VILLAGE OF WINDSOR
RESOLUTION 2016-31

RESOLUTION REGARDING ENGAGEMENT OF PROFESSIONAL ENGINEER FOR STORMWATER MODELING AND PHOSPHORUS LOAD ESTIMATES

WHEREAS, the Village Board finds that the Village of Windsor has a need to acquire professional engineering services for stormwater modeling and phosphorus load estimates;

WHEREAS, on January 21, 2016 the Village Board authorized the Village Engineer to Request Proposals for Professional Engineering Services for Stormwater Modeling and Phosphorus Load Estimates, and

WHEREAS, the Village Engineer solicited request for proposals, received four proposals and has provided a review and recommendation for the engagement of Ayres Associates per the Engineer Memorandum dated February 25, 2016 attached hereto as Exhibit A;

NOW THEREFORE, BE IT RESOLVED, by the Village Board of the Village of Windsor that it hereby approves engagement of Ayres Associates to perform such stormwater modeling and phosphorus load estimates per the Ayres Associates Proposal for Stormwater Modeling and Phosphorus Load Estimates attached hereto as Exhibit B.

The above and foregoing resolution was duly adopted by the Village Board of the Village of Windsor, Dane County, Wisconsin at a meeting held on the 3rd day of March, 2016, by a vote of 5 in favor and 0 opposed.

Village of Windsor

Robert E. Wipperfurth, President

Donald G. Madelung, Trustee

Bruce Stravinski, Trustee

Alan Buchner, Trustee

Monica M. Smith, Trustee

Attest:

Tina Butteris
Deputy Clerk

V1

Windsor
Growing Forward

Memorandum

To: Windsor Village Board

CC: Tina Butteris, Finance Officer
Christine Capstran, Clerk
Amy Anderson Schweppe, Planning & Development Coordinator

From: Kevin Richardson, Village Engineer

Date: February 25, 2016

Re: Professional Engineering Proposals Stormwater Modeling and Phosphorus Load Estimates

Four proposals were received for providing engineering services for storm water modeling and phosphorus load estimates. Proposals were solicited from engineering firms known for their expertise in storm water modeling. Staff reviewed the proposals and called references listed for the required experience in the type of services to be provided. All of the firms, who submitted proposals, presented similar scopes of work and complied with the requirements outlined in the request for proposals. The table below summarizes the engineering firm's proposals.

Firm	Fee	Total Hours	Submittal to WDNR
Baxter and Woodman	$23,380	192	Late June
Town & Country	$23,000	209	Mid July
Foth	$18,400	134	Late May
Ayres Associates	$17,450	157	Late May

The references that were contacted for similar projects submitted by Ayres Associates were satisfied and would use Ayres Associates again. Ayres Associates was the engineering firm that prepared the maps used by the Dane County GIS system. The Ayres Associates proposal complies with the scope of work requested and meets the schedule required. I recommend retaining Ayres Associates to provide engineering services for storm water modeling and phosphorus load estimates.

Village of Windsor

Stormwater Modeling and Phosphorus Load Estimates

PROPOSAL

February 2016

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AYRES ASSOCIATES

AYRES ASSOCIATES

February 8, 2016

Kevin Richardson, PE, BCEE
Village Engineer
Village of Windsor
4084 Mueller Road
DeForest, WI 53532

Re: Stormwater Modeling and Phosphorus Load Estimates

Dear Mr. Richardson:

The Village of Windsor's planned stormwater modeling project will provide you with a better understanding of pollutant loads (particularly phosphorus) from the urban areas within the Village. With these modeling results, a fair allocation of costs may be developed for adaptive management of phosphorus in the Yahara River watershed.

We understand the complexities in stormwater management planning and in developing technical models to evaluate existing and future pollutant loadings within the study area. We are ready to assist the Village of Windsor with your project. Our project team provides the Village with many advantages, including:

- **Extensive stormwater management experience** gained from numerous projects throughout Wisconsin and other states.
- **Familiarity with state and federal regulations.** Our staff members are well-versed in state and federal guidelines regarding stormwater management, TMDL needs, WinSLAMM modeling, and MS4 requirements.
- **Proven success in meeting project goals, schedules, and budgets** on similar projects through effective project management and client teamwork relationships.

We appreciate this opportunity to work with you on your project, and we look forward to beginning work immediately upon receiving your notification to proceed. Thank you for considering our qualifications. If you have any questions or need more information, please contact either of us.

