UTILITY COMMITTEE
Meeting Notice

Governing Body: Utility Committee of Boone, Iowa
Date of Meeting: May 20, 2024
Time of Meeting: 4:15 P.M.
Place of Meeting: City Hall Council Chambers

1. Call Meeting to Order.
2. Approve Minutes from the April 15, 2024 Meeting.
3. Request to Remove I/I Fees from 304 Monona Street Water Account. – John Roberts.
4. Review/Consider Professional Services Agreement with WHKS for 2024 Sanitary Sewer I/I Inspection Program (Phase 6).
5. Review April 2024 US Water Monthly Report.
6. Meter Upgrade Report.
    a. April
7. Stop Box Repair/Shut Off Report.
    a. April
8. Other Business.
9. Adjourn.

UTILITY COMMITTEE
Meeting Notice

Governing Body: Utility Committee of Boone, Iowa
Date of Meeting: April 15, 2024
Time of Meeting: 4:30 P.M.
Place of Meeting: City Hall Council Chambers

1. Call Meeting to Order.

Present: Angstrom, Moorman

Absent: Byrd

Others present: Andrews, Vote, Skare, Majors

2. Approve Minutes from the March 12, 2024 Meeting.

Moorman moved; Angstrom seconded to approve the minutes from the March 12, 2024, Utility Meeting. Ayes: all those in attendance. Nays: none.

3. Request to Reduce Storm Sewer Change on High Water Bill. – Ryan Gray.

Skare presented a request to reduce $2,083.50 in sewer charges from Ryan Gray. Gray stated through an email that a waterline had burst and flooded his basement; the floor drain was plugged, and he manually pumped the water to the back yard with submergible pumps. There is no leak protection on the account. The Committee discussed negligence as the house has been vacant for several years and the water was not shut off at an inside valve or at the curb. The Committee could not be certain the water wasn't processed. Moorman moved; Angstrom seconded to deny Ryan Gray's request to reduce the sewer charge and to pay the bill in full. Ayes: all those in attendance. Nays: none.

4. Review March 2024 US Water Monthly Report.

The Committee reviewed the monthly US Water and Wastewater Operations and Maintenance Report for March 2024.

5. Meter Upgrade Report.
    a. March

Andrews reported that in March staff finished fifty-two (52) meter upgrades. Andrews stated that meters for the 22nd and Linn Street development project are in the process of being installed.

6. Stop Box Repair/Shut Off Report.
    a. March

Vote stated that in March, $3,957.53 was collected during shut-offs; twenty-one (21) accounts qualified to be on the shut off list. Eight (8) delinquent bills totaling $2,248.72 were certified March 28, 2024, and if left unpaid, sixteen (16) bills totaling $7,211.97 are scheduled to be certified on April 30, 2024. Vote also reported that there are one hundred thirty-four (134) stop boxes in need of repair, fifty-seven (57) of which have lead service lines and Andrews has ordered six (6) to be repaired.

7. Other Business.
8. Adjourn.

4:38 p.m.

Kim Majors

To: Lesli Vote
Subject: RE: removal of sump pump charges

Bill Skare. I have been receiving the $50 charge on my water bill for several months now even though I have been on the waiting list with Hull Plumbing for much longer than that. Hull has now come out and did the repair work that was requested , even though I had never had a water issue or sump pump ever, and I am now waiting to be re inspected. I request that all back charges be removed because of the wait time between Hull and the conversations with Waylon. I am waiting on your reply!

John Roberts

PROFESSIONAL SERVICES AGREEMENT

THIS AGREEMENT, by and between **City of Boone** hereinafter referred to as the "Client" and WHKS & Co., hereinafter referred to as "WHKS", is made as follows:

WHEREAS, the Client has a need for certain professional services relating to the project described as **2024 Sanitary Sewer I/I Inspection Program (Phase 6).**

WHEREAS, WHKS proposes to furnish the professional services required by the Client for said project,

NOW THEREFORE, the Client hereby agrees to retain and compensate WHKS to perform the professional services in accordance with the terms and conditions of this Agreement and the attached Standard Terms and Conditions.

Scope of Services

WHKS shall perform the following described services for the Client:

Field investigation and analysis engineering services as described on the attached Scope of Services included in Exhibit A.

Basis of Compensation

For the services described above, the Client shall remunerate WHKS as follows:

Item A (Base Price for I/I Program Setup and Management)- Lump Sum fee of $18,600.

Item B (Sump Pump Program Inspections)- Billed at $51/Initial Inspection. Estimated fee based on 548 properties is $27,948.

Item C (Sump Pump Program Re-Inspections)- Billed at $82/Re-Inspection. Estimated fee based on 109 properties is $8,938.

Item D (Flow and Rainfall Monitoring)-Billed at $665/flow meter/month, $540/rain gauge/month, $2,000 reimbursable expense for flow meter band purchase, and $5,800 lump sum for flow data analysis. Estimated fee based on 3 flow monitors and 1 rain gauge for a duration of 9 months is $30,615.

Item E (Smoke Testing, Manhole Inspections, and Private Dye Testing)- Billed at $0.49/linear foot of sewer for smoke testing, $259 private sector dye test per property, and $69/manhole. Estimated fee based on 29,650 linear feet of sewer, 5 private sector dye tests, and 96 manhole inspections is $22,447.

Total Estimated Fee on next page.

Total Estimated Fee of $108,548 including expenses.

Executed this _____ day of _____, 2024

City of Boone		***WHKS** & co.*	
By:	_____	By:	_____
Printed Name:	_____	Printed Name:	Derek J. Thomas, P.E.
Title:	_____	Title:	Vice President

Exhibit A to Professional Services Agreement

A. Project Description

The overall goal of the proposed 2024 Sanitary Sewer I/I Inspection Programs is to reduce the amount of rainwater and groundwater entering the sanitary sewer system during wet weather. Removing this clear water will reduce sewage handling and treatment costs, minimize sanitary sewer overflows, and extend the life of upgrades made to the sewer system and treatment facilities.

The Project will consist of sanitary sewer collection system inspections, sump pump/beaver drain inspections, and analysis within the eastern area of the City shown on the attached Exhibit B.

Sources of clear water will be investigated and inventoried through sump pump inspections, smoke testing, manhole inspections, and flow/rain monitoring. Defects will be analyzed and prioritized to identify critical structural deficiencies and sources of I/I that are cost effective to reduce. Inventory data will be reported in Geographic Information System (GIS) format, which will assist in creation of GIS base mapping and asset management.

Private sector sump pump and beaver drain inspections will be conducted to identify and correct illicit private sources of clear water in the collection system. This task will include a public workshop at the beginning of the inspection season.

Approximate quantities of sanitary mains, manholes, and properties within the 2024 area (see Exhibit B for identification of subareas):

Area	Length of Sewer Mains	Number of Manholes	Number of Properties for Inspection
Primary inspection area	21,982 L.F.	72	532
Subarea A	4,279 L.F.	9	16
Subarea B	3,389 L.F.	15	0 (excluded in this subarea)
Subarea C	0	0	0

Subarea C includes the Chicago Northwestern railroad line. There is only one sanitary sewer crossing this area, which will be accessed for smoke testing via the Primary inspection area and Subarea A. No work is proposed within Subarea C under this scope of services.

B. Scope of Services Provided Under This Agreement:

1. Item "A" I/I Program Setup and Management

- Perform general project administrative duties including supervision and coordination of the project team, review of project costs and billings, prepare invoices using Consultant's standard forms, preparation of status reports, and general administrative activities.
- Prepare Public Notices and Informational Literature. WHKS will reuse the methods and information established in the previous three phases of the Program, for this

Project. We will renew and update the public information website BooneSump for use during this Project.

- Sump Pump Project Support and Administration. Project administration services, including setup of initial inspection list, refinement of proposed inspection methodology, quality assurance / quality control of inspection data and coordination with the City. WHKS will also provide the Client access to the project website, if Client desires. At the completion of the program, WHKS will provide a Final Report that will include statistics and maps showing the inspections passed, failed, and unresolved. The report will be provided in electronic table (Excel, Access, CSV) and GIS shapefile formats.
- Advise the Client of the necessity of obtaining Special Engineering Services as described in Paragraph D., and act as the Client's representative in connection with any such services not actually performed by WHKS.
- Attend one (1) public information meeting to inform the public about the sump pump program.

