

AGENDA
COMMITTEE OF THE WHOLE
Special Meeting
January 15, 2019
2200 Harnish Drive
Village Board Room
- AGENDA -
7:45 P.M.

Trustee Brehmer– Chairperson
Trustee Glogowski
Trustee Steigert
Trustee Sosine
Trustee Spella
Trustee Jasper
President Schmitt

1. **Roll Call – Establish Quorum**
2. **Public Comment – Audience Participation** (*Persons wishing to address the Committee on an item on this agenda must register with the Chair prior to roll call.*)
3. **Community Development**
 - A. Consider the 2019 Zoning Map Update
4. **General Administration**
5. **Public Works & Safety**
 - A. Consider and Agreement with Baxter Woodman for Professional Engineering Services for the Capacity, Management, Operation, and Maintenance (CMOM) Plan
6. **Executive Session**
 - A. Land Acquisition
7. **Other Business**
8. **Adjournment**



VILLAGE OF ALGONQUIN
COMMUNITY DEVELOPMENT DEPARTMENT

– M E M O R A N D U M –

DATE: January 15, 2019

TO: Committee of the Whole

FROM: Ben Mason, AICP, Senior Planner

SUBJECT: *2019 Zoning Map Update*

Introduction

The Zoning Map has been updated to reflect the developments over the past year. Zoning of lots has been updated and special uses added. A revised map is attached for your review. Summarized below is a list of changes that have been made:

Added/Corrected:

- Added PUD and SU for 235 South Randall Road, Oberweis Dairy. *Regardless of whether this developer moves forward with their project – at this time Oberweis has not closed on purchase of the property – the PUD approval remains valid for this property should the developer decide to proceed in the next two years.
- Re-subdivided property north of Klasen Road, Meyer Material. Lot 2 remains I-1 SU and is to be disconnected and annexed to Village of Cary in 2019. Lot 3 and Lot 4 zoned B-2.
- Added SU for 2651 West Algonquin Road, Ombudsman Education.
- Re-zoned property at 801-813 North Harrison Street, Fox 14 Marina. Lots 2, 7, 8, 9 zoned B-1 PUD, SU.
- Re-subdivided property at 2401 Huntington Drive North, CarMax. Lots 1, 2, 3 zoned B-2. Lot 1 also PUD and SU.
- Disconnected portion of 118 Riverview Drive, to be unified with majority of unincorporated lot which was already under McHenry County jurisdiction.
- Re-subdivided 1033 North River Road, River Bluff Estates. Lots 1, 2, 3, 4, 5, 6 added PUD.
- Added SU for 123 South Harrison Street, Clock Tower Cupcakes.

Recommendation

Staff recommends forwarding the 2019 Zoning Map to the Village Board for approval.



VILLAGE OF ALGONQUIN
McHENRY / KANE COUNTY, ILLINOIS

ZONING DISTRICTS 2019

ZONING DISTRICTS

- R-1E ONE FAMILY DWELLING (18,000 sq.ft. min.)
- R-1 ONE FAMILY DWELLING (10,000 sq.ft. min.)
- R-1A ONE FAMILY DWELLING (14,000 sq.ft. min.)
- R-2 ONE FAMILY DWELLING (8,700 sq.ft. min.)
- R-3 TWO FAMILY DWELLING (10,000 sq.ft. min.)
- R-4 MULTIPLE FAMILY DWELLING (3,600 sq.ft. min.)
- R-5 MULTIPLE FAMILY DWELLING (2,400 sq.ft. min.)
- B-1 BUSINESS, LIMITED RETAIL
- B-2 BUSINESS, GENERAL RETAIL
- I-1 INDUSTRIAL, LIMITED
- I-2 INDUSTRIAL, GENERAL
- O-T OLD TOWN
- B-P BUSINESS PARK
- OR & D OFFICE RESEARCH and DEVELOPMENT
- SU SPECIAL USE
- PUD SPECIAL USE, PLANNED UNIT DEVELOPMENT

* INDICATES NOT IN VILLAGE

OLD TOWN DISTRICT

REVISD : FEBRUARY 5, 2019

FEBRUARY 5, 2019

VILLAGE PRESIDENT

DATE

Map prepared by:
Village of Algonquin
2000 Main St.
Algonquin, IL 60102
(815) 398-2700

Map Source: Village of Algonquin
Kane and McHenry Counties

VILLAGE PRESIDENT

Dis claimer
This map is for analysis purpose only.
It is not intended for navigation or location
of infrastructure. The reliability of this map
depends on the accuracy of its underlying
data source which has not been verified.
Unauthorized duplication or distribution is
prohibited.

Data Source: Village of Algonquin
Kane and McHenry Counties

Map prepared by:
Village of Algonquin
2200 Harms Dr.
Algonquin, IL 60101
(847)658-2700



VILLAGE OF ALGONQUIN
PUBLIC WORKS DEPARTMENT

– M E M O R A N D U M –

DATE: *October 17, 2018*

TO: Bob Mitchard, Public Works Director

FROM: *Thomas Hall, Chief Wastewater Operator*

SUBJECT: Baxter & Woodman Professional Engineering Services - Capacity, Management, Operation, and Maintenance (CMOM) Plan

Bob

I recommend contracting Baxter & Woodman to assist the Village in developing a Capacity, Management, Operations, and Maintenance (CMOM) plan. Baxter & Woodman's engineering fee for the scope of services they will provide was quoted at \$25,000.00 (See attached proposal). Funds were requested and approved within the FY2018/19 Budget under Sewer Division Account Number 07800400-42232 (CMOM Plan).

Professional engineering services are needed to realize the completion of a Capacity, Management, Operations, and Maintenance (CMOM) plan in accordance with Special Condition No. 20 of the Village of Algonquin's National Pollutant Discharge Elimination System (NPDES) permit.

Thank you for considering this recommendation.

Thomas Hall



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 • (217) 782-3397

BRUCE RAUNER, GOVERNOR

ALEC MESSINA, DIRECTOR

217/782-0610

December 28, 2018

Village of Algonquin
2200 Harnish Drive
Algonquin, Illinois 60102

Re: Village of Algonquin - WWTP
NPDES Permit No. IL0023329
Bureau ID: W1114050001
Final Permit

Gentlemen:

Attached is the final NPDES Permit for your discharge. The Permit as issued covers discharge limitations, monitoring, and reporting requirements. Failure to meet any portion of the Permit could result in civil and/or criminal penalties. The Illinois Environmental Protection Agency is ready and willing to assist you in interpreting any of the conditions of the Permit as they relate specifically to your discharge.

Pursuant to the Final NPDES Electronic Reporting Rule, all permittees must report DMRs electronically unless a waiver has been granted by the Agency. The Agency utilizes NetDMR, a web based application, which allows the submittal of electronic Discharge Monitoring Reports instead of paper Discharge Monitoring Reports (DMRs). More information regarding NetDMR can be found on the Agency website, <http://epa.state.il.us/water/net-dmr/index.html>. If your facility has received a waiver from the NetDMR program, a supply of preprinted paper DMR Forms will be sent to your facility. Additional information and instructions will accompany the preprinted DMRs. Please see the attachment regarding the electronic reporting rule.

