

FACILITIES EVALUATION - 1105 MASSACHUSETTS AVENUE



April 25, 2011

INTRODUCTION

Facilities Evaluation -- 1105 Massachusetts Avenue, Cambridge

Constructed in 1973-1974, 1105 Massachusetts Avenue is a condominium building located near Harvard Square in Cambridge. The building consists of a base accommodating retail enterprises and a tower of office and residential units, all fronting south onto Massachusetts Avenue, the city's main thoroughfare. For purposes of this report, Massachusetts Avenue is considered to run in an east-west direction. Side streets onto which the property abuts are Trowbridge on the east and Remington on the west. Based on visual observations and on conversations with the property manager and facilities manager, the complex generally appears to be well maintained and subject to an average level of wear and tear for its type and location. In particular, the building mechanical equipment and interior common spaces seem very well-maintained, and the parking deck was recently resurfaced and appears to be holding up well. However, other interior and exterior elements appear to need attention in the near term. These include:

- ♦ Stucco finished fascias and soffits.
- ♦ Brick and tile terrace pavement.
- ♦ Exterior stairs and ramps, in particular the parking garage exterior egress stair.
- ♦ Limited areas of masonry cladding where water appears to have infiltrated into the cavity behind the face brick.
- ♦ Roofs above the topmost occupied tower floor and the east side retail area.
- ♦ Exterior lighting fixtures.
- ♦ Garage ventilation fan.
- ♦ Water system booster pump.
- ♦ Ejector pump.

In addition, the concrete ceilings in garage level spaces, particularly the room housing the electrical substation, should be monitored to verify that the new parking deck membrane has halted infiltration and consequent deterioration. Portions of the garage structure are showing deterioration from past water infiltration, a condition addressed in a report by this office and JSN Associates, Inc. dated August 29, 2006. The report found the deterioration not to be inimical to the building's structural integrity, and the infiltration causing the damage has reportedly been addressed successfully by the garage deck resurfacing. Handicapped accessibility is limited, but the Architectural Access Board (AAB) has reportedly agreed to the access procedures adopted by the association.

In 2010, this office was retained by the property manager and Trustees to conduct a review and evaluation of the property. The purpose of the study is to determine the type and extent of repair and replacement programs necessary to maintain, in good operating condition, those portions of the property for which the condominium association is responsible. The review process involved on-site visual inspection of the facility and discussions with the property manager and facilities manager. Exterior conditions were also reviewed with a contractor experienced in multi-family housing construction. Visual inspection included exterior building and site features, the garage and related spaces, the lobby area, typical corridors and related spaces, and all common mechanical and electrical devices and equipment. In addition to the report referenced above, other documentation provided for review included:

- A report by Kruger Kruger Albenberg dated 26 February, 1979 evaluating garage structural issues, water infiltration sources and other deficiencies. The report states that "the first cost of the building appears to have been minimized at the expense of the life-cycle cost", a decision that apparently resulted in conditions requiring remedy shortly after the building was erected. The general appearance of the project today suggests that these conditions were addressed subsequent to the issuance of the report.
- A 1985 five year capital needs projection produced by Meredith Management Corporation.
- A July 9, 1999 schedule of estimated capital expenditures produced by Trustee Bill Shawcross.
- A schedule of capital expenditures dated April, 2003 updated through 2010, prepared by Mike Mulyk.
- A sprinkler system inspection report by William M. Collins Co., Inc. dated 11/8/2010.
- A current washer/dryer replacement schedule.
- The condominium master deed with amendments.
- Recent budgets and financial statements.
- A partial set of architectural and structural design drawings by Hugh Stubbins and Associates and LeMessurier and Associates produced in 1974. These constitute the whole drawing record possessed by the Trustees, but do not correspond to actual as-built conditions in a number of important respects. In particular, there are major discrepancies in penthouse, garage, and other utility area layouts, garage deck details, and the like. Consequently, quantities indicated in this report -- and by extension cost estimates associated with them -- are somewhat conjectural and should be considered merely a suggestive predictor of actual replacement quantities or costs.

Based on this review process, the evaluation identifies those items of repair and replacement that would normally be expected in the course of routine operation of the facility over a period of 20 years, together with estimates for the replacement cost of those items not normally associated with routine maintenance. The property has been assessed as it is, without judgment or prejudice concerning the systems and components observed, and replacement schedules assume retention of existing conditions in place. Where replacement or reconditioning is scheduled, identical systems and components are assumed, unless specifically noted otherwise. In general, we found that the facility is in good condition -- well-managed and well-maintained. Consequently, many systems and components have been assigned a life expectancy exceeding the average one might expect in ordinary circumstances. Accelerated schedules for specific components and systems reflect conditions observed by visual inspection or reported by property management staff. Repair and replacement programs associated with these conditions are summarized in Part II of this report.