2. Item "B" Sump Pump Inspections

This task is for inspection of properties to identify cross connections between sump pumps, beaver drains, other clear water sources, and the sanitary sewer.

- **Schedule Inspections.** WHKS will schedule all inspections. WHKS will develop and maintain a project website for use in scheduling and reporting inspections. WHKS will provide inspection reports to residents. Up to three (3) notification letters per property are included in this scope. Additionally distribution of door hangers to unresponsive properties between the 2nd and 3rd notices are also included in this scope.
- **Conduct Initial Inspections.** Inspections will be conducted for all properties with active sewer accounts within the identified basins, including commercial and industrial properties. The inspections will consist of observing the discharge location and discharge pipe materials of any sump pumps and pits and the discharge locations of interior foundation drains. WHKS will photograph the interior plumbing and exterior of the home. WHKS will also record grading that is sloped towards the buildings and building roof drain/downspout locations. Inspections will not include dye tracing to determine sump pump discharge point. Inspections will not include televising of laterals. If a sump pump or roof drain discharge location cannot be determined by visual inspection, it shall be noted, and a separate dye test inspection will be necessary for making the final determination. Inspections will be completed between the hours of 7:00 am and 7:00 pm, Monday through Friday. WHKS will not provide corrective plumbing services. This contract assumes all initial inspections will be completed by the end of 2024. Initial inspections past 2024 may be billed at the reinspection rate or be completed under a future scope of work as directed by the City. Inspection fee is on a per-inspection basis and includes conducting inspections, travel time, receiving resident phone calls to schedule inspections, field QA/QC data checks, data entry, per diem, mileage, and expenses.
- **Resident Reports.** WHKS will provide a copy of the completed inspection form to the property owner following each inspection.
- **QA/QC.** The field data on each form will be reviewed for completeness and for obvious errors or inaccuracies.

3. Item "C" Sump Pump Reinspections

This task is for reinspection of properties to confirm that plumbing corrections have been completed.

- **Schedule Reinspections.** WHKS will schedule all reinspections using the same system as for initial inspections. WHKS will provide reinspection reports to residents. One (1) notification letter/report per property is included in this scope.
- **Conduct Reinspections.** WHKS will provide reinspection of failed inspections after correction. Reinspection fee is on a per-inspection basis and includes all labor and expenses. This contract assumes all reinspections will be completed by the end of 2024. Reinspections past 2024 may be completed under a future scope of work.
- **Resident Reports.** WHKS will provide a copy of the completed reinspection form to property owner following reinspection.
- **QA/QC.** The field data on each form will be reviewed for completeness and for obvious errors or inaccuracies.

4. Item "D" Flow and Rainfall Monitoring

This task includes installation, maintenance, and removal of temporary flow meters and analysis of city-provided rainfall gauge data. The intent is to capture at least one significant rainfall event and use the data to identify leaky sub-basins. A secondary intent is to provide preliminary flow data for a future post-rehabilitation analysis. The locations, quantity, and duration of monitoring has not yet been determined. There is no guarantee of weather conditions or the potential duration of monitoring needed to meet the Client's objectives.

- **Temporary flow and rainfall monitoring**. WHKS crews will perform a field check of proposed locations and review these locations with City staff prior to flow monitor installation. WHKS will install temporary battery-operated flow meters. WHKS will perform field calibration during installation and perform monthly calibration checks and data/downloads during the duration of the monitoring. WHKS will remove flow meters after monitoring is complete. Proposed price is based on utilizing the City's Teledyne Isco 2150 Area/Velocity monitoring equipment monthly. If rental equipment is required, rental fees will be billed at additional cost to the City.

  The City's Isco 4120 monitoring equipment will be installed and monitored as a 4th site, and included in the end-of-season data analysis. No separate fee will be charged for this 4th site for the 2024 season.
- **Data analysis.** Data will be downloaded, consolidated, and graphed at the conclusion of the monitoring period. Identification of peak rain events and peaking factors for subsheds will be provided from the data analysis.
- **Reimbursable Expense.** Reimbursable expense budget is included in this proposal for purchase of replacement sensor, band, or other flow metering items as needed. Client will pre-approve any reimbursable expense prior to purchase.

5. Item "E" Smoke Testing, and Manhole Inspections

This task consists of conducting smoke testing of sewer mains, and manhole inspections.

- **Smoke Testing Procedures.** Smoke testing procedures and methodology used in the previous phases of the program will be reviewed and refined for this Project. Methodology includes discussion of public notices, staffing, weather and ground conditions, timeframe, any sensitive areas to avoid, etc.

- **Prepare Smoke Test Information Material.** We will provide public notice templates for newspaper, cable TV, City website and/or door hangers to inform the area residents of the smoke testing activities. WHKS will distribute one set of door hangers prior to conducting smoke testing.
- **Prepare Manhole Database, Smoke and Dye Test Database, and Reporting Forms**. Inspection forms, databases and reports will follow WHKS format and may incorporate special City codes as requested by the Client.
- **Conduct Smoke Testing.** The smoke testing program will force non-toxic smoke into the sewer pipes with a mechanical blower and observe the areas from which the smoke appears. While the blower is running, crews will travel throughout the area taking photographs of problem areas. The smoke is non-toxic, leaves no residue, and creates no fire hazard. The white smoke should appear from vent pipes on the roofs of buildings and may appear from defects in the collection system in areas such as storm sewer intakes, roof drains, etc. We provide the smoke canisters and blower. We will provide a WHKS crew chief and two WHKS crew members to conduct the smoke testing.
- **Dyed Water Rainfall Simulation to Verify Cross Connections – Public Sector.** This item has been deleted from the scope, per Client direction.
- **Dye Tests for Sump Pump Follow-ups.** Follow-up inspections will be conducted to determine the discharge location for sump pumps in properties marked for 'Followup' during initial inspection. Private sector dye testing shall be conducted as part of this task. We will provide a two-person crew to perform the followup dye tests. An inspection report will be mailed to the property owner following inspection.
- **Conduct Manhole Inspection**. All manholes within the project area will be inspected from the street surface. Each manhole will be inspected to document the condition of the manhole casting, barrel sections, base, and pipe connections. Manhole center invert elevations will also be measured in each manhole. For manholes with multiple pipes entering or where there is an apparent elevation difference between incoming and outgoing pipes a measurement from the rim to invert will be made without entering the manhole, unless it is felt that such measurement would be inaccurate due to angling of the level rod or another reason. A digital photograph of the lid and interior of the structure will be taken. All observations of manhole condition and leakage will be recorded in an Access database suitable for use with the City's Geographic Information System (GIS). A projected average inspection time of 3 manholes per hour was used for this estimate.
- **QA/QC.** Field data will be reviewed for completeness and for obvious errors or inaccuracies. Smoke, dye and manhole forms will be reviewed to correlate with the City's sewer maps.

C. Items to be Provided by Client:

We will request the following from the Client as needed to complete this work:

1. Sanitary and storm sewer electronic base maps
2. Publishing of public notices for smoke testing, if desired by Client
3. Property owner names, sewer account numbers, and addresses for sump pump inspections.
4. Parcel GIS file, or assistance obtaining parcel GIS from County.
5. City sewer surcharges. We will rely on City to apply surcharges to unresponsive and non-compliant properties based on WHKS sump pump inspection results. Failure to apply

surcharges may result in lower resolution rates, or request for additional fee to extend the duration of the inspection program.