The attached Permit is effective as of the date indicated on the first page of the Permit. Until the effective date of any re-issued Permit, the limitations and conditions of the previously-issued Permit remain in full effect. You have the right to appeal any condition of the Permit to the Illinois Pollution Control Board within a 35 day period following the issuance date.

Should you have questions concerning the Permit, please contact me at 217/782-0610.

Sincerely,

Amy L. Dragovich, P.E.
Manager, Permit Section
Division of Water Pollution Control

ALD:LT:17021001.bah

Attachments: Final Permit

cc: Records
Compliance Assurance Section
Des Plaines Region
Billing
Trotter and Associates, Inc.

CMAP

4302 N. Main St., Rockford, IL 61103 (815) 987-7760
9511 Harrison St., Des Plaines, IL 60016 (847) 294-4000
595 S. State, Elgin, IL 60123 (847) 608-3131
2125 S. First St., Champaign, IL 61820 (217) 278-5800

2009 Mall St., Collinsville, IL 62234 (618) 346-5120
412 SW Washington St., Suite D, Peoria, IL 61602 (309) 671-3022
2309 W. Main St., Suite 116, Marion, IL 62959 (618) 993-7200
100 W. Randolph, Suite 10-300, Chicago, IL 60601

NPDES Permit No. IL0023329

Illinois Environmental Protection Agency

Division of Water Pollution Control

1021 North Grand Avenue East

Post Office Box 19276

Springfield, Illinois 62794-9276

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

Reissued (NPDES) Permit

Expiration Date: December 31, 2023

Issue Date: December 28, 2018

Effective Date: January 1, 2019

Name and Address of Permittee:

Village of Algonquin
2200 Hamish Drive
Algonquin, Illinois 60102

Facility Name and Address:

Village of Algonquin - WWTP
125 Wilbrant Drive
Algonquin, Illinois 60102
(McHenry County)

Receiving Waters: Fox River

In compliance with the provisions of the Illinois Environmental Protection Act, Title 35 of the Ill. Adm. Code, Subtitle C, Chapter I, and the Clean Water Act (CWA), the above-named Permittee is hereby authorized to discharge at the above location to the above-named receiving stream in accordance with the Effluent Limitations, Monitoring, and Reporting requirements; Special Conditions and Attachment H Standard Conditions attached herein.

Permittee is not authorized to discharge after the above expiration date. In order to receive authorization to discharge beyond the expiration date, the Permittee shall submit the proper application as required by the Illinois Environmental Protection Agency (IEPA) not later than 180 days prior to the expiration date.



Amy L. Dragovich, P.E.
Manager, Permit Section
Division of Water Pollution Control

SAK:LT:17021001.bah

Effluent Limitations, Monitoring, and Reporting

FINAL

Discharge Number(s) and Name(s): 001 STP Outfall

Load limits computed based on a design average flow (DAF) of 5.0 MGD (design maximum flow (DMF) of 11.3 MGD).

From the effective date of this Permit until the expiration date, the effluent of the above discharge(s) shall be monitored and limited at all times as follows:

Parameter	LOAD LIMITS lbs/day			CONCENTRATION			Sample Frequency	Sample Type
	Annual Average	Monthly Average	Weekly Maximum	Annual Average	Monthly Average	Weekly Maximum		
Flow (MGD)							Continuous	
CBOD ₅ ** ****	417(942)	834(1885)	1668(3770)	10	20	40	3 Days/Week	Composite
Suspended Solids****	500(1131)	1043(2356)	1877(4241)	12	25	45	3 Days/Week	Composite
pH	Shall be in the range of 6 to 9 Standard Units						3 Days/Week	Grab
Fecal Coliform ¹	The monthly geometric mean shall not exceed 200 per 100 mL						3 Days/Week	Grab
Parameter	Monthly Average		Daily Maximum	Monthly Average		Daily Maximum	Sample Frequency	Sample Type
Chlorine Residual***						0.05	***	Grab
Ammonia Nitrogen: As (N)								
April-May/Sept.-Oct.	63(141)		67(151)	1.5		1.6	3 Days/Week	Composite
June-August	50(113)		67(151)	1.2		1.6	3 Days/Week	Composite
Nov.-Feb.			146(330)			3.5	3 Days/Week	Composite
March	63(141)		75(170)	1.5		1.8	3 Days/Week	Composite
Total Phosphorus (as P)	42(94)			1.0			3 Days/Week	Composite
Total Nitrogen ²		Monitor Only					1 Day/Week	Composite
Dissolved Phosphorus		Monitor Only					1 Day/Month	Composite
Nitrate/Nitrite		Monitor Only					1 Day/Month	Composite
Total Kjeldahl Nitrogen (TKN)		Monitor Only					1 Day/Month	Composite
Alkalinity		Monitor Only					1 Day/Month	Grab
Temperature		Monitor Only					1 Day/Month	Grab
				Monthly Average not less than	Weekly Average not less than	Daily Minimum		
Dissolved Oxygen March-July				N/A	6.0	5.0	3 Days/Week	Grab
August-February				5.5	4.0	3.5	3 Days/Week	Grab

NPDES Permit No. IL0023329

Effluent Limitations, Monitoring, and Reporting

FINAL

Discharge Number(s) and Name(s): 001 STP Outfall (continued)

*Load limits based on design maximum flow shall apply only when flow exceeds design average flow.

**Carbonaceous BOD₅ (CBOD₅) testing shall be in accordance with 40 CFR 136.

***See Special Condition 9.

****BOD₅ and Suspended Solids (85% removal required): In accordance with 40 CFR 133, the 30-day average percent removal shall not be less than 85 percent. The percent removal need not be reported to the IEPA on DMRs but influent and effluent data must be available, as required elsewhere in this Permit, for IEPA inspection and review. For measuring compliance with this requirement, 5 mg/L shall be added to the effluent CBOD₅ concentration to determine the effluent BOD₅ concentration. Percent removal is a percentage expression of the removal efficiency across a treatment plant for a given pollutant parameter, as determined from the 30-day average values of the raw wastewater influent concentrations to the facility and the 30-day average values of the effluent pollutant concentrations for a given time period.

¹No more than 10% of the samples during the month shall exceed 400 per 100 ml.

²See Special Condition 16.

Flow shall be reported on the Discharge Monitoring Report (DMR) as monthly average and daily maximum.

Fecal Coliform shall be reported on the DMR as a monthly geometric mean and as a percentage of the samples exceeding 400 per 100 mL.

pH shall be reported on the DMR as minimum and maximum value.

Chlorine Residual shall be reported on the DMR as a daily maximum value.

Dissolved oxygen shall be reported on the DMR as a minimum value.

Total Phosphorus shall be reported on the DMR as a monthly average and a daily maximum value.

Total Nitrogen shall be reported on the DMR as a monthly average and daily maximum value. Total Nitrogen is the sum of total kjeldahl nitrogen (TKN), nitrate and nitrite.

