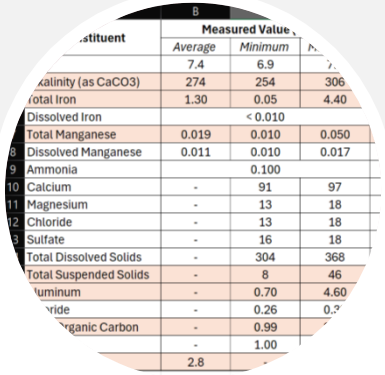
TWC Summit Fischer WTP Design

HOA Coordination Meeting

April 22, 2026

We will cover the following in this meeting

Existing Site Conditions



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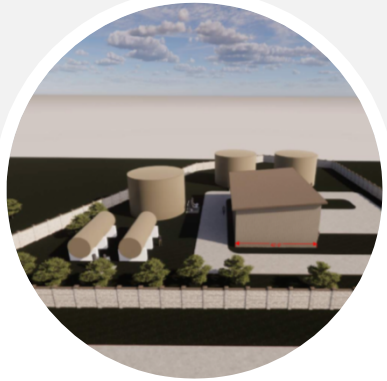
Water Quality Data

Proposed Improvements



Proposed Site Renderings

Existing Site Conditions

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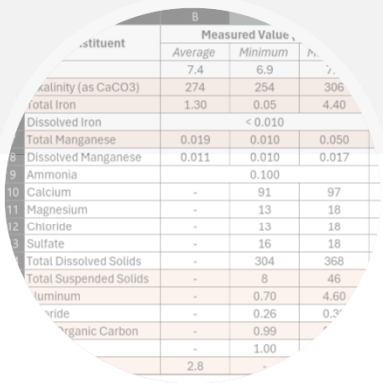

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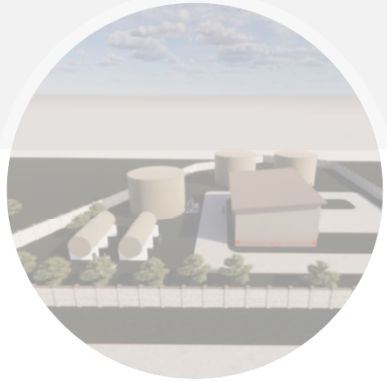
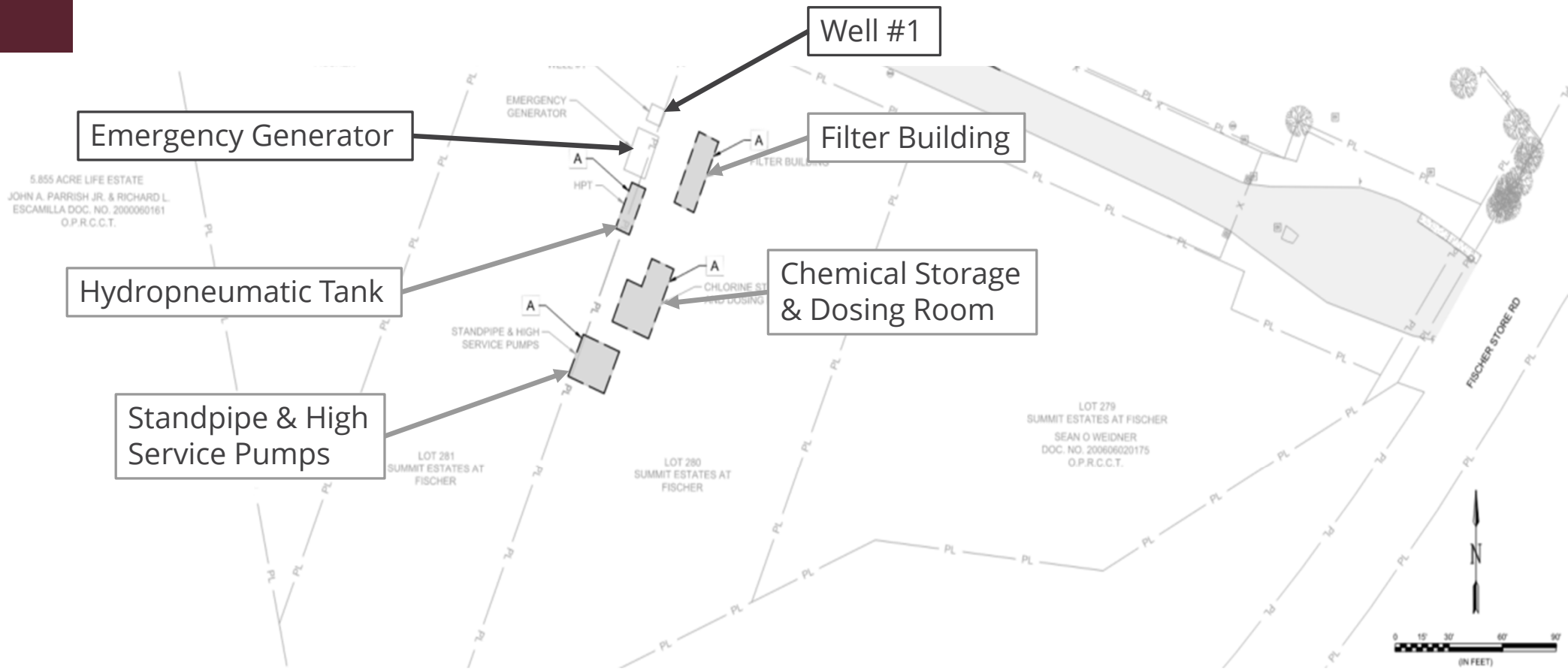


