

A decorative graphic consisting of several overlapping, wavy bands of pink and magenta colors, flowing across the top of the slide.

gaineys

Bridging the Gap: Large Residential & Small Municipal

Cyndi Glascock

Gaineys

A decorative graphic consisting of a thick, black, wavy line that curves across the bottom of the slide. Several bright pink stars are scattered along the line.

What's the Issue?



There's a GAP

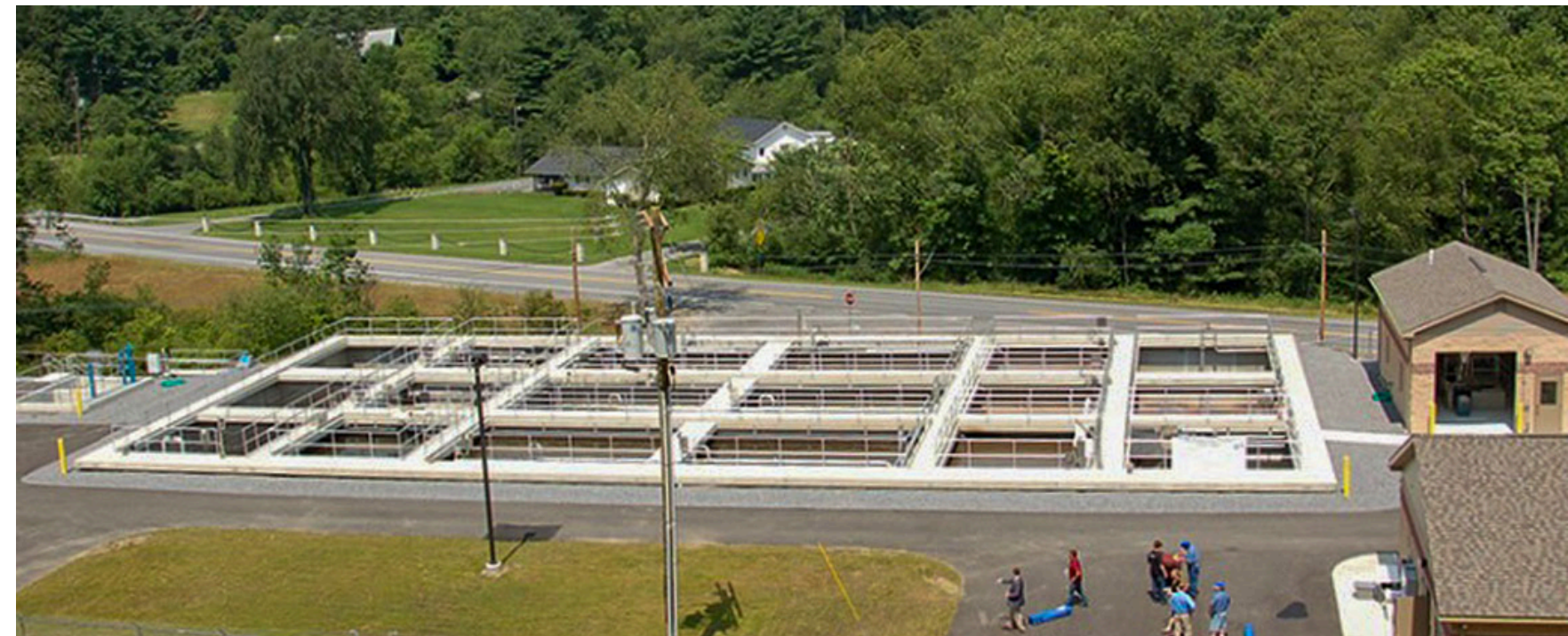
- Development Sizes Increasing
- Municipalities Need Affordable Solution
- Sustainable Investment for Everyone

The Gap

- Traditionally – Pkg Extended Aeration Plants Maxed Out at 250,000 GPD
 - Example: 500,000 GPD – Cast in place contractor would not touch

