DUFRESNE GROUP
CONSULTING ENGINEERS

WATER TREATMENT FACILITY FILTER RENOVATIONS

CLAREMONT, NEW HAMPSHIRE

Dufresne Group (DG) completed a filter media pilot investigation at the Claremont Water Treatment Plant in an attempt to document the treatment capabilities of the existing filters. The results showed that the existing filters, if renovated, would produce up to 4.0 mgd of water in accordance with State and Federal Standards. The pilot testing also documented that the renovated GAC filter could function as a filtration treatment process in the event the primary sand filter had to be taken off line. This finding indicated a substantial savings by negating the need for a complete filter replacement project. The construction costs for the filter upgrade using the current technology as compared to new filters was estimated as follows:

- Replace Existing Filters with New Filters $5,400,000
- Renovate Traveling Bridge Filters $ 650,000
- SAVINGS $4,750,000

The City of Claremont and the State of New Hampshire accepted this recommendation and DG competed final design drawings and specifications. US Filter (a Siemens Company) was selected as the low bidder at a bid price of $650,000.

DG designed several enhancements to the traveling bridge filters to improve performance and reliability and required a full scale demonstration test of operational readiness be performed prior to acceptance by the City. After several tries, US Filter successfully completed the test and demonstrated the filters could produce 4.0 mgd at levels far superior than allowed under State and Federal requirements.

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