Proposed Site Renderings

Due to underperforming equipment and increased demand, the existing WTP needs to be expanded

Reduced Capacity	High TSS and turbidity rapidly foul existing cartridge filters, limiting production to ~0.10 MGD – this does not meet current or buildout demands of the Summit Fischer subdivision
Previous Solution Attempts	Several solutions have been attempted without success, so the current maintenance methods remain labor-intensive, costly, and ineffective
Outdated System Limitations	Additionally, other existing equipment is not aligned with site necessities, e.g. the standpipe needs to be replaced, there is not adequate treatment or redundancy, etc.
Other Issues	The existing system is not designed to handle sudden, unpredictable turbidity spikes which lead to variable water quality, well shutdowns, and reliance on supplemental water supply

Existing Facilities



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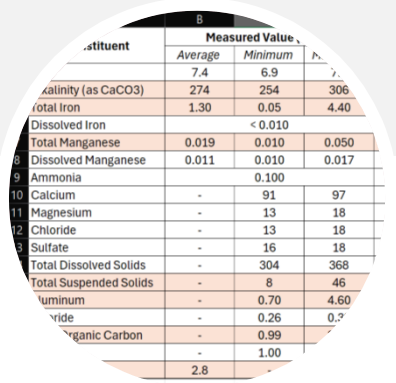

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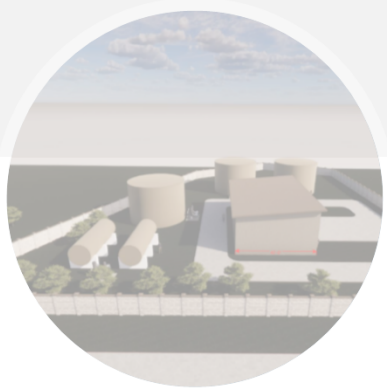


Proposed Site Renderings

Water Quality Constituents

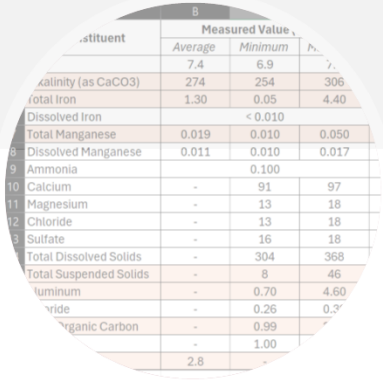
Water Quality Constituents	Problems if Left Untreated
High alkalinity	Causes scale deposition
High total iron	Stains clothes/fixtures and propagates growth of iron bacteria that deposits slime on pipes
High total manganese	Affects taste and stains clothes
High total suspended solids	High turbidity
High aluminum	Formation of aluminum hydroxide flocs and exacerbation of water discoloration due to iron
High total organic carbon	Formation of disinfection byproducts
High turbidity	Can carry microorganisms, negatively affect disinfection, and cause cloudiness in water

This is a summary of the current water quality challenges and proposed improvements