Dutchland

- 250k – 1 mil
- Possibly 1 – 2 mil





The Gap

○ Municipal WWTPs came with:

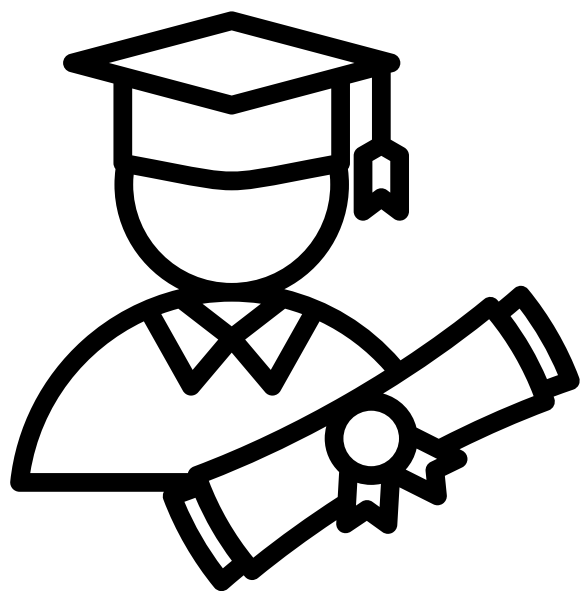
■ High Price Tag



■ Complex Operating Systems



■ Equipment that Required a Degree to Operate



Development Sizes Increasing

- Cost to Treat Increased Due to Regulations = Developments Scaled to Support the Costs
- Permitting and Infrastructure Development Pushed Developers Breakeven Point



Municipalities Need an Affordable Solution

- Couldn't Afford the Cadillac Treatment Plants (high capital costs)
- Processes were Dictated by Designers
- Couldn't Operate Them
- Much Less Troubleshoot/Repair

SBR

**FIXED
FILM**

**LAGOONS
& MEDIA
FILTERS**

**LARGE
CIRCULAR
WWTP**

Everyone Needs a Sustainable Investment

Metal Plants Do Not Hold Up

- Precast Concrete = 50+ yrs
- Equipment is Inexpensive to Replace



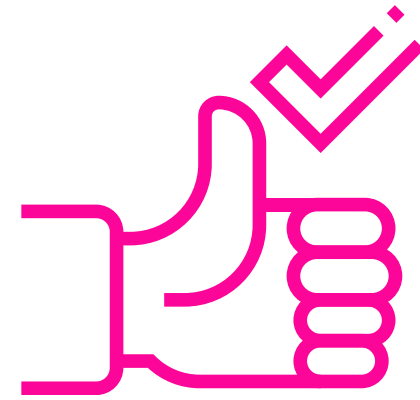
Life Cycles and Costs of Materials and Equipment (20 Years)

	ITEM	LIFECYCLE	# OF REPLACEMENTS IN 20 YEARS	QTY TO REPLACE	CURRENT COST EA	LIFECYCLE COST (# x QTY x COST)
1	P.D. BLOWERS	20 YEARS	1	8	\$2,500	\$20,000
2	10 HP MOTORS	20 YEARS	1	8	\$1,500	\$12,000
3	FILTERS	1 YEAR	20	8	\$300	\$48,000
4	PRESSURE RELIEF VALVE	10 YEARS	2	4	\$500	\$4,000
5	CONTROL PANEL W/ ELEC.	20 YEARS	1	5	\$2,750	\$13,750
6	BELTS	1 YEAR	20	16	\$15	\$4,800
7	PIPING	20 YEARS	1	25%	\$25,000	\$25,000
TOTAL LIFECYCLE COST						\$ 127,550

