

Date

November 1, 2024

То

Mr. Syed M. Mansoor, P.E. Civil Engineer Village of Schaumburg Engineering and Public Works Department 714 S. Plum Grove Road Schaumburg, IL 60193 SMansoor@schaumburg.com

Re

Request for Proposal Braintree Drive (Wise Road to Weathersfield Way, Weathersfield Way to Schaumburg Road and Schaumburg Road to Bode Road) Phase II Engineering Services

Civiltech Engineering, Inc.

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Dear Mr. Mansoor:

Civiltech Engineering enthusiastically submits this statement of qualifications to provide Phase Il Engineering Services for the **Braintree Drive Reconstruction (Wise to Weathersfield) and Resurfacing (Weathersfield Way to Schaumburg Road and Schaumburg Road to Bode Road)** project. It is recognized that the improvements involve significant pedestrian and water main improvements in addition to the roadway work, including a roundabout. Our recent design experience with Village projects includes all these elements. All aspects of our Phase II design will all come together in a high quality, well-coordinated package meeting the requirements of the Village and IDOT BLRS for federally funded projects. We acknowledge receipt of Addendum 1.

Civiltech offers the Village a uniquely suited team bringing the following strengths:

- A primary area of expertise the implementation of federally funded improvements processed and approved through the IDOT Bureau of Local Roads and Streets. We have been completing these projects since our inception in 1988 and over the past 10 years have as many as 20-25 Federal-aid projects ongoing at any given time. We are therefore always up to date with changing policies and procedures that relate to the implementation of these type of projects. We have established relationships with staff at IDOT BLRS who work with us towards successfully completing these projects within the schedules that our local agencies have committed to their councils of mayors.
- A strong working relationship with the Village and knowledge of the project area. We have successfully completed many recent Phase II projects for the Village, including those featured in Section 6 Project References. Also, we have extensive experience with Village underground infrastructure as well as understanding of your standards and expectations. We will provide you with continuity of the team that we commit to the project, and we will staff this project with people that know how the Village works and what you want and expect.
- Experience with the requirements of the Northwest Municipal Conference (NWMC) and the preparation of the required STP-L Quarterly reports. We understand the Village's strategies for breaking up the overall corridor into multiple projects and support this strategy to maximize STP funding.
- Expertise in all the components of this project, including roadway and roundabout design, drainage design and permitting with MWRD, water main design and permitting with the IEPA, ADA compliance, pedestrian facility design, roadway lighting design, GIS services, and IDOT coordination. Our team also has unmatched experience with CCDOTH who has jurisdiction of two major intersections within the project limits, Wise Road and Schaumburg Road. All the elements of this project are core services at Civiltech.

We have assigned **Dave Kreeger, P.E.** as Senior Project Manager. Dave has led our team on many recent Schaumburg improvements and has a strong understanding of the Village's standards and expectations. Please see Section 6 - Project Team Organizational Chart for the other proposed Civiltech Staff and subconsultants.

I will be the individual, knowledgeable and responsible for all matters regarding this submittal. Please contact me if you have any questions. I can be reached at 630.735.3382 or by email at jvana@civiltechinc.com.

We believe the timing of this project works perfectly with our staffing and resource availability, and we stand ready to get started. I hope this submittal captures not only our qualifications, but our excitement about the project. If selected, we will provide the Village of Schaumburg with an outstanding engineering partner to ensure a successful project outcome.

Verv truly yours

Jonathan R. Vana Director of Design Services | President CIVILTECH ENGINEERING, INC.



Village of Schaumburg

PROJECT UNDERSTANDING

Braintree Drive is a vital collector roadway through a residential area that provides north-south connectivity across the Village. It also provides access to neighboring villages (Hoffman Estates to the north and Roselle to the south), as well as access to I-390 to the south (via Rodenburg Road). There are schools and parks along this primarily residential corridor. It is a marked bike route in the Village's system, and the onstreet bike lanes will be removed and replaced with an off-street bike path as part of the project.