Sincerely,

Ayres Associates Inc

Michael D. Liebman, PE
Project Manager

800.678.4828
LiebmanM@AyresAssociates.com

James E. Owen, PE
Manager – Engineering Services

608.255.0800
OwenJ@AyresAssociates.com

MDL:wlk

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Project Approach, Scope of Services, and Schedule

"Literally, we didn't hear about the project. It didn't make news. It was silent. That's what everybody wants – no problems."

Doug Martin,
Director of Public Works,
Village of Ashwaubenon

As detailed in the Request for Proposals (RFP), the Village of Windsor plans to evaluate the nonpoint pollutant loadings in the urban areas of the Village. This is particularly timely in view of the upcoming intergovernmental agreement with the Yahara Watershed Improvement Network group and the associated phosphorus compliance obligations.

Proposed Coordination with Village Staff

The use of Village data, information, mapping, stormwater systems documents, and especially knowledge will be essential to the timely and successful completion of the project tasks. This project should be viewed as a team effort, and while Ayres staff will do the lion's share of the work, the Village staff's local knowledge, systems understanding, future goals, and details of the study area will help to make the project a success.

It is understood that past plan mapping, existing parcel documents, and land use maps will be available in digital and hard-copy format. In addition, it is understood that the Village will provide best management practice (BMP) locations and design details, future growth plans, existing drainage system plans, and other documents pertinent to the project.

All documents will be returned to the Village and updated, where appropriate.

Scope of Services – Stormwater Modeling and Phosphorus Load Estimates

The engineering services needed to complete these efforts include the following tasks:

1. Meet with the Village to gather information pertinent to the completion of stormwater modeling of urban areas within the Village and to gain a full understanding of the goals and objectives of the project. We will collect necessary information such as historical data; existing problem areas; digital mapping with drainage area designations; existing BMP locations and design, including maintenance practices and schedules; current and planned land uses; Total Maximum Daily Load (TMDL) issues and compliance plans and schedule; and any other information and details useful to the stormwater management system evaluation. A preliminary meeting with the Wisconsin Department of Natural Resources (WDNR) is planned to establish proper coordination and to make sure documentation and submittal details meet the agency's needs.

2. Review the existing Village stormwater system serving the urbanized area. This review will include gaining a full understanding of drainage areas, current and planned future land use, and existing BMP locations and conditions. The Village has many BMP facilities that will be critical to the modeling and pollutant removal performance results.

3. Delineate all areas in the basin that drain to the Yahara River and for each outfall and existing BMP. Complete WinSLAMM source area inventory sheets for each drainage basin for input into the WinSLAMM model. Existing mapping, Village knowledge, and the field overview will provide accurate representation of the drainage basin parameters.

4. Each existing BMP will be reviewed and visually inspected, including review of construction plans and outfalls, for accurately modeling the existing system.

5. Model the study area with WinSLAMM, inputting updated sub-basin and reach-shed land uses and detailed existing BMP configurations. This task will establish "No Control" conditions for both total suspended solids (TSS) and total phosphorus (TP) and will detail "Existing Conditions" system performance in meeting TSS and TP removal, which will result in TP removal performance along with remaining TP expectations for the Village.

6. As part of the upcoming intergovernmental agreement with the Yahara Watershed Improvement Network, the Village will be allocated costs for phosphorus load reductions based on existing phosphorus loading in stormwater discharges. We will estimate the Village's phosphorus loadings based on the detailed WinSLAMM modeling results.

7. Summarize the results of the previous tasks and incorporate into a stormwater management plan summary report. We will strive to keep the Village current on the project progress so your input is included in the effort. We will include updated mapping, SLAMM modeling results, existing BMP performance documentation, and other details as appropriate for the report upon concurrence with the Village.

8. After the Village reviews and approves the summary report, the report will be submitted to the WDNR for concurrence. Follow-up with the appropriate WDNR staff will lead to timely agreement with study results. Models, mapping, and the final stormwater report will be presented to the Village and provided to Village staff in electronic and hard-copy formats.

Schedule

Though somewhat aggressive, the deadline for this project detailed in the Village's RFP can be met due to our understanding of the needed deliverables, existing system information, and Village staff knowledge of the existing stormwater system.

As such, Ayres Associates proposes to complete the tasks detailed in this proposal and as needed to meet the deliverables noted in the Village's RFP within the planned project schedule shown below.

