



# TONKA EQUIPMENT COMPANY

## Project Profile

### Tuckasegee Water and Sewer Authority

Tuckasegee Water Treatment Plant  
Jackson County, North Carolina

#### TUCKASEEGEE WATER AND SEWER AUTHORITY

Contact: William Mills  
Plant Operations Supervisor  
(828) 293-3243

#### TONKA REPRESENTATIVE

*Crocker & Associates*  
Contact: Monte Ridenhour  
(704) 718-3099



#### APPLICATION:

Turbidity Removal

#### TONKA PROCESS EQUIPMENT:

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

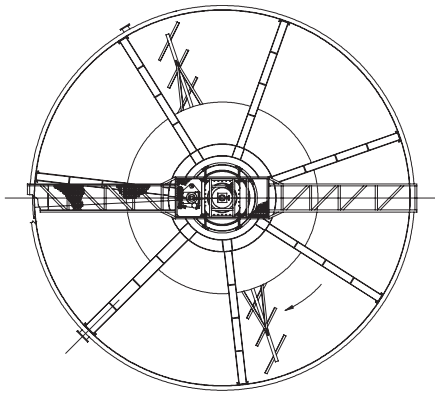
#### PROJECT

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

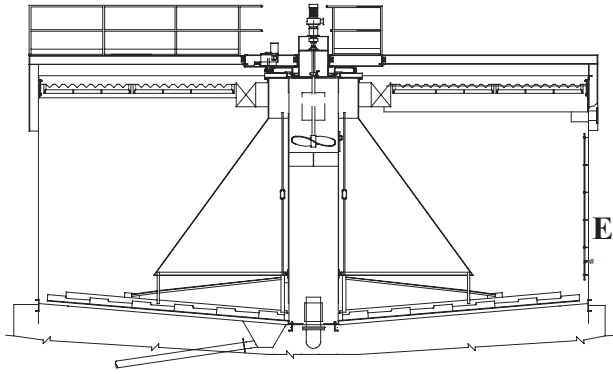
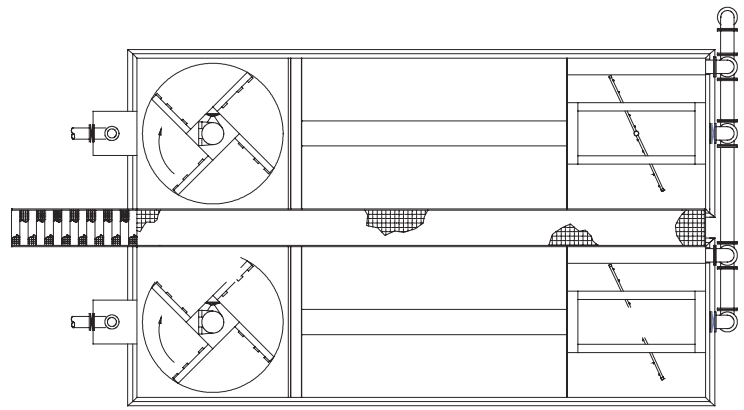
#### PROCESS

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.

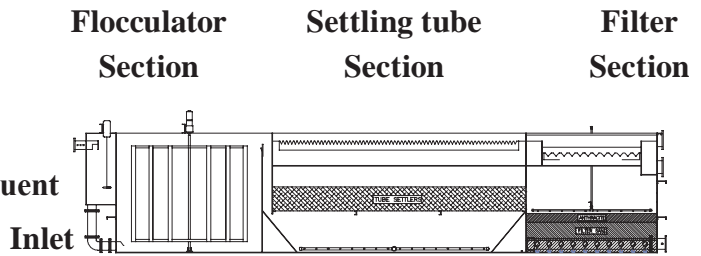
The following chemicals, polymer, caustic, and Alum, are added to the raw water prior to clarification to help generate a stable floc that can be agglomerated and settled within the clarifier.



**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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