Braintree Drive will be reconstructed from Wise Road to Weathersfield Way and resurfaced from Weathersfield Way to the northern Village limit at Bode Road. The project will restore good pavement conditions and enhance pedestrian safety and mobility along the corridor. The project is split into three segments between Wise Road and Weathersfield Way, Weathersfield Way and Schaumburg Road, and Schaumburg Road to Bode Road.



A new roundabout is proposed at the intersection of Weathersfield Way, and we are aware of the political sensitivity of this design. Civiltech's design team has designed many roundabouts including the recently constructed one at National Parkway at American Lane. We can assist the Village with public involvement and educational strategies to help shape public understanding and build project support. Our Construction Engineering team is also very familiar with roundabout construction, and they will be engaged during the design to ensure a safe and efficient work zone. Everything Schaumburg

With a unanimous vote this week, Schaumburg trustees have pulled out the stops for the design of the village's fourth roundabout, this one at Braintree Drive and Weathersfield Way next to Campanelli Park.

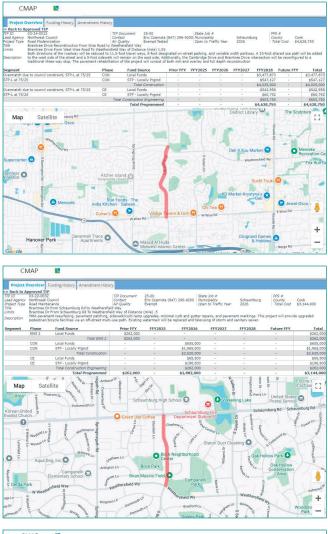


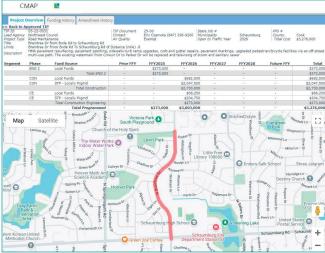
Schaumburg trustees move forward with area's first residential roundabout Schaumburg trustees are moving forward with a regionally rare roundabout at Braintree Drive ...

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Village of Schaumburg





The signalized intersections of Wise Road and Schaumburg Road are under the jurisdiction of Cook County. A county permit will be secured as part of the design engineering work. Civiltech is currently contracted with Cook County Division of Transportation and Highways as part of a \$5 million Various-Various design engineering services contract. Our team is very familiar with their requirements and standards, which will ensure the most efficient approval of the project.

The roadway is primarily residential and intersects with many driveways and cross streets throughout. Maintaining safe access to properties during construction will be an important aspect of the Maintenance of Traffic (MOT) and Staging design. The roadway is used heavily as part of school bus routes and emergency service providers. The Schaumburg Police Station and Fire Station 51 exist just east of the intersection at Schaumburg Road and Fire Station 53 is just southeast of Wise Road. Coordination with these types of stakeholders will be critical to continue during the Phase II engineering when designing MOT concepts.

The Village's water main will also be replaced according to the RFQ within all three segments. Our team is very experienced with water main replacement as part of STP funded projects. We will work closely with the Village's Engineering and Public Works team when establishing the preferred alignment for the new main, valving and shut down strategies, service connections, and fire hydrant layout. All costs for the water main work will need to be tracked separately and this work will also be permitted through the IEPA.

The three project segments are in the NWMC active STP Program. The two resurfacing sections are in FY 2026. The reconstruction section is currently shown partially funded in FY 2028 with plans to use redistribution funds, if available in FY 2026.

Target letting for the three segments is early in 2026 to allow construction to be substantially completed in a single season. This is an aggressive schedule leaving only 6 months to advance the project to a pre-final stage for submittal to IDOT. We will work closely with the Village, IDOT and NWMC to establish the project schedules and ensure that our work is completed in a manner that meets the commitments that the Village has with NWMC for project funding and schedules. We have 20-25 projects ongoing with the IDOT BLRS at any given time, and have an unmatched track record with the Village with the implementation of their major STP improvement projects over the years. We look forward to continuing to serve the Village in an exceptional manner with the Braintree Drive projects.



