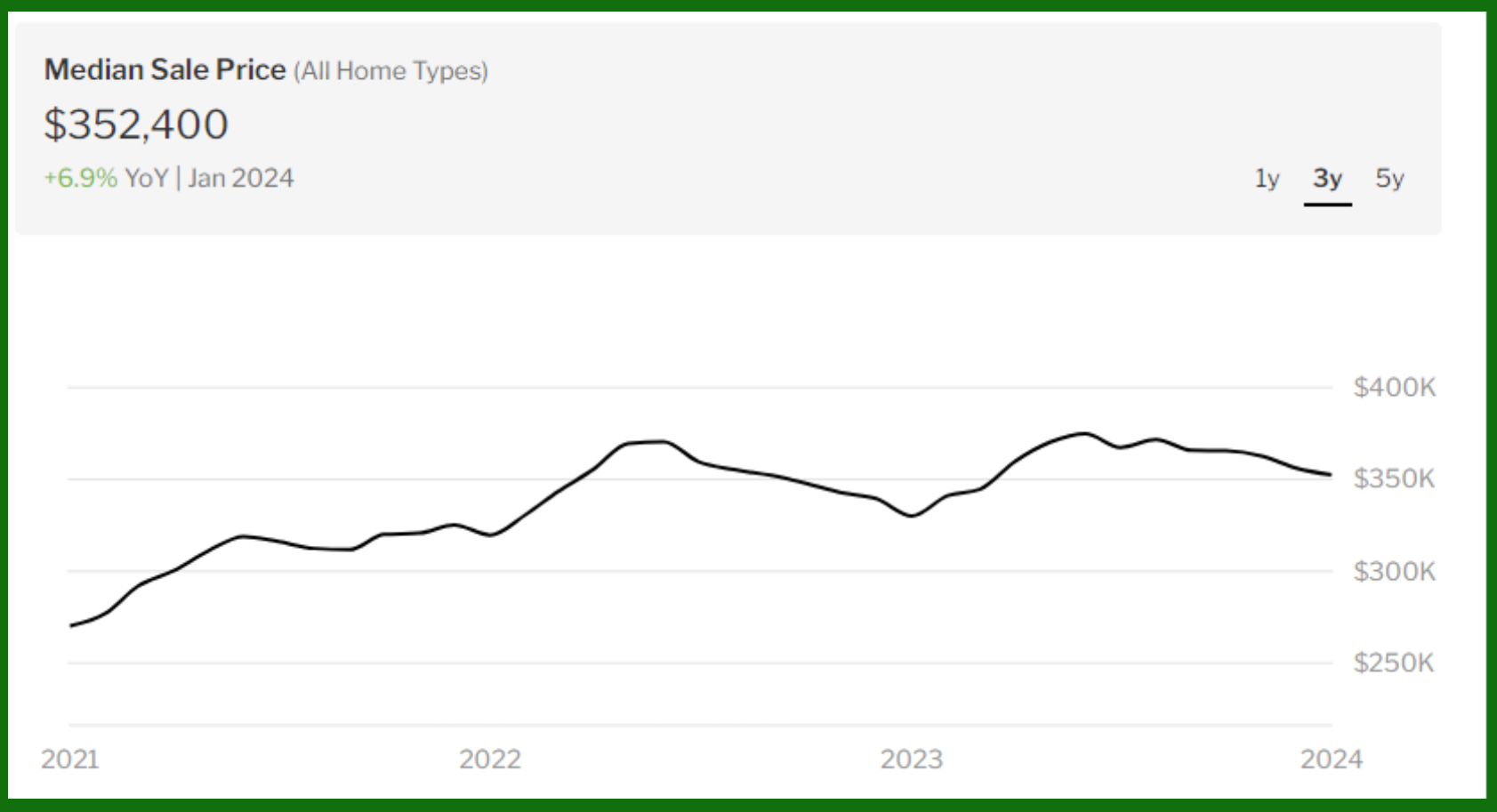
01

DECENTRALIZED DEVELOPMENT

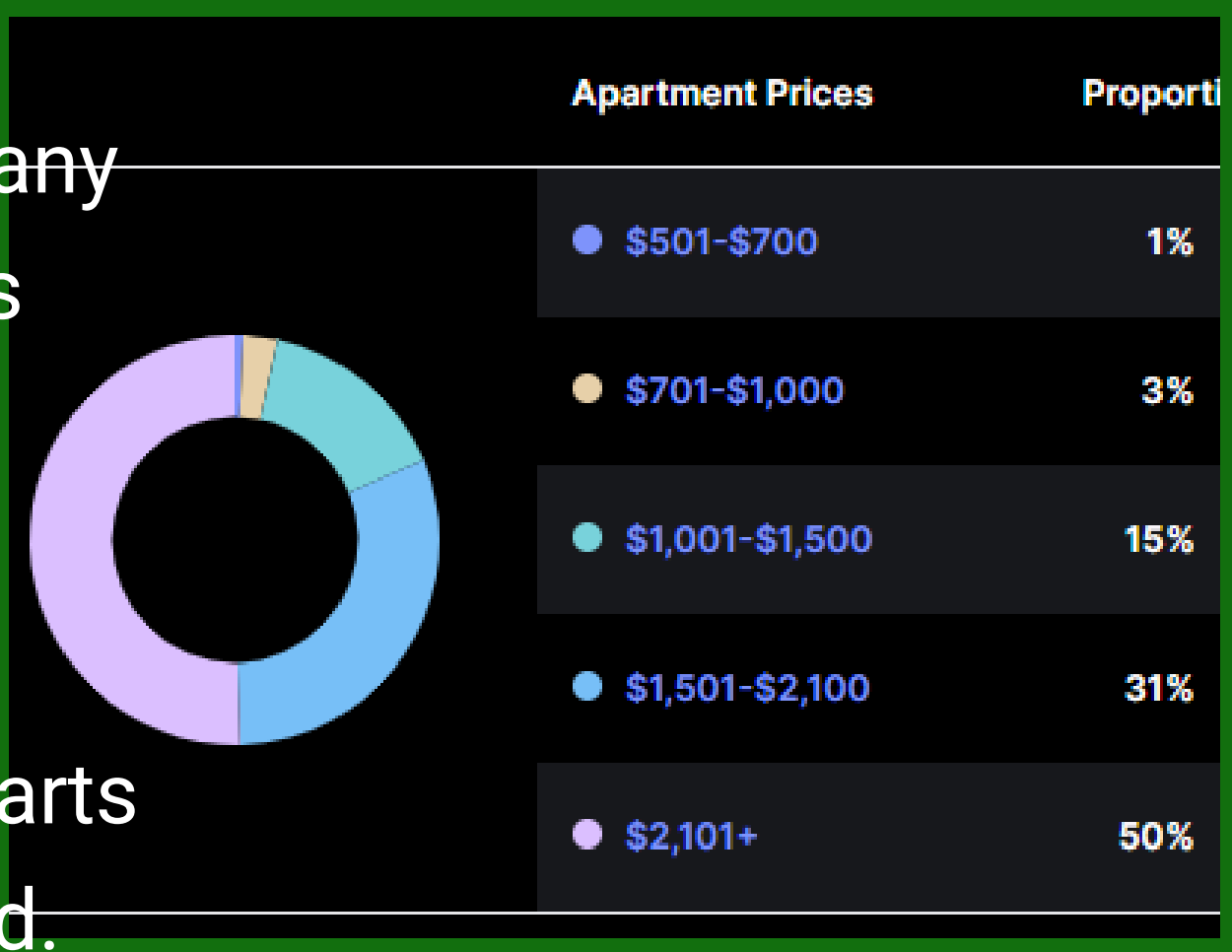
The secret to municipal density on rural land.

AquaTech Systems
DECENTRALIZED WASTEWATER SYSTEMS

IT'S GETTING HARD TO FIND A PLACE TO LIVE IN GEORGIA



