

E. A smoke control system would need to be added in the open stairwell area.

However, as was stated, Section 436 of the code omits the need for these improvements as follows:

"The legal use and occupancy of any partially preserved building may be continued without change or further compliance to this Code."

Overall, the architectural appeal of this building is impressive. The condition of the building is excellent for its age.

3. STRUCTURAL REVIEW

The structure is masonry bearing wall founded on wood piles with wood framed floors and a mansard roof. Foundation masonry is cut granite, exterior is brown stone with brick backup, and the interior bearing walls are brick. All masonry appears to be in excellent condition with the exception of some erosion of the brown stone on the exterior back face of the chimneys.

Floor and roof framing appears heavy although no measurements were taken at this time. The floor over the boiler room is brick arches set in the bottom flange of steel beams to provide for fire-resistant construction.

Structurally, the basement parking scheme is impractical to impossible due to the proximity of several bearing walls in the area at the back alley where the grades are feasible for access to the basement.

The interior bearing wall at grade level in the proposed reception area at the Massachusetts Avenue side could have two arched openings cut in the wall at each side of the existing door.

4. MECHANICAL REVIEW

The Governor Oliver Ames Mansion is a six-story historical building of about 28,000 square feet, heated by steam-fired column type radiators and hot water radiation. Steam is produced by an oil-fired low pressure steam boiler.

The basement boiler room has a H.B. Smith Series 28 seven section oil-fired steam boiler with Carlin 800 CRD 3/4 horsepower burner for No. 2 oil. The steam boiler has a nominal 47 boiler horsepower with an IBR net output rating of 1,200 MBH (gross 1566 MBH) and 13.6 GPH of oil consumption. It has 153.5 square foot of heating surface and furnace volume of 24.34 cubic feet. It has a 12-inch vent connection and two steam risers connected to a 5-inch header and 2½-inch equalizer. The boiler is new and was installed very recently and is in good condition. It was not working during the visit.