Village of Schaumburg

PROJECT APPROACH

Our experience with the Phase II design of similar projects allows us to identify the critical tasks and key elements that need to be addressed up front in the project design. Civiltech's designers have completed many federally funded projects in the Village that involved similar roadway corridors including Salem Drive (Bode to Golf), Walnut Lane (Bode to Golf), Wise Road (Plum Grove to Roselle) and Wright Boulevard (Irving Park to Wise). We also have recent design experience with roundabouts including the National Parkway STP project along with several others in nearby communities. There is a heightened focus on this location due to it being the first roundabout in a residential area within the Village. We will draw on our experience, and partner with the Village to promote the benefits and safety enhancements that a roundabout brings versus a conventional intersection.

Critical Tasks Up Front to Ensure Success

Construction Staging and Maintenance of Traffic

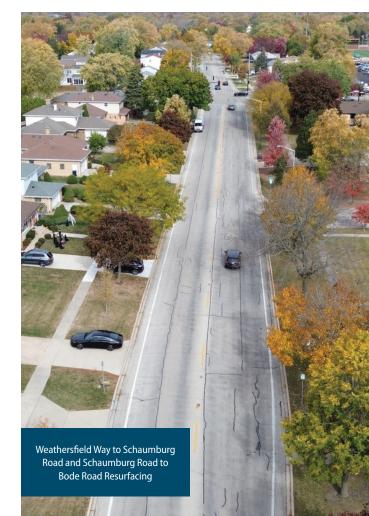
The Village has secured funding for three separate projects with the NWMC with all three lettings targeting the same construction year (FY 2026). While it is possible that these three projects can be let and constructed as separate contracts, we believe that consideration should be given to potential advantages of combining the Weathersfield to Schaumburg and Schaumburg to Bode resurfacing projects. This may produce better bid pricing and more straightforward and consistent coordination during construction.

Staging and maintenance of traffic in the two resurfacing sections will be more straightforward than the reconstruction section:

There will be three major operations in these two sections including water main construction, roadway construction and pedestrian facility construction. Maintenance of traffic in these sections can be handled with IDOT's Highway Standards and Maintenance of Traffic Notes included in the plan set. Permanent lane closures are not anticipated to be required, and the intention is that the roadway would be fully opened back up to traffic at the end of each workday.

Pedestrian detours will be required for the construction of the new bike path that can be addressed by using the sidewalk on the opposite side of the street. Short term closures of driveways will be required when water main operations are occurring in front of houses, or when concrete work is occurring within the limits of the driveways.

2,600 feet of water main will be replaced in the Weathersfield to Schaumburg section, and 1,700 feet will be replaced in the Schaumburg to Bode section. The underground work will occur up front during construction under daily lane closures in advance of the pavement rehabilitation.







Village of Schaumburg



Based on a review of the Phase I information provided by the Village as part of the RFQ process, the horizontal alignment and overall width of Braintree Drive will be the same in the existing and proposed conditions. Half width of the roadway is 19.5 feet. This presents challenges maintaining two-way traffic during construction because some temporary pavement would be required in both stages if one side of the roadway was reconstructed and then the other. We believe the added cost of the temporary pavement, additional parkway impacts (trees, light poles, etc.) and constrained work zone do not lend this as the preferred alternative to maintain traffic.

Another option would be to close full portions of the roadway and reconstruct section by section. Local access would need to be maintained through the work zone. This approach is inefficient from a construction operations standpoint, and results in safety concerns maintaining local access.

In the end, pavement reconstruction within this type of corridor is not conducive to two-way traffic. Our recommendation would be to evaluate the ability to construct the improvements under a one-way detour using local paralleling routes such as Salem Drive and Springinsguth Road. We would determine with the Village which direction of traffic to maintain through the work zone and which to detour. An advantage to this approach is also that the contractor will have a more efficient work zone that will also be safer. We have successfully used this approach on several projects in the past with the Village including the Wise Road, Walnut Lane and Salem Drive reconstruction projects in the Village, as well as several other projects in other municipalities.

