Strand Associates, Inc. 910 West Wingra Drive

Task Order No. 24-02
City of Whitewater, Wisconsin (OWNER)
and Strand Associates, Inc. (ENGINEER)
Pursuant to Agreement for Technical Services dated December 30, 2020

Project Information

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Services Name: Stormwater Quality Management Plan (SQMP) Update

Services Description: Prepare a SQMP update to the existing 2017 plan in accordance with OWNER's municipal separate storm sewer system (MS4) permit and the Rock River total maximum daily load (TMDL) criteria. This project is partially funded by a Wisconsin Department of Natural Resources (WDNR) Urban Nonpoint Source and Stormwater Grant.

Scope of Services

ENGINEER will provide the following services to OWNER.

Administration and Meetings

- 1. Submit a draft task order to WDNR for approval prior to execution by OWNER and ENGINEER. Prepare and submit WDNR Final Report (Form 3400-189).
- 2. Participate in one in-person kickoff meeting, two virtual progress meetings, and one in-person presentation meeting.

Stormwater Quality Modeling, Alternatives Analysis, and Implementation Plan

- 1. Submit a data request to OWNER for existing stormwater-related reports, existing stormwater Best Management Practices (BMP) information, and existing geographic information system (GIS) files showing locations of existing stormwater quality BMPs for which OWNER seeks pollutant reduction credit. Review existing reports and data.
- Update OWNER's baseline and existing conditions stormwater quality models in accordance with the WDNR's October 20, 2014, TMDL Guidance for MS4 Permits: Planning, Implementation, and Modeling Guidance (recertified on September 16, 2019). Modeling will be performed in WinSLAMM for total suspended solids and total phosphorus (TP). OWNER's existing grass-lined swales, street sweeping, catch basin cleaning, and up to 2 publicly-owned, and 9 privately-owned stormwater BMPs with maintenance agreements will be incorporated into the models based on OWNER-provided stormwater BMP information. Privately-owned BMPs without maintenance agreements will not be modeled. The WinSLAMM models created for the 2017 SQMP will be updated to the current WinSLAMM version. Provide a database of BMP information in spreadsheet format based on information provided by OWNER. If additional BMPs are requested to be modeled by the OWNER, the additional modeling will be provided through an amendment to this Task Order. Modeling of University of Wisconsin—Whitewater lands is not included.
- Provide a tabular summary of stormwater quality modeling for OWNER in accordance with Wisconsin Pollutant Discharge and Elimination System (WPDES) Permit No. WI-S050075-3.

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- 4. Re-evaluate the three alternatives that were analyzed in the 2017 plan to assist in meeting the TMDL criteria within the city limits consisting of a combination of up to ten potential component stormwater BMPs that were analyzed in the 2017 plan. Up to three total additional potential component stormwater BMPs will be analyzed after consideration of the previously proposed alternatives in the 2017 plan. Prepare a figure, analysis, opinion of probable construction cost (OPCC), and total 20-year present worth cost for up to 13 potential component stormwater BMPs. Costs will be presented in terms of total cost and cost per pound TP removed. Provide a figure showing the locations of the 13 potential component stormwater BMPs.
- 5. Provide a narrative in the plan discussing potential options for achieving TMDL compliance through water quality trading (with other MS4s, private point dischargers, and agricultural lands). Develop concept level 20-year present worth cost for water quality trading (with agricultural lands) to assist in meeting TMDL wasteload allocations.
- 6. Develop a potential project implementation plan considering feasibility, water quality benefit, available funding sources, land availability, and proximity to wetlands. The Implementation Plan will include prioritization of improvements, potential schedule of improvements, budgeting plan, and review of potential funding sources based on OWNER's input. This plan will consist of a table in the SQMP update.
- 7. Prepare and submit a watershed map (storm sewer system, municipal boundary, TMDL reachsheds, existing stormwater BMPs, and areas excluded from modeling), WinSLAMM land use map, and soils classification map in accordance with WPDES Permit No. WI-S050075-3 and in accordance with OWNER-provided information.