NPDES Permit No. IL0023329

Influent Monitoring, and Reporting

The influent to the plant shall be monitored as follows:

<u>Parameter</u>	<u>Sample Frequency</u>	<u>Sample Type</u>
Flow (MGD)	Continuous	
BOD ₅	3 Days/Week	Composite
Suspended Solids	3 Days/Week	Composite
Total Nitrogen*	1 Day/Week	Composite

Influent samples shall be taken at a point representative of the influent.

Flow (MGD) shall be reported on the Discharge Monitoring Report (DMR) as monthly average and daily maximum.

BOD₅ and Suspended Solids shall be reported on the DMR as a monthly average concentration.

*Total Nitrogen concentration shall be reported on the DMR as monthly average concentration.

Special Conditions

SPECIAL CONDITION 1. This Permit may be modified to include different final effluent limitations or requirements which are consistent with applicable laws and regulations. The IEPA will public notice the permit modification.

SPECIAL CONDITION 2. The use or operation of this facility shall be by or under the supervision of a Certified Class 1 operator.

SPECIAL CONDITION 3. The IEPA may request in writing submittal of operational information in a specified form and at a required frequency at any time during the effective period of this Permit.

SPECIAL CONDITION 4. The IEPA may request more frequent monitoring by permit modification pursuant to 40 CFR § 122.63 and Without Public Notice.

SPECIAL CONDITION 5. The effluent, alone or in combination with other sources, shall not cause a violation of any applicable water quality standard outlined in 35 Ill. Adm. Code 302 and 303.

SPECIAL CONDITION 6. The Permittee shall record monitoring results on Discharge Monitoring Report (DMR) electronic forms using one such form for each outfall each month.

In the event that an outfall does not discharge during a monthly reporting period, the DMR Form shall be submitted with no discharge indicated.

The Permittee is required to submit electronic DMRs (NetDMRs) instead of mailing paper DMRs to the IEPA unless a waiver has been granted by the Agency. More information, including registration information for the NetDMR program, can be obtained on the IEPA website, <http://www.epa.state.il.us/water/net-dmr/index.html>.

The completed Discharge Monitoring Report forms shall be submitted to IEPA no later than the 25th day of the following month, unless otherwise specified by the permitting authority.

Permittees that have been granted a waiver shall mail Discharge Monitoring Reports with an original signature to the IEPA at the following address:

Illinois Environmental Protection Agency
Division of Water Pollution Control
Attention: Compliance Assurance Section, Mail Code # 19
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276

SPECIAL CONDITION 7. The provisions of 40 CFR Section 122.41(m) & (n) are incorporated herein by reference.

SPECIAL CONDITION 8. Samples taken in compliance with the effluent monitoring requirements shall be taken at a point representative of the discharge, but prior to entry into the receiving stream.

SPECIAL CONDITION 9. For Discharge No. 001, any use of chlorine to control slime growths, odors or as an operational control, etc. shall not exceed the limit of 0.05 mg/L (daily maximum) total residual chlorine in the effluent. Sampling is required on a daily grab basis during the chlorination process. Reporting shall be submitted on the DMR's on a monthly basis.

SPECIAL CONDITION 10. The Permittee shall conduct semi-annual monitoring of the effluent and report concentrations (in mg/l) of the following listed parameters. Monitoring shall begin three (3) months from the effective date of this permit. The sample shall be a 24-hour effluent composite except as otherwise specifically provided below and the results shall be submitted on Discharge Monitoring Report Forms to IEPA unless otherwise specified by the IEPA. The parameters to be sampled and the minimum reporting limits to be attained are as follows:

<u>STORET CODE</u>	<u>PARAMETER</u>	<u>Minimum reporting limit</u>
01002	Arsenic	0.05 mg/L
01007	Barium	0.5 mg/L
01027	Cadmium	0.001 mg/L
01032	Chromium (hexavalent) (grab)	0.01 mg/L
01034	Chromium (total)	0.05 mg/L
01042	Copper	0.005 mg/L
00720	Cyanide (total) (grab)***	5.0 ug/L

Special Conditions

00722	Cyanide (grab) (available**** or amenable to chlorination)***	5.0 ug/L
00951	Fluoride	0.1 mg/L
01045	Iron (total)	0.5 mg/L
01046	Iron (Dissolved)	0.5 mg/L
01051	Lead	0.05 mg/L
01055	Manganese	0.5 mg/L
71900	Mercury (grab)**	1.0 ng/L*
01067	Nickel	0.005 mg/L
00556	Oil (hexane soluble or equivalent) (Grab Sample only)	5.0 mg/L
32730	Phenols (grab)	0.005 mg/L
01147	Selenium	0.005 mg/L
01077	Silver (total)	0.003 mg/L
01092	Zinc	0.025 mg/L

Minimum Reporting Limits are defined as – (1) The minimum value below which data are documented as non-detects. (2) Three to ten times the method detection limit. (3) The minimum value of the calibration range.

All sample containers, preservative, holding times, analyses, method detection limit determinations and quality assurance/quality control requirements shall be in accordance with 40 CFR 136.

Unless otherwise indicated, concentrations refer to the total amount of the constituent present in all phases, whether solid, suspended or dissolved, elemental or combined, including all oxidation states.

*1.0 ng/L = 1 part per trillion.

**Utilize USEPA Method 1631E and the digestion procedure described in Section 11.1.1.2 of 1631E.

***Analysis for cyanide (available or amenable to chlorination) is only required if cyanide (total) is detected at or more than the minimum reporting limit.

****US EPA Method OIA-1677.

The Permittee shall provide a report briefly describing the permittee's pretreatment activities and an updated listing of the Permittee's significant industrial users. The list should specify which categorical pretreatment standards, if any, are applicable to each Industrial User. Permittees who operate multiple plants may provide a single report. Such report shall be submitted within six (6) months of the effective date of this Permit to the following addresses:

U.S. Environmental Protection Agency
Region 5
77 West Jackson Blvd.
Chicago, Illinois 60604
Attention: Water Assurance Branch Enforcement and Compliance

Illinois Environmental Protection Agency
Division of Water Pollution Control
Attention: Compliance assurance Section, Mail Code #19
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276

SPECIAL CONDITION 11. During January of each year the Permittee shall submit annual fiscal data regarding sewerage system operations to the Illinois Environmental Protection Agency/Division of Water Pollution Control/Compliance Assurance Section. The Permittee may use any fiscal year period provided the period ends within twelve (12) months of the submission date.

Submission shall be on forms provided by IEPA titled "Fiscal Report Form For NPDES Permittees".

SPECIAL CONDITION 12. The Permittee shall conduct biomonitoring of the effluent from Discharge Number(s) 001.

