

West Branch City Council City Administrator's Report 7/23/18

Pending Action Items:

(Wastewater Taskforce)

V&K our engineering consultants will be starting the process of preparing a Wastewater Treatment Facility Plan. Although, we suspect that there will be cost savings with an alternative wastewater treatment process in comparison to an Aero-mod Wastewater Treatment Plant, this facility planning process will determine which process is financially viable and effective in meeting state requirements. We also believe that the cost of operating a plant would be considerable higher than an alternative lagoon process, but it will take the facility planning process to verify if this assumption is accurate. In an attempt to get a jump on assisting V&K with their work Gross-Wen Technologies has forwarded their proposal for a revolving Algal Biofilm System for Ammonia Removal in West Branch, IA (see Attachment1).

College Street Bridge

Due to the delays associated with obtaining needed right of way for the College Street Bridge Replacement Project (Project BROS-S252(605)--8J-16) and securing funding for the non-participating portions of the project. The City was not able to let the project within 3 years of authorization of the funding agreement. Therefore under the advice of the City Engineer, I respectfully requested a 6 month extension of the letting date agreement. **The HBP funding agreement extension has been granted.**

However it was noted that the City will need to complete their ROW purchase within the next 6 months either by purchasing the property through a deed or by having a condemnation hearing date set.

Report from the Desk of the City Administrator:

- Grants I spoke with Marla Quinn Grants and Development Coordination for East Central Intergovernmental Association (ECIA) who we contracted \$2,400 for approximately 30 hours grant preparation and research. To date we have found well above the amount spent on this contract. Ms. Quinn has agreed to provide a status report on her hours spent writing and researching grants next month (once she returns from vacation).
- August 29th District Court hearing regarding Nuisance Violations at 203 E. Green

Follow up / Reminder Items:

- MOU with Cedar's Edge Golf Course & Little Lights Events has been delivered, but we are still
 waiting to get final signatures.
- Fireworks Permit for Hoover Hometown Days (All in Submitted)

- Restore and Stabilize Hoover Creek for Flood Mitigation at Herbert Hoover National Historic Site. The National Park Service is currently in the scoping phase of the proposed project and will be presenting an overview of the project to a public scoping meeting July 12, 2018 from 6:00 pm to 8:00pm at the park visitor center at 110 Parkside Drive.
 - Public Scoping and Agency Coordination: July / August 2018
 - o Preparation of Draft Environmental Assessment: June-October 2018
 - o Environmental Assessment for Public Review: Fall 2018
 - Decision Document: Early 2019
 - Implementation: 2019
- Meadows Phase 4 We expect to get cost projection soon (before the 23 council meeting) relating to the sewer system proposed and the abandonment of the old existing system.
 Staff has also prepared the Planning and Zoning Commission to be expecting this project to come forward for the July 24 P&Z meeting.
- Kudos to our first responders as they were recognized for our "All Weather Hazards
 Community Preparedness". Although, it wasn't singled out as the sole reason, I believe the
 Fire Department's ability to work through our early warning siren issues last year was an
 indication why such an acknowledgment is deserved. Thumbs Up to our Men and Women
 who make up our first responders (see attachment 2)
- In an attempt to strength the teamwork among staff, I have implemented an added evaluation methodology known as Real Colors (also known as True Colors). It is a methodology used to help people strengthen communications among each other. I conducted two surveys with staff and worked through an assessment process to identify communication tendencies of our management team (including myself). The results and an explanation of the communication styles are presented in a PowerPoint attached to this update (see attachment 3)
- We received final approval from the Regional Office of the National Park Service for the
 fireworks permit needed for Hoover Hometown Days. We should be getting the final signed
 permit copy sometime this week. Of course we are always subject to bad weather, but
 everything else is good to go.

Events / Scheduled Meetings:

- Library
 - July 23, 2018 Movie Monday
 - o July 24, 2018 Kindness Rocks, Friendship Rock Painting for All Ages
 - o July 25, 2018 10:30 WBPL Teens and 1:30 Snack and Stories
 - o July 26, 2018 Preschool Storytime
 - o July 30, 2018 Movie Monday
- Hoover Hometown Days August 3 & 4 2018
 - Friday night's doubles bags tournament at the Fire Station! (August 3r)
 - The Hoover Presidential Foundation has confirmed Lt. Governor Adam Gregg as the keynote speaker for the Life Celebration at 1pm on Saturday, August 4th
 - National Hoover Ball Championships..... and more!!!

- With the success of our Cedar County Iowa Great Place designation, our communities have qualified for the first round of special Great Places grant funding. For the opportunity to secure these funds we must submit a pre application by August 1st . First round money will be available for the following Great Places Cedar County designated projects:
 - Community Park projects and enhancements
 - o Community Mural project

Community Park Project

\$300,000 - 600,000 reminder Cubby Park and Splash Pad.

Community Mural Project

(For Visualization Purpose Only – see below)

Before



After



All project activities and incurred expenses must occur within the eligible contracted funding period of January 1, 2019 – December 31, 2021. Funding is awarded to grant recipients on a reimbursement basis after expenses have been incurred for approved project activities within the eligible funding period. Expenses that are incurred before or after the eligible funding period are not eligible for reimbursement.

For additional assistance please reach out to <u>Rod Ness</u> at CCEDCO 319.321.2164 or <u>riness44@outlook.com</u> with your questions or if you need assistance completing the attached spreadsheet.