- House prices continue to rise beyond what many first-time buyers can afford.
- Rent has skyrocketed.
- New housing starts have plummeted.



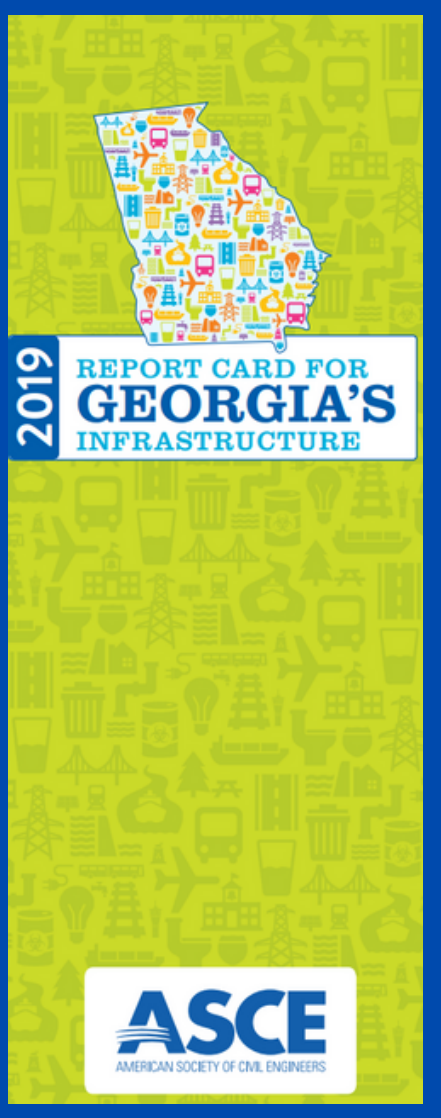
Georgia Housing Supply

Are there enough homes for sale to meet buyer demand?

