



TONKA EQUIPMENT COMPANY

Project Profile

Tuckasegee Water and Sewer Authority

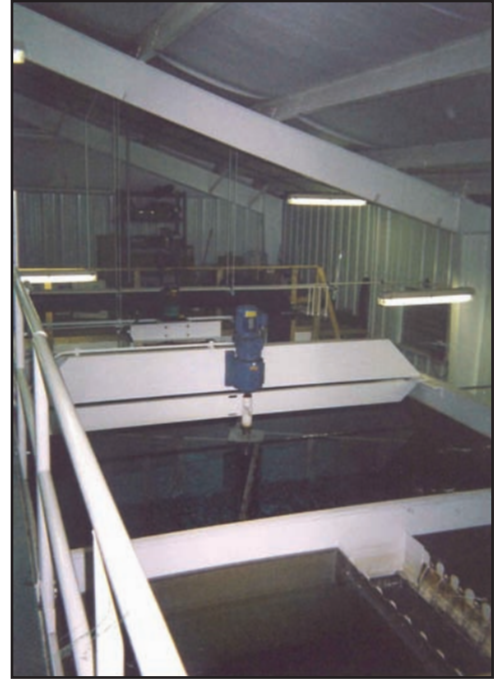
Tuckasegee Water Treatment Plant
Jackson County, North Carolina

TUCKASEEGEE WATER AND SEWER AUTHORITY

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Plant Operations Supervisor
(828) 293-3243

TONKA REPRESENTATIVE

Pete Duty & Associates
Contact: Andrew Herndon
(704) 573-2035



APPLICATION:

Turbidity Removal

TONKA PROCESS EQUIPMENT:

40' diameter Solids Contact Clarifier
followed by 2 Tonka (UTS) Surface water
treatment plants

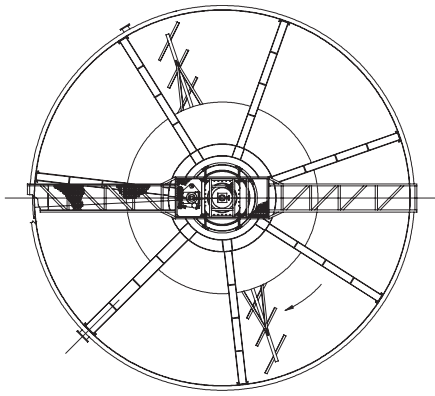
PROJECT

The designed rate of flow for the plant is 1.5 MGD.

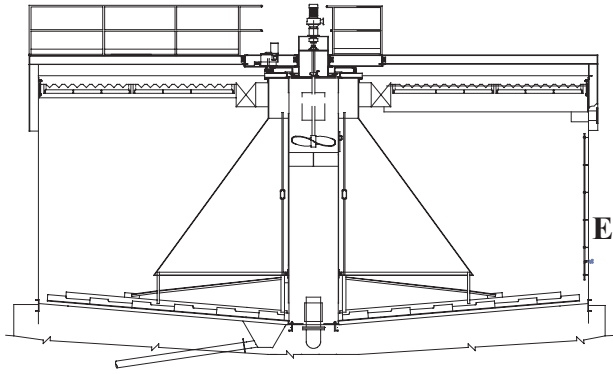
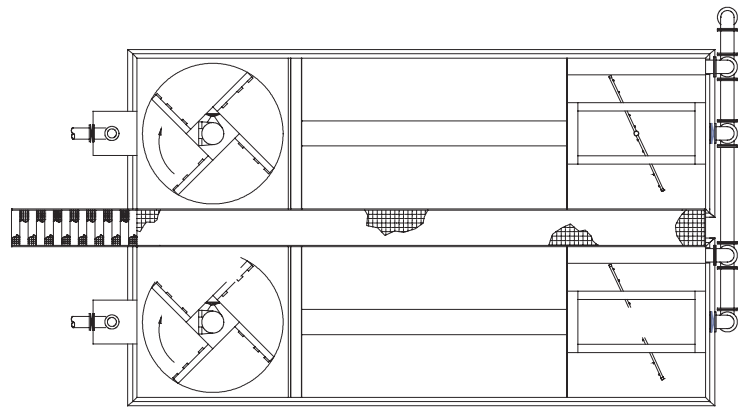
PROCESS

Water is supplied from the Tuckasegee river. The treatment process consists of conventional clarification followed by two Tonka UTS packaged water treatment plants consisting of adjustable flocculation, tube settling sedimentation, and filtration. The gravity filters have a dual media bed of silica sand and anthracite. Filtered water is discharged into a clearwell and pumped to elevated storage and the distribution system.

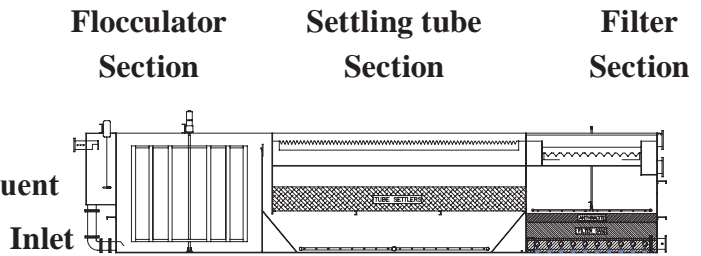
The following chemicals, polymer, caustic, and Alum, are added to the raw water prior to clarification to help generate a stable floc that can be agglomerated and settled within the clarifier.



Solids Contact Clarifier



Inlet
Solids Contact Clarifier



Tonka UTS

The pre-treated water splits into two parallel lines inside the treatment building prior to the Tonka UTS systems. The plant operators have the option to turn off the UTS flocculators if the water quality produced from the clarifier is sufficient for tube settling. Once through the flocculation chambers, the water upflows through tube settlers, dropping out any remaining solids. The water then flows to a dual media filter bed of anthracite and silica sand. Filter effluent is sent to a clearwell and on to distribution.

PERFORMANCE

The Tonka treatment equipment supplied on this project has been extremely efficient in delivering high quality drinking water as indicated below. The water treatment plant as designed brings current state-of-the-art technology to maximize treatment plant production.

	Raw Water	Finished Water
Turbidity	1-2 NTU	0.04 NTU

FOR ADDITIONAL DETAILS, CONTACT:
Tonka Equipment Company



TONKA EQUIPMENT COMPANY

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