Everyone Needs a Sustainable Investment

- Proven Technology

- Easy to Operate



- History of Performance



	SYSTEM NAME	LOCATION	CONTACT INFO.	DESIGN FLOW	AVG DMR RESULTS	YRS IN OPER.
1	University of Lafayette Apartments	Lafayette, LA	Lafayette Utilities System Charles Corkern (337)278-8936	80,000 GPD	3.7 BOD / 3.5 TSS 0.87 NH3-N 7.10 DO	5
2	Avery Meadows Subdivision	Duson, LA	Lafayette Utilities System Charles Corkern (337)278-8936	52,500 GPD	6.1 BOD/ 6.9 TSS 0.40 NH3-N 6.67 DO	3
3	Louisiana War Veteran Facility	Jackson, LA	Louisiana War Vets Keith (225)480-7645	100,000 GPD	3 BOD/ 12.3 TSS	3
4	Villa Feliciana Medical Center	Jackson, LA	Villa Feliciana Derrick Herring (225)245-4919	100,000 GPD	3.1 BOD/ 8.3 TSS	3
5	Summerview Subdivision	Lafayette, LA	Lafayette Utilities System Charles Corkern (337)278-8936	25,000 GPD	5.4 BOD/ 7.7 TSS	3
6	Kokomo Subdivision	Opelousas, LA	Utilities Inc. of Louisiana Brandon Strunk 985-551-1484	47,000 GPD	3 BOD/ 2.5 TSS	4
7	Georgetown Municipal WWTP	Georgetown, LA	Georgetown Municipal Ray Baum (318)542-0845	80,000 GPD	8.3 BOD/ 6.5 TSS	5

Everyone Needs a Sustainable Investment

- Highest Performance Standards
 - Standard Plant = 20 BOD / 20 TSS
 - Gainey's Supped Up =
10 BOD / 15 TSS / 2 ammonia



Bigger & Better

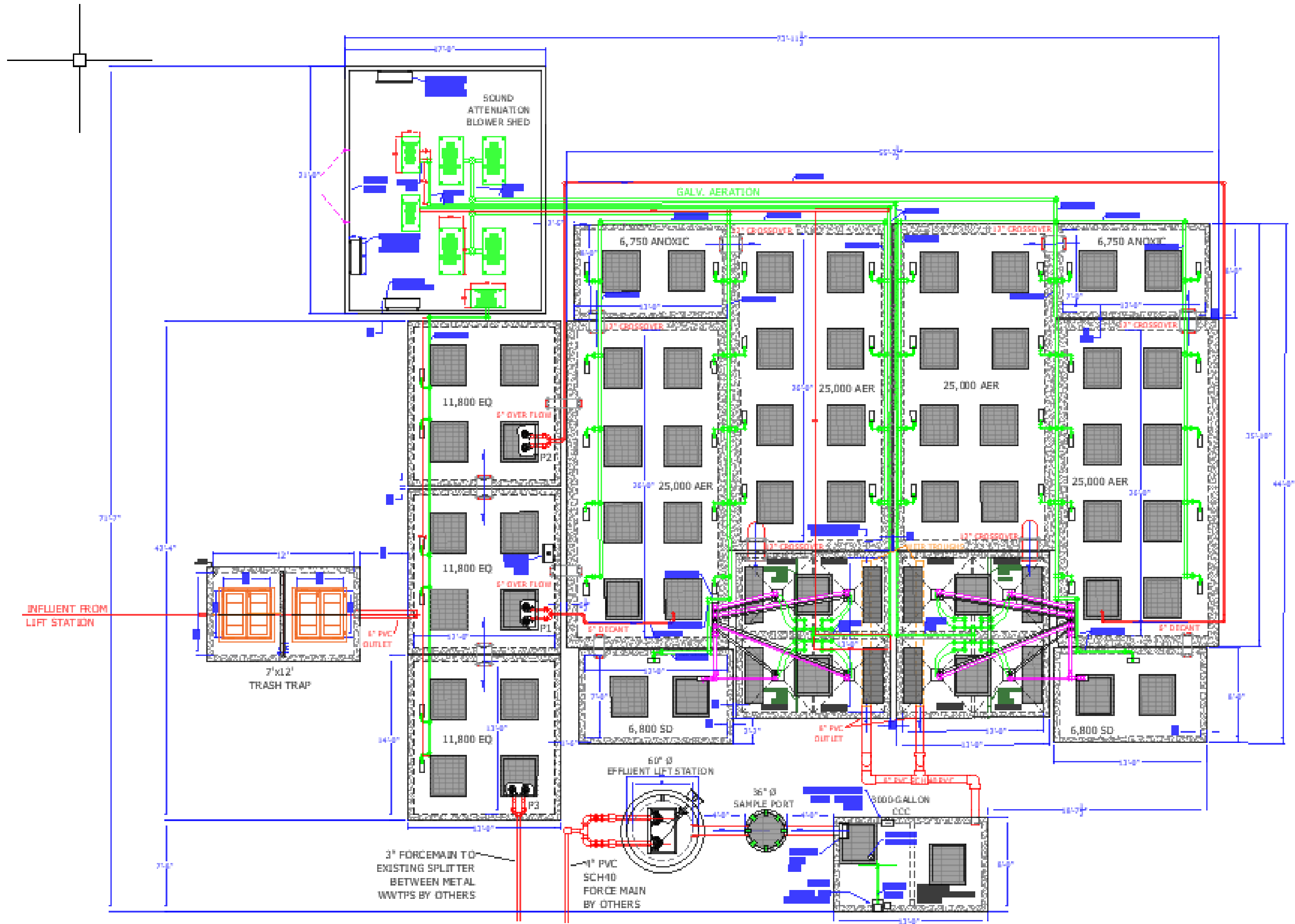
- Advantages
 - Larger Tanks Equal Less Chambers to Maintain
 - 4 vs. 20
 - More Capacity in a Smaller Footprint
 - Less Headers, Less Diffusers