In January 2024, there were 38,890 homes for sale in Georgia, down 15.6% year over year. The number of newly listed homes was 11,656 and down 9.15% year over year. The average months of supply is 4 months, down year over year.

Source: Redfin.com

GEORGIA'S WASTEWATER INFRASTRUCTURE IS FAILING (LITERALLY)



WASTEWATER

D+

Georgia's wastewater infrastructure continues to age, and wastewater agencies struggle to upgrade wastewater treatment systems to meet changing water quality standards. While progress has been made in dealing with the threats of overflows from combined sewer systems, slow progress in addressing overflows from sanitary sewer systems, aging wastewater infrastructure and the demands of a growing population have resulted in lowering of the grade. In 2017, the Georgia Water & Wastewater Report found that 45% of the 373 local government water or wastewater agencies in Georgia did not generate enough revenue to cover their operations and maintenance costs and account for future capital costs. Systems need to be properly maintained and expanded for future growth. Nearly half of all Georgians do not have access to public sewers, many relying on septic systems.

Source: Infrastructurereportcard.org

AQUA TECH SYSTEMS LLC

2

A significant number of our water-related utilities (drinking water, wastewater and stormwater) are consistently underfunded. The long-term viability of these utilities will require adequate user fees that cover the full cost of service.

ASCE Infrastructure Report Card

PRIVATE INTERESTS CAN'T PICK UP THE BILL FOR DECADES OF NEGLECT

With high house prices and flagging residential construction, the state can‘t afford to discourage new developments with moratoriums on new flows or exorbitant improvement fees.

GEORGIA NEEDS A BETTER WASTEWATER OPTION RIGHT NOW

AQUA TECH SYSTEMS LLC

DECENTRALIZED SEWER SYSTEMS CAN SOLVE GEORGIA'S DEVELOPMENT PROBLEMS.

Here's a 192-unit apartment development on 27 acres in Northwest Arkansas.

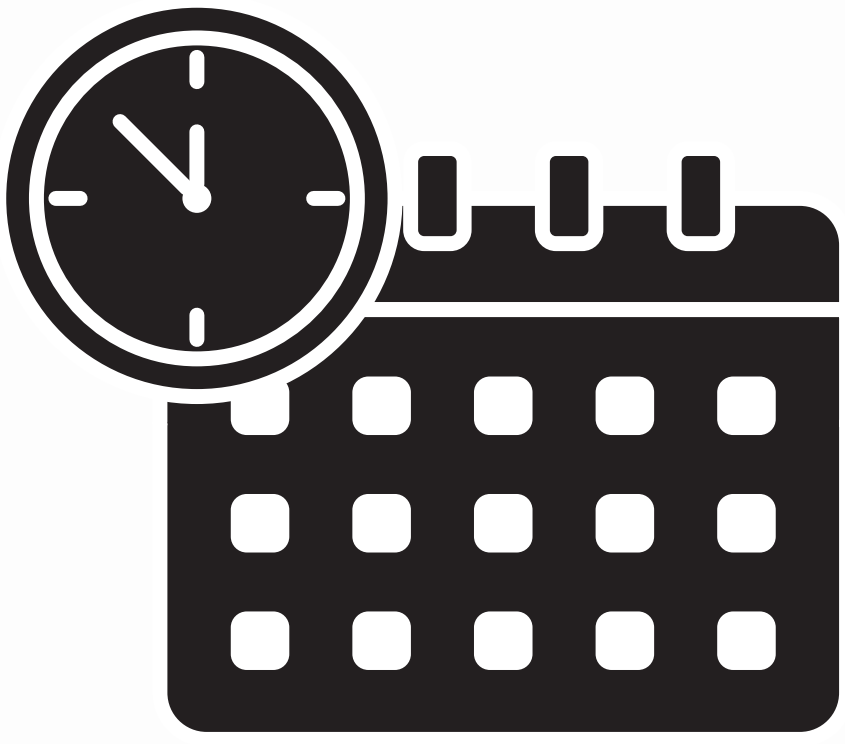
AQUA TECH SYSTEMS LLC

AQUA TECH SYSTEMS

You can develop property at the speed of growth with Aqua Tech.

WITH AQUA TECH'S DECENTRALIZED SEWER SYSTEMS YOU CAN:

AQUA TECH SYSTEMS



DEVELOP ON YOUR OWN TIMETABLE.

Don’t wait for municipal sewer capacity. Treat your own wastewater and develop now.

GEORGIA
DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

The state of Georgia has issued a general permit for systems with a capacity between 10,000 gallons per day and 150,000 gallons per day.

Permit No. GAG278000
Issuance Date: JAN 15 2020

In accordance with the provisions of the Georgia Water Quality Control Act (O.C.G.A. §12-5-20), and the Rules and Regulations (Chapters 391-3-6-.13 and 391-3-6-.19, as amended) promulgated pursuant thereto, this permit is issued for the discharge of sanitary wastes from any large community system with a monthly average design flow of 10,000 to 150,000 gallons per day, located within the State of Georgia to a preapplication treatment system and then to a subsurface fluid distribution system.

