriate affirmative action to rectify any such underutilization; (III) ensure all solicitations or advertisements for employees placed by it or on its behalf, it will state that all applicants will be afforded equal opportunity without discrimination because of race, color, religion, sex, marital status, national origin or ancestry, age, or physical or mental handicap unrelated to ability, or an unfavorable discharge from military service; (IV) send to each labor organization or representative of workers with which it has or is bound by a collective bargaining or other agreement or understanding, a notice advising such labor organization or representative of the Vendor's obligations under the Illinois Human Rights Act and Department's Rules and Regulations for Public Contract; (V) submit reports as required by the Department's Rules and Regulations for Public Contracts, furnish all relevant information as may from time to time be requested by the Department or the contracting agency, and in all respects comply with the Illinois Human Rights Act and Department's Rules and Regulations for Public Contracts; (VI) permit access to all relevant books, records, accounts and work sites by personnel of the contracting agency and Department for purposes of investigation to ascertain compliance with the Illinois Human Rights Act and Department's Rules and Regulations for Public Contracts; and (VII) include verbatim or by reference the provisions of this Equal Employment Opportunity Clause in every subcontract it awards under which any portion of this Agreement obligations are undertaken or assumed, so that such provisions will be binding upon such subcontractor. In the same manner as the other provisions of this Agreement, the Proposer will be liable for compliance with applicable provisions of this clause by such subcontractors; and further it will promptly notify the contracting agency and the Department in the event any subcontractor fails or refuses to comply therewith. In addition, the Proposer will not utilize any subcontractor declared by the Illinois Human Rights Department to be ineligible for contracts or subcontracts with the State of Illinois or any of its political subdivisions or municipal corporations. Subcontract" means any agreement, arrangement or understanding, written or otherwise, between the Proposer and any person under which any portion of the Proposer's obligations under one or more public contracts is performed, undertaken or assumed; the term "subcontract", however, shall not include any agreement, arrangement or understanding in which the parties stand in the relationship of an employer and an employee, or between a Proposer or other organization and its customers. In the event of the Proposer's noncompliance with any provision of this Equal Employment Opportunity Clause, the Illinois Human Right Act, or the Rules and Regulations for Public Contracts of the Department of Human Rights the Proposer may be declared non-responsible and therefore ineligible for future contracts or subcontracts with the State of Illinois or any of its political subdivisions or municipal corporations, and this agreement may be canceled or avoided in whole or in part, and such other sanctions or penalties may be imposed or remedies involved as provided by statute or regulation.

5) TAX CERTIFICATION: Yes [x] No [ ]

Contractor is current in the payment of any tax administered by the Illinois Department of Revenue, or if it is: (a) it is contesting its liability for the tax or the amount of tax in accordance with procedures established by the appropriate Revenue Act; or (b) it has entered into an agreement with the Department of Revenue for payment of all taxes due and is currently in compliance with that agreement.

6) AUTHORIZATION & SIGNATURE:

I certify that I am authorized to execute this Certificate of Compliance on behalf of the Contractor set forth on the Proposal, that I have personal knowledge of all the information set forth herein and that all statements, representations, that the Proposal is genuine and not collusive, and information provided in or with this Certificate are true and accurate. The undersigned, having become familiar with the Project specified, proposes to provide and furnish all of the labor, materials, necessary tools, expendable equipment and all utility and transportation services necessary to perform and complete in a workmanlike manner all of the work required for the Project.

ACKNOWLEDGED AND AGREED TO:

Signature of Authorized Officer

Gregory V. Wolterstorff

Name of Authorized Officer

Vice President

Title

March 26, 2021

Date

REFERENCES

Provide three (3) references for which your organization has performed similar work.