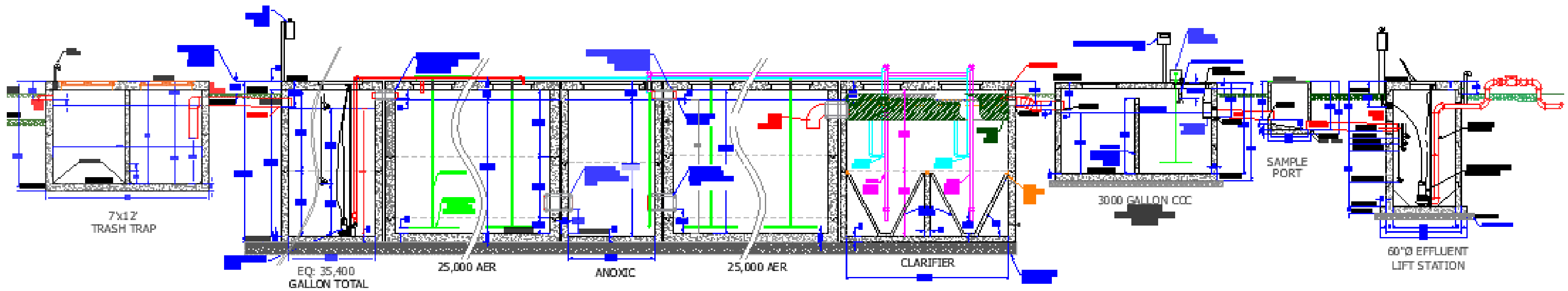


Equipment

- Trash Trap
- 35k gallons EQ
- 13k gallons Anoxic
- 100k gallons Aeration
- 34k gallons Clarification
- 13k gallons Sludge Digestion
- 3k gallons CCC w/ Liquid Chlorine
- Effluent Lift Station