The Village's water main will be replaced within the Wise Road to Weathersfield Road reconstruction segment. We will need to work with Engineering and Public Works early on up front about the new alignment/location of the replacement water main as it will influence staging and MOT designs.

The project also includes the construction of a new roundabout at the intersection of Braintree Drive and Weathersfield Way. Roundabouts present a unique challenge since construction of the splitter islands on the approach roadways and the center island block through movements. When a roundabout is constructed in an area with a large amount of right-of-way or is offset from the existing intersection, temporary pavement can be constructed to shift traffic away from the construction. In the case of Braintree, it is anticipated that there will not be adequate right-of-way to build temporary pavement to maintain traffic. Our recommendation would be to construct the improvements south of the roundabout first using the one-way detour noted above. This would also include constructing the outside curb and gutter and any drainage improvements at the intersection. During a limited duration stage after the second reconstruction stage, a full detour of Braintree and Weathersfield would



be allowed. Based on discussions with our resident engineer that recently completed the National Parkway roundabout, we anticipate the roundabout construction would require a four week closure. Traffic on Weathersfield Way would be detoured north to Schaumburg Road.

We will work with the Village to develop an acceptable MOT concept that will be used as the basis for the detailed MOT plans. All concepts will be vetted and communicated with schools, service providers and emergency services as part of the Phase II engineering.



Village of Schaumburg

Water Main Design

The Village's plan to address aging water main along the corridor as part of this pavement work takes advantage of cost savings opportunities. Certain pavement and concrete removal and replacement that would be additive costs to a stand alone water main project are already being completed as part of the roadway work. Our design team has completed many projects where local agency water main is included in federally funded projects. We will bring this up at the Phase II kick off meeting with IDOT BLRS and will separate the costs of the water main work from the federally eligible roadway construction.

We will work closely with the Village EPW team during the Preliminary stage of the project to establish the replacement water main location and alignment. We will also gain an understanding of the system to ensure that the proper pay items are included in the contract for connections to the existing system to remain. Valving strategies and fire hydrant locations will be agreed on with the Village before proceeding with final design efforts. Civiltech will secure IEPA permits for this work in time to include in the project bidding documents.

Street Lighting

During our field visit, we noted that there are light poles along the corridor that are immediately behind the back of curb. These poles may be able to remain if temporary pavement is not constructed as discussed in the Maintenance of Traffic section. However, depending on where the buried cable exists and where power is coming from, there is a chance that impacts due to the excavation for pavement and utility construction may impact these underground lines.

Based on experience, the Village has often upgraded the street lighting as part of these types of improvements. The scope of lighting improvements was unclear based on review of the RFQ and Phase I documents. Fortunately, Civiltech's lighting design team is very experienced with Schaumburg's lighting systems, and we will be able to handle the project needs no matter what decisions are made up front in the Phase II engineering work.

Tree Protection

The Braintree Drive corridor is lined with many mature trees, and loss of these trees will have a detrimental effect on the corridor and neighborhoods. Tree canopy trimming and tree protection will be important elements of the construction documents. We will also work with the Village's forester to determine if the condition of any trees warrant their removal as part of the project.





Our designers will maintain an awareness of tree impacts with the placement of the new water. Some tree impacts may be unavoidable depending on where water services fall in relation to the trees.

As discussed in the Maintenance of Traffic section above, maintaining two-way traffic will require temporary pavement that will impact many of the trees in the corridor. We want to avoid this by considering the one-way detour option that has effectively been used on many past similar projects.