INTRODUCTION

Facilities Evaluation -- 1105 Massachusetts Avenue, Cambridge

The results of the evaluation have been organized in this report as follows:

- I. PROJECT DESCRIPTION
- II. SUMMARY OF MAJOR CAPITAL IMPROVEMENT PROGRAMS
- III. SUMMARY OF ANTICIPATED CAPITAL EXPENSES
 - A. Projected Expenses
 - B. Replacement Reserve Analysis
 - C. Current and Projected Annual Contributions
- IV. GENERAL LISTING AND DISCUSSION OF CAPITAL, OPERATIONS AND MAINTENANCE ITEMS
- V. PROJECT REFERENCE DOCUMENTATION

I. PROJECT DESCRIPTION

Facilities Evaluation -- 1105 Massachusetts Avenue, Cambridge

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| PROJECT AGE: | 37 years. |
| BUILDING DESCRIPTION: | <p>The structure consists of 15 occupied floors and a 2 story mechanical equipment penthouse. The lowest two floors house 15 retail businesses facing Massachusetts Avenue, some at street level, but most at half a level below or above street grade. On the lowest level behind the businesses is a single story parking garage covered by a parking deck. The first 3 floors immediately above the upper retail level consist of office and residential units. The next 10 floors above those are almost exclusively residential, including penthouses on the topmost floor. On the parking deck, a trash shed serving the retail establishments was erected shortly after the principal structure was built. The building consists of 95 condominiums: 94 residential/office units and 1 retail unit encompassing all the retail areas. Vehicular access is from Trowbridge Street onto the parking deck level, and from Remington Street down a ramp into the garage. Secondary, restricted parking deck access is also located on Remington Street, as well as the retail trash collection area. A portion of the facility is located above the MBTA Red Line subway tracks.</p> |
| Envelope: | <p>Cladding: Primarily brick veneer cavity wall, with stucco fascias and soffits at the lower levels, precast concrete above. Construction behind the brick veneer is concrete masonry in the mechanical penthouse and either concrete masonry or steel studs elsewhere (contradictory documentation). The rear walls of the retail establishments, and the trash shed, are painted concrete masonry. The east retail block has corrugated steel fascia on the north and east walls. Windows and sliding doors in the residential/office units, and retail storefront systems, are insulated glass in anodized aluminum frames. The garage and trash shed have overhead doors. Tower windows and balconies have precast sills and spandrels with drywall soffits. Retail storefronts rest on concrete curbs. Wall surfaces receive routine applications of clear waterproof sealer to discourage water infiltration.</p> |
| | <p>Roofing: Ballasted rubber membrane with gravel stops at the retail level, residential penthouse terraces, and mechanical penthouse roofs, and parapets at the tower roof. Membrane-covered bituminous sheeting runs up parapet back sides terminating in metal cap flashing.</p> |
| Structure: | <p>Chiefly steel frame, fireproofed construction. No asbestos. Typical floors are concrete over steel deck. At grade levels are concrete foundation walls, retaining walls, stairs and ramps, concrete-cased steel columns, and concrete decks. Outside the building footprint, the parking structure consists of concrete columns and ribbed slab running north-south.</p> |
| Interior Walls: | <p>Chiefly painted drywall. Utility area walls subject to heavy use are concrete or painted concrete masonry.</p> |
| Terraces and Balconies: | <p>Mortared brick paving at the lower retail level and grouted terra cotta tile paving at the upper retail level over concrete substrates. Typical tower units have precast spandrels with aluminum railings at sliding doors. Residential penthouses and first level residential/office units have terraces surfaced with wooden duckboards over the membrane roofs.</p> |
| Stairs and Ramps: | <p>Unfinished, and some painted, concrete with painted steel railings. The garage egress stair is in an open well exposed to the sky.</p> |
| Lighting: | <p>Building-attached exterior fixtures: Wall-mounted metal halide area lights and incandescent "can" type downlights; recessed, incandescent "can" type soffit fixtures. Interior fixtures: Ceiling-mounted fluorescent fixtures in typical corridors; recessed "can" type fixtures in the lobby and 2nd floor; fluorescent ceiling-mounted lighting in utility areas and the garage.</p> |
| Infrastructure: | <p>Building-wide systems include electrical service and distribution wiring; water service and hot water storage; common area heating and lighting; elevators; fire and security protection systems; trash management; intercom; and rooftop ventilators. Retail-related HVAC equipment is rooftop mounted.</p> |
| Common Facilities: | <p>Exterior courtyards and terraces at the entry levels; exterior building envelope, except unit windows, doors and storefront; basic building structure; building-wide infrastructure; lobbies, corridors, and egress stairs; laundry rooms and equipment; trash chute rooms; utility rooms and access corridors. While part of the common area, parking facilities are subject to a long term lease agreement. Common parking "facilities" include the deck membrane and overhead vehicle entry door. Limited common areas pertaining exclusively to retail use (1105B) consist of bathrooms and the trash shed located at the parking deck level. Terrace duckboard maintenance is the unit owner's responsibility.</p> <p>Utility rooms at the garage level house the electrical transformer, substation and meter banks; ejector pump; water pressure booster and fire pumps; and emergency power batteries. Utility rooms at the garage deck level house the trash compactor; and telephone, security and intercom controls. Mechanical penthouse utility rooms house the emergency generator, hot water heaters and storage tanks, elevator switchgear and motors, and common area air handling unit.</p> |
| SITE FEATURES: | <p>Landscaping and Paving: The site is urban, consisting exclusively of paved surfaces without landscaping. In addition to masonry pavers at retail terraces, the parking deck has a rubberized membrane.</p> |
| | <p>Rails and Fencing: Painted steel guardrails follow the sidewalk and upper terrace edges above the depressed lower retail level. Painted steel guardrails follow the rear edge of the parking deck, and painted steel gate structures are located at parking deck access points.</p> |
| Utilities | <p>Electrical: The main electrical power entrance is underground feeding the transformer. Two free-standing, pole-mounted lighting fixture at the rear of the parking deck. Step lights in walls.</p> |
| | <p>Water & Septic: The facility is connected to the city systems.</p> |
| | <p>Storm Water: Drains in the terraces and parking garage floor lead to the city stormwater system. The garage drains have no oil and gas separator traps.</p> |
| | <p>Fire Protection: Main panel in garage, annunciator panel in lobby, & 2 siamese connections on west wall feeding building standpipes. Dry sprinklers in the garage and glycol in parking deck soffit.</p> |
| | <p>Other: Gas service to hot water system equipment and common area HVAC equipment.</p> |
| OTHER: | <p>A bank of recessed mailboxes is installed in the lobby. On the two lowest levels, fascia and soffit attached, lighted signage facing Massachusetts Avenue advertises the retail establishments.</p> |