PROGRESS SCHEDULE

Project ID	Project	Village	Consultant
	Stormwater Modeling and Phosphorus Load Estimates	Windsor	Ayres Associates

YEAR	2016								
MONTH / Work Items or Operations	January	February	March	April	May	June	July	August	Estimated Hours
Stormwater modeling / phosphorus estimates									157
Meet with Village; review information, data, models									20
Review BMP plans, sub-basins, characteristics									18
Detail BMPs in field									8
Incorporate adaptive management strategies									4
Complete SLAMM inventory sheets									14
Complete SLAMM modeling									30
Summarize phosphorus loads and removals									6
Complete summary report; submit to WDNR									40
Follow up with WDNR for approval									5
Present project to Village Board									12

Similar Project Experience

"The first thing that pops into my head is ***confidence in the firm's ability to perform.***

They've established themselves as ***a very good partner.*** *The end result has always been* ***successful and impressive."***

Brian Miller,
Director of Public Works,
City of Marinette

Ayres Associates has been involved in studies, analyses, design, and construction of stormwater system improvements for municipalities for much of our history. We provide both stormwater quantity reduction improvements as well as stormwater quality enhancements. Our capabilities include:

- Sustainable stormwater management master plans
- Stormwater quality improvement evaluations and designs, including detailed WinSLAMM modeling of municipal systems
- Sustainable stormwater conveyance system evaluations and designs (rain gardens, landscaped stormwater facilities, infiltration trenches, permeable pavement, stormwater ponds, vegetated swales, bioretention)
- Constructed stormwater conveyance system evaluations and designs (pipes, inlets, culverts, drain tile, proprietary devices)
- Erosion control plan development
- Stormwater pollution prevention plan development
- Stormwater ordinance development
- Miscellaneous best management practice (BMP) evaluation and design
- Flood control studies, including hydrologic and hydraulic analysis
- Stormwater permitting (municipal, industrial, and Wisconsin Department of Natural Resources)

Whether detailing improvements to BMP facilities for better performance, conducting specialized WinSLAMM modeling to demonstrate performance, or developing funding alternatives for taking care of stormwater management facility capital and maintenance costs, Ayres Associates has the experience and expertise to help the Village of Windsor develop needed stormwater management systems.

Several of our similar projects are shown on the following pages.

Village of Ashwaubenon Stormwater Management Engineering

Client: Village of Ashwaubenon, 2155 Holmgren Way, Ashwaubenon, WI 54304-4605
Reference: Douglas Martin, PE, 920.492.2335
Completion Date: 2009 – 2015
Key Staff: Mike Liebman, PE; Jon Shallow

Ayres Associates assisted the Village of Ashwaubenon with design and implementation of stormwater management facilities and evaluation and possible implementation of stormwater BMPs. The use and expansion of the Village's stormwater management plan (completed by Mike Liebman under previous employment) provided details necessary for Municipal Separated Stormwater Sewer System (MS4) permit compliance.

Additional stormwater pond and other BMP development was explored and evaluated using WinSLAMM modeling and detailed hydraulic configurations. Illicit discharge monitoring has been an annual task performed by Ayres staff to meet permit requirements. Ayres has also been providing ongoing project erosion control and stormwater management plans, as well as obtaining stormwater permitting for these projects.

Village of Denmark Stormwater Management Plan

Client: Village of Denmark, 118 E. Main Street, Denmark, WI 54208
Reference: Erika Sisel, 920.863.8401
Completion Date: December 2014
Key Staff: Mike Liebman, PE; Pete Kolaszewski, PE; Jon Shallow

For the Village of Denmark to plan for stormwater utility budget needs, it contracted with Ayres Associates to complete a detailed stormwater management plan for the entire Village.

The plan specifically evaluated the local storm sewer drainage facilities and the natural drainage features (culverts, drainageways, etc.) to find the level of performance of each system component. Where conveyance performance was found to not meet desired levels (passing the 5- or 10-year storm flow for storm sewers and passing the 25-year or 50-year storm for culverts, depending on individual location needs), recommended improvements were documented. These results can then be used to plan improvements and associated budgets.

General stormwater quality improvements and maintenance operations were also discussed in the plan.

Village of Brown Deer Aldi Inc. Stormwater Management and Park Plaza Court Reconstruction

Client: Village of Brown Deer, 4800 W. Green Brook Drive, Brown Deer, WI 53223
Reference: Matthew Maederer, 414.357.0120
Completion Date: Ongoing
Key Staff: Michael Liebman, PE; Peter Kolaszewski, PE; Kristine Anderson, PE; Jon Shallow

The Village of Brown Deer retained Ayres Associates to design the reconstruction of Park Plaza Court, along with stormwater management for the new Aldi store site and flood storage for Beaver Creek. Work includes survey, roadway design, stormwater management design, landscape design, Water Resource Application for Project Permits (WRAPP) and Chapter 30 environmental permitting, utility coordination, and bidding services.