Biomonitoring

- A. Acute Toxicity - Standard definitive acute toxicity tests shall be run on at least two trophic levels of aquatic species (fish, invertebrate) representative of the aquatic community of the receiving stream. Testing must be consistent with Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms (Fifth Ed.) EPA/821-R-02-012. Unless substitute tests are pre-approved; the following tests are required:

Special Conditions

1. Fish - 96 hour static LC₅₀ Bioassay using fathead minnows (*Pimephales promelas*).
 2. Invertebrate 48-hour static LC₅₀ Bioassay using *Ceriodaphnia*.
- B. Testing Frequency - The above tests shall be conducted using 24-hour composite samples unless otherwise authorized by the IEPA. Samples must be collected in the 18th, 15th, 12th, and 9th month prior to the expiration date of this Permit.
- C. Reporting - Results shall be reported according to EPA/821-R-02-012, Section 12, Report Preparation, and shall be submitted to IEPA, Bureau of Water, Compliance Assurance Section within one week of receipt from the laboratory. Reports are due to the IEPA no later than the 16th, 13th, 10th, and 7th month prior to the expiration date of this Permit.
- D. Toxicity - Should a bioassay result in toxicity to >20% of organisms test in the 100% effluent treatment, the IEPA may require, upon notification, six (6) additional rounds of monthly testing on the affected organism(s) to be initiated within 30 days of the toxic bioassay. Results shall be submitted to IEPA within (1) week of becoming available to the Permittee. Should any of the additional bioassays result in toxicity to ≥50% of organisms tested in the 100% effluent treatments, the Permittee shall immediately notify IEPA in writing of the test results.
- E. Toxicity Reduction Evaluation and Identification - Should the biomonitoring program identify toxicity and result in notification by IEPA, the Permittee shall develop a plan for toxicity reduction evaluation and identification. The plan shall be developed and implemented in accordance with Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment Plants, EPA/833B-99/002, and shall include an evaluation to determine which chemicals have a potential for being discharged in the plant wastewater, a monitoring program to determine their presence or absence and to identify other compounds which are not being removed by treatment, and other measures as appropriate. The Permittee shall submit to the IEPA its plan within ninety (90) days following notification by the IEPA. The Permittee shall implement the plan within ninety (90) days of notification of the permittee above or other such date as is received by letter from IEPA.

The IEPA may modify this Permit during its term to incorporate additional requirements or limitations based on the results of the biomonitoring. In addition, after review of the monitoring results and toxicity reduction evaluation, the IEPA may modify this Permit to include numerical limitations for specific toxic pollutants and additional whole effluent toxicity monitoring to confirm the results of the evaluation. Modifications under this condition shall follow public notice and opportunity for hearing.

SPECIAL CONDITION 13. For the duration of this Permit, the Permittee shall determine the quantity of sludge produced by the treatment facility in dry tons or gallons with average percent total solids analysis. The Permittee shall maintain adequate records of the quantities of sludge produced and have said records available for U.S. EPA and IEPA inspection. The Permittee shall submit to the IEPA, at a minimum, a semi-annual summary report of the quantities of sludge generated and disposed of, in units of dry tons or gallons (average total percent solids) by different disposal methods including but not limited to application on farmland, application on reclamation land, landfilling, public distribution, dedicated land disposal, sod farms, storage lagoons or any other specified disposal method. Said reports shall be submitted to the IEPA by January 31 and July 31 of each year reporting the preceding January thru June and July thru December interval of sludge disposal operations.

Duty to Mitigate. The Permittee shall take all reasonable steps to minimize any sludge use or disposal in violation of this Permit.

Sludge monitoring must be conducted according to test procedures approved under 40 CFR 136 unless otherwise specified in 40 CFR 503, unless other test procedures have been specified in this Permit.

Planned Changes. The Permittee shall give notice to the IEPA on the semi-annual report of any changes in sludge use and disposal. The Permittee shall retain records of all sludge monitoring, and reports required by the Sludge Permit as referenced in Standard Condition 25 for a period of at least five (5) years from the date of this Permit.

If the Permittee monitors any pollutant more frequently than required by this permit or the Sludge Permit, the results of this monitoring shall be included in the reporting of data submitted to the IEPA.

The Permittee shall comply with existing federal regulations governing sewage sludge use or disposal and shall comply with all existing applicable regulations in any jurisdiction in which the sewage sludge is actually used or disposed.

The Permittee shall comply with standards for sewage sludge use or disposal established under section 405(d) of the CWA within the time provided in the regulations that establish the standards for sewage sludge use or disposal even if the permit has not been modified to incorporate the requirement.

The Permittee shall ensure that the applicable requirements in 40 CFR Part 503 are met when the sewage sludge is applied to the land, placed on a surface disposal site, or fired in a sewage sludge incinerator.

Special Conditions

Monitoring reports for sludge shall be reported on the form titled "Sludge Management Reports" to the following address:

Illinois Environmental Protection Agency
Bureau of Water
Compliance Assurance Section
Mail Code #19
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276

SPECIAL CONDITION 14. This Permit may be modified to include alternative or additional final effluent limitations pursuant to an approved Total Maximum Daily Load (TMDL) Study, an approved Implementation Plan, or an approved trading program.

SPECIAL CONDITION 15. The Permittee shall, within 12 months of the effective date of this permit, prepare and submit to the Agency a Phosphorus Removal Feasibility Study (PRFS) that identifies the method, timeframe, and costs of reducing phosphorus levels in its discharge to a level consistently meeting a potential future effluent limit of 0.5 mg/L and 0.1 mg/L. The study shall evaluate the construction and O & M costs of the application of these limits on a monthly, seasonal and annual average basis. The feasibility report shall also be shared with the Fox River Study Group.

SPECIAL CONDITION 16. The Permittee shall operate the facilities consistent with its design parameters for biological nutrient removal (BNR). Monitoring for Total Nitrogen is required to document the actual total nitrogen effluent concentration. The Permittee shall monitor the influent and effluent for total nitrogen once per week. The monitoring shall be a composite sample and the results reported as a monthly average and a daily maximum on the Permittee's Discharge Monitoring Forms.

SPECIAL CONDITION 17. The Permittee shall develop and submit to the Agency a Phosphorus Discharge Optimization Plan within 12 months of the effective date of this permit. The plan shall include a schedule for the implementation of these optimization measures. Annual progress reports on the optimization of the existing treatment facilities shall be submitted to the Agency by March 31 of each year beginning 12 months from the effective date of the permit. In developing the plan, the Permittee shall evaluate a range of measures for reducing phosphorus discharges from the treatment plant, including possible source reduction measures, operational improvements, and minor facility modifications that will optimize reductions in phosphorus discharges from the wastewater treatment facility. The Permittee's evaluation shall include, but not be limited to, an evaluation of the following optimization measures:

- A. WWTF influent reduction measures.
 - 1. Evaluate the phosphorus reduction potential of users.
 - 2. Determine which sources have the greatest opportunity for reducing phosphorus (i.e., industrial, commercial, institutional, municipal and others).
 - a. Determine whether known sources (i.e., restaurant and food preparation) can adopt phosphorus minimization and water conservation plans.
 - b. Evaluate implementation of local limits on influent sources of excessive phosphorus.
- B. WWTF effluent reduction measures.
 - 1. Reduce phosphorus discharges by optimizing existing treatment processes.
 - a. Adjust the solids retention time for either nitrification, denitrification, or biological phosphorus removal.
 - b. Adjust aeration rates to reduce dissolved oxygen and promote simultaneous nitrification-denitrification.
 - c. Add baffles to existing units to improve microorganism conditions by creating divided anaerobic, anoxic, and aerobic zones.
 - d. Change aeration settings in plug flow basins by turning off air or mixers at the inlet side of the basin system.
 - e. Minimize impact on recycle streams by improving aeration within holding tanks.
 - f. Reconfigure flow through existing basins to enhance biological nutrient removal.
 - g. Increase volatile fatty acids for biological phosphorus removal.