SOMP Update

Prepare a SQMP update documenting the plan services and submit to OWNER in draft, draft final, and final format. The draft plan will include introduction, contributing watershed characteristics, and stormwater quality modeling report sections. The draft final plan will include the alternatives analysis report section. The draft plan and associated WinSLAMM stormwater quality models will be submitted to WDNR for concurrence with the submitted existing conditions WinSLAMM stormwater quality models. Provide one portable document format (PDF) file of the draft, draft final, and final SQMP update. Submit PDF files of the final plan to OWNER and WDNR.

Service Elements Not Included

In addition to those listed in the associated Agreement for Technical Services, the following service elements are not included in this Task Order. If such services are required, they shall be provided through an amendment to this Task Order.

- 1. <u>Data Gathering of Public or Private Stormwater BMP Information</u>: Any services related to gathering public or private BMP data or other information.
- 2. <u>Topographic Survey of Additional Public or Private Stormwater BMPs</u>: Any services to provide topographic survey, information processing, and WinSLAMM modeling if record drawings of public or private stormwater BMPs are insufficient to prepare WinSLAMM models of public or private BMPs.

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3. <u>WinSLAMM Modeling of Additional Public or Private Stormwater BMPs</u>: If OWNER desires additional WinSLAMM modeling of public or private stormwater BMPs, the additional services to provide information processing and WinSLAMM modeling will be provided through an amendment to this Task Order.

Compensation

OWNER shall compensate ENGINEER for Services under this Task Order on an hourly rate basis plus expenses an estimated fee of \$85,000.

Schedule

Services will begin upon execution of this Task Order, which is anticipated the week of January 1, 2024. Services are scheduled for completion on June 30, 2025.

OWNER's Responsibilities

In addition to those items found in the associated Agreement for Technical Services, OWNER shall be responsible for the following:

- 1. Provide a stormwater inlet sump inventory of visual observation and measurement of each stormwater inlet/catch basin on OWNER's property if OWNER intends to seek stormwater quality credit for stormwater inlet sumps. This information will be used in the water quality model to provide OWNER credit for the inlets that have sumps in them. OWNER shall provide a map of the locations and depths of inlets with sumps and maintenance schedule.
- 2. Provide information regarding existing stormwater management programs including public education and outreach, public involvement and participation, illicit discharge detection and elimination, stormwater pollution prevention for municipal operations, street sweeping, deicing and snow removal, leaf and yard waste management, municipal garage and storage area management, and turf maintenance policies.
- Provide a list of new development, redevelopment, and in-fill development projects with a notice of intent submitted after 2016, and a map showing the location of each.
- 4. Provide a list, locations, design drawings (grading plans and details), and stormwater management reports for all known existing stormwater BMPs (including privately owned) and practices for which stormwater quality credit is pursued, as available. Provide existing stormwater maintenance agreements for privately-owned stormwater BMPs. For stormwater BMPs, minimum necessary information includes stage/storage, outlet structure/pipes, and approximate current depth of water in the pond today for wet detention basins, as available.
- 5. Provide available existing soil borings at dry detention basins, infiltration basins, and other stormwater facilities.
- 6. Provide the most recent version of the following maps in digital format:
 - Stormwater system map including locations of storm sewer, storm structures, grass lined ditches, outfalls, and stormwater BMPs.

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- b. City boundary map.
- c. Existing land use map.
- d. Zoning map.
- e. Street map.
- f. Street sweeping map.
- g. Parcel map.
- h. Parks, recreational facilities, and open space map.
- i. Public Works Facilities map.
- j. Wetlands map.
- k. Floodplain map.
- 1. Aerial photography map.
- m. Contour map.
- n. Stormwater-related computer-aided design, GIS, and WinSLAMM files (i.e., watersheds, land use, WinSLAMM .dat or .mdb files) from OWNER's previous stormwater plans, as available.
- 7. Prepare and submit grant reimbursement requests to WDNR.
- 8. Assist ENGINEER in field survey/inventory of stormwater system and stormwater BMPs including a staff person and all necessary traffic control.
- 9. Guarantee access to and make all provisions for ENGINEER to enter upon public and private lands as required for ENGINEER to perform Task Order-specified project Services.

TASK ORDER AUTHORIZATION AND ACCEPTANCE:

CITY OF WHITEWATER
DRAFT
John Weidl Date City Manager
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