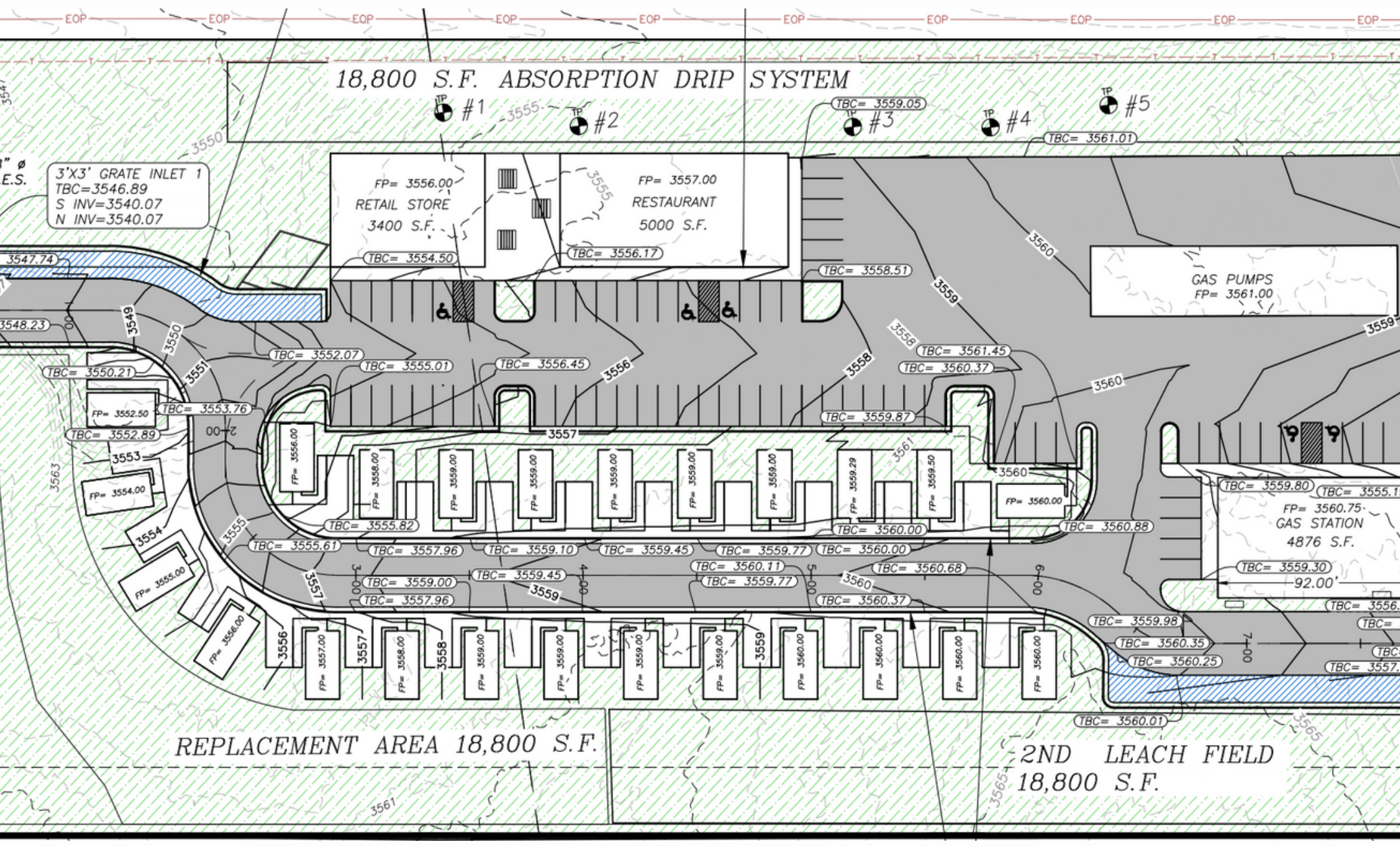
That means you can begin to develop as soon as your engineer’s NOI gets approved.

Next up, “Design for the Bottom Line”:

AQUA TECH SYSTEMS

DESIGN FOR THE BOTTOM LINE.

With a range of collection, treatment, and disposal options, you can configure your development around the market for maximum ROI.



Our systems can treat wastewater from institutional, residential, recreational, and commercial sources. We can even mix it up!

Continued:

AQUA TECH SYSTEMS

DESIGN FOR THE BOTTOM LINE.