Proposal # 20180717-A Revolving Algal Biofilm System for Ammonia Removal in West Branch, IA

Prepared for:

City of West Branch

Prepared by:

Max Gangestad Gross-Wen Technologies Inc.



GWT Company Contacts:

Max Gangestad Bioprocessing Engineer (515)-851-8598 max@gross-wen.com

Revision History:

Version	Date	Description	
A	July 17, 2017	Initial Offering	



1. Background:

The city of West Branch is facing stricter effluent permits. These effluent permits are not able to be met with the existing treatment system being employed by the city today. These water quality standards are forcing the city to evaluate new and cost-effective approaches to meet their new permits.

Gross-Wen Technologies, Revolving Algal Biofilm (RAB) treatment system has been shown to be an effective technology to help communities like West Branch cost effectively and sustainably meet stricter effluent permits. Furthermore, during the treatment process, algae biomass is produced. This algae has value and can be sold to create a variety of produces such as fertilizers, bioplastics and biofuels. See the treatment process diagram below:



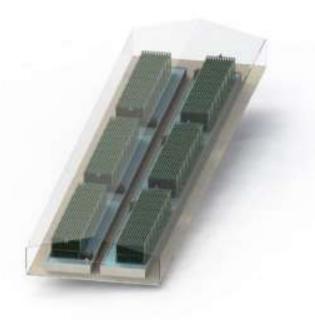
The RAB system is a simple retrofit to the existing wastewater treatment system being employed by the city. The RAB system will only require a grade 2 operator to run the facility. Overall the RAB solution allows for the city to effectively utilize the existing infrastructure without the need for significant plant retrofits. Furthermore, using algae for wastewater treatment greatly boosts the cities commitment to sustainability.

2. Project Description:

Gross-Wen Technologies (GWT) is pleased to offer proposal #20180717-A for our modularbased revolving algal biofilm (RAB) treatment system to West Branch, IA. Given our understanding of this project as defined in your provided documents and in discussions with your



project team, GWT proposes a commercial greenhouse treatment system. The sizing and staging of this system will be based on the sizing, staging and redundancy requirements agreed to by IDNR. This system to be installed in West Branch includes 6 RAB modules and has an area approximately 13,125 ft^2. This estimate includes groundwork, foundation, greenhouse, liquid reservoir, electrical, plumbing and RAB system. This estimate also includes installation and startup of the system. This commercial greenhouse unit is shown below:

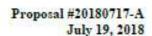


The greenhouse treatment system design encompasses an all-inclusive cost to implement the RAB system. It should be noted that GWT can only offer a firm cost for the RAB system itself and the remaining pieces of the installation are our best estimates based on conversations with local contractors. It should be expected that site specific considerations will be defined that can either increase or decrease the estimated amount.



2.1 Algae biomass:

The City of West Branch will have an offtake agreement with GWT for any algae biomass produced during the treatment process. GWT will be responsible for transportation, processing, sales, and/or disposal of the algae product. GWT will provide 50% of the net profit generated by the algae sales to the city in the form of discounted services/products or paid directly to the city. GWT will be responsible for collection and transporting the algae from the city to a GWT processing facility. The intended method for processing includes thermally treating the algae to dry and kill pathogens. The algae will then be pelletized prior to selling as a fertilizer. The efficacy of this process will be validated prior to implementation at Tipton. Tipton will provide storage of algae biomass for up to 180 days on site. It is anticipated that a profit of \$500/ton of algae will be achieved.





3. System Pricing:

3.1 Capital Costs:

For the below cost it is important to note that some of the costs are out of GWT's control. The bold text outlines the costs that GWT can control and should not be looked at as a firm number. The other cost are estimates that GWT has put together by speaking to multiple engineering firms, vendors and contractors across Iowa.

The estimated price for the installed commercial RAB greenhouse is \$3,395,666

3.1.1 Reference Pricing Breakdown for Capital Costs:

RAB Modules (Installed)	\$2,676,666
Greenhouse (Installed)	\$252,000
Groundwork, Foundation, Reservoir	\$216,000
Grit/Screening or Clarifier	\$250,000



2.2 Annual Operational Costs:

2.2.1 Reference Pricing Breakdown for Operational Costs:

Electricity (\$2,900/module)	\$17,400
Annual Operation and Routine Upkeep (\$2,500/module, Contracted with GWT)	\$15,000
Greenhouse Heating/Cooling	\$3750
Algal Sales Revenue (4.5 dry ton/module/year)	13,500 Profit)

2.3 Operation and Upkeep Contract Between GWT and Customer:

GWT and the city are expected to have a fixed cost operating and maintenance contract for GWT personnel to operate and maintain the RAB system. This contract will outline that GWT personnel will be responsible for algae harvest and processing. This contract will outline that GWT personnel will perform and pay for any non-routine maintenance that is required on the RAB system. The actual cost of this agreement will be negotiated between GWT and the city on a later date. This contract will result in a minimal time commitment for the city to operate and maintain the RAB system. Additionally, the city will be buffered from any unforeseen costs associated with implementing the first RAB systems. It is expected that this contract will be for 5 years with the option to extend.



Cedar County, Iowa West Branch

2015-2021

Presented by the Tri-state StormReady Advisory Board

In Recognition of All Weather Hazards Community Preparedness Initial Recognition September 23, 2015. Renewed 2018.

Chairperson, Tri-state StormReady Advisory Board

Meteorologist in Charge, National Weather Service

Attachment 3

Management Team - Team Building and Communication Exercise.