Bidder's Name: V3 Companies, Ltd.
(Enter Name of Business Organization)

1. ORGANIZATION: Village of Downers Grove
   ADDRESS: 801 Burlington Avenue, Downers Grove, IL 60515
   PHONE NUMBER: 630.434.5494
   CONTACT PERSON: John Welch
   YEAR OF PROJECT: October 2019 - On-going

2. ORGANIZATION: Elim Christian Services
   ADDRESS: 13020 South Central Avenue, Palos Heights, IL 60463
   PHONE NUMBER: 708.293.3687
   CONTACT PERSON: Paul Rathje
   YEAR OF PROJECT: September 2015 - 2017

3. ORGANIZATION: East Skokie Drainage District
   ADDRESS: 9 North County Street, Suite 200, Waukegan, IL 60085
   PHONE NUMBER: 847.244.0770
   CONTACT PERSON: Bryan Winter
   YEAR OF PROJECT: October 2016 - On-going

ORLAND PARK

INSURANCE REQUIREMENTS

Please submit a policy Specimen Certificate of Insurance showing bidder's current coverage's

WORKERS COMPENSATION & EMPLOYER LIABILITY
Workers' Compensation – Statutory Limits
Employers' Liability
$1,000,000 – Each Accident $1,000,000 – Policy Limit
$1,000,000 – Each Employee
Waiver of Subrogation in favor of the Village of Orland Park

AUTOMOBILE LIABILITY
$1,000,000 – Combined Single Limit

GENERAL LIABILITY (Occurrence basis)
$1,000,000 – Each Occurrence $2,000,000 – General Aggregate Limit
$1,000,000 – Personal & Advertising Injury
$2,000,000 – Products/Completed Operations Aggregate
Primary Additional Insured Endorsement & Waiver of Subrogation in favor of the Village of Orland Park

PROFESSIONAL LIABILITY
$1,000,000 Limit - Claims Made Form, Indicate Retroactive Date & Deductible

EXCESS LIABILITY (Umbrella-Follow Form Policy)
$2,000,000 – Each Occurrence
$2,000,000 – Aggregate
EXCESS MUST COVER: General Liability, Automobile Liability, Workers Compensation

Any insurance policies providing the coverages required of the Consultant, excluding Professional Liability, shall be specifically endorsed to identify "The Village of Orland Park, and their respective officers, trustees, directors, officials, employees, agents, representatives and assigns as Additional Insureds on a primary/non-contributory basis with respect to all claims arising out of operations by or on behalf of the named insured." If the named insureds have other applicable insurance coverage, that coverage shall be deemed to be on an excess or contingent basis. The policies shall also contain a Waiver of Subrogation in favor of the Additional Insureds in regards to General Liability and Workers Compensation coverages. The certificate of insurance shall also state this information on its face. Any insurance company providing coverage must hold an A VII rating according to Best's Key Rating Guide. Permitting the contractor, or any subcontractor, to proceed with any work prior to our receipt of the foregoing certificate and endorsement, however, shall not be a waiver of the contractor's obligation to provide all of the above insurance.

Proposer agrees that prior to any commencement of work to furnish evidence of Insurance coverage providing for at minimum the coverages and limits described above directly to the Village of Orland Park, Nicole Merced, Purchasing Coordinator, 14700 S. Ravinia Avenue, Orland Park, IL 60462. Failure to provide this evidence in the time frame specified and prior to beginning of work may result in the termination of the Village's relationship with the contractor.

ACCEPTED & AGREED THIS 26th DAY OF March, 2021

Signature — Authorized to execute agreements for:

Gregory V. Wolterstorff, Vice President — V3 Companies, Ltd.

Printed Name & Title — Name of Company

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 12/28/2020

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Willis Towers Watson Midwest, Inc. c/o 26 Century Blvd P.O. Box 305191 Nashville, TN 372305191 USA	CONTACT NAME: Willis Towers Watson Certificate Center PHONE (A/C, No, Ext): 1-877-945-7378 FAX (A/C, No): 1-888-467-2378 E-MAIL ADDRESS: certificates@willis.com
INSURED V3 Companies Ltd. 7325 Janes Avenue, Suite 100 Woodridge, IL 60517	INSURER A: Continental Insurance Company — 35289 INSURER B: National Fire Insurance Company of Hartfor — 20478 INSURER C: Berkley Insurance Company — 32603 INSURER D: INSURER E: INSURER F:

COVERAGES **CERTIFICATE NUMBER:** W19541494 **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	X COMMERCIAL GENERAL LIABILITY CLAIMS-MADE [X] OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: POLICY [X] PRO-JECT [ ] LOC OTHER:			6045653373	01/01/2021	01/01/2022	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG	$ 1,000,000 $ 1,000,000 $ 15,000 $ 1,000,000 $ 2,000,000 $ 2,000,000
	AUTOMOBILE LIABILITY ANY AUTO OWNED AUTOS ONLY HIRED AUTOS ONLY SCHEDULED AUTOS NON-OWNED AUTOS ONLY						COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)	$ $ $ $
A	X UMBRELLA LIAB [X] OCCUR EXCESS LIAB [ ] CLAIMS-MADE DED [X] RETENTION $ 10,000			6045653390	01/01/2021	01/01/2022	EACH OCCURRENCE AGGREGATE	$ 10,000,000 $ 10,000,000
B	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) Y/N: No If yes, describe under DESCRIPTION OF OPERATIONS below	N/A		6045653423	01/01/2021	01/01/2022	X PER STATUTE [ ] OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	$ 1,000,000 $ 1,000,000 $ 1,000,000
C	Professional Liability			AEC-9041558-05	01/01/2021	01/01/2022	Per Claim: Aggregate:	$5,000,000 $10,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

CERTIFICATE HOLDER

Sample

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

ACORD 25 (2016/03)

SR ID: 20516146 BATCH: 1927339

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 10/26/2020

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER DSP Insurance 1900 E Golf Rd Suite 650 Schaumburg IL 60173	CONTACT NAME: John Adams PHONE (A/C, No, Ext): (847) 934-6100 FAX (A/C, No): (847) 934-6186 E-MAIL ADDRESS: jmiller@dspins.com	
	INSURER(S) AFFORDING COVERAGE	NAIC #
	INSURER A : National Fire Insurance Compan	20478
INSURED V3 Companies Ltd. V3 Companies of Illinois Ltd. 7325 Janes Avenue Suite 100 Woodridge IL 60517	INSURER B :	
	INSURER C :	
	INSURER D :	
	INSURER E :	
	INSURER F :	

COVERAGES **CERTIFICATE NUMBER:** Cert ID 30096 **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
	COMMERCIAL GENERAL LIABILITY						EACH OCCURRENCE	$
	[ ] CLAIMS-MADE [ ] OCCUR						DAMAGE TO RENTED PREMISES (Ea occurrence)	$
							MED EXP (Any one person)	$
							PERSONAL & ADV INJURY	$
	GEN'L AGGREGATE LIMIT APPLIES PER:						GENERAL AGGREGATE	$
	[ ] POLICY [ ] PRO-JECT [ ] LOC						PRODUCTS - COMP/OP AGG	$
	[ ] OTHER:							$
A	AUTOMOBILE LIABILITY						COMBINED SINGLE LIMIT (Ea accident)	$ 1,000,000
	[X] ANY AUTO			7011433078	10/26/2020	10/26/2021	BODILY INJURY (Per person)	$
	[ ] OWNED AUTOS ONLY [ ] SCHEDULED AUTOS						BODILY INJURY (Per accident)	$
	[X] HIRED AUTOS ONLY [X] NON-OWNED AUTOS ONLY						PROPERTY DAMAGE (Per accident)	$
								$
	UMBRELLA LIAB [ ] OCCUR						EACH OCCURRENCE	$
	EXCESS LIAB [ ] CLAIMS-MADE						AGGREGATE	$
	[ ] DED [ ] RETENTION $							$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY Y / N						[ ] PER STATUTE [ ] OTH-ER	
	ANYPROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? [ ] N / A						E.L. EACH ACCIDENT	$
	(Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - EA EMPLOYEE	$
							E.L. DISEASE - POLICY LIMIT	$
								$
								$

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Sample Certificate -proof of insurance

CERTIFICATE HOLDER

SAMPLE

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

ACORD 25 (2016/03) The ACORD name and logo are registered marks of ACORD