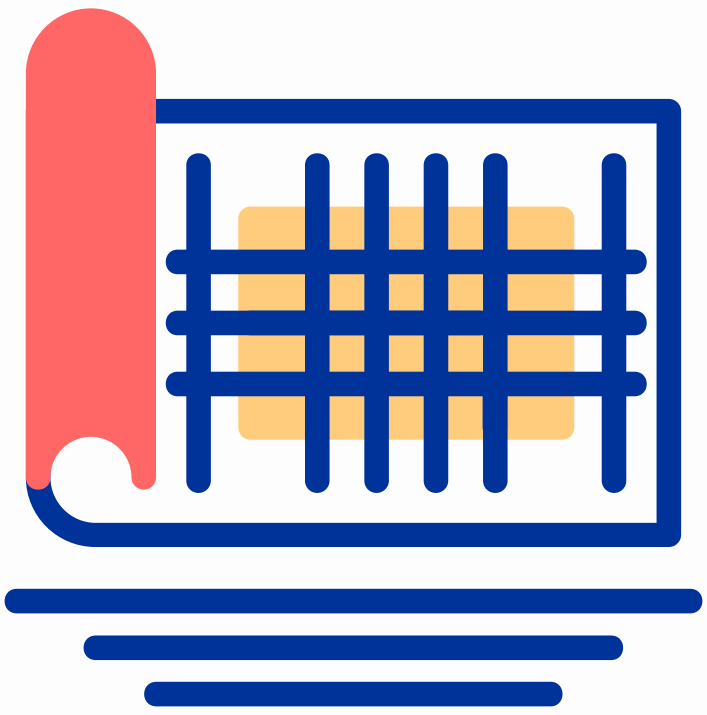
Every Aqua Tech System is custom designed to fit your development so you never pay off-the-shelf pricing for prefabricated products.

A residential wastewater treatment system from Aqua Tech might cost as little as $3000/door.*

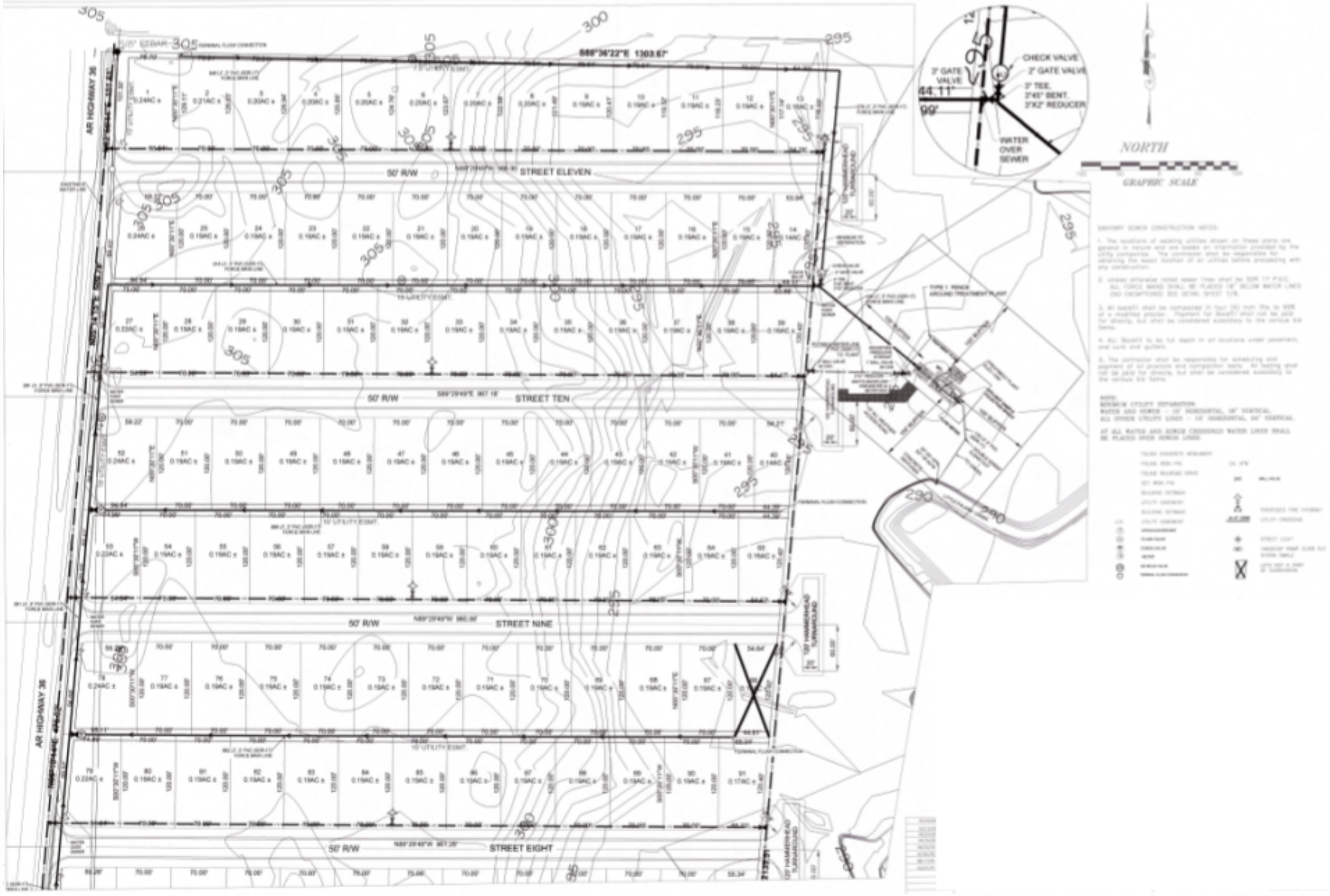
Continued:

*Depending on size of the system, collection and disposal type.

