CONSIGLI
Est. 1905

Abatement and Demolition Process
Stoneham High School

Before bulk demolition can be performed, an asbestos-containing building set to be torn down requires testing by a licensed testing agency under the supervision of the consultant engineer for identification of Asbestos Containing Materials (ACM) throughout the building areas. These findings are summarized in a report and are the basis of the abatement and demolition plan developed for the project.

Only contractors and workers who are licensed by the state of MA to abate asbestos will be involved in the removal and disposal of ACM material, and when the abatement takes place, only trained, authorized workers are permitted to enter the area. All containments and asbestos waste storage areas will have warning signs posted so that they are readily seen. Personal protective material (PPE) must be worn at all times during removal of asbestos. This includes respirators, Tyvek suits/coveralls, gloves, eye protection, foot covers, and head covers (hard hats).

Typically, the part of the building from which asbestos is being removed must be placed under containment (sealed off) in order to prevent contamination of other areas outside the zone. This is done through various methods, often including the use of polyethylene film, duct tape, wetting, negative air machines and a three-stage decontamination chamber at each containment site. Negative air machines are air moving equipment that utilize HEPA filters, and when used in containment areas, pull fresh air into the containment and only allow HEPA-filtered air back out into the surrounding environment. All containments and asbestos waste storage areas will have warning signs posted so that they are easily identified and can be readily seen by the workers in the building.

During and after asbestos removal, only a HEPA vacuum that is designed for asbestos containment can be used for final cleaning purposes.

Due to the health and safety risks posed by asbestos in the US, activities involving ACM are strictly regulated by the local government and state agencies. In this case, a work plan was submitted by Costello to MA DEP ten days prior to the start of abatement for review. Also, a third-party industrial hygienist has to be hired by the Town through the school building committee to perform air monitoring outside of the containment area during abatement, and the same hygienist will also perform air monitoring inside the containment area after abatement. Once final air monitoring in the area under containment is cleared (meaning free of asbestos), the hygienist will notify the abatement contractor who will then dismantle

and properly segregate the protective containment. Polyethylene used to build the containments and the Tyvek suits, APR cartridges and any other trash from containment will be considered asbestos contaminated and will be placed in labeled bags, which can only be disposed of at licensed asbestos waste disposal sites as it is classified as hazardous waste.

Once abatement has been completed in the areas of the building and ACM removed from the building, the major demolition operation can begin. This will be done with the use of heavy equipment and planned to be completed in phases (or zones) of the existing building.

During the actual building demolition, all debris will be hauled off site. A water truck will also be used when debris is hauled to eliminate dust created by trucking, as well as the installation of a truck tire wash. Dust control during this phase of the demolition will be provided by Stoneham Fire Department personnel. Additional air monitoring will take place on the fence line between the new and existing buildings during the final phase of building demolition. This air monitoring will be initially conducted during the first week of building tear-down and then again when the demolition of the building section closest to the new school starts.

This testing will be for respirable dust (non-asbestos containing as the ACM has already been removed) and if at any time samples come back above acceptable levels, demolition work will stop, and dust control methods will be reassessed and corrected.