

WASTEWATER TREATMENT SYSTEM

Southborough, Massachusetts



Client

Fay School

Description

The Fay School is a private day and boarding school for elementary and middle school students in Southborough, Massachusetts. Construction of a 26,500 gallon per day membrane bioreactor wastewater treatment facility was completed in 2009. A portion of the treated effluent is reused for toilet flushing in five new dormitory facilities and a new maintenance building. Wastewater is treated by fine screens, a membrane bioreactor and ultraviolet disinfection. As a school facility, The Fay School experiences significant fluctuations in wastewater flow rate over the course of a day and throughout the year. Careful planning was required to ensure that adequate pre-treatment and post-treatment storage capacity was provided and that the treatment capabilities of the equipment would be able to handle such fluctuations.

Tighe & Bond designed the treatment facility and assisted the School with the permit application process, which included working closely with the Massachusetts Department of Environmental Protection on the water reuse system permitting, effluent testing and quality requirements. This project was part of a campus expansion that included LEED certification of buildings and use of "green" technologies and construction practices.