Stormwater management for the Aldi store redevelopment was required to meet peak flow control and total suspended solids removal for the regulatory agencies, which included the Wisconsin Department of Natural Resources (WDNR), Milwaukee Metropolitan Sewage District, and Village of Brown Deer. A bioretention system was used to meet stormwater management requirements. The Village elected to route runoff from adjacent areas to the stormwater management system to contribute to its MS4 permit requirements. The site was modeled with HydroCAD and WinSLAMM to determine treatment and flow control capabilities. Landscape design was included to create an aesthetically appealing site and to determine appropriate plantings for the bioretention system.

Bradley Road Reconstruction and Stormwater Management Improvements

Client: Village of Brown Deer, 4800 W. Green Brook Drive, Brown Deer, WI 53223
Reference: Nathaniel Piotrowski, 414.371.3061
Completion Date: Ongoing
Key Staff: Kristine Anderson, PE

The Village of Brown Deer contracted with Ayres Associates under its master agreement for engineering services to design a narrower roadway and improved stormwater management on Bradley Road from North 51st Street to North Sherman Boulevard. The minor arterial street is a five-lane roadway with two lanes in each direction and a center two-way left-turn lane and a 35 mph speed limit. The reconstruction resulted in one lane in each direction and a grassed swale median to improve stormwater quality.

Other stormwater improvements included ditch naturalization from the storm sewer outfall at West Bradley Road downstream to West Willow Road and a new BaySaver sediment control device at the end of the storm sewer pipe at West Bradley Road.

Services included topographic survey, preliminary and final roadway design, ditch and sediment control design, and permitting and bidding assistance.

Ayres Associates previously assisted the Village in applying for stormwater management grants for

this project – one from the Milwaukee Metropolitan Sewerage District's Green Infrastructure Partnership Program and one from the WDNR's Urban Nonpoint Source Storm Water Management Program.

Sheboygan County Stormwater Management Plan Update

Client: Sheboygan County Transportation Department, 1211 N. 23rd Street, Sheboygan, WI 53081
Reference: Greg Schnell, 920.459.3822
Completion Date: August 2011
Key Staff: Kristine Anderson, PE

Sheboygan County retained Ayres Associates to update its stormwater management plan to help the County meet current WDNR standards and regulations. Items in particular need of updating included WinSLAMM modeling, illicit discharge detection and elimination programs, development of public education programs, and an inventory of public works facilities and maintenance of stormwater controls.

Ayres Associates provided WinSLAMM modeling, research on illicit discharges, and information on public education, research on existing public works facilities, report writing, and meeting attendance.

University of Wisconsin System Stormwater Management

Client: Wisconsin Department of Administration, Division of Facilities Development, 101 E. Wilson Street, Madison, WI 53707-7866
Reference: David Kaul, PE, 608.267.7993
Completion Date: August 2012
Key Staff: Kristine Anderson, PE

The State of Wisconsin required stormwater management plans prepared for each of the four-year University of Wisconsin campuses. The plans were intended to provide direction to the campuses to meet WDNR NR 151 and NR 216 regulations for stormwater discharges and obtain stormwater discharge permits.

Ayres Associates prepared stormwater management plans for the four northwest campuses: UW-Eau Claire, UW-River Falls, UW-Stout, and UW-Superior. The plans included an assessment of existing stormwater features; an overview of proposed future development; an assessment of existing stormwater BMPs; a description of applicable codes; and recommendations for stormwater management. A separate stormwater management report including mapping, methods, conclusions, recommendations, and cost estimates was prepared for each campus.

La Salle Wastewater Treatment and Stormwater Management

Client: City of La Salle, P.O. Box 143, La Salle, MN 56056-0143
Reference: Mark Skarphol, 507.642.2801
Completion Date: February 2010
Key Staff: Pete Kolaszewski, PE; Jon Shallow

The City of La Salle retained Ayres Associates to design a collection and wastewater treatment system and a stormwater management system for the city of 100 people in southeastern Minnesota. The collection system includes a gravity collection system. The treatment system includes two septic tanks totaling 45,000 gallons; a combination septic/recirculation/dosing tank; recirculating gravel filter; disinfection-dosing tank; ultraviolet light disinfection; and point discharge to the Watonwan River.

Additional Experience

Stormwater Management Design, Planning, and Utility Formation Assistance

Clients: Village of Ashwaubenon, Village of Bellevue, Village of Suamico, Town of Vernon
Key Staff: Mike Liebman, PE (under previous employment)

To meet initial MS4 regulations for communities larger than 10,000 people, Mike performed a wide array of stormwater management engineering services for a number of public and private entities across the state and the Midwest.