D. <u>Special Engineering Services</u>:

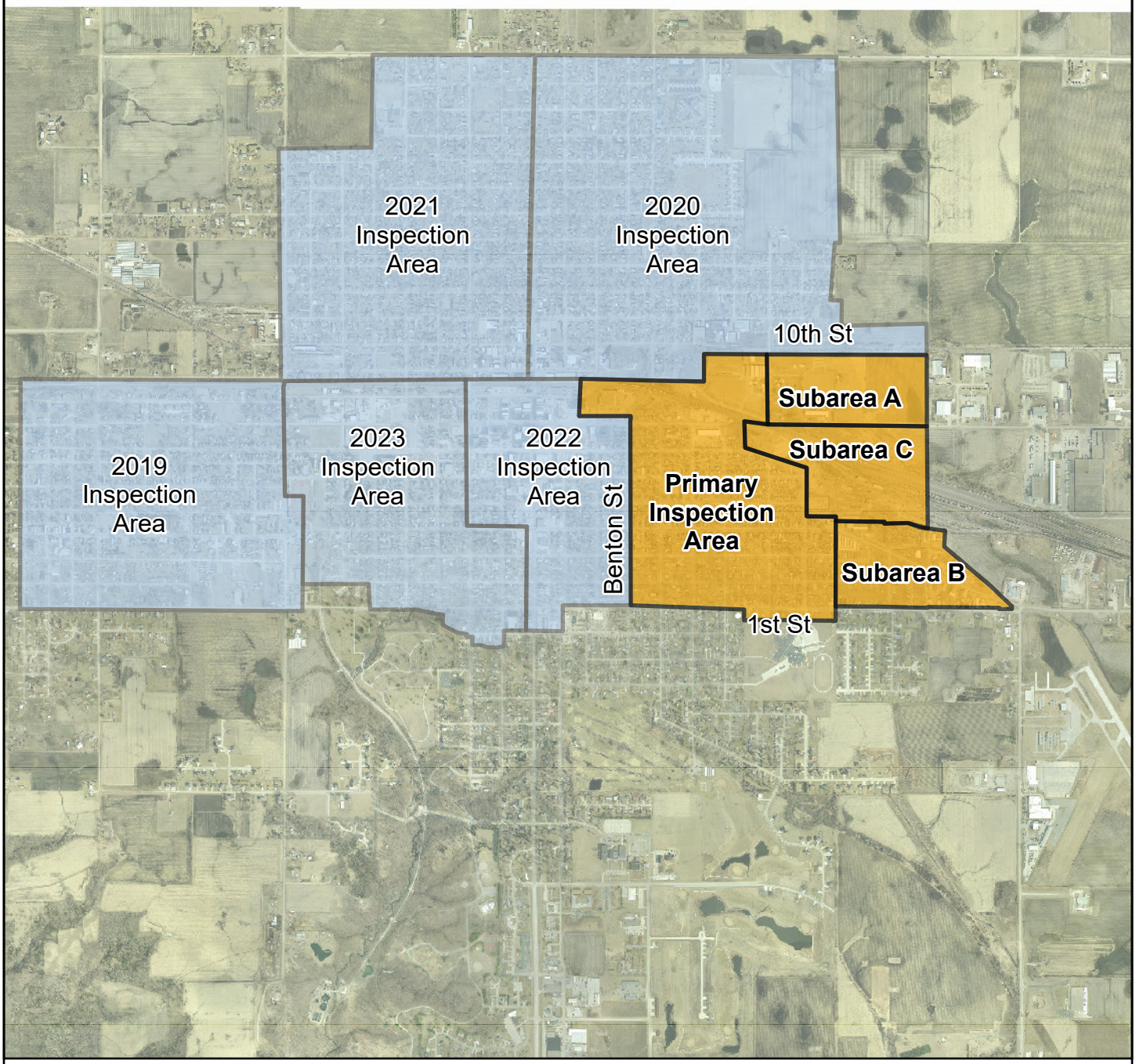
Special Engineering Services are those services not listed above, but which may be required or advisable to accomplish the Project. Special Engineering Services shall be performed when authorized by the Client for additional fees, to be determined at the time authorized.

Special Engineering Services include:

1. Inspection and analysis of sectors other than that identified above
2. Survey-grade manhole rim elevation measurements
3. Sewer modeling
4. Investigation of private commercial/industrial facilities above the typical scope for sump pump inspections.
5. Piezometer and/or river gauge installation and monitoring
6. Wet weather observation services
7. Lift station analysis
8. CCTV inspection of sanitary sewer collection system
9. CCTV inspection of private service laterals
10. Public sector dye testing
11. Attendance at additional meetings (other than those listed above)
12. Plans and specifications for repair / rehabilitation projects
13. Construction phase engineering services, including construction administration, staking, construction observation, preparation of record drawings and project close-out services
14. Post-mitigation analysis

Exhibit B

City of Boone
2024 Sump Inspection Program



Area Description: Bordered by Benton St on the west, 10th St on the north, and 1st St on the south

whks
engineers + planners + land surveyors

STANDARD TERMS AND CONDITIONS
FOR
PUBLIC SECTOR PROJECTS

1. Scope of Services

Client and WHKS have agreed to a list of services WHKS will provide to Client as listed on the Professional Services Agreement Form.

2. Governing Law

The laws of the State of Iowa will govern this Agreement, its interpretation and performance. Any litigation arising in any way from this Agreement shall be brought in the courts of that State.

3. Standard of Care

Services provided by WHKS under this Agreement will be performed in a manner consistent with that degree of care and skill ordinarily exercised by members of the same profession currently practicing under similar circumstances and locality.

4. Integration

This Agreement comprises the final and complete agreement between Client and WHKS. It supersedes all prior communications, representations, or agreements, whether oral or written, relating to the subject matter of this Agreement. Execution of this Agreement signifies that each party has read the document thoroughly. Amendments to this Agreement shall not be binding unless made in writing and signed by both Client and WHKS.

5. Guarantees and Warranties

WHKS shall not be required to sign any documents, no matter by whom requested, that would result in WHKS having to guarantee or warrant the existence of conditions whose existence WHKS cannot ascertain. Client also agrees not to make resolution of any dispute with WHKS or payment of any amount due to WHKS in any way contingent upon WHKS signing any such guarantee or warranty.

6. Indemnification

WHKS agrees, to the extent permitted by law, to indemnify and hold Client harmless from any damage, liability or cost (including reasonable attorney's fees and costs of defense) to the extent caused by WHKS' negligent acts, errors or omissions in the performance of professional services under this Agreement and those of its subconsultants or anyone for whom WHKS is legally liable.

Client agrees, to the extent permitted by law, to indemnify and hold WHKS harmless from any damage, liability or cost (including reasonable attorneys' fees and costs of defense) to the extent caused by Client's negligent acts, errors or omissions and those of Client's contractors, subcontractors or consultants or anyone for whom Client is legally liable.

Neither WHKS nor Client shall be obligated to indemnify the other party in any manner whatsoever for the other party's own negligence.

7. Billing and Payment Provisions

Invoices shall be submitted by WHKS monthly and are due upon presentation and shall be considered PAST DUE if not paid within thirty (30) calendar days of the invoice date.

If payment is not received by WHKS within thirty (30) calendar days of the invoice date, Client shall pay as interest an additional charge of one and one-quarter percent (1.25%) of the PAST DUE amount per month. Payment thereafter shall first be applied to accrued interest and then to the unpaid principal.

If Client fails to make payments within sixty (60) days from the date of an invoice or otherwise is in breach of this Agreement, WHKS may, at its option, suspend performance of services upon five (5) calendar days' notice to Client. WHKS shall have no liability whatsoever to Client for any costs or damages as a result of such suspension caused by any breach of this Agreement by Client. If Client fails to make payment to WHKS in accordance with the payment terms herein, this shall constitute a material breach of this Agreement and shall be cause for termination by WHKS.

In the event legal action is necessary to enforce the payment provisions of this Agreement, WHKS shall be entitled to collect from Client any judgment or settlement sums due, reasonable attorneys' fees, court costs and expenses incurred by WHKS in connection therewith and, in addition, the reasonable value of WHKS personnel time and expenses spent in connection with such collection action, computed at WHKS current fee schedule and expense policies.

Payment of invoices is in no case subject to unilateral discounting or set-offs by Client, and payment is due regardless of suspension or termination of this Agreement by either party.

8. Ownership of Records

All reports, plans, specifications, field data and notes and other

documents, including all documents on electronic media, prepared by WHKS as instruments of service shall remain the property of WHKS.

Client shall be permitted to retain copies, including reproducible copies, of the plans and specifications for information and reference in connection with Client's use of the completed project. The plans and specifications shall not be used by Client or by others on other similar projects except by agreement in writing by WHKS.

9. Delivery of Electronic Files

In accepting and utilizing any drawings, reports and data on any form of electronic media generated and provided by WHKS, Client covenants and agrees that all such electronic files are instruments of service of WHKS, who shall be deemed the author, and who shall retain all rights under common and statutory laws, and other rights, including copyrights. Client is aware that differences may exist between the electronic files delivered and the respective construction documents due to addenda, change orders or other revisions. In the event of a conflict between the signed construction documents prepared by WHKS and electronic files, the signed construction documents shall govern.