SPECIAL CONDITION 18. The Permittee shall monitor the wastewater effluent for Total Phosphorus, Dissolved Phosphorus, Nitrate/Nitrite, Total Kjeldahl Nitrogen (TKN), Ammonia, Total Nitrogen (calculated), Alkalinity and Temperature at least once a month beginning on the effective date of this permit. The Permittee shall monitor the wastewater influent for Total Phosphorus at least once a month. The results shall be submitted on electronic Discharge Monitoring Report Forms (NetDMRs) to IEPA unless otherwise specified by the IEPA.

SPECIAL CONDITION 19. The Permittee shall participate in the Fox River Study Group (FRSG) throughout the duration of this permit cycle. The Permittee shall work with other watershed members of the FRSG to determine the most cost effective means to remove dissolved oxygen (DO) impairment and offensive condition impairments in the Fox River to the extent feasible. The Permittee shall participate in the FRSG for the completion of the following tasks set out in the 2015 Fox River Implementation Plan (either by the permittee or through the FRSG) by the schedule dates set forth below:

Special Conditions

- A. The Permittee shall implement the recommendations of the 2015 Fox River Implementation Plan that are applicable to said Permittee during the term of this Permit.
- B. The FRSG will conduct these activities during the term of the permit:
 - 1. Work with the Army Corps of Engineers and Illinois Department of Natural Resources to restart the Fox River Habitat & Connectivity Study.
 - 2. Collect continuous dissolved oxygen data and other water quality parameters at the Stratton Dam from April through September 2019, 2020, and 2021 to update the FRSG's water quality model.
 - 3. Analyze Fox River and Major Tributary Water Quality Data and Trends, for the period 1998-2016 by December 31, 2018.
 - 4. Update the Fox River DB database with newly collected data, by July 31, 2019.
 - 5. Amend the modelling and use the modified model to reevaluate water quality improvement scenarios, by August 31, 2019.
 - 6. Amend the Implementation Plan by December 31, 2022 based on the improved modelling and which will include proposed watershed improvement projects.
- C. The Permittee shall submit an annual progress report on the activities identified in Item B above to the Agency by March 31 of each year. The Permittee may work cooperatively with the FRSG to prepare a single annual progress report that is common among FRSG permittees.
- D. In its application for renewal of this permit, the Permittee shall consider and incorporate recommended FRSG activities listed in the Implementation Plan that the Permittee will implement during the next permit term.

SPECIAL CONDITION 20. The Permittee shall work towards the goals of achieving no discharges from sanitary sewer overflows or basement back-ups and ensuring that overflows or back-ups, when they do occur do not cause or contribute to violations of applicable standards or cause impairment in any adjacent receiving water. Overflows from sanitary sewers are expressly prohibited by this permit and by Ill. Adm. Code 306.304. As part of the process to ultimately achieve compliance through the elimination of and mitigating the adverse impacts of any such overflows if they do occur, the Permittee shall (A) identify and report to IEPA all SSOs that do occur, and (B) develop, implement and submit to the IEPA a Capacity, Management, Operations, and Maintenance (CMOM) plan which includes an Asset Management strategy within 18 months of the effective date of this Permit or review and revise any existing plan accordingly. The Permittee shall modify the Plan to incorporate any comments that it receives from IEPA and shall implement the modified plan as soon as possible. The Permittee should work as appropriate, in consultation with affected authorities at the local, county, and/or state level to develop the plan components involving third party notification of overflow events. The Permittee may be required to construct additional sewage transport and/or treatment facilities in future permits or other enforceable documents should the implemented CMOM plan indicate that the Permittee's facilities are not capable of conveying and treating the flow for which they are designed.

The CMOM plan shall include the following elements:

A. Measures and Activities:

- 1. A complete map and system inventory for the collection system owned and operated by the Permittee;
- 2. Organizational structure; budgeting; training of personnel; legal authorities; schedules for maintenance, sewer system cleaning, and preventative rehabilitation; checklists, and mechanisms to ensure that preventative maintenance is performed on equipment owned and operated by the Permittee;
- 3. Documentation of unplanned maintenance;
- 4. An assessment of the capacity of the collection and treatment system owned and operated by the Permittee at critical junctions and immediately upstream of locations where overflows and backups occur or are likely to occur; use flow monitoring and/or sewer hydraulic modeling, as necessary;
- 5. Identification and prioritization of structural deficiencies in the system owned and operated by the Permittee. Include preventative maintenance programs to prevent and/or eliminate collection system blockages from roots or grease, and prevent corrosion or negative effects of hydrogen sulfide which may be generated within collection system;
- 6. Operational control, including documented system control procedures, scheduled inspections and testing, list of scheduled frequency of cleaning (and televising as necessary) of sewers;
- 7. The Permittee shall develop and implement an Asset Management strategy to ensure the long-term sustainability of the collection system. Asset Management shall be used to assist the Permittee in making decisions on when it is most appropriate to repair, replace or rehabilitate particular assets and develop long-term funding strategies; and
- 8. Asset Management shall include but is not limited to the following elements:
 - a. Asset Inventory and State of the Asset;
 - b. Level of Service;
 - c. Critical Asset Identification;
 - d. Life Cycle Cost; and
 - e. Long-Term Funding Strategy.

B. Design and Performance Provisions:

- 1. Monitor the effectiveness of CMOM;
- 2. Upgrade the elements of the CMOM plan as necessary; and

Special Conditions

3. Maintain a summary of CMOM activities.

C. Overflow Response Plan:

1. Know where overflows and back-ups within the facilities owned and operated by the Permittee occur;
2. Respond to each overflow or back-up to determine additional actions such as clean up; and
3. Locations where basement back-ups and/or sanitary sewer overflows occur shall be evaluated as soon as practicable for excessive inflow/infiltration, obstructions or other causes of overflows or back-ups as set forth in the System Evaluation Plan.
4. Identify the root cause of the overflow or basement backup, and document to files;
5. Identify actions or remediation efforts to reduce risk of reoccurrence of these overflows or basement backups in the future, and document to files.

D. System Evaluation Plan:

1. Summary of existing SSO and Excessive I/I areas in the system and sources of contribution;
2. Evaluate plans to reduce I/I and eliminate SSOs;
3. Evaluate the effectiveness and performance in efforts to reduce excessive I/I in the collection system;
4. Special provisions for Pump Stations and force mains and other unique system components; and
5. Construction plans and schedules for correction.