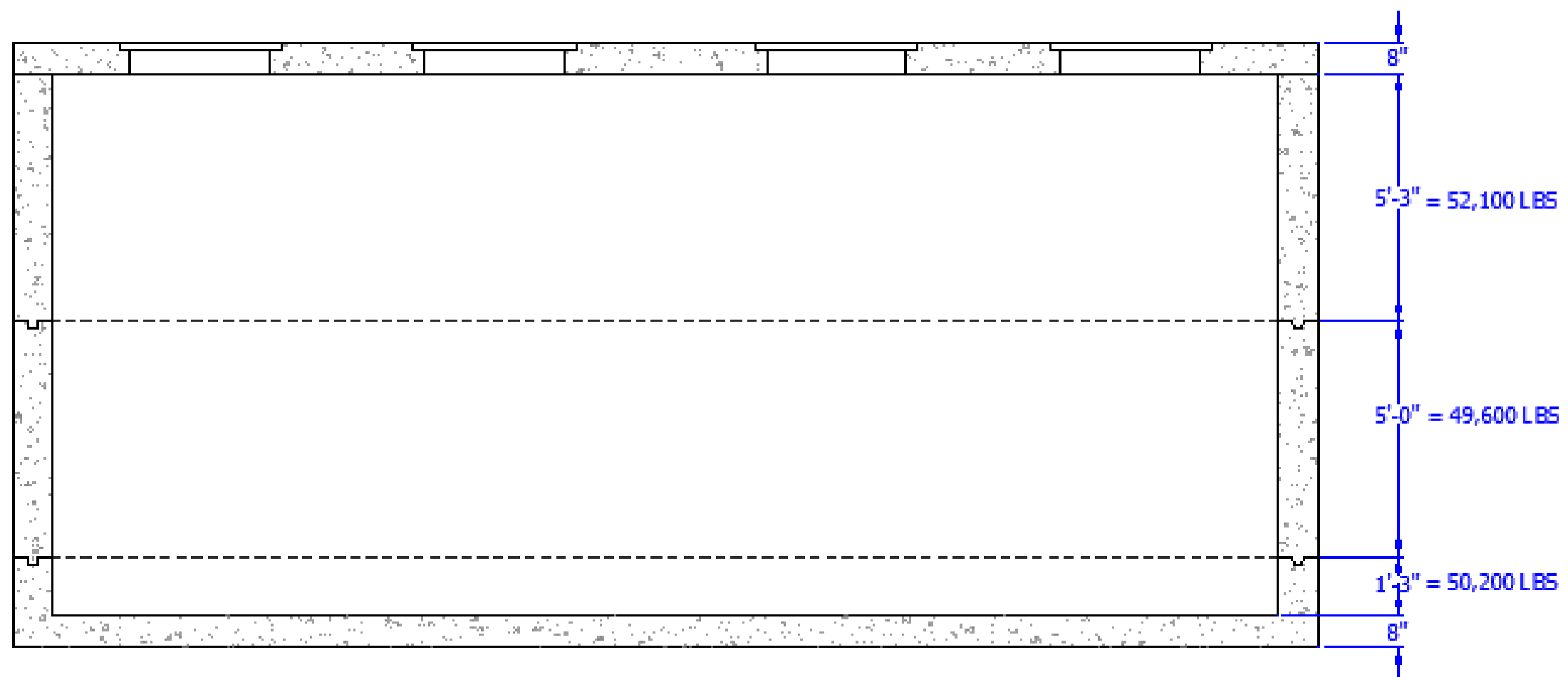