Village of Schaumburg

Utility Conflict Assessment and Coordination

Utility coordination will be a key element of the project success with the watermain work being proposed as part of these projects. Accurate identification of existing utilities, both public and private, is the first key step in the utility coordination process. Our goal will be to define potential conflicts up front in the design process so that coordination and design of utility relocations can begin. We have had great success in our utility coordination over the past several years. This coordination starts with performing a J.U.L.I.E. Design Stage utility locate request and requesting atlases from identified utility companies at the beginning of the project. Once preliminary plans have been prepared, we will send those





plans directly to the utility companies. The key to this coordination will be holding periodic utility coordination meetings, starting early in the design stage. Having these meetings helps to hold each company accountable for confirming the accuracy of the utility information shown on the plans and making progress in identifying conflict locations and designing relocation plans when needed. The goal of the coordination is that all relocation work can be completed prior to the start of construction.

A particular area of concern is the utility corridor midway between Radcliffe Lane and Concord Lane. It appears that there are gas, petroleum and JAWA water pipelines within this corridor. Civiltech has recent experience with reconstructing roadways over these pipelines. Extensive coordination with the pipeline companies will be required. They will be concerned with any new crossings of their pipeline, any changes in elevation of the roadway, and the use of construction equipment when the roadway is removed. Unless previously performed, we highly recommend that the Phase 2 contract include potholing of the pipelines to determine their exact horizontal and vertical locations. The pipeline companies will be required to be onsite during this investigation and the information will need to be included on the plans. This coordination needs to start very early in the project to not affect the proposed letting date. Because of the extreme cost associated with relocating pipelines, all efforts will focus on avoiding conflicts with the pipelines.

As part of this work, all of the information related to the existing and proposed municipal facilities will be incorporated into the Village's GIS system. Civiltech's GIS Analyst, Erich Kutschke, will work closely with the Village's GIS group to either access the Village's system or provide updated information.



Village of Schaumburg

Pedestrian Design

An assessment of existing pedestrian facilities to remain will be performed as part of our work to determine what areas will be removed and replaced to comply with ADA requirements. All new sidewalk ramps will be designed in detail to meet ADA requirements and included in the construction plans. We will work with the Village to determine what sidewalk improvements outside of the curb ramps and bike path construction discussed in the RFQ are appropriate to include in these projects versus other separate Village contracts.

Drainage and Permitting

The drainage design criteria and permitting requirements for the project will be developed early in the project. The criteria will ensure compliance with MWRD's Watershed Management Ordinance (WMO). Based on the scope of work, we believe that the MWRD reviews will focus primarily on sediment and erosion control.

However, we will need to address the fact that the additional imperviousness due to the added 5' path width for the length of the project exceeds 1.0 acre. With this being a "ROW project" as defined in MWRD's ordinance, we will most likely be able to make a case that providing detention in this case is not practicable, and therefore not required as a condition of the permit.

No wetland impacts are anticipated with the project. We will ensure that any wetland reports prepared during Phase I are up to date, and confirm as part of the MWRD permitting process that no impacts to wetlands or buffers are necessary.

We will follow the recommendations of the Phase I report with respect to storm water drainage, specifically as it relates to underground storm sewer. Our designers will work with the Schaumburg EPW team to address the condition and capacity of the existing drainage system. We anticipate the need to inspect the drainage structures in the field and also review available sewer video tapes. If the Village does not have existing videotapes, or is unable to videotape the sewers, we can include this work in our engineering contract. We will also draw on the Village's GIS information to assist with storm sewer evaluations.

Environmental and Special Waste

Information about Recognized Environmental Concerns (REC's) were not identified as part of the RFP process. If necessary, Civiltech will have GSG Consultants prepare a PSI during Phase II. At a minimum, field sampling will be performed to certify existing material for disposal at Clean Construction and Demolition Debris (CCDD) sites.

There is also a chance that the biological clearance for the project may need updating during Phase II. If that is the case, we will need to be sure to update the bat inspection for the culvert just south of Radcliffe Drive.