Most pertinent was the completion of stormwater management plans for several large municipalities, which ultimately led to implementation of several stormwater utilities. Project tasks included drainage basin breakdowns and characterizations, detailed WinSLAMM modeling to determine existing pollutant removal performance, planned BMP improvements to attain desired pollutant removal performance, development of cost estimates for BMP implementation and maintenance, ERU development for cost allocations, preliminary assistance with stormwater utility development, stormwater ordinance development, storm sewer performance evaluations and improvement recommendations, and overall stormwater system performance and recommended improvements. Mike also assisted these communities in obtaining their MS4 permits.

Project Team

"They have a very good understanding of the regulatory requirements and how what you're proposing may give you heartburn.

They know the regulators; they have a good reputation with them."

Katherine Kalscheur, Principal Civil Engineer, Wisconsin Department of Administration, Division of Facilities Development

Ayres Associates has put together an experienced and knowledgeable team to complete the Village of Windsor's stormwater modeling and phosphorus load estimates.

We use a project manager approach to provide engineering services. A registered professional engineer is assigned to serve as your primary contact, attend meetings, develop project budgets, schedule work, monitor progress and budgets, and see that this project is completed to your satisfaction.

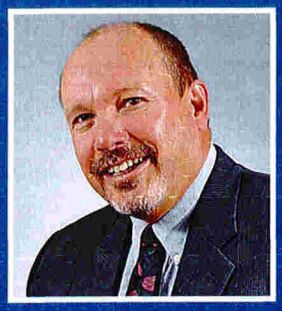
Your project manager will be Mike Liebman, PE. He will coordinate work tasks with team members and is responsible for implementing Ayres Associates' quality assurance program on this project.

Your Project Team

We have assigned experienced staff to your project; team members and their roles are shown in the chart below. Resumes showing relevant experience of key project team members also provided in this section. A table showing Ayres Associates' hourly rates is provided in the fee section.

Team Member	Role
Mike Liebman, PE	Project Manager
Pete Kolaszewski, PE	Project Engineer
Kristime Anderson, PE	Quality Assurance / Quality Control
Jon Shallow	CADD Technician

Mike Liebman, PE, Project Manager



Total Experience

38 Years

Registrations

Registered Professional Engineer, WI, 1981

Education

BS, Civil Engineering/Water Resources, University of Wisconsin-Madison, 1977

Memberships

Northeastern Wisconsin Stormwater Consortium

Mike joined Ayres Associates in August 2009 as a senior civil engineer, bringing 32 years of experience in municipal project management, design, construction administration, hydrologic and hydraulics modeling, and stormwater management and permitting. As a water resources engineer, he has created innovative facility designs to meet the stormwater management needs of municipalities, private sites, and industrial complexes.

Mike's stormwater management experience over three decades includes master drainage plan development, erosion control, stormwater utility district formation assistance, flood control, floodplain studies, detention/ retention pond design, dam permitting and design, streambank stabilization, dredging project permitting, site drainage, bridge hydraulics, and stormwater quality evaluation and design.

In addition to extensive street and storm sewer experience, Mike has assisted communities throughout the Midwest with municipal engineering services. These projects have included water distribution modeling, water system design, sanitary sewer system study and rehabilitation, subdivision infrastructure and roadway design, assessment calculations and reports, and permitting for a variety of needs.

Related Project Experience

Village of Ashwaubenon Stormwater Management Engineering: Responsible for project management. Assisted with design and implementation of stormwater management facilities, and design and construction of many streets and developments within the Village which included storm sewer design, stormwater pond designs, stormwater permitting, illicit discharge monitoring, and other related tasks.

City of Oconto Falls STH 22 Stormwater Drainage: Responsible for project management. Project involves evaluating STH 22 storm sewer system and working with Wisconsin Department of Transportation (WisDOT) on storm sewer design as part of WisDOT's reconstruction of STH 22 in the City.

Services include detailed modeling of storm sewer networks; detailed survey of existing storm sewer systems and areas proposed for improvements; and preliminary piping design, including cost estimates, specifications, and details.

Deyo Disposal Stormwater Pollution Prevention Plan: Responsible for project management and permitting. Project involved assisting Deyo Disposal with preparing Stormwater Pollution Prevention Plan (SWPPP) and working through related permitting issues with State for its site in Brown County, Wisconsin.

Plan involves properly managing site to prevent rainfall and stormwater runoff from contacting materials that can potentially discharge pollutants to water, enclosing or covering materials with significant pollutant potential, strategic placement of site materials, and use of best management practices to minimize pollutant discharge potential.