Challenges	Current System	Proposed System
Treatment Technology	Filters clog quickly	Filtration system designed to handle high turbidity and TSS in local groundwater
Reliability	Frequent filter replacement and unexpected well shutdowns	Minimizes well shutdowns by providing consistent, reliable water quality
Capacity	0.10 MGD	1.0 MGD (10× increase)
Water Quality	Sensitive to rainfall/turbidity spikes	More stable and consistent treatment
Maintenance	Maintenance intensive	Automated backwash cycles
Subdivision Buildout	Limited ability to serve existing and new homes due to well outages	Designed to meet the buildout demand of the Summit Fischer subdivision

Proposed Improvements

Existing Site Conditions



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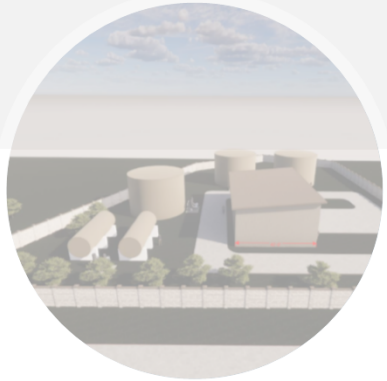

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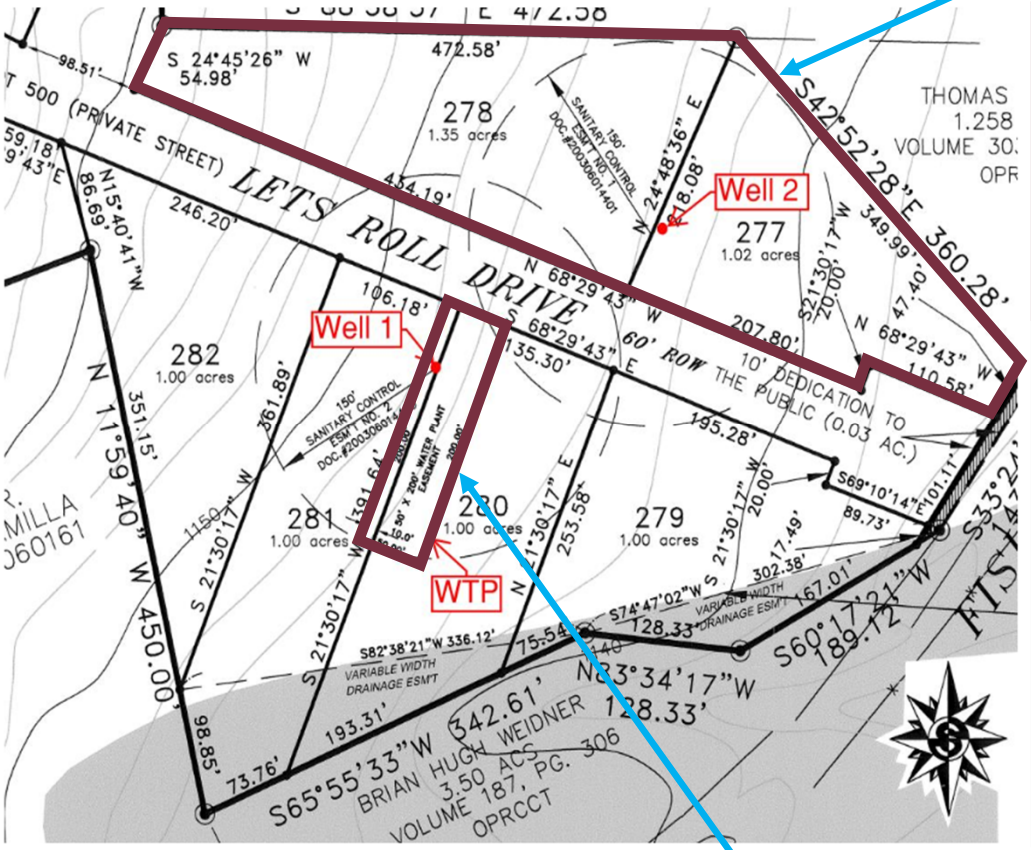
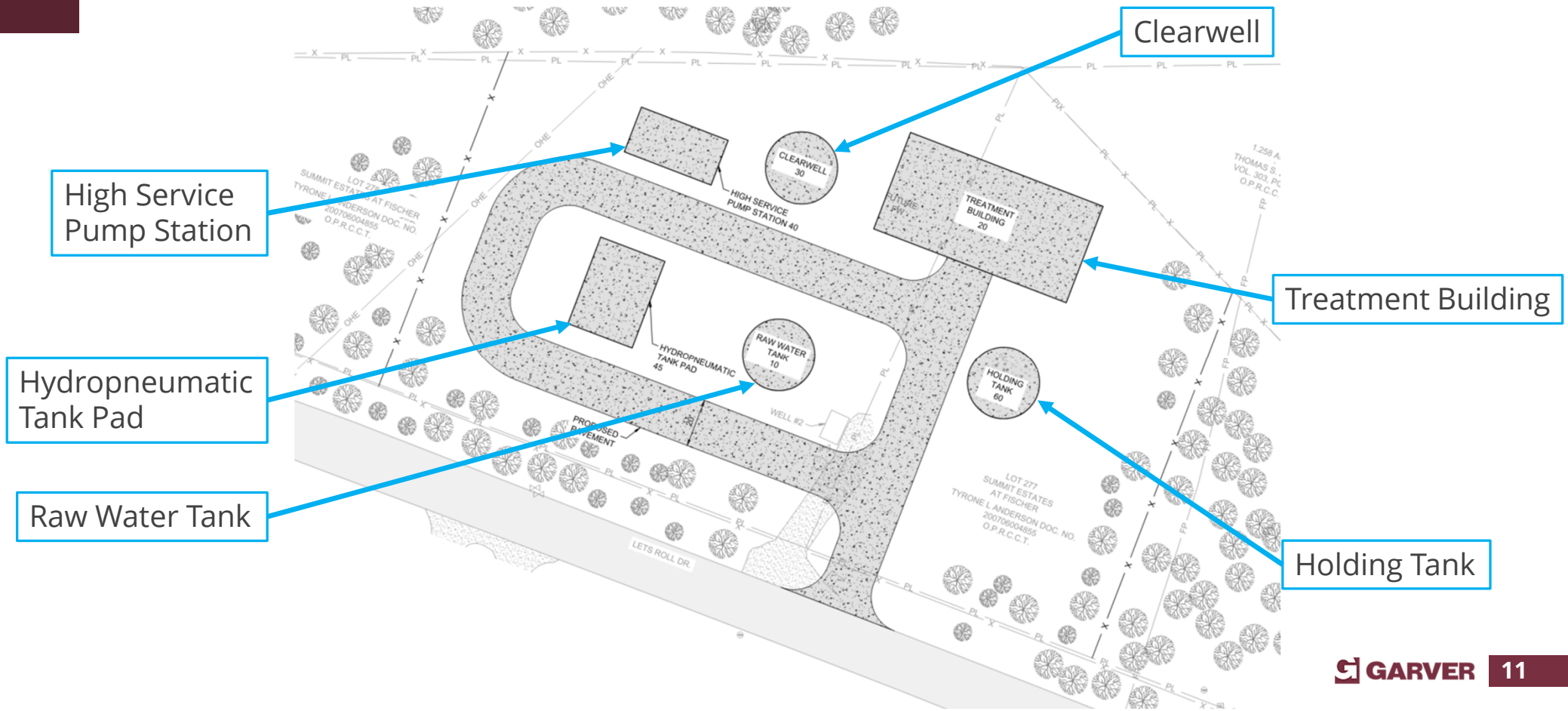