E. Reporting and Monitoring Requirements:

1. Program for SSO detection and reporting; and
2. Program for tracking and reporting basement back-ups, including general public complaints.

F. Third Party Notice Plan:

1. Describes how, under various overflow scenarios, the public, as well as other entities, would be notified of overflows within the Permittee's system that may endanger public health, safety or welfare;
2. Identifies overflows within the Permittee's system that would be reported, giving consideration to various types of events including events with potential widespread impacts;
3. Identifies who shall receive the notification;
4. Identifies the specific information that would be reported including actions that will be taken to respond to the overflow;
5. Includes a description of the lines of communication; and
6. Includes the identities and contact information of responsible POTW officials and local, county, and/or state level officials.

For additional information concerning USEPA CMOM guidance and Asset Management please refer to the following web site addresses.
http://www.epa.gov/npdes/pubs/cmom_guide_for_collection_systems.pdf and
http://water.epa.gov/type/watersheds/wastewater/upload/guide_smallsystems_assetmanagement_bestpractices.pdf

SPECIAL CONDITION 21. An effluent limit of 0.5 mg/L Total Phosphorus 12-month rolling geometric mean (calculated monthly) (hereinafter Limit) will be applicable to the Permittee beginning January 1, 2030. The Agency may modify the permit if:

- A. The Permittee demonstrates that the Limit is not technologically feasible; or
- B. The Permittee demonstrates the Limit would result in substantial and widespread economic or social impact. Substantial and widespread economic impacts must be demonstrated using applicable USEPA guidance, including but not limited to any of the following documents:
 1. Interim Economic Guidance for Water Quality Standards, March 1995, EPA-823-95-002;
 2. Combined Sewer Overflows – Guidance for Financial Capability Assessment and Schedule Development, February 1997, EPA-832—97-004;
 3. Financial Capability Assessment Framework for Municipal Clean Water Act Requirements, November 24, 2014; or
- C. If the Implementation Plan determines that a greater phosphorus reduction is necessary and achievable before January 1, 2030, then the Permittee shall meet the phosphorus limit identified in the Implementation Plan in accordance with the schedule set out therein; or
- D. If the Limit is demonstrated not to be technologically or economically feasible by January 1, 2030, but is feasible within a longer timeline, then the Limit shall be met as soon as feasible; or
- E. If the Limit is demonstrated not to be technologically or economically achievable by the Permittee, then an effluent limit that is achievable by the Permittee must be met as soon as feasible and shall not exceed 0.6 mg/L Total Phosphorus 12-month rolling geometric mean (calculated monthly).

The Agency will modify or reissue the NPDES permit as necessary. Any permit modification or renewal will be public noticed and made available for public review and comment prior to issuance of any permit modification or renewal. No date deadline extension or effluent limitation modification will be effective until it is included in a modified or reissued NPDES permit.

April 25, 2018

Robert G. Mitchard
Director of Public Works
Village of Algonquin
110 Meyer Drive
Algonquin, Illinois 60102

***Subject: Village of Algonquin, Illinois
Capacity, Management, Operation, and Maintenance (CMOM) Plan –
Baxter & Woodman Proposal for Professional Engineering Services***

Dear Bob:

Baxter & Woodman, Inc. appreciates the opportunity to submit this Proposal to assist the Village in developing a Capacity, Management, Operations, and Maintenance (CMOM) plan. Your Project Manager, Dan Bounds, has assisted over 20 communities complete CMOM program elements and is a recognized CMOM and collection systems expert in the Chicagoland Area. He is supported by a team of collection system engineers with a broad range of system management and regulatory expertise.

Project Description

The Village's NPDES Permit Special Conditions require the preparation of a CMOM Plan, summarized below:

SPECIAL CONDITION No. 20 Requirements:

"The Permittee shall work towards the goals of achieving no discharges from sanitary sewer overflows or basement back-ups and ensuring that overflows or back-ups, when they do occur do not cause or contribute to violations of applicable standards or cause impairment in any adjacent receiving water. Overflows from sanitary sewer are expressly prohibited by this permit and by Ill. Adm. Code 306.304. In order to accomplish these goals of complying with this prohibition and mitigating the adverse impacts of such any overflows if they do occur, the Permittee shall (A) identify and report to IEPA all SSOs that do occur, and (B) develop, implement, and submit to IEPA a Capacity, Management Operations, and Maintenance (CMOM) plan which includes an Asset Management strategy. The permittee should work as appropriate, in consultation with affected authorities at the local, county, and/or state level to develop the plan components involving third party notification of overflow events. The Permittee may be required to construct additional sewage transport and/or treatment facilities in future permits or other enforceable documents should the implemented CMOM plan indicate that the permittee's facilities are not capable of conveying and treating the flow for which they are designed."

Scope of Services

The following outlines our scope of services to assist the Village with preparation of CMOM plan documentation.

1. **PROJECT MANAGEMENT** – Plan, schedule, and control the activities that must be performed to complete the Project. These activities include, but are not limited to budget, schedule, and scope. Submit a monthly status report and invoice that describes the tasks completed that month.
2. **PROJECT WORKSHOP MEETING** – A Project Workshop meeting with Village staff and Project team will be held for the CMOM Plan. The purposes of the meeting are to establish clear lines of communication, introduce Village staff to the team members, and establish the Village's needs, objectives, and goals for the Project. The meeting will also be utilized to obtain information, plans, atlases, and other data to be supplied by the Village, and set schedules and goals for future meetings.
3. **GATHER AND REVIEW DATA**
 - *Request to Village:* We ask the Village to gather the following documents, if available:
 - Sanitary Sewer, Manhole, and Lift Station GIS feature classes
 - Including age, materials, and size attributes
 - Sanitary Sewer Cityworks Operational Tasks (work order, service request, inspection templates and samples)
 - Work Order System Information/Data, Staff Time Data Export, if available
 - Organization Chart(s)
 - Sewer Use / Pretreatment Ordinance
 - Intergovernmental Agreements with Communities, if any
 - Collection System Capital Improvement Plan (CIP) and Budget
 - Collection System O&M Budget
 - Asset Management Plan Information, if available
 - Sewer System Description, if documented
 - Collection System Goals, if documented
 - Sanitary Sewer Atlas Maps
 - Highlighted Map with Approx. Age of Collection System Assets, by catchment area
 - Highlighted Map of Collection System Issues
 - List or Map of Overflows and Basement Backups
 - Identification of Critical Sewers
 - Collection System Design Standards or Details
 - Sewer System As-builts, if available

- Pump Station Info (Record Drawings, O&M's, Pump Curve Info, Criticality, Generator Locations), if available.
- O&M Manuals (Lift Stations)
- Sewer Master Plans or Evaluations
- Sewer System and Equipment O&M Schedule or Documentation, all SOPs
- Emergency Response Plans (sewer backup, SSO, cleanup, notification, etc.)

