



**Black&McDonald**

# Natural Gas & Heating System Retrofit

## CLIENT

Bona Building and  
Management Company

## LOCATION

27 Stoney Brook Court,  
Halifax, Nova Scotia

## PROJECT DESCRIPTION

Black & McDonald (B&M) has an existing relationship with the Bona Building and Management Company (BBM) providing maintenance, repair and project services at a few locations within the Halifax Regional Municipality.

B&M met with BBM to design/build a new heating system, domestic water system and boiler plant modifications for the 27 Stoney Brook Court site, one of its residential locations. The location has more than 200 residential suites and a heating plant that was more than 35 years old. The goal of the design/build project was to provide new equipment, a better design of the heating system and address energy efficiencies.

## B&M SCOPE OF WORK

B&M dismantled the existing boiler room, including all system circulating pumps, heating boilers, existing water storage tanks and heating piping throughout the plant.

Two high-efficiency boilers and domestic storage tanks were installed in the new domestic water system. Four high-efficiency boilers were also installed in the heating plant and one new high efficiency boiler was installed for the heated pool. The piping of the entire heating system was dismantled and new piping was installed, separating the heating plant, the domestic water system and the pool heating systems. All new electrical wiring and panels were placed in the new boiler room to accommodate the new equipment.

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## BENEFITS TO CLIENT

BBM saw numerous benefits from the new design/build solution including:

- Removal of old fired equipment and heating piping resulting in lower energy costs
- Removal of an underground oil tank that addressed environmental concerns
- New natural gas piping into the building that permitted the option of a natural gas generator to replace the oil tank
- Installation of high efficiency natural gas fired boilers and circulating pumps with VFD's, which will reduce energy costs by 40 per cent and maintenance costs by 33 per cent
- Adding new heating system piping in the boiler room, separating the domestic water system, heating system and pool heating systems; the boilers no longer have to have to run year round
- Reduction in service calls, major repairs, downtime and creating a better quality of life for tenants through better comfort and reliable domestic hot water

## INNOVATIVE TECHNOLOGY USED

- High efficiency, modulating gas fired boilers
- High efficiency circulating pumps with built in VFDs
- Separation of the existing heating system loop piping, domestic water, heating and pool heat piping permitting boiler shutdown in the shoulder seasons and summer months