New Property Boundary

- The proposed expansion cannot fit within the existing site to the south, so the new facilities will be built across the street
- TWC has acquired a blanket easement on lots 277 and 278

This is the preliminary site layout



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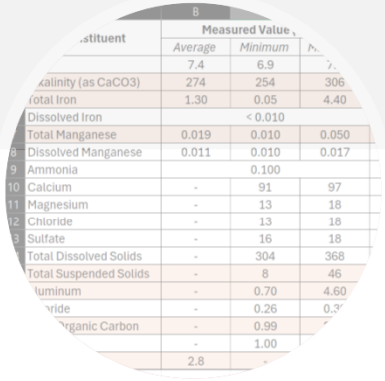

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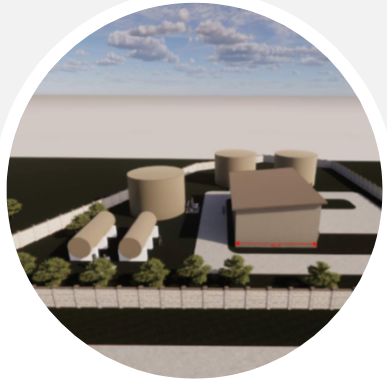

Proposed Site Renderings

Proposed Site Renderings

Proposed Site Renderings (Cont.)

GARVER

Thank you!