4. MEETINGS WITH VILLAGE STAFF

- Conduct meetings with staff at times during the Project to clarify staff wishes and available information.
- *Our Proposal includes four (4) meetings, including the Project Workshop meeting.*

5. PREPARE CMOM PLAN – The plan shall include the following information, provided by the Village or developed by Baxter & Woodman, as outlined in the NPDES Special Conditions of the NPDES Permit:

A. Measures and Activities:

1. A complete map and system inventory for collection system owned and operated by the Permittee;
2. Organizational structure; budgeting; training of personnel; legal authorities; schedules for maintenance, sewer system cleaning, and preventative rehabilitation; checklists, and mechanisms to ensure that preventative maintenance is performed on equipment owned and operated by the Permittee;
3. Documentation of unplanned maintenance;
4. An assessment of the capacity of collection and treatment system owned and operated by the Permittee at critical junctions and immediately upstream of locations where overflows and backups occur or are likely to occur; use flow monitoring as necessary;
5. Identification and prioritization of structural deficiencies in system owned and operated by the Permittee;
6. Operational control, including documented system control procedures, scheduled inspections, and testing;
7. The Permittee shall develop and implement an Asset Management strategy to ensure the long-term sustainability of collection system. Asset Management shall be used to assist the Permittee in making decisions on when it is most appropriate to repair, replace or rehabilitate particular assets, and develop long-term funding strategies; and

8. Asset Management shall include, but is not limited to, the following elements:
 - a. Asset Inventory and State of the Asset;
 - b. Level of Service;
 - c. Critical Asset Identification;
 - d. Life Cycle Cost; and
 - e. Long-Term Funding Strategy.
- B. Design and Performance Provisions:
 1. Monitor the effectiveness of the CMOM;
 2. Upgrade the elements of the CMOM plan as necessary; and
 3. Maintain summary of CMOM activities.
- C. Overflow Response Plan:
 1. Know where overflows within facilities owned and operated by the Permittee occur;
 2. Respond to each overflow to determine additional actions such as clean up; and
 3. Locations where basement back-ups and/or sanitary sewer overflows occur shall be evaluated as soon as practicable for excessive inflow /infiltration, obstructions or other causes of overflows or back-ups as set forth in the System Evaluation Plan.
- D. System Evaluation Plan:
 1. Summary of existing SSO and Excessive I/I areas in system and sources of contribution;
 2. Evaluate plans to reduce I/I and eliminate SSOs;
 3. Special provisions for Pump Stations and force mains and other unique system components; and
 4. Construction plans and schedules for correction.
- E. Reporting and Monitoring Requirements:
 1. Program for SSO detection and reporting; and
 2. Program for tracking and reporting basement back-ups, including general public complaints.

F. Third Party Notice Plan:

1. Describes how, under various overflow scenarios, the public, as well as other entities, would be notified of overflows within the Permittee's system that may endanger public health, safety, or welfare;
 2. Identifies overflows within the Permittee's system that would be reported, giving consideration to various types of events including events with potential widespread impacts;
 3. Identifies who shall receive the notification;
 4. Identifies the specific information that would be reported including actions that will be taken to respond to the overflow;
 5. Includes a description of the lines of communication; and
 6. Includes the identities and contact information of the responsible POTW officials and local, county, and/or state level officials.
6. **STANDARD OPERATING PROCEDURES REVIEW AND REVISION** – Existing Standard Operating Procedure (SOP) documents for system repair and maintenance will be reviewed. Up to three (3) existing SOPs will be updated to improve system repair and maintenance procedure documentation, or will be or created if does not currently exist.

DELIVERABLES: DRAFT AND FINAL CMOM PLAN

- Up to four (4) CMOM development meetings with Village staff
- Electronic preliminary draft CMOM Program documentation
- Electronic draft CMOM Program documentation
- Reply to comments from Village Staff
- Prepare Final CMOM Plan and submit electronically to Village
- Standard Operating Procedure (SOP) documents for system repair and maintenance

Engineering Fee

Our engineering fee for the above stated scope of services will be a lump sum amount of **\$25,000**.

Thank you for the opportunity to submit our Proposal for this Project. Upon your written authorization to proceed, we will begin working immediately. Please contact Sean at 815-444-4438 or sodell@baxterwoodman.com if you should have any questions or need additional information.



The attached Standard Terms & Conditions apply to this Proposal. If you find this Proposal acceptable, **please sign and return one copy for our files.**

Sincerely,

BAXTER & WOODMAN, INC.
CONSULTING ENGINEERS

A handwritten signature in blue ink, reading "Carolyn A. Grieves".

Carolyn A. Grieves, P.E.
Regional Manager

A handwritten signature in blue ink, reading "Sean E. O'Dell".

Sean E. O'Dell, P.E.
Vice President

C: Dan Bounds, P.E., & Andy Zaletel, Baxter & Woodman, Inc.
Jason Schultz & Ed Brown, Village of Algonquin

VILLAGE OF ALGONQUIN, ILLINOIS

ACCEPTED BY: _____

TITLE: _____

DATE: _____

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STANDARD TERMS AND CONDITIONS

Agreement - These Standard Terms and Conditions, together with the letter proposal, constitute the entire integrated agreement between the Owner and Baxter & Woodman, Inc. (BW) and take precedence over any other provisions between the Parties. These terms may be amended, but only if both parties consent in writing.

Owner's Responsibility - Provide BW with all criteria and full information for the Project. BW will rely, without liability, on the accuracy and completeness of all information provided by the Owner including its consultants, contractor, specialty contractors, manufacturers, suppliers and publishers of technical standards without independently verifying that information. The Owner warrants that all known hazardous materials on or beneath the site have been identified to BW. BW and their consultants shall have no responsibility for the discovery, presence, handling, removal or disposal of, or exposure of persons to, unidentified or undisclosed hazardous materials unless this service is set forth in the proposal.

Schedule for Rendering Services - The agreed upon services shall be completed within a reasonable amount of time. If BW is hindered, delayed or prevented from performing the services as a result of any act or neglect of the Owner or force majeure, BW's work shall be extended and the rates and amounts of BW's compensation shall be equitably adjusted in writing executed by all Parties.

Invoices and Payments - The fees to perform the proposed scope of services constitute BW's estimate to perform the agreed upon scope of services. Circumstances may dictate a change in scope, and if this occurs, an equitable adjustment in compensation and time shall be made by all parties. No service for which added compensation will be charged will be provided without first obtaining written authorization from the Owner. BW invoices shall be due and owing by Owner in accordance with the terms and provisions of the Local Government Prompt Payment Act.

Opinion of Probable Construction Costs - BW's opinion of probable construction costs represents its reasonable judgment as a professional engineer. Owner acknowledges that BW has no control over construction costs of contractor's methods of determining prices, or over competitive bidding, of market conditions. BW cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from BW's opinion of probable construction costs.