AQUA TECH SYSTEMS



DESIGN FOR THE BOTTOM LINE.



Make the most of that lower-cost rural parcel with municipal building density. Since our systems treat to municipal standards they reduce, and in some cases, eliminate septic building density limits.

Continued:

AQUA TECH SYSTEMS

DESIGN FOR THE BOTTOM LINE.

Aqua Tech’s wastewater treatment technology can reach surface water discharge standards. If your parcel is on an active waterway, you might be able to obtain an NPDES permit to discharge treated wastewater to it eliminating the need to devote any land at all to wastewater disposal.

Talk to your permitting engineer about obtaining an NPDES permit. Don’t have an engineer? We can refer one!

Continued:

DESIGN FOR THE BOTTOM LINE.

At the heart of Aqua Tech’s wastewater systems is our MBBR biological treatment technology.

MBBR stands for “moving bed biofilm reactor.” It’s a multichambered container for high density media.

This plastic media hosts over 3000 M2 of biofilm for every M3 of wastewater. That means our systems are highly efficient making them smaller and consequently more cost effective.

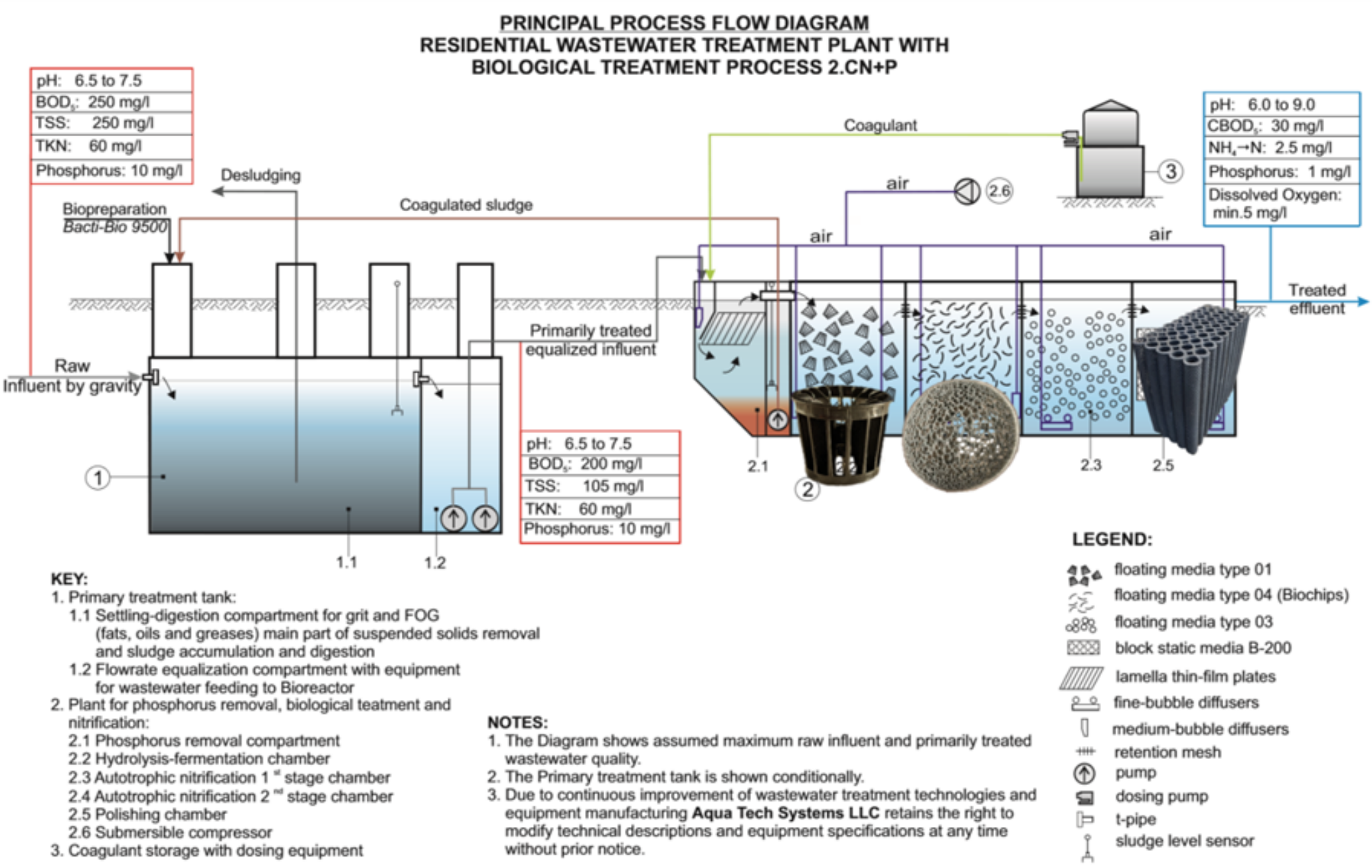
Other types of biofilm media are included for nutrient reduction and polishing.