Client and WHKS agree that the electronic files prepared by WHKS shall conform to the current CADD software in use by WHKS or to other mutually agreeable CADD specifications defined in the Agreement. Any changes to the CADD specifications by either Client or WHKS are subject to review and acceptance by the other party. Additional efforts by WHKS made necessary by a change to the CADD specifications or other software shall be compensated for as Additional Services.

The electronic files provided by WHKS to Client are submitted for an acceptance period of 60 days. Any defects Client discovers during this period will be reported to WHKS and will be corrected as part of the Scope of Services. Correction of defects detected and reported after the acceptance period will be compensated for as Additional Services.

Client agrees not to reuse the electronic files, in whole or in part, for any purpose or project other than the project that is the subject of this Agreement. Client agrees not to transfer the electronic files to others without the prior written consent of WHKS, except as required by law. In addition, Client agrees, to the extent permitted by law, to indemnify and hold WHKS harmless from any damage, liability or cost, including reasonable attorney's fees and costs of defense, arising from any changes made by anyone other than WHKS or from any reuse of the electronic files without the prior written consent of WHKS.

Under no circumstance shall delivery of the electronic files for use by Client be deemed a sale by WHKS and WHKS makes no warranties, either express or implied, of merchantability and fitness for any particular purpose. In no event shall WHKS be liable for any loss of profit or any consequential damages.

10. Changed Conditions

Client shall rely on the judgment of WHKS as to the continued adequacy of this agreement in light of occurrences or discoveries that were not originally contemplated by or known to WHKS. Should WHKS call for contract renegotiation, WHKS shall identify the changed conditions necessitating renegotiation and WHKS and Client shall promptly and in good faith enter into renegotiation of this Agreement. If terms cannot be agreed to, the parties agree that either party has the absolute right to terminate this Agreement.

11. Permits and Approvals

WHKS shall assist Client in applying for those permits and approvals typically required by law for projects similar to the one for which WHKS services are being engaged. This assistance consists of completing and submitting forms as to the results of certain work included in the Scope of Services.

12. Suspension of Services

If the project is suspended for more than thirty (30) calendar days in the aggregate, WHKS shall be compensated for services performed and charges incurred prior to receipt of notice to suspend and, upon resumption, an equitable adjustment in fees to accommodate the resulting demobilization and remobilization costs. In addition, there shall be an equitable adjustment in the project schedule based on the delay caused by the suspension. If the project is suspended for more than ninety (90) calendar days in the aggregate, WHKS may, at its option, terminate this Agreement upon giving notice in writing to Client.

13. Termination

Either Client or WHKS may terminate this Agreement at any time with or without cause upon giving the other party seven (7) calendar days prior written notice. Client shall within thirty (30) calendar days of termination pay WHKS for all services rendered and all costs incurred up to the date of termination, in accordance with the compensation provisions of the Agreement.

14. Unauthorized Changes

In the event Client, Client's contractors or subcontractors or anyone for whom Client is legally liable makes or permits to be made any changes to any reports, plans, specifications or other contract documents prepared by WHKS without obtaining WHKS' prior written consent, Client shall assume full responsibility for the results of such changes. Therefore, Client agrees to waive any claim against WHKS and to release WHKS from any liability arising directly or indirectly from such changes.

Client also agrees, to the extent permitted by laws, to indemnify and hold WHKS harmless from any

damage, liability or cost, including reasonable attorneys' fees and costs of defense, arising from such changes.

15. Jobsite Safety

Neither the professional activities of WHKS nor the presence of WHKS or its employees and subconsultants at a construction site, shall relieve the General Contractor and any other entity of their obligations, duties and responsibilities including, but not limited to, construction means, methods, sequence, techniques or procedures necessary for performing, superintending or coordinating all portions of the construction work in accordance with the contract documents and any health or safety precautions required by any regulatory agencies. WHKS and its personnel have no authority to exercise any control over any construction contractor or other entity or their employees in connection with their work or any health or safety precautions.

16. Additional Services

Services which are requested by Client or are required as part of the Project, but are not included in the Scope of Services, are considered Additional Services.

WHKS will notify Client in writing when Additional Services will be needed. WHKS and Client will agree on the extent of the Additional Service(s) required and will agree on the method and amount of the compensation for performance of said agreed upon Additional Services.

WHKS will not perform Additional Services which will result in additional cost to Client without documented verbal or written authority of Client.

In the event WHKS is requested or required to participate in any dispute resolution procedure which involves any aspect of the Project, Client agrees to compensate WHKS for the reasonable value of WHKS' personnel time and expenses spent in connection with such procedures computed at WHKS' then current fee schedule and expense policies.

17. Dispute Resolution

In an effort to resolve any conflicts that arise, Client and WHKS agree that all disputes between them arising out of or relating to this Agreement shall be submitted to nonbinding mediation unless the parties mutually agree otherwise.

18. Third Party Beneficiaries

Nothing contained in this Agreement shall create a contractual relationship with or a cause of action in favor of a third party against either Client or WHKS. WHKS' services under this Agreement are being performed solely for Client's benefit, and no other entity shall have any claim against WHKS because of this Agreement or the performance or nonperformance of services hereunder.

19. Extension of Protection

Client agrees to extend any and all liability limitations and indemnifications provided by Client to WHKS to those individuals and entities WHKS retains for performance of the services under this Agreement, including but not limited to WHKS officers and employees and their heirs and assigns, as well as WHKS subconsultants and their officers, employees, heirs and assigns.

20. Timeliness of Performance

WHKS will perform the services described in the Scope of Services with due and reasonable diligence consistent with sound professional practices.

21. Delays

WHKS is not responsible for delays caused by factors beyond WHKS' reasonable control, including but not limited to delays because of strikes, lockouts, work slowdowns or stoppages, accidents, acts of God, failure of any governmental or other regulatory authority to act in a timely manner, failure of Client to furnish timely information or approve or disapprove of WHKS' services or work product promptly, or delays caused by faulty performance by Client or by contractors of any level. When such delays beyond WHKS' reasonable control occur, Client agrees WHKS is not responsible for damages, nor shall WHKS be deemed to be in default of this Agreement.

22. Right to Retain Subconsultants

WHKS may use the services of subconsultants when, in the sole opinion of WHKS, it is appropriate and customary to do so. Such persons and entities include, but are not limited to, aerial mapping specialists, geotechnical consultants and testing laboratories. WHKS' use of other consultants for additional services shall not be unreasonably restricted by Client provided WHKS notifies Client in advance.

23. Assignment

Neither party to this Agreement shall transfer, sublet or assign any rights under or interest in this Agreement (including but not limited to monies that are due or monies that may be due) without the prior written consent of the other party.

24. Severability and Survival

Any provision of this Agreement later held to be unenforceable for any reason shall be deemed void, and all remaining provisions shall continue in full force and effect.

25. Hazardous Materials

It is acknowledged by both parties that WHKS' Scope of Services does not include any services related to asbestos or hazardous or toxic materials. In the event WHKS or any other party encounters asbestos or hazardous or toxic materials at the jobsite, or should it become known in any way that such materials may be present at the jobsite or any adjacent areas that may affect the performance of WHKS services,

WHKS may, at its option and without liability for consequential or any other damages, suspend performance of services on the project until Client retains appropriate specialist consultant(s) or contractor(s) to identify, abate and/or remove the asbestos or hazardous or toxic materials, and warrant that the jobsite is in full compliance with applicable laws and regulations.

26. Joint Participation

The parties have participated jointly in the negotiation and preparation of all agreements between the parties. Each party has had an opportunity to obtain the advice of legal counsel and to review and comment upon this instrument. Accordingly, no rule of construction shall apply against any party or in favor of any party. This instrument shall be construed as if the parties jointly prepared it and any uncertainty or ambiguity shall not be interpreted against one party and in favor of another.

27. Record Documents

If required in the Professional Services Agreement, WHKS shall, upon completion of the Work, compile for and deliver to the Client a reproducible set of Record Documents that are based upon the marked-up record drawings, addenda, change orders and other data furnished by the Contractor or other third parties. These Record Documents may show certain significant changes from the original design made during construction. Because these Record Documents are based on unverified information provided by other parties, which the Consultant is entitled to assume as reliable, the Consultant does not warrant their accuracy.