Village of Schaumburg

Northwest Council of Mayors and IDOT Coordination

Civiltech will provide coordination either directly, or through the Village, with the Northwest Council of Mayors regarding project information, status updates, funding and schedule. This will include the use of IDOT's Project Programming Information (PPI) form, as well as the Councils' Active Program Management project update/

tracking forms. Our coordination with IDOT will begin with a Phase II kick-off meeting early in the project. As part of this work, we will also assist the Village in the preparation of the Local Agency Agreement for construction funding. Civiltech is very active in the NWMC, and we will be a strong advocate for the Village's projects should additional funding be required and come available.



Illinois Department





Cook County Coordination and Permitting

With Wise Road and Schaumburg Road being under the jurisdiction of Cook County, any work in the County right-of-way will be processed as a County Highway permit. This permit will need to be in place prior to letting, and our Phase II designers are very experienced with Cook County requirements. Civiltech has a \$5M Various-Various design contract with the County and we have established relationships with those that will review the project as part of their permit process. This will be valuable in tracking and obtaining the permit from the County.

Public Involvement

Through the recent completion of many municipal street rehabilitation and reconstruction projects for our clients, Civiltech realizes the importance of public involvement as a key component to the success of these types of projects. Providing and seeking the appropriate information at the right times from the project stakeholders produces positive results from a public relations standpoint. Stakeholders tend to be very appreciative of pre-construction communications, and expectations can be managed by addressing their concerns before the heavy equipment arrives on the project site. The real impact of public involvement varies from project to project based on the actual scope of improvements. Civiltech's experience has been that individual meetings with property owners during the preliminary

design phase along with a pre-construction presentation to the stakeholders provides beneficial results, and goes a long way to managing good relations during construction. These meetings can be supplemented with website and social media tools to reach out to the residents and property owners. We will develop a Public Involvement Plan with the Village as part of this project to maximize positive perception throughout.

Project Quality and Budget Controls

Our designers recognize the importance to design to our client's budgets, and we maintain a constant awareness of the status of project costs from the beginning to end of every project. Agencies are tasked with completing projects with limited funding, and scope changes that could potentially increase project costs will always be recognized and immediately communicated with the Village.

We propose to complete quantity calculations and an engineer's estimate of cost at all project milestones in order to develop accurate estimates throughout the project design development. All estimating will be completed in accordance with our Quality Control/Quality Assurance Plan. Reviews will include input from our construction engineering staff to ensure that pay item identification is complete and comprehensive. This will result in high quality and accurate project budget management.

All work will be completed in accordance with Civiltech's Quality Control/Quality Assurance Plan. A key component of that plan includes reviews from our construction engineering staff to ensure that the plans are constructible and that all necessary pay items have been identified. This review will result in a high quality, accurate set of contract documents.



Village of Schaumburg

SCHEDULE

	2025											
	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sep	Oct	Nov	Dec
Phase II Engineering												
Notice to Proceed (January 2025)												
Early Coordination and Data Collection				April 1	8, 2025							
Initial Meetings with the Village and IDOT					ary Plans							
Geotechnical Investigation and Reports								September 5, 2025 Pre-Final P,S&E		Permit Approvals		
Special Waste (C.C.D.D)												
Preliminary Engineering										November 24, 2025		
Village Review of Preliminary Plans									Final P,S8 Agreeme	E and Draft		
Pre-Final P, S & E						—			•			
IDOT and Village Review of Pre-final P, S & E												
Permitting (IEPA, CCDOTH and MWRD)									—			
Final P, S & E												
Final P, S & E Approval												

2026 Feb Mar Apr May Jun July Jan Aug Sep 0ct Nov Dec Final P, S & E Approval Final Final Agreements to D-1 BLRS March 6, 2026 Project Bidding Phase IDOT Letting Notes: Milestone Agency Task Project Bidding **Consultant** Task 1. Schedule applies to all three sections of the Braintree Drive project as they are all targeting early 2026 letting

2. Village will be seeking additional funding from redistribution pot for Wise Road to Weathersfield Road

3. Design shall proceed as quicly as possible to maximize time in 2026 for construction.