Village of Denmark Stormwater Management Plan: Responsible for project management and plan development. Project involved completing a detailed stormwater management plan to help the Village plan for future stormwater utility budget needs. The plan evaluated local storm sewer drainage facilities and the natural drainage features to find the level of performance of each system component. Where conveyance performance was found to not meet desired levels, recommended improvements were documented.

General stormwater quality improvements and maintenance operations were also discussed in the plan.

Stormwater Management Experience from previous employment: Experience spans 30 years in all aspects of stormwater management, including master drainage plan development, erosion control, stormwater utility district formation (including ERU development for cost allocations), flood control, floodplain studies, detention/retention pond design, dam permitting and design, streambank stabilization, dredging project permitting, site drainage, and stormwater quality design. Developed comprehensive stormwater management plans for small and large communities and provided Municipal Separate Storm Sewer System (MS4) permitting, drainage, flood control, and water quality improvements. Provided site drainage design planning and review in communities throughout Wisconsin, Iowa, Michigan, and Illinois.

Projects included:

Stormwater Management Plans and MS4 Permitting Prepared stormwater management plans for Villages of Suamico, Ashwaubenon, and Bellevue and Town of Vernon to provide planning to meet the WDNR MS4 water quality regulations.

Plans include detailed runoff quality (SLAMM) modeling for each drainage basin within urbanized areas, as well as ordinance creation, illicit discharge monitoring, and development of public education programs.

Stormwater Quality Enhancement Completed planning, hydrologic evaluation, hydraulic design, and final siting and sizing of stormwater quality improvement facilities throughout Midwest.

Such facilities include created, restored, and improved and mitigated wetlands in urban and rural settings for flood control, water quality improvement, and wildlife enhancement for many public and private clients; surface drainage and sedimentation basin designs for 30 different landfills; detention/retention pond designs for more than 36 major commercial sites; erosion control and

improvement designs for scores of projects; and stormwater management plans and improvement projects for large and small communities throughout Wisconsin and Midwest.

Industrial Stormwater Permitting
Completed permitting for wide variety of stormwater issues for such clients as Schneider National, Green Bay, WI; Procter & Gamble, Green Bay, WI; Wisconsin Tissue, Neenah and Menasha, WI; Moore Response Marketing Service, National Schreiber Foods, Inc.; National Oshkosh Truck, Oshkosh, WI; Johnsonville Sausage; National Monroe Truck Equipment, WI.

Regional Retention and Detention Ponds
Designed many stormwater retention and detention pond facilities for industrial, commercial, and municipal developments. Basins incorporated many sedimentation and other water quality enhancement features and met variety of peak flow reduction and water quality needs.

Wetland detention basin was constructed for City of Appleton, creating 10 acres of wetland for water quality improvement and flood protection for entire southeast quadrant of City. A 34-acre stormwater management facility was completed to handle Appleton's Northeast Area Expansion with relocated wetlands, created wetlands, permanent ponds, and flood flow diversion and control. Similar facility two miles downstream, along with connecting environmental corridor and new bridge placements, also has been constructed.

STH 54/57 Business Center, City of Green Bay, WI
Worked with regulatory authorities in identifying environmentally sensitive areas for 1,100-acre area in far northeast Green Bay. Identified sensitive areas were delineated and mapped and included wetlands, navigable streams (floodplains modeled), environmental site assessments, and all associated setbacks and buffers. Master drainage and stormwater management plan included drainage swales, detention ponds, culverts, and storm sewer layout.

Stormwater Facility Financing
Instrumental in development and implementation of varied financing programs for many communities, including basin-wide assessments, impact fees, grants, ordinance/taxation, and utility financing. Stormwater management facilities were used as the basis for formation of several stormwater utilities. Additional guidance included cost estimates, ordinance and policy revision, and utility parameters.

Site Development
Provided project management and design for numerous subdivision and site developments within many communities in Wisconsin. In Fond du Lac, developed roadway, bridge, and infrastructure designs for Spring Lakes Estates Subdivision along Taycheedah Creek.

Also developed alternatives for redevelopment of former Kohl's store site along East Branch of Fond du Lac River that included park, stormwater pond, and stormwater lift station modifications for rerouting stormwater into pond for treatment.

As one of the initial members of the Northeast Wisconsin Stormwater Consortium (NEWSC), Mike helped communities throughout northeast Wisconsin by working on the development of stormwater ordinances, standards, permit application forms and protocols, and other MS4 permit compliance issues.

Mike also spearheaded development of the Fox-Wolf Basin Stormwater Conference, which has grown to be the largest stormwater conference in the state.

