

SMITH & LOVELESS INC.

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1.33

3.76

Modular FAST® Keeps Hotel Running Smoothly During Busy Season

Effluent



Application Profile: S&L Equipment: Installed:

Falmouth, MA Modular FAST® Process 1995

When a historic hotel located in a popular tourist location experienced problems with its wastewater treatment system, it turned to Smith & Loveless and its unique Modular FAST® wastewater treatment system to solve the problem.

The hotel, located in Cap Cod, goes through peak seasons and regularly caters to wedding parties and banquets on weekends. As a result, the wastewater it generates throughout the year varies in flow and loading. Its original wastewater system, a conventional underground septic system, eventually could not handle the wide variations. However, the hotel faced a dilemma. An *underground* system, was critical because of the hotel's location and history— it was built before the Revolutionary War. Thus, it needed a system that could effectively treat the variable flows without disturbing the aesthetics of this historical and premium resort.

After reviewing the hotel's situation, Smith & Loveless recommended its Modular **FAST**[®] wastewater treatment system. Modular **FAST**[®] is a complete biological treatment system which can be placed underground—thus making it an attractive augmentation to a septic tank arrangement. More importantly, the system's patented, fixed-film **FAST**[®] process is designed to effectively handle the wide variations of flow and loading like those experienced at the hotel. Following a primary septic tank, wastewater enters the Modular **FAST**[®] system and encounters completely submerged **FAST**[®] media. Because bacteria attaches and grows on the media, Modular **FAST**[®] offers a high surface area to volume ratio (offering increased biological treatment) and prevents solids washout.

In addition, the media provides a stable environment for the bacteria to grow, eliminating the need for return activated sludge. This is important because it means no daily operator attention is required. There are no filters to clean/replace, and the system has only one moving part, the remote air blower. The air blower supplies air which provides oxygen for the bacteria to grow and multiply.

After the Modular **FAST**[®] installation, the historic hotel successfully handles the busy seasons while looking virtually the same—above ground.

Modular FAST® Avg. Influent/Effluent Data							
Avg. Flow: 14,500 GPD							
	BOD	TSS	\mathbf{NH}_4	TKN	NO ₃	TN	
Influent	660	101		25	<0.10	<0.20	

The chart also shows the system's ability to nitrify. These test results were submitted to the County Department of Health and Environment.





Smith & Loveless provided the Modular **FAST**® wastewater treatment system (top) to a historic hotel to help the facility maintain its seasonal variations of flow based on tourism. Placing the system underneath the parking lot (below), keeps the establishment aesthetically pleasing.

E-mail: answers@smithandloveless.com • Phone: 913.888.5201 • FAX: 913.888.2173 Smith & Loveless Inc. System Innovators for global pumping, water and wastewater treatment