Continued:

AQUA TECH SYSTEMS

DESIGN FOR THE BOTTOM LINE.

Here’s what everything looks like put together. This is a process flow diagram for a surface water discharge residential system.



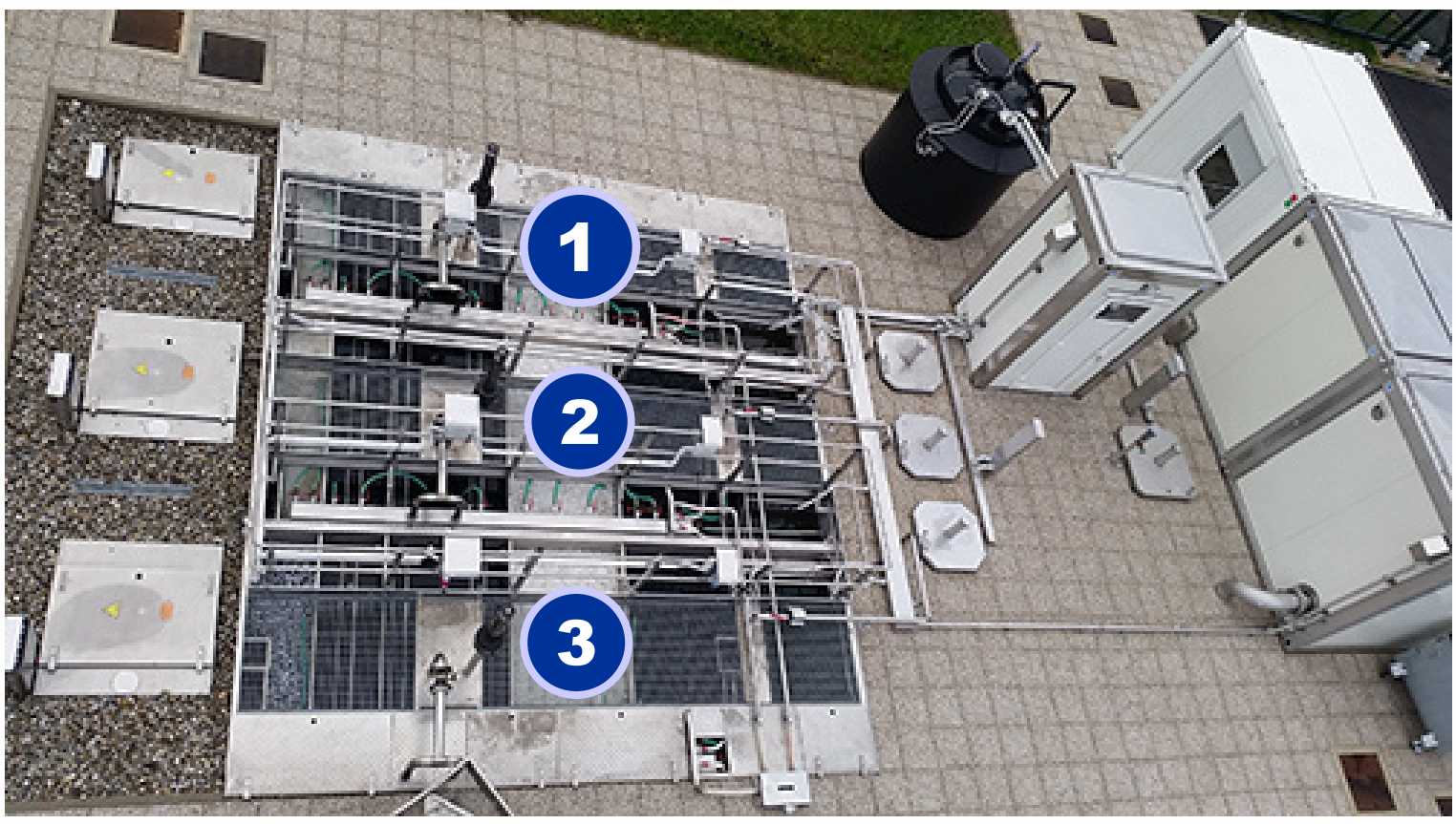
It’s designed to treat up to 100 homes with a footprint of less than 1000 sf.

Next up, “Control Your Cash Flow”:

AQUA TECH SYSTEMS

CONTROL YOUR CASH FLOW.

It can take years to develop a large property. Why not minimize risk by deploying your wastewater treatment system in phases?



Because they are arranged in trains, our systems naturally deploy modularly.

You can even design and permit the whole buildout, but just purchase the equipment you need for each phase of the development. This saves time and money.