III. SUMMARY OF ANTICIPATED CAPITAL MAINTENANCE EXPENSES

Facilities Evaluation -- 1105 Massachusetts Avenue, Cambridge

A. Projected Expenses

Date: Apr 25 2011
 Project Number: 20533.00
 Project Name: 1105 Massachusetts Avenue, Cambridge
 Project Age: 37

Replacement Schedule Codes
 1 100% in 1 yr 3 33% ovr 3 yr 5 20% ovr 5 yr

| ANTICIPATED EXPENSES* | | | | | | | | | | | | | | | FUTURE REPLACEMENT COSTS (000's omitted) | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------|------|----------------------------------|-------------|-------|---------------|------------|-----|------|-------------|-------|-------|-------|-----|------|--|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | Year | Year | Year | Year | Year | Year | Year | Year | Year | Year | Year | Year | Year | Year | Year | | | | | | | | | |
| Codes | | Replacement | Quantity | | Est. Cost per | Total Cost | Age | Avg | Replacement | Yrs | R/S | Infl | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | | | | |
| Ctgy | Item | Item | Item (unit) | Item | Item | 2011 \$ | Now | Life | 1st | Later | Typ | rate | | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | | | | | |
| 1A | 01 | Garage Deck Membrane | 1 | LS | 35,000.00 | 35,000 | 4 | 7 | 3 | 10 | 17 | 24 | 1 | 2% | 0.0 | 0.0 | 37.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 44.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 52.4 | 0.0 | 0.0 | 0.0 | | |
| 1A | 02 | Terra Cotta Pavers | 1 | LS | 27,000.00 | 27,000 | 20 | 20 | 1 | 21 | 41 | 61 | 1 | 2% | 27.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | |
| 1A | 03 | Brick Pavers | 1 | LS | 105,000.00 | 105,000 | 18 | 20 | 2 | 22 | 42 | 62 | 1 | 2% | 0.0 | 109.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | |
| 1C | 01 | Pole Mounted Site Lighting | 2 | EA | 1,250.00 | 2,500 | 7 | 15 | 8 | 23 | 38 | 53 | 1 | 2% | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | |
| 1C | 02 | Recessed Walkway Lighting | 10 | EA | 250.00 | 2,500 | 13 | 17 | 4 | 21 | 38 | 55 | 1 | 2% | 0.0 | 0.0 | 0.0 | 2.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | |
| 1C | 05 | Transformer Grate | 1 | EA | 5,000.00 | 5,000 | 15 | 20 | 5 | 25 | 45 | 65 | 1 | 2% | 0.0 | 0.0 | 0.0 | 0.0 | 5.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | |
| 1D | 03 | Garage Egress Stair Headhouse | 1 | LS | 20,000.00