Revised 02/23/07
Revised: 04/29/09

April 2024

City of Boone, Iowa

Water & Wastewater Treatment Facilities, Storage, and Lift Stations

Monthly Operations & Maintenance Report

Prepared by:

USW UTILITY GROUP

1406 Central Avenue
Fort Dodge, IA 50501
(515) 269-2338

Prepared For:

City of Boone

923 8th Street
Boone, IA 50036
(515) 432-4211

April 2024

City of Boone
William J. Skare, City Administrator
923 8th Street
Boone, IA 50036

April Monthly Water & Wastewater Operations Report

Dear Mr. Skare:

In accordance with contract requirements, we are pleased to provide the following monthly report for April 2024. Below is a list of the significant events that occurred during the month:

SUBMITTED TO: William J. Skare, City Administrator
Utility Committee and City Council, City of Boone
Aaron Voss, U.S. Water Services Corporation

We appreciate the opportunity to be of service to the City of Boone. We are available to discuss this report, or any other aspect of our operations, at your convenience. Should you have any questions or need additional information, please do not hesitate to contact us.

Sincerely,

J.D. Roberts, Water Environment Plant Supervisor
USW Utility Group
(712) 259-0805
JRoberts@USWaterCorp.net

Dave Moore, Water Works Supervisor
USW Utility Group
(515) 230-3130
DMoore@USWaterCorp.net

WATER

Water Treatment Facility

Finished Water Monthly Flows and Hardness			
		April-2023	April-2024
Water	**Units**		
Average Daily Pumped	gallons	1,642,000	1,637,000
Maximum Daily Pumped	gallons	1.851,000	1,934,000
Minimum Daily Pumped	gallons	1,385,000	1,344,000
Hardness			
Hardness - Avg Raw	grains	16.3	19.6
Hardness - Avg Finish	grains	8.5	10.9
Iron mg/l			
Avg Raw	mg/L	.01	.01
Avg Finish	mg/L	.01	.01
Fluoride mg/l			
Avg Raw Fl.	mg/L	.59	.46
Avg Finish Fl.	mg/L	.76	.75

Water Storage

During the month of April all three water towers were in operation as well as the 2-million-gallon reservoir and 100,000-gallon contact basin for a total of 3,700,000-gallons of storage.

Maintenance Report

During the month of April, the following tasks were completed:

- Wells #19 and #28 were cleaned and serviced
- Electrical work was completed at Greene Street Water Tower in anticipation of the installation of the tank mixer
- Repaired lab water distiller
- Replaced tubing and cleaned all three CL17 Chlorine analyzers

- Installed replacement battery backup at Industrial Water Tower
- Serviced all four chemical feed pumps
- Serviced both Backwash Blowers
- Sprayed fence lines at water towers and water plant for weeds
- Repairs made to slaker #2
- Repaired blower room faucet
- Serviced gear boxes on both Lime Slakers
- Mowed grass at Water Plant and Water Towers
- Cut, pulled and removed tree around lime pond #2 and surrounding areas
- Cleaned and repaired PH probe influent manifold and feed lines
- Verified all five turbidity meters weekly
- Calibrated all five turbidity meters
- Cleaned and verified calibration on all three CL2 analyzers weekly
- Rebuilt two chlorine cylinder feed regulators
- Cleaned chlorine injector at pump station
- Replaced rooftop dehumidifier filters

Current & Planned Projects

During the month of May, the following maintenance tasks are planned:

- Begin installing new PLC's at water Plant.
- Greene Street Tower rehabilitation project
- Replace dehumidifier filters
- Service tractor and mower
- Continue to cut down and remove trees around the lime pond, plant, and pump station
- Replace backflow valve on ClariCone #2
- Clean and service Well #28
- Misc. yard and building maintenance

Health & Safety

There were no safety violations to report for the current month.

The subjects of the monthly safety training were:

- Hand Tools Deserve Respect
- Setting Up a Safe Traffic Control Zone
- Facing Up to Stress
- Bug Bites and Stings Can Be Serious
- Respiratory Protection Overview.

Regulatory Reports

See attached documents

WASTEWATER

Wastewater Treatment Facility

Wastewater Treatment Facility Flows			
	Plant Influent	**Plant Effluent**	**Units**
Total	69.9	•	MGD
Average per day	2.32	•	MGD
Minimum	1.7	•	MGD
Maximum	3.6	•	MGD

	Wastewater Influent & Effluent Quality							
	Influent		**Effluent**					
Parameter	**Daily Ave MG/L**	**Daily Ave LBS/Day**	**Daily Max MG/L**	**Permit Daily MG/L Limit**	**7 Day Max Ave MG/L**	**Permit 7 Day Max Limit**	**30 Day Average**	**Permit 30 Day Ave**
BOD_5	**126**	**2264**	•	•	•	•	•	•
$CBOD_5$	•	•	**4**	•	**3.5**	**40**	**3**	**25**
Suspended solids	**164**	**2792**	**7**	•	**6**	**45**	**5.6**	**30**
Nitrogen Ammonia	**12.5**	**261**	**.1**	**15.70**	**.1**	•	**.1 MG/L**	**1.6 MG/L**
Nitrate Nitrogen	•	•	**248 LBS/Day**	**1075 LBS/Day**	•	•	•	**657 LBS/Day**
Dissolved Oxygen	•	•	**10.0**	**>5.0**	**9.70**	•	**9.60**	**>5.0**
pH	**7.58**	•	**7.8**	**6.5 to 9 STD Units**	**7.98**	•	**7.9**	**6.5 to 9 STD Units**

ND= No Detection

- **= No limit set**

Solids Inventory

During the month of April, we pressed for 10 days (324,000 gallons) and hauled 123.8 tons of biosolids to the landfill.

Lift Stations

All lift stations are inspected at least twice per week to ensure proper operations. Airport Road Lift Station pump #1 does not keep a prime. Electric Pump and Iowa Pump have both provided repairs, but pump continues to fail. This station is on the R&R list for replacement.

Maintenance Report

4-1-24: McClellan Electric fixed the chew threw cords for the UV system

4-9-24: Replaced diffuser in north sludge holding tank

4-12-24: Repaired the air relief valve on the North Sludge Pump

4-16-24: Automatic Systems had to fix the alarm dialer; it would not call out

4-25-24: Repacked the check valve on RAS Pump 1

4-2-24: Put a new control switch on a hot plate in the laboratory

There were a total of fifty (50) Preventive Maintenance Work orders completed in April

Current & Planned Projects

4-19-24 RAS pumps are installed and working. There may be some programming issues that are taking place as the pumps cannot run full speed without pulling too many amps and making the pumps fail. SEH is looking into the problem.

- Sand Blasting on North Clarifier: Project will resume in summer 2024.
- Roof Replacements-(currently in Engineering)
- In-plant Lift Station-(currently in Engineering)
- Preliminary Screen Install-(currently in Engineering)

Health & Safety

There were no safety violations to report for the current month.

The subjects of the monthly safety training were:

- Respiratory Protection Overview
- Bug Bites and Stings Can Be Serious
- Setting Up a Safe Traffic Control Zone

Regulatory Reports

See attached documents

SURFACE WATER/INFLUENCED GROUNDWATER MONTHLY OPERATION REPORT

IOWA DNR WATER SUPPLY SECTION

Basic Information

S/EP #: 1

SYSTEM NAME: Boone Water Works **PWSID #:** 0819033 **MONTH:** April **YEAR:** 2024

