

**ASBESTOS
SEGREGATION AND DEMOLITION PLAN
For Former
New Style Building #2
87 Grove Street "Rear"
Franklin, Massachusetts**

INTRODUCTION

The site is a single approximately one quarter-acre lot located at 87 Grove Street "Rear" in Franklin, Massachusetts, and is listed with the Town of Franklin Tax Assessor as Plot 276, Lot 22. The site includes a condemned 9,929 square foot building that consists of a distinct older and newer constructed section. The older front area has collapsed as well as the garage roof of the newer portion of the building. The building directly abuts an occupied building to the northwest on lot 28 which will remain. The site can be accessed through a right of way from Grove Street through lot 27.

In 2005, the Town of Franklin took control of the site. The site has been formally condemned by the local Building Commissioner.

This plan has been prepared by FLI Environmental, Inc. on behalf of the Town of Franklin, prepared to comply with all federal, state, and local requirements regarding the demolition of structures and removal of building materials containing asbestos-containing material (ACMs)

The scope of work includes the demolition of the on-site building, including the segregation of building materials containing or contaminated with asbestos, for proper disposal. Work shall include demolition of the majority of existing foundations and excavation of a limited volume of soil containing hazardous materials, removal of asphalt paving to the west and south of the building, in addition to the building demolition. Some of the areas of the building are unsafe for entry. Therefore in order to demolish this structure without first removing the asbestos, it will necessary to request an exemption from MassDEP regulations regarding the removal of asbestos before demolition and 310 CMR 7.15 (1)(c)3(d), air cleaning and sealed work area.

PLAN

PART I - GENERAL

1.01 General:

- A. The work will be done by licensed workers employed by a Massachusetts Licensed Asbestos Abatement Contractor.
- B. The compliance oversight and air monitoring (Project Monitor) will be done by FLI Environmental, Inc. (FLI) of Dedham, MA (Asbestos Analytical Service License # AA 000144).

1.02 Summary of Work:

- A. The work of this section will be performed at **87 Grove Street "Rear", Franklin, Massachusetts**. The scope of work is as follows:

Material	Location	Estimated Quantity
Floor Tile	Bathroom Area 4 1 st Floor	15 SF
Mastic	Rubble Area 1 and Area 2	Not Quantified
Roofing	Garage Area 3	400 SF
Window Glazing	Area 4 1 st Floor	8 Units

Note: For a description of the identified areas, please see the attached floor sketch

1.03 Sequence of Work:

Prior to any demolition work abatement of floor tile and window glazing needs to be completed in the rear building area.

Floor Tile

1. A regulated work area negative pressure containment shall be constructed inside the building using 2-layers of 6-mil polyethylene sheeting from floor to ceiling inside subject area. A two-stage decontamination chamber shall be erected at the work area entrance. The chambers shall be arranged so that the clean room precedes equipment room, which precedes the Asbestos Control Area. Each chamber shall have two flaps (one on each side) that fully cover each opening. Public access shall be restricted to the decontamination facilities.
2. Workers shall wear two disposable Tyvek™ suits (or equivalent) and HEPA-filtered respirators while performing the work.
3. ACM floor tile shall be removed using wet methods and hand tools. Care should be taken to prevent breakage during the removal process.
4. Surfaces within each regulated work area will be cleaned of visible debris and any suspect material is encountered during this process, it will be removed and disposed of as ACM.
5. After completion of abatement activities, FLI's licensed project monitor will perform a final visual inspection of the area. Upon passing the visual inspection, engineering controls will be removed and the project considered complete for that area.

Window Glazing

1. Workers shall wear two disposable tyvek® suits (or equivalent) and HEPA-filtered respirators while performing the work.
2. Windows shall be removed using wet methods and hand tools.
3. Wrap each wet window in two layers of 6 mil poly, seal with duct tape, and label.
4. Manage all wrapped asbestos sheeting and any other material contaminated as asbestos containing waste material in accordance with 310 CMR 7.15 and 310 CMR 19.061.
5. After completion of abatement activities, FLI's licensed project monitor will perform a final visual inspection of the area. Upon passing the visual inspection, engineering controls will be removed and the project considered complete for that area.

Additional Hazardous Materials

1. Any additional potentially hazardous materials should be removed from the building prior to demolition. These materials include fluorescent light tubes and ballasts, thermostats, miscellaneous equipment, and miscellaneous drums and containers.