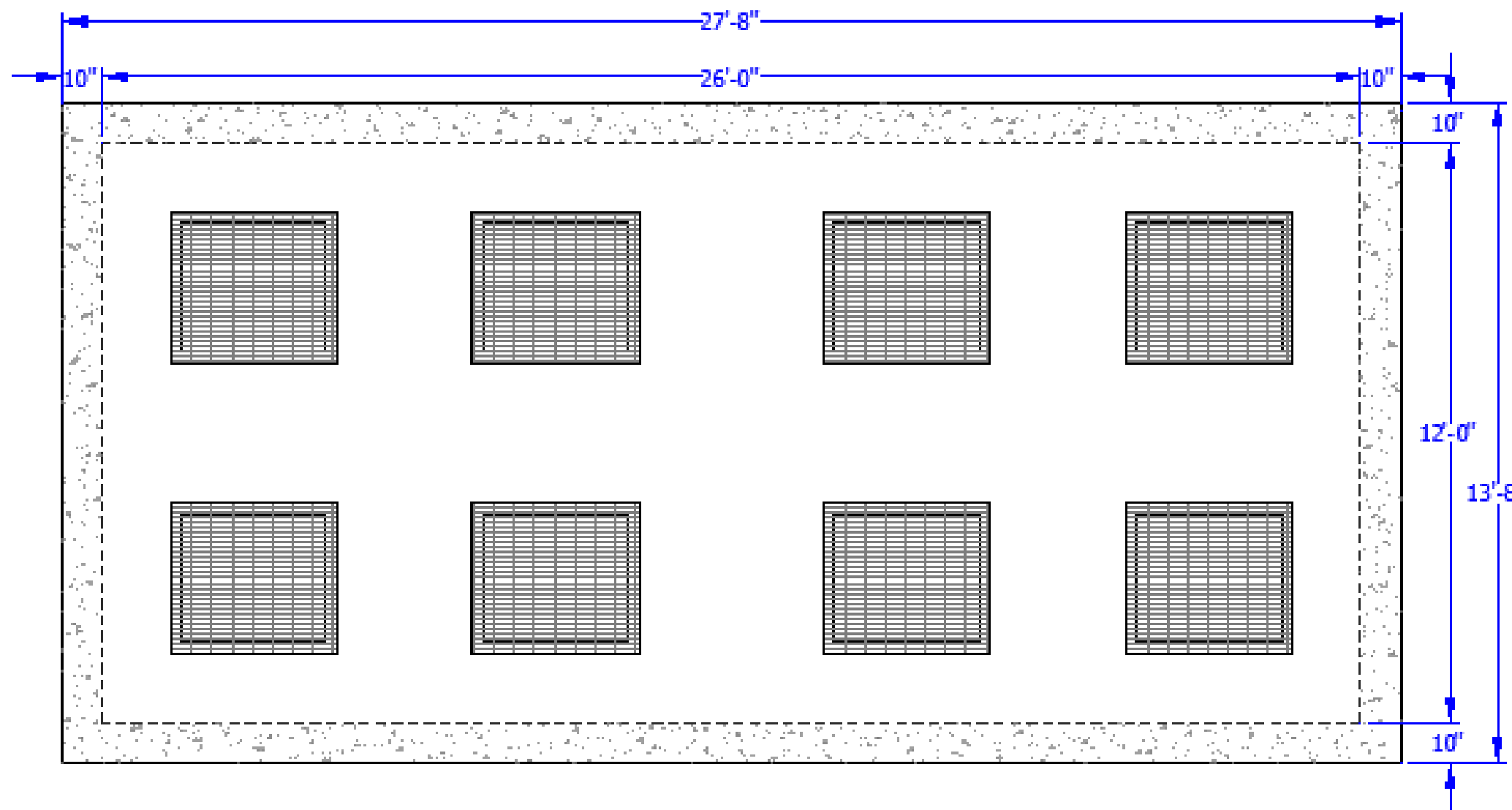