DAY	Pumpage		Operating Hours	Fluoride		Chlorine Residual								CT	Cl_2 Used
						Source/Entry Point (S/EP)				Distribution					
	Raw in 1000s Gallons Per Day	To System in 1000s Gallons Per Day	Number of Hours of Treatment Plant Operation Per Day	Quantity Used in lbs.	Finished Water (mg/L)	Number of Tests Taken*	Specify Free (F) or Total (T)	Lowest Measured Residual (mg/L)	Continuous Hours Less Than 0.3 mg/L Free or 15 mg/L Total	Number of Tests Taken	Lowest Measured Residual Free (mg/L)	Number With Undetected Residual	Highest Measured Residual Free (mg/L)	Ratio of CT Obtained to CT Required	Chlorine in lbs.
1	1,895	1,644	18.00	24	0.90	"C"	(F)	0.91	0	6	0.90	0	1.60	5.1	33
2	1,730	1,484	16.50	20	0.84	"C"	(F)	0.91	0	1	0.99	0	0.99	5.4	31
3	1,691	1,460	16.25	18	0.81	"C"	(F)	0.89	0	1	0.97	0	0.97	5.5	31
4	1,859	1,610	17.75	19	0.75	"C"	(F)	0.90	0	1	0.99	0	0.99	5.0	39
5	1,743	1,503	16.50	12	0.78	"C"	(F)	0.92	0	1	0.99	0	0.99	5.5	37
6	1,889	1,639	18.00	20	0.82	"C"	(F)	0.96	0	1	1.00	0	1.00	5.3	36
7	1,679	1,442	16.00	13	0.75	"C"	(F)	0.96	0	1	1.00	0	1.00	5.9	32
8	1,864	1,617	17.75	15	0.75	"C"	(F)	0.94	0	1	0.99	0	0.99	5.2	37
9	1,770	1,527	16.75	10	0.68	"C"	(F)	0.95	0	6	0.98	0	1.39	5.9	33
10	2,147	1,754	20.50	16	0.66	"C"	(F)	1.00	0	1	0.99	0	0.99	5.1	42
11	1,715	1,344	17.25	14	0.68	"C"	(F)	0.95	0	1	0.98	0	0.98	6.2	32
12	2,064	1,713	19.50	14	0.70	"C"	(F)	0.96	0	1	0.96	0	0.96	5.3	39
13	2,140	1,747	20.25	17	0.62	"C"	(F)	1.00	0	1	0.96	0	0.96	5.4	39
14	2,262	1,829	21.50	14	0.73	"C"	(F)	0.89	0	1	0.95	0	0.95	4.5	38
15	1,983	1,603	19.00	14	0.72	"C"	(F)	0.90	0	6	0.94	0	1.26	5.4	33
16	2,193	1,864	21.00	10	0.65	"C"	(F)	0.87	0	1	0.94	0	0.94	4.8	37
17	2,307	1,872	22.00	26	0.73	"C"	(F)	0.86	0	1	0.97	0	0.97	4.5	40
18	1,887	1,535	17.75	19	0.63	"C"	(F)	0.87	0	1	0.96	0	0.96	5.5	34
19	1,737	1,405	16.25	18	0.77	"C"	(F)	0.85	0	1	0.90	0	0.90	5.7	32
20	1,707	1,381	16.00	19	0.74	"C"	(F)	0.78	0	1	0.87	0	0.87	5.5	30
21	2,439	1,934	22.50	21	0.77	"C"	(F)	0.81	0	1	0.85	0	0.85	3.8	42
22	1,872	1,510	17.75	22	0.78	"C"	(F)	0.90	0	1	0.85	0	0.85	5.5	30
23	2,176	1,777	20.50	24	0.78	"C"	(F)	0.85	0	1	0.85	0	0.85	4.5	40
24	2,459	1,914	23.75	30	0.78	"C"	(F)	0.86	0	1	0.83	0	0.83	4.0	46
25	2,021	1,635	17.25	25	0.74	"C"	(F)	0.87	0	1	0.83	0	0.83	5.0	35
26	1,999	1,624	17.00	25	0.81	"C"	(F)	0.83	0	1	0.83	0	0.83	4.9	33
27	1,977	1,646	16.50	24	0.88	"C"	(F)	0.94	0	1	0.85	0	0.85	5.5	31
28	1,898	1,529	16.00	26	0.78	"C"	(F)	0.84	0	1	0.83	0	0.83	5.2	29
29	2,153	1,805	18.75	28	0.78	"C"	(F)	0.76	0	1	0.83	0	0.83	4.1	34
30	2,168	1,769	19.00	26	0.77	"C"	(F)	0.71	0	1	0.85	0	0.85	3.9	35
Total	59,424	49,116	553.50	583						45		0			1,060
Avg	1,981	1,637	18.54	19	0.75										35
Max	2,459	1,934	23.75	30	0.90				0				1.60		46
Min	1,679	1,344	16.00	10	0.62			0.71			0.83			3.8	29

*If continuous monitoring of chlorine is provided, enter "C" in the space provided.

I certify that I am familiar with the information contained in this report and that the information is true, complete, and accurate.

DRC Operator's or Designee's Signature: David Moore

Certificate #: 4108 Grade: IV Date: 5/2/2024

SURFACE WATER/INFLUENCED GROUNDWATER MONTHLY OPERATION REPORT

IOWA DNR WATER SUPPLY SECTION

Turbidity Data Page 1 of 1

S/EP: #1

SYSTEM NAME: Boone Water Works **PWSID #:** 0819033 **MONTH:** April **YEAR:** 2024

DAY	Finished Water			Filter Effluent																Raw Water Turbidity (Highest Daily Reading NTU)
				#1				#2				#3				#4				
	Number of Readings Taken **	Number of Readings >0.3 NTU	Highest Daily Reading (NTU)	Highest Consecutive Results >0.5 NTU Anytime After 4 Hours From Start Up or Backwash		Daily Highest (NTU)	# of Consec Results >10 NTU	Highest Consecutive Results >0.5 NTU Anytime After 4 Hours From Start Up or Backwash		Daily Highest (NTU)	# of Consec Results >10 NTU	Highest Consecutive Results >0.5 NTU Anytime After 4 Hours From Start Up or Backwash		Daily Highest (NTU)	# of Consec Results >10 NTU	Highest Consecutive Results >0.5 NTU Anytime After 4 Hours From Start Up or Backwash		Daily Highest (NTU)	# of Consec Results >10 NTU	
1	16	0	.03	.04	.04	.04	0	.02	.02	.03	0	.02	.02	.04	0	.03	.03	.03	0	0.09
2	19	0	.04	.04	.04	.06	0	.03	.03	.06	0	.02	.02	.03	0	.03	.03	.03	0	0.09
3	17	0	.03	.02	.02	.03	0	.02	.02	.07	0	.05	.05	.05	0	.03	.03	.13	0	0.07
4	16	0	.03	.02	.02	.03	0	.02	.02	.05	0	.02	.03	.05	0	.04	.03	..05	0	0.07
5	18	0	.03	.04	.04	.04	0	.02	.02	.03	0	.02	.02	.03	0	.02	.02	.03	0	0.07
6	17	0	.03	.04	.04	.06	0	.04	.04	.04	0	.02	.02	.03	0	.02	.02	.03	0	0.07
7	18	0	.03	.02	.02	.03	0	.03	.03	.03	0	.04	.04	.04	0	.02	.02	.03	0	0.07
8	16	0	.03	.02	.02	.03	0	.02	.02	.05	0	.02	.02	.03	0	.04	.03	.05	0	0.06
9	18	0	.03	.05	.04	.05	0	.02	.02	.03	0	.02	.02	.02	0	.03	.02	.03	0	0.07
10	18	0	.04	.04	.03	.05	0	.03	.02	.05	0	.02	.02	.02	0	.02	.02	.02	0	0.07
11	21	0	.02	.02	.02	.02	0	.02	.02	.03	0	.04	.03	.04	0	.02	.02	.02	0	0.06
12	18	0	.03	.02	.02	.03	0	.02	.02	.03	0	.02	.02	.03	0	.04	.03	.05	0	0.06
13	20	0	.05	.04	.04	.04	0	.02	.02	.04	0	.02	.02	.02	0	.02	.02	.02	0	0.07
14	21	0	.09	.04	.04	.11	0	.03	.02	.09	0	.02	.02	.02	0	.02	.02	.02	0	0.06
15	22	0	.02	.02	.02	.02	0	.02	.02	.02	0	.04	.03	.04	0	.02	.02	.02	0	0.06
16	19	0	.03	.02	.02	.03	0	.02	.02	.05	0	.02	.02	.03	0	.04	.03	.05	0	0.06
17	21	0	.02	.04	.03	.04	0	.02	.02	.02	0	.02	.02	.02	0	.02	.02	.02	0	0.06
18	17	0	.04	.03	.04	.06	0	.03	.02	.05	0	.02	.02	.03	0	.02	.02	.04	0	0.07
19	19	0	.03	.02	.02	.03	0	.02	.02	.02	0	.03	.03	.04	0	.02	.02	.02	0	0.07
20	16	0	.03	.02	.02	.03	0	.02	.02	.05	0	.02	.02	.03	0	.03	.03	.05	0	0.08
21	17	0	.02	.04	.04	.04	0	.02	.02	.09	0	.02	.02	.03	0	.02	.02	.05	0	0.08
22	23	0	.03	.04	.04	.05	0	.02	.02	.04	0	.02	.02	.02	0	.02	.02	.02	0	0.08
23	19	0	.03	.02	.02	.03	0	.02	.02	.04	0	.03	.03	.03	0	.02	.02	.03	0	0.07
24	21	0	.02	.02	.02	.03	0	.02	.02	.04	0	.02	.02	.02	0	.03	.03	.04	0	0.07
25	24	0	.02	.03	.03	.03	0	.02	.02	.02	0	.02	.02	.02	0	.02	.02	.02	0	0.09
26	17	0	.03	.02	.02	.05	0	.02	.02	.05	0	.02	.02	.02	0	.02	.02	.02	0	0.07
27	17	0	.02	.02	.02	.02	0	.02	.02	.04	0	.03	.02	.03	0	.02	.02	.02	0	0.08
28	17	0	.02	.02	.02	.03	0	.02	.02	.06	0	.02	.02	.03	0	.03	.03	.05	0	0.07
29	16	0	.02	.04	.04	.04	0	.02	.02	.05	0	.02	.02	.02	0	.02	.02	.03	0	0.09
30	19	0	.03	.04	.05	.05	0	.03	.03	.04	0	.02	.02	.03	0	.02	.02	.03	0	0.09
Total	557	0					0				0				0				0	
Avg																				0.07
Max			.09			.11				.09				.05				.13		0.09
Min																				0.06