Building Demolition

1. The contractor shall acquire a demolition permit from the Town Building Commissioner.
2. The contractor shall comply with all conditions specified in an *Order of Conditions* (CE159-1085) issued by the Town Conservation Commission issued in March 2015.
3. The contractor will prepare the site to facilitate complete controlled demolition, segregation and disposal of ACM building materials.
4. The contractor shall prepare a *Health and Safety Plan* in accordance with OSHA requirements, including but not limited to training, medical monitoring, respiratory protection, exposure monitoring and hazard communication.
5. The contractor will use engineering controls to control emissions to ensure compliance with USEPA requirements for "no visible emissions" in accordance with National Emission Standards for Hazardous Air Pollutant (NESHAP) regulations (40 CFR 61).
6. The contractor will mark and secure the limits of work. The contractor will secure a DigSafe permit number prior to the commencement of any excavation work performed at the site. Securing the site will consist of, at a minimum, the erection of six-foot chain link fences with asbestos barrier tape around all accessible portions of the site.
7. The contractor will maintain all records and distribute as needed.
8. The contractor will demolish and live load areas 1, 2, and 3 to be disposed as asbestos contaminated waste. Demolition will be completed under wet conditions to minimize any emissions from the area. Water runoff shall be controlled to ensure the capture and containment of any asbestos contaminated water. All captured water will be processed through a five (5) micron filter. All filters will be disposed of as asbestos waste.
9. Upon completion of demolition, the Project Monitor shall perform a visual inspection. If any visible ACM is present on the ground surface, the Contractor will excavate the ACM and an additional six inches of soil around the ACM. The soil shall be disposed of as asbestos contaminated material.

10. Upon completion of demolition of the front building, final clearance of the Project Monitor, and removal of all asbestos waste from site, the rear building area can be demolished and disposed using conventional methods. Site control and protection of Mine Brook should remain in place during the additional demolition activities.

1.04 Quality Assurance:

- A. The Contractor shall utilize Commonwealth of Massachusetts-licensed personnel to perform the work outlined herein. Workers shall maintain on-site, current licenses, training certificates, fit-test and medical records.
- B. The Contractor shall properly notify the Commonwealth of Massachusetts DLS and Massachusetts Department of Environmental Protection (MassDEP), and local authorities having jurisdiction over this project. Each permit required for the work including disposal of asbestos in an approved landfill shall be secured, including all costs and fees, by the Contractor prior to the commencement of abatement work.
- C. Work shall be performed in accordance with the MassDEP, Department of Labor and Workforce Development (DOLWD) and Federal OSHA and EPA - AHERA regulations. The Contractor is responsible for complying with the outlined regulations and the requirements of the work plan outlined herein.
- D. Areas 1, 2, and 3 will be demolished and live-loaded for disposal as ACM at an appropriate facility
- E. Air Monitoring
 1. The project monitor shall provide air monitoring during and after work activities.
 2. Samples will be collected adjacent to the work area during abatement for interior abatement work. Samples will be collected at the north, south, east, and west perimeter of the work area for the demolition and live loading of the front building.
 3. If background samples exceed 0.010 F/cc at any time, work will be stopped and work practices and/or engineering controls will be corrected until fiber levels drop below the clearance level.
- F. The Contractor shall be responsible for controlling access to the work area and shall maintain a daily log of personnel entering the work area. A list of names, social security numbers and their donned respiratory equipment shall be generated with their start and stop times, including breaks for each day.
- G. The contractor shall provide his own power source (generator) adequate for all tools and equipment necessary for proper completion of the project, including air filtration devices and air sampling pumps operated by the owner's representative (project monitor). Power sources shall be located outside the work area and shall be equipped with GFCI protectors at the source.

1.05 Visual Inspection and Air Monitoring:

- A. After abatement, post work final visual inspection for job completeness shall be performed by the independent Project Monitor. The work area shall be cleaned free of visible dust and debris.
- B. During demolition and live loading of the front building daily perimeter monitoring (on the north, south, east and west sides of the site) shall be performed during work to monitor fiber levels in ambient air. Samples shall be analyzed on site using Phase Contrast Microscopy (PCM). Samples shall be collected during a four hour period in the morning and an additional four hour period in the afternoon. Work will temporarily cease and engineering controls will be evaluated if total asbestos fiber levels exceed 0.010 f/cc during demolition operations, as measured using PCM. Following the completion of demolition activities, the inspector will observe the excavation area and the ground surface around the work area, and confirm the presence or absence of visible asbestos. Excavation will be conducted to the extent necessary to remove the visible asbestos.
- C. The independent Project Monitor shall conduct visual inspections throughout the work process. Air samples before, during and after the work may be collected within the work area and/or outside the work area at the discretion of the project monitor.

- D. Phase Contrast Microscopy (PCM) air sample analysis shall be utilized in accordance with the NIOSH 7400 method using Massachusetts Asbestos Regulation sampling protocols for background and clearance air samples for the window and floor tile abatement work. If background samples exceed 0.010 F/cc at any time, work will be stopped and work practices and/or engineering controls will be corrected until fiber levels drop below the clearance level. Regulated work areas will be considered complete when post abatement clearance air samples collected within each area are analyzed and determined to be below 0.010 F/cc.
- E. The Contractor is responsible for conducting his own personal air sampling as required by OSHA 29 CFR Section 1926.1101. An inspection log indicating the Contractor's activities, asbestos controlled work area locations, and all other pertinent information, shall be prepared and submitted with each days sampling results.



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