Standards of Performance - (1) The standard of care for all services performed or furnished by BW, will be completed with the same care and skill ordinarily used by professionals practicing under similar circumstances, at the same time and in the same locality on similar projects. BW makes no guarantees or warranties, express or implied, in connection with its services; (2) BW shall be responsible for the technical accuracy of its services and documents; (3) BW shall use reasonable care to comply with all applicable laws and regulations and Owner-mandated standards; (4) BW may employ such sub-consultants as BW deems necessary to assist in the performance or furnishing of the services, subject to reasonable, timely, and substantive objection by Owner; (5) BW shall not supervise, direct, control, or have authority over any contractor work, nor have authority over or be responsible for the means, methods, techniques sequences, or procedures of construction selected or used by any contractor, or the safety precautions and programs incident thereto, for security or safety of the site, nor for any failure of a contractor to comply with laws and regulations applicable to such contractor's furnishing and performing of its work; (6) BW neither guarantees the performance of any contractor nor assumes responsibility for contractor's failure to furnish and perform the work in accordance with the contract documents; (7) Engineer is not acting as a municipal advisor as defined by the Dodd-Frank Act. Engineer shall not provide advice or have any responsibility for municipal financial products or securities. (8) BW is not responsible for the acts or omissions of any contractor, subcontractor, or supplier, or any of their agents or employees or any other person at the site or otherwise furnishing or performing any work; (9) Shop drawing and submittal review by BW shall apply to only the items in the submissions and only for the purpose of assessing if upon installation or incorporation in the Project work they are generally consistent with the construction documents. Owner agrees that the contractor is solely responsible for the submissions (regardless of the format in which provided, i.e. hard copy or electronic transmission) and for compliance with the construction documents. Owner further agrees that BW's review and action in relation to these submissions shall not constitute the provision of means, methods, techniques, sequencing or procedures of construction or extend to safety programs or precautions. BW's consideration of a component does not constitute acceptance of the assembled item; (10) BW's site observation during construction shall be at the times agreed upon in the Project scope. Through standard, reasonable means, BW will become generally familiar with observable completed work. If BW observes completed work that is inconsistent with the construction documents, that information shall be communicated to the contractor and Owner for them to address.

Insurance - BW will maintain insurance coverage with the following limits and Certificates of Insurance will be provided to the Owner upon written request:

Worker's Compensation:	Statutory Limits	Excess Umbrella Liability:	\$5 million per claim and aggregate
General Liability:	\$1 million per claim	Professional Liability:	\$5 million per claim
	\$2 million aggregate		\$5 million aggregate
Automobile Liability:	\$1 million combined single limit		

BW's liability under this Agreement, based on any theory of liability or for any cause of action, shall not exceed the total amount of BW's contract amount for the project. Any claim against BW arising out of this Agreement may be asserted by the Owner, but only against the entity and not against BW's directors, officers, shareholders or employees, none of whom shall bear any liability and may not be subject to any claim.

Indemnification and Mutual Waiver – (1) To the fullest extent permitted by law, BW shall indemnify and hold harmless the Owner and its officers and employees from claims, costs, losses, and damages arising out of or relating to the Project, provided that such claim, cost, loss, or damage is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property, including the loss of use resulting therefrom, but only to the extent caused by any negligent act or omission of BW or its officers, directors, employees, agents, or consultants; (2) Owner shall indemnify and hold harmless BW and its officers, directors, employees, agents and consultants from and against any and all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court, arbitration, or other dispute resolution costs) arising out of or relating to the Project provided that any such claim, cost, loss, or damage is attributable to bodily injury, sickness, disease, or death of to injury or destruction of tangible property, including the loss of use resulting therefrom, but only to the extent caused by any negligent act or omission of Owner or its officers, directors, employees, consultants, or others retained by or under contract to the Owner with respect to this Agreement or to the Project; (3) To the fullest extent permitted by law, Owner and BW waive against each other, and the other's employees, officers, directors, insurers, and consultants, any and all claims for or entitlement to special, incidental, indirect, or consequential damages arising out of, resulting from, or in any way related to the Project; (4) In the event claims, losses, damages or expenses are caused by the joint or concurrent negligence of the ENGINEER and OWNER, they shall be borne by each party in proportion to its negligence; (5) The Owner acknowledges that BW is a business corporation and not a professional service corporation, and further acknowledges that the corporate entity, as the party to this contract, expressly avoids contracting for individual responsibility of its officers, directors, or employees. The Owner and BW agree that any claim made by either party arising out of any act of the other party, or any officer, director, or employee of the other party in the execution or performance of the Agreement, shall be made solely against the other party and not individually or jointly against such officer, director, or employees.

Termination - Either party may terminate this Agreement upon ten (10) business days' written notice to the other party in the event of failure by the other party to perform with the terms of the Agreement through no fault of the terminating party. A condition precedent to termination shall be an opportunity for the Parties to meet. If this Agreement is terminated, Owner shall receive reproducible copies of drawings, developed applications and other completed documents. Owner shall be liable for, and promptly pay for all services and reimbursable expenses rendered to the date of suspension/termination of services.

Use of Documents - BW documents are instruments of service and BW retains ownership and property interest (including copyright and right of reuse). Client shall not rely on such documents unless in printed form, signed or sealed by BW or its consultant. Electronic format of BW's design documents may differ from the printed version and BW bears no liability for errors, omissions or discrepancies. Reuse of BW's design documents is prohibited and Client shall defend and indemnify BW from all claims, damages, losses and expenses, including attorney's fees, consultant/expert fees, and costs arising out of or resulting from said reuse. BW's document retention policy will be followed upon Project closeout, and project documents will be kept for a period of 14 years after Project closeout.

Successors, Assigns, and Beneficiaries – Nothing in this Agreement shall be construed to create, impose, or give rise to any duty owed by Client or BW to any third party, including any lender, Contractor, Contractor's subcontractor, supplier, manufacturer, other individual, entity or public body, or to any surety for or employee of any of them. All duties and responsibilities undertaken pursuant to this Agreement are for the sole and exclusive benefit of the Client and BW and not for the benefit (intended, unintended, direct or indirect) of any other entity or person.

Dispute Resolution - All disputes between the Parties shall first be negotiated between them for a period of thirty (30) days. If unresolved, disputes shall be then submitted to mediation as a condition precedent to litigation. If mediation is unsuccessful, litigation in the county where the Project is pending shall be pursued.

Miscellaneous Provisions – (1) This Agreement is to be governed by the law of the state or jurisdiction in which the Project is located. (2) All notices must be in writing and shall be deemed effectively served upon the other party when sent by certified mail, return receipt requested; (3) All express representations, waivers, indemnifications, and limitations of liability included in this Agreement will survive its completion or termination for any reason; (4) Any provision or part of the Agreement held to be void or unenforceable under any Laws or Regulations shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon the Owner and BW, which agree that the Agreement shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close to expressing the intention of the stricken provision; (5) A party's non-enforcement of any provision shall not constitute a waiver of the provision, nor shall it affect the enforceability of that provision or of the remainder of this Agreement; (6) To the fullest extent permitted by law, all causes of action arising under this Agreement shall be deemed to have accrued, and all statutory periods of limitation shall commence, no later than the date of substantial completion, which is the point where the Project can be utilized for the purposes for which it was intended.