**If continuous monitoring of turbidity is provided, measurements must be recorded at equal time intervals at least once every four hours or hourly for plants w/pop. >100,000.

I certify that I am familiar with the information contained in this report and that the information is true, complete, and accurate.

DRC Operator's or Designee's Signature: David Moore

Certificate #: 4108 Grade: IV Date: 5/2/2024

SURFACE WATER/INFLUENCED GROUNDWATER MONTHLY OPERATION REPORT

IOWA DNR WATER SUPPLY

Basic Information

S/EP: #1

System Name: **PWSID #:** 819033 **Month:** April **Year:** 2024

Day	Operating Hours	Pumpage		Fluoride		Raw Turbidity	Settled Turbidity (individual sedimentation basin)							
	Number of hours the plant operated per day.	Raw in 1000s Gallons Per Day	To System in 1000s Gallons Per Day	Quantity Used in lbs. or gal. (circle one)	Finished Water (mg/L)	Highest Daily Reading (NTU)	Highest Daily Reading Sed 1 (NTU)	Highest Daily Reading Sed 2 (NTU)	Highest Daily Reading Sed 3 (NTU)	Highest Daily Reading Sed 4 (NTU)	Gallons Of Liquid Chlorine Used 15%			
1	18.00	1895.00	1644.00	24.00	0.90	0.09		0.69			12.4			
2	16.50	1730.00	1484.00	20.00	0.84	0.09		0.88			12.1			
3	16.25	1691.00	1460.00	18.00	0.81	0.07		0.99			11.8			
4	17.75	1859.00	1610.00	19.00	0.75	0.07		1.47			13.1			
5	16.50	1743.00	1503.00	12.00	0.78	0.07		1.53			12.0			
6	18.00	1889.00	1639.00	20.00	0.82	0.07		1.74			13.0			
7	16.00	1679.00	1442.00	13.00	0.75	0.07		2.58			11.7			
8	17.75	1864.00	1617.00	15.00	0.75	0.06		0.93			12.2			
9	16.75	1770.00	1527.00	10.00	0.68	0.07		2.53			11.2			
10	20.50	2147.00	1754.00	16.00	0.66	0.07		1.43			12.7			
11	17.25	1715.00	1344.00	14.00	0.68	0.06		0.66			10.0			
12	19.50	2064.00	1713.00	14.00	0.70	0.06		0.64			13.2			
13	20.25	2140.00	1747.00	17.00	0.62	0.07		1.34			14.1			
14	21.50	2262.00	1829.00	14.00	0.73	0.06		1.22			13.5			
15	19.00	1983.00	1603.00	14.00	0.72	0.06		0.63			11.6			
16	21.00	2193.00	1864.00	10.00	0.65	0.06		0.86			13.8			
17	22.00	2307.00	1872.00	26.00	0.73	0.06		0.60			13.8			
18	17.75	1887.00	1535.00	19.00	0.63	0.07		0.78			11.0			
19	16.25	1737.00	1405.00	18.00	0.77	0.07		0.96			10.1			
20	16.00	1707.00	1381.00	19.00	0.74	0.08		0.90			10.5			
21	22.50	2439.00	1934.00	21.00	0.77	0.08		0.64			14.0			
22	17.75	1872.00	1510.00	22.00	0.78	0.08		0.68			11.5			
23	20.50	2176.00	1777.00	24.00	0.78	0.07		0.58			13.5			
24	23.75	2459.00	1914.00	30.00	0.78	0.07		0.65			14.9			
25	17.25	2021.00	1635.00	25.00	0.74	0.09		0.77			13.0			
26	17.00	1999.00	1624.00	25.00	0.81	0.07		1.08			12.8			
27	16.50	1977.00	1646.00	24.00	0.88	0.08		1.82			12.8			
28	16.00	1898.00	1529.00	26.00	0.78	0.07		0.62			12.0			
29	18.75	2153.00	1805.00	28.00	0.78	0.09		0.29			13.9			
30	19.00	2168.00	1769.00	26.00	0.77	0.09		1.26			13.8			
Total	554	59,424	49,116	583							376	0	0	0
Avg	17.85	1,917	1,584	18.81	0.73	0.07	#DIV/0!	1.06	#DIV/0!	#DIV/0!	12.53	#DIV/0!	#DIV/0!	#DIV/0!
Max	23.75	2,459	1,934	30.00	0.90	0.09	0.00	2.6	0.0	0.00	14.90	0.00	0.00	0.00
Min	16.00	1,679	1,344	10.00	0.62	0.06	0.00	0.29	0.00	0.00	10.00	0.00	0.00	0.00

I certify that I am familiar with the information contained in this report and that the information is true, complete, and accurate.

DRC Operator or Designee's Signature: David Moore

Certificate #: 4108 Grade: IV Date: 5/2/2024

October 2018 FORM 542-8027

IOWA DEPARTMENT OF NATURAL RESOURCES
NPDS REPORTING SYSTEM - DISCHARGE MONITORING REPORT
FACILITY INFORMATION

This form is valid 2/1/2023 to 7/31/2024

Facility Name: BOONE CITY OF STP

Permit #: 0819001

Month/Year: 4 2024

Outfall #(s): 001 - DISCHARGE FROM AN ACTIVATED SLUDGE WASTEWATER TREATMENT FACILITY.

Operator Name: John Roberts

Certification #: 10924

Phone #: 7122590805

Lab Cert. #: 156

Comments:

*Include Comments longer than 1000 characters in email

Signature:

John Roberts

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibilityof fine and imprisonment for known violations.

Permit # 0819001
Facility Name: BOONE CITY OF STP

Monthly Operation Report
IOWA DEPARTMENT OF NATURAL RESOURCES
NPDS - Operation Permit System
INFLUENT Data

Outfall #: 001
Month/Year: 4-2024

Mon. Point	RAW WASTE												
Parameter	FLOW	BOD5		TSS		TOT-N		TKN		PHOS		TEMP	PH
Units	MGD	MG/L	LBS/DAY	MG/L	LBS/DAY	MG/L	LBS/DAY	MG/L	LBS/DAY	MG/L	LBS/DAY	FAHRENHEIT	STD UNITS
Frequency	7/WEEK OR DAILY	2 TIMES PER WEEK	2 TIMES PER WEEK	2 TIMES PER WEEK	2 TIMES PER WEEK	1 TIME PER WEEK	1 TIME PER WEEK	1 EVERY MONTH	1 EVERY MONTH	1 TIME PER WEEK	1 TIME PER WEEK	2 TIMES PER WEEK	2 TIMES PER WEEK
Start Date													
End Date	Permit Duration	Permit Duration	Permit Duration	Permit Duration	Permit Duration	Permit Duration	Permit Duration	Permit Duration	Permit Duration	Permit Duration	Permit Duration	Permit Duration	Permit Duration
No Discharge													
LOQ													
Day: 1	2.219			115	2128.2429							54	7.6
2	2.385					21.6	429.64344	19	377.9271	3.6	71.60724	54	7.6
3	2.202	124	2277.22032	104	1909.92672							56	7.7
4	2.033	104	1763.34288									56	7.6
5	1.992											59	7.7
6	2.04												
7	2.048												
8	1.903			147	2333.03994							58	7.6
9	1.859					33.1	513.184386	32	496.12992	5.2	80.621112	58	7.6
10	1.817	159	2409.45102	155	2348.8359							58	7.5
11	1.853											56	7.6
12	1.773	200	2957.364									56	7.7
13	1.759												
14	1.685												
15	1.679			491	6875.40426							58	7.7
16	3.213					30.2	809.251884	29	777.09618	4.7	125.943174	58	7.3
17	2.496	125	2602.08	196	4080.06144							56	7.5
18	2.951											56	7.5
19	2.504	68	1420.06848									56	7.6
20	2.406												
21	2.38												
22	2.226			93	1726.53012							58	7.6
23	2.48					20.6	426.07392	18	372.2976	3.7	76.52784	56	7.5
24	2.024	103	1738.65648	96	1620.49536							56	7.5
25	2.088											56	7.6
26	2.843	124	2940.11688									56	7.6
27	3.028												
28	3.328												
29	3.08			82	2106.3504							60	7.7
30	3.593											58	7.6
31													
Total	69.887	1007	18108.30006	1479	25128.88704	105.5	2178.15363	98	2023.4508	17.2	354.699366	1249	166.9
Monthly Avg.	2.329566667	125.875	2263.537508	164.3333333	2792.09856	26.375	544.5384075	24.5	505.8627	4.3	88.6748415	56.77272727	7.586363636
Daily Max.	3.593	200	2957.364	491	6875.40426	33.1	809.251884	32	777.09618	5.2	125.943174	60	7.7
Daily Min.	1.679	68	1420.06848	82	1620.49536	20.6	426.07392	18	372.2976	3.6	71.60724	54	7.3
Max. 7/Avg.	2.573857143	179.5	2683.40751	343.5	5477.73285	33.1	809.251884	32	777.09618	5.2	125.943174	57.2	7.64

Permit #: 0819001
Facility Name: BOONE CITY OF STP

Monthly Operation Report
IOWA DEPARTMENT OF NATURAL RESOURCES
NPDS - Operation Permit System
EFFLUENT Data

Outfall #: 001
Month/Year: 4-2024

Mon. Point	EFFLUENT PRIOR TO DISINFECTION													EFFLUENT AFTER DISINFECTION			
Parameter	CBOD5		TSS		NH3-N		NO3-N	TOT-N		PHOS		TOX CER	TOX PIM	TEMP	DO	PH	E. COLI
Units	MG/L	LBS/DAY	MG/L	LBS/DAY	MG/L	LBS/DAY	LBS/DAY	MG/L	LBS/DAY	MG/L	LBS/DAY	NO TOXICITY	NO TOXICITY	FAHRENHEIT	MG/L	STD UNITS	#/100 ML
Frequency	2 TIMES PER WEEK	2 TIMES PER WEEK	2 TIMES PER WEEK	2 TIMES PER WEEK	2 TIMES PER WEEK	2 TIMES PER WEEK	1 EVERY MONTH	1 TIME PER WEEK	1 TIME PER WEEK	1 TIME PER WEEK	1 TIME PER WEEK	1 EVERY 12 MONTHS	1 EVERY 12 MONTHS	2 TIMES PER WEEK	2 TIMES PER WEEK	5 TIMES PER WEEK	GEO. MEAN 1/3 MONTHS
Start Date																	8/1/2023
End Date	Permit Duration	Permit Duration	Permit Duration	Permit Duration	Permit Duration	Permit Duration	Permit Duration	Permit Duration	Permit Duration	Permit Duration	Permit Duration	Permit Duration	Permit Duration	Permit Duration	Permit Duration	Permit Duration	7/31/2024
No Discharge												06 - NOT REQ / MP	06 - NOT REQ / MP				
LOQ																	
Day: 1			5	92.5323										52	9.4	7.8	
2					0.1	1.98909		12.1	240.67989	2.2	43.75998			52	9.8	7.9	1
3	3	55.09404	6	110.18808	0.1	1.836468								54	9.7	7.9	
4	3	50.86566			0.1	1.695522								54	9.8	7.9	1
5					0.1	1.661328								55	10.2	7.9	
6																	
7																	
8			4	63.48408										56	9.5	7.9	
9					0.1	1.550406		14	217.05684	2.9	44.961774			56	9.7	7.9	1
10	3	45.46134	6	90.92268	0.1	1.515378								56	9.6	8.1	
11					0.1	1.545402								54	9.6	7.9	1
12	3	44.36046			0.1	1.478682								56	9.7	8.1	
13																	
14																	
15			6	84.01716										58	9.7	8	
16					0.1	2.679642		15.2	407.305584	3.1	83.068902			56	9.2	7.9	1
17	3	62.44992	6	124.89984	0.1	2.081664								56	9.6	7.9	
18					0.1	2.461134								54	9.6	8	
19	4	83.53344			0.1	2.088336								54	9.7	7.9	
20																	
21																	
22			7	129.95388										56	9.7	8	
23					0.1	2.06832	248	12.97	268.261104	2.2	45.50304			56	9.5	7.9	
24	4	67.52064	4	67.52064	0.1	1.688016								56	9.6	7.9	
25					0.1	1.741392								56	9.9	7.9	
26	3	71.13186			0.1	2.371062								54	9.3	8.1	
27																	
28																	
29			7	179.8104										58	9.4	8	
30					0.1	2.996562								56	9.5	8	
31																	
Total	26	480.41736	51	943.32906	1.7	33.448404	248	54.27	1133.303418	10.4	217.293696			1215	211.7	174.8	5
Monthly Avg.	3.25	60.05217	5.666666667	104.81434	0.1	1.967553176	248	13.5675	283.3258545	2.6	54.323424			55.22727273	9.622727273	7.945454545	1
Daily Max.	4	83.53344	7	179.8104	0.1	2.996562	248	15.2	407.305584	3.1	83.068902			58	10.2	8.1	1
Daily Min.	3	44.36046	4	63.48408	0.1	1.478682	248	12.1	217.05684	2.2	43.75998			52	9.2	7.8	1
Max. 7/Avg.	3.5	72.99168	6	104.4585	0.1	2.327694	248	15.2	407.305584	3.1	83.068902			55.6	9.78	7.98	1

1406 Central Avenue
Fort Dodge, Iowa 50501
515-269-2338

UPGRADE PROGRAM		April 2024				
DATE	ADDRESS	ORIG INSTALL	Note	Low	Med	High
4/1/2024	1015 Carroll	11/16/2006				
4/2/2024	515 8th	11/20/2008				
4/2/2024	1728 13th	New Service				
4/2/2024	Xenia Boone East	Warranty				
4/8/2024	1412 Linn	6/21/1999				
4/10/2024	1326 Cedar	12/2/2014				
4/11/2024	411 Ashwood H	11/27/2001				
4/11/2024	411 Ashwood L	11/27/2001				
4/12/2024	615 Woodland	Frozen				
4/15/2024	1205 Noble Hills	Pre 1999				
4/16/2024	1415 Se Linn	11/07/14				
4/16/2024	1315 Benton	Reinstall				
4/18/2024	507 Boone	12/22/1998				
4/19/2024	722 W Mamie	New Service				
4/22/2024	803 5th	8/4/2015				
4/22/2024	1446 Kate Shelley	8/29/2003				
4/24/2024	1410 13th	3/28/2000				
4/24/2024	1015 Union	9/17/2014				
4/25/2024	1427 Champa	Pre 1999				
4/26/2024	508 Madison	Reinstall				

Curb Box Repair Update for 05/20/2024 – as of 5/9/2024

$3,160.06 was collected during shut offs. 35 accounts qualified to be on the list.

137 stop boxes need repaired, 61 of which have lead service lines & Waylon has ordered 6 to be repaired.

10 delinquent bills totaling $5,763.85 certified on April 29th. If left unpaid, 10 delinquent bills totaling $6,930.37 are scheduled to certify on May 28th.

Lesli Vote
Utility Billing Supervisor