In addition, Mike has provided expert testimony on many stormwater management issues, and has published/presented many papers on stormwater management topics throughout his career.

Pete Kolaszewski, PE, Project Engineer

Total Experience
11 Years

Registrations
Registered Professional Engineer, WI, 2009

Certifications
Confined Space Training

Education
BS, Civil Engineering, University of Wisconsin-Madison, 2004

Fox-Wolf Watershed Alliance Conference, 2006-2014

Memberships
American Society of Civil Engineers

Wisconsin Wastewater Operators' Association

Pete works on municipal design and construction projects with emphasis on stormwater management, sanitary sewer, water main systems, and wastewater treatment. His experience includes design of sanitary and storm sewer collection systems, stormwater management plans, roadway construction, utility extensions, lift stations, wastewater treatment systems, and construction observation and administration of these projects. He has also performed water system studies and sanitary sewer system infiltration and inflow studies.

Related Project Experience

Denmark Business Park Roadway, Stormwater, and Lift Station: Responsible for design engineering and construction observation. Work involved designing several projects within Denmark Business Park. Design was provided for new urban section asphalt pavement roadway on Bohemia Drive from De Pere Road to Schleis Lane. Stormwater pond, grading plan, and associated stormwater permitting were provided for business park and a major residential development, both requiring stormwater pond lay-out, design, and hydraulic configurations.

Ayres Associates also designed IH 43 Business Park lift station, sanitary sewer extension and services, and water main extension. Crossing under IH 43 was designed to serve commercial property west of IH 43. Bidding and construction observation services were provided on all projects.

Marinette Storm Sewer System Evaluation: Responsible for storm sewer system capacity analysis and design. The project was needed due to frequent flooding in the area of a major storm sewer outfall and several major industries and City streets. The analysis included delineation of the drainage basin and upstream subbasins, analysis of the existing pipe capacities, design of upgrades, and working with the private industries to perform simultaneous upgrades to interconnected storm sewers.

Miller-St. Nazianz Storm Sewer Improvements: Responsible for stormwater management, permitting, and design. A main drainageway and storm sewer in the southeast part of the Village of St. Nazianz was experiencing frequent flooding, specifically on the site of a major manufacturing facility. The project included analysis of the existing drainage system and design of a stormwater detention basin to reduce peak flows. The analysis consisted of modeling existing drainage areas as well as future development in the area.

Village of Denmark Stormwater Management Plan: Responsible for system hydrologic and hydraulics modeling. Project involved completing a detailed stormwater management plan to help the Village plan for future stormwater utility budget needs. The plan evaluated local storm sewer drainage facilities and the natural drainage features to find the level of performance of each system component. Where conveyance performance was found to not meet desired levels, recommended improvements were documented.

Kristine Anderson, PE, Quality Assurance/Quality Control

Total Experience

22 Years

Registrations

Registered Professional Engineer, WI, 2001; AZ, 2007

Education

BS, Engineering, University of Wisconsin-Milwaukee, 1993

Memberships

American Council of Engineering Companies

American Public Works Association

American Society of Civil Engineers

Kristine joined Ayres Associates in 2001 as a project engineer, bringing eight years of engineering experience. She has worked extensively with state and local stormwater ordinances and has experience writing stormwater management reports, preparing stormwater management and erosion control plans, and providing stormwater quality planning and stormwater permitting assistance. Her responsibilities have included planning, managing, and designing stormwater, civil, transportation, and environmental projects.

Related Project Experience

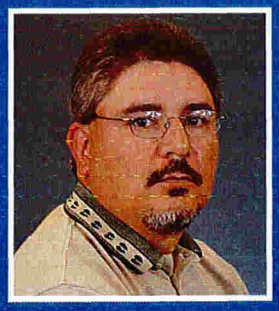
Mequon Business Park Stormwater Management Plan: Project engineer. Provided engineering services for development of Mequon Business Park (TID No. 2). General engineering services included stormwater management, detention basin design, and erosion control design. Two detention ponds were designed per Milwaukee Metropolitan Sewerage District's (MMSD) Chapter 13 Rules and Regulations and Wisconsin Department of Natural Resources Code 1001 – Wet Detention Ponds. Stormwater management plan was also prepared per MMSD rules.

Sheboygan County Stormwater Management Plan Update: Responsible for project management. Project involved updating stormwater management plan to help County meet current Wisconsin Department of Natural Resources standards and regulations. Services included SLAMM modeling, research on illicit discharges, information on public education, research on existing public works facilities, report writing, and meeting attendance. Upon completion of updates, County was eligible for construction grants to install features outlined as helping County to reach permit goals.