NOTES:

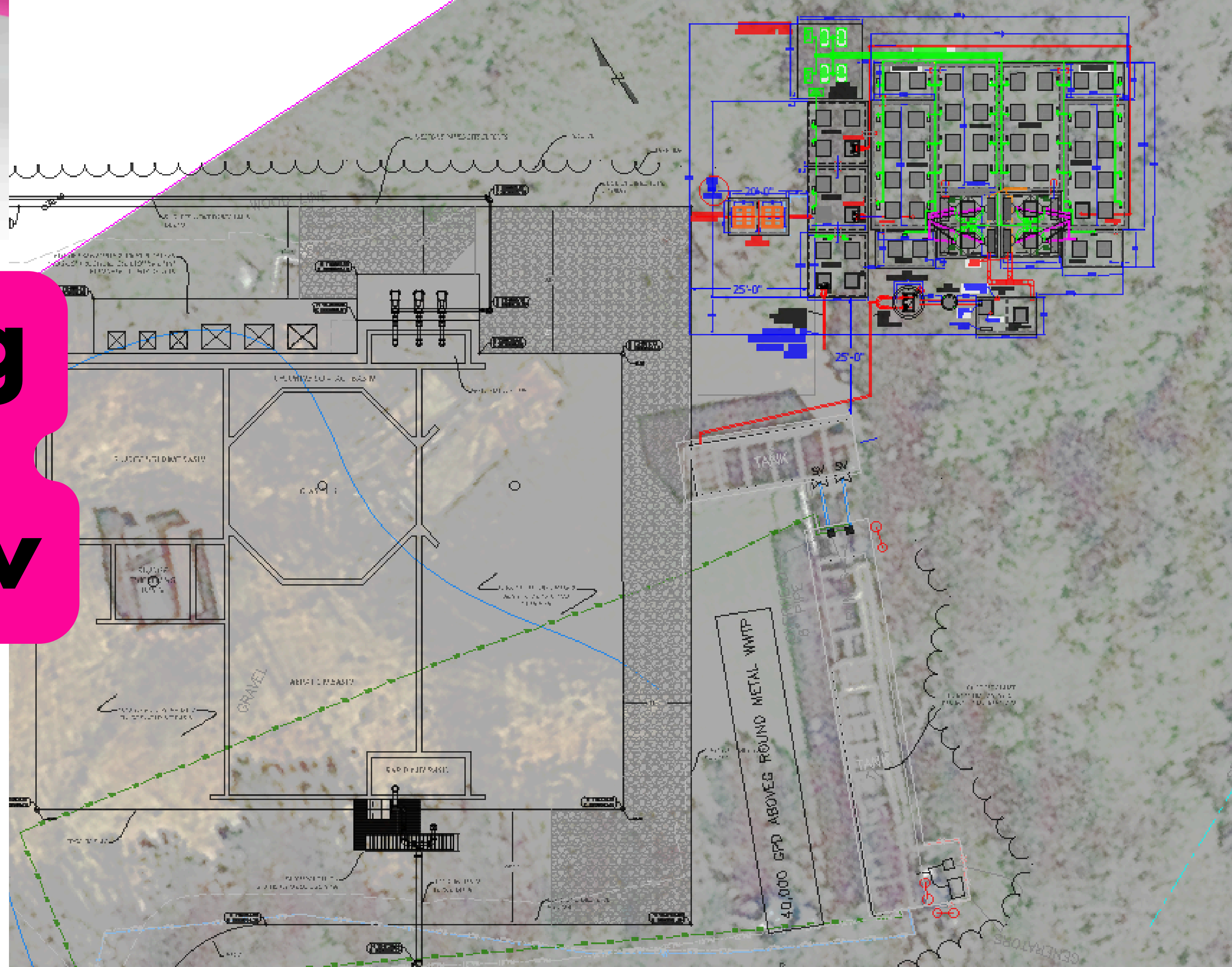
- APPROVED SUBMITTALS REQUIRED PRIOR TO CONSTRUCTION.
- ALL STRUCTURES ARE SUBJECT TO BE RELOCATED DEPENDING ON THE SITE LAND RESTRICTIONS/CONDITIONS.
- THE ABOVE PROFILE VIEW IS A DIAGRAM OF THE SYSTEM AND IS REVOLVED FOR CLARITY OF THE HYDRAULIC FLOW.
- FINAL LOCATION OF CONTROL PANELS AND BLOWERS MAY DEVIATE BASED ON FIELD CONDITIONS.







Bridging the Old and New



These Tanks Will Hold Anything!



These Tanks Will Hold Anything!



These Tanks Will Hold Anything!



These Tanks Will Hold Anything!