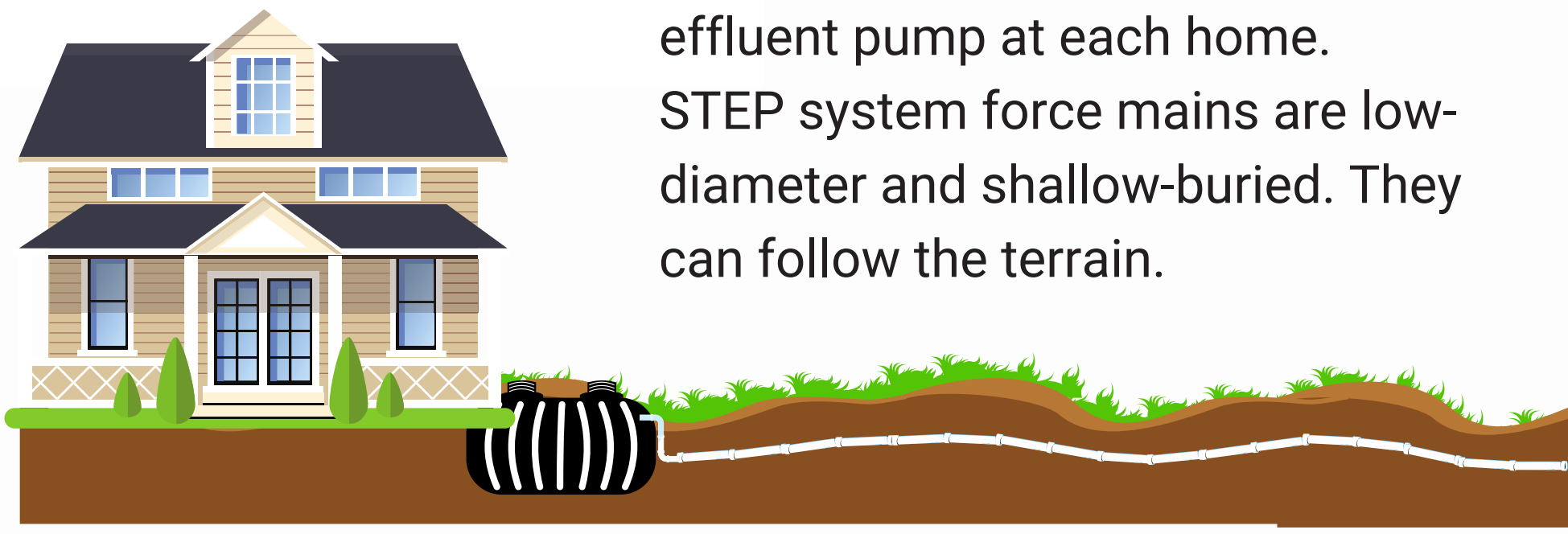
Continued:

AQUA TECH SYSTEMS

CONTROL YOUR CASH FLOW.

Your sanitary sewer is one of the largest upfront costs associated with property development.
But it doesn't have to be.

With STEP (septic tank effluent pump) collection you can build out your sanitary sewer as lots sell. Instead of high diameter, deep-bury pipe, manholes, wet wells and lift stations, you simply install on STEP tank with a half horsepower effluent pump at each home.
STEP system force mains are low-diameter and shallow-buried. They can follow the terrain.



Continued:

CONTROL YOUR CASH FLOW.

STEP can be installed as homes are built. STEP pumps work together to pressurize the 2" to 4" force main so your treatment works can even be uphill from the development.

Up next, “Collect Wastewater Utility Fees” :

AQUA TECH SYSTEMS

COLLECT WASTEWATER UTILITY FEES.

Aqua Tech’s decentralized sewer systems are high value products that require very little ongoing time or expense to operate.

A system like the one above could serve 400 homes and only require around 3 hours per week to operate. The only cost associated with this system is electricity cost of around $800 per month. The current market for wastewater monthly utility fees is around $65/home.
That means this system could gross $26,000/month.
If someone paid $1.2 million dollars for it in today’s dollars, it would pay for itself in four years.

Of course, not every developer will want to establish and manage a wastewater utility. Even if ownership is handed off to another entity, these systems more than pay for themselves by enabling-high density development of low-cost land.

WHAT DOES IT TAKE TO DEVELOP WITH DECENTRALIZED SEWER?

HERE’S WHERE TO START AND WHERE TO GO:

- Request a budgetary estimate from Aqua Tech at https://communitysewer.com
- Engage an engineer to write the permit application. If you already have an engineer, just set up a time for them to visit with an Aqua Tech rep. If you don’t have an engineer, Aqua Tech can refer an indepedent PE who understands our technology.

AQUA TECH SYSTEMS LLC

DECENTRALIZED DEVELOPMENT

The secret to municipal density on rural land.

AquaTech Systems
DECENTRALIZED WASTEWATER SYSTEMS