



Traveling Bridge Shallow Bed Filters



This fact sheet addresses common questions about the **traveling bridge shallow bed filter** that is being incorporated in the proposed project.

Purpose and Benefits of Process

The traveling bridge shallow bed filters were the primary filtering system prior to treatment plant improvements that occurred in the early 2000s. They currently serve as a backup filtration method in the event that one or more deep bed denitrification filters is out of service during peak flow events. Much like the deep bed filters, the traveling bridge shallow bed filters utilize sand filtration to remove additional solids from the water after it leaves the clarification process. The traveling bridge filters get their name from a bridge that automatically travels up and down the length of the filter cleaning the filter sand compartment by compartment as it makes its trip. The filters have the following benefits:

- Removes additional solid particles from the water, which further reduces suspended solids concentration. By reducing suspended solids concentrations, it also reduces the concentrations of other pollutants that are associated with the solids.
- Removal of suspended solids reduces the energy required for ultraviolet disinfection.

What Process Modifications will be made?

Currently, three traveling bridge shallow bed filters exist at the Franklin WRF. Because this filter design will only be used as a backup to the deep bed denitrification filters in the future plant, two of the three filters will be removed, leaving one backup traveling bridge shallow bed

filter to function under the new plant design.

Is the process a potential odor source? Is the process odor controlled?

Filters are not a potential odor source.

Does the process include equipment that has the potential to create noise? If so, is there any noise control provided?

There are motors for propelling the traveling bridge and pump motors. Both operate at very low noise levels and would not be heard at the property lines. In addition, the proposed modifications will result in removal of two of the three filters, which will result in lowering the noise potential.

Will the process modification change the look and feel of the site?

Yes, but because of the location of the filters on the site no changes will be seen from the property lines. The removal of two of the three existing traveling bridge shallow bed filters will make space for the new UV disinfection process which will be an unobtrusive structure.

Will the process modification change the safety of the site?

The filters currently pose no offsite safety concerns and will not do so in the future.