Stormwater Management Plan Review for Kohler Credit Union: Responsible for project management. Project involved providing stormwater management review services for Kohler Credit Union. Work involved reviewing stormwater management plan, including site grading plan, erosion control plan, and site utility plan.

University of Wisconsin System Stormwater Management: Project engineer. Project involved preparing stormwater management plans for UW-Eau Claire, UW-River Falls, UW-Stout, and UW-Superior. Plans include assessment of existing stormwater features; overview of proposed future development; assessment of existing stormwater best management practices; description of applicable codes; and recommendations for stormwater management. Separate stormwater management report prepared for each campus.

Jon Shallow, CADD Technician



Total Experience

23 Years

Education

AS, Civil Technician, Northeast Wisconsin Technical College, 1992

AS, Architectural Drafting, Northeast Wisconsin Technical College, 1990

Jon joined Ayres Associates in 2001 with nine years of experience as a CADD technician. His responsibilities at Ayres Associates include plan preparation and drafting and record keeping of municipal and transportation projects.

Related Project Experience

Village of Ashwaubenon Stormwater Management Engineering: Assisted with design, mapping, and related tasks associated with the Village's stormwater management program. Projects included erosion control plans for permit compliance, design of stormwater quality facilities, and assistance with capital improvement plan mapping for possible implementation of stormwater management improvements.

Denmark Business Park Roadway, Stormwater, and Lift Station: Responsible for CADD. Work involved designing several projects within Denmark Business Park east of IH 43. Design was provided for new urban section asphalt pavement roadway on Bohemia Drive from De Pere Road to Schleis Lane. Stormwater pond, grading plan, and associated stormwater permitting were provided for business park and a major residential development, both requiring stormwater pond lay-out, design, and hydraulic configurations within site constraints.

Village also retained Ayres Associates to design IH 43 Business Park lift station, sanitary sewer extension and services, and water main extension. Crossing under IH 43 was designed to serve commercial property west of IH 43. Bidding and construction observation services were provided on all projects.

La Salle Wastewater Treatment and Stormwater Management: Responsible for CADD. Project involved design of collection and wastewater treatment system and stormwater management system for city of 100 people. Collection system includes gravity collection system. Treatment system includes two septic tanks totaling 45,000 gallons; combination septic/recirculation/dosing tank; recirculating gravel filter; disinfection-dosing tank; ultraviolet light disinfection; and point discharge to Watonwan River.

Village of Crivitz Dory Road Storm Sewer and Roadway Improvements: Responsible for drafting of the roadway improvements. Project involves designing approximately 550 linear feet of storm sewer and roadway improvements along Dory Road and intersecting USH 141. Services include design and bidding for street and utility improvements.

Engineering Fee

"At every corner Ayres Associates has been there to assist us and keep us on track.

I don't think we could have done this without making the right choice in a firm that would help us."

Chuck Christensen,
General Manager,
Cumberland Municipal Utilities

Ayres Associates proposes to complete the tasks detailed in this proposal and as needed to meet the tasks noted in the Village's Request for Proposal for the cost of $17,450. A standard rate schedule for our staff follows this page.

Additional services can be provided for additional fees upon authorization by the Village. Such additional services may include evaluation of potential phosphorus removal facilities, storm sewer hydraulic performance evaluation, grant administration, best management practices design, and other engineering services.

AYRES ASSOCIATES
HOURLY RATE SCHEDULE
JANUARY 1, 2016

CLASSIFICATION	2016 HOURLY RATE*
Manager	126.15 – 209.40
Engineer 3	122.35 – 204.28
Engineer 2	89.73 – 128.52
Engineer 1	72.67 – 94.63
Architect 3	124.41 – 138.13
Architect 1 and 2	71.05 – 109.53
Interior Designer	80.74 – 87.70
Landscape Architect 3	110.20 – 190.58
Landscape Architect 1	58.73 – 82.03
Planner	104.69 – 139.36
Scientist 3	112.48 – 145.66
Scientist 2	73.60 – 82.72
Scientist 1	66.35 – 78.75
Surveyor	85.55 – 122.06
Geospatial Services Specialist	105.97 – 124.00
Geospatial Services Technician	53.94 – 97.81
Technician 3	66.90 – 113.94
Technician 2	69.17 – 85.05
Technician 1	36.25 – 75.13
Clerical	52.58 – 99.19

* For each classification, specific rates will depend on the level of experience required to meet project needs and goals.

This rate schedule covers normal and customary services only. Rates for environmental classifications and other specialized services are excluded.