

# WASTEWATER

## LAGOON UPGRADE

Norway, IA

### ACHIEVING REGULATORY COMPLIANCE

Evolving regulatory requirements and aging infrastructure present challenges to existing wastewater treatment facilities. With diverse expertise in-house, we'll collaborate with you through all stages of your project to streamline the complexities and manage schedule and cost impacts to rate payers. We understand the long-term value of rehabilitation and improvement projects. As a result, our experienced staff will prepare you for future regulatory changes by designing your infrastructure improvement program with flexibility in mind.

We're prepared to assist with all project aspects, from evaluating your current system through facility plan preparation, creation of design documents, bidding, construction services, and funding opportunities for improvements such as:

- Lagoon systems
- Flow equalization basins
- Complex plants
- Force mains
- Lift stations
- Gravity mains

### RELIABLE INFRASTRUCTURE SOLUTIONS

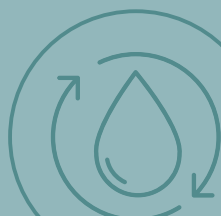
Wastewater utilities play a vital role in keeping your community safe and healthy, which is a cause our wastewater group is dedicated to. Through lasting relationships with you and your stakeholders, we'll help you optimize, economize, protect, and extend the life of your wastewater system. We have licensed operators on staff who are available to help develop operational procedures and documents to guide smooth, efficient operation long-term.

From the planning and design of new facilities to improvements for aging treatment and collection systems, we'll help determine the solution that's best for you and your community.



#### WATER

DRINKING WATER  
ENVIRONMENTAL  
RIVERS, LAKES, & STREAMS  
STORMWATER  
WASTEWATER





## SEWER INTERCEPTOR

*Polk County, IA*

## HOW WE CAN HELP

### SYSTEM ANALYSIS & PLANNING

We provide sewer system modeling, condition assessments, inflow and infiltration analysis, and treatment facility performance analysis. These resources are integral to develop cost-effective capital improvement plans and assist with budgetary forecasting.

### CONSTRUCTION PLANS & SPECS

We produce high-quality construction plans and specifications contractors are comfortable with, which is reflected in the bid price. Clear and concise bidding documents are essential to accurately estimate construction costs and obtain the lowest, competitive bids.

### FUNDING ASSISTANCE

Traditional funding sources include the Community Development Block Grants, State Revolving Fund, and the United States Department of Agriculture Loans. We can help you navigate the funding process, write grant applications, and administer funding documentation.

### PERMITTING

Each project is unique with various conditions to meet before construction permits become available. We coordinate with regulatory agencies daily to keep everything on schedule and expedite the permitting process.

### GRAVITY SEWER DESIGN & OPERATION

Our experience with gravity sewer systems ranges from simple sewer extensions to large diameter trunk sewers through urban areas.

### ON-SITE TREATMENT SYSTEM DESIGN

Remote areas often utilize on-site wastewater treatment methods such as septic tanks, sand filters, lateral fields, aerobic treatment units, and land application. We're well-versed in regulatory requirements and have successfully designed numerous on-site wastewater treatment systems.

### TREATMENT FACILITY DESIGN

From simple lagoon systems to fixed film mechanical plants and complex activated sludge treatment facilities, we're prepared to help. We can also assist with disinfection systems such as chlorination/de-chlorination or UV.

### PUMP STATION & FORCE MAIN DESIGN

We've designed numerous systems from small, individual pump stations to large, multi-pump facilities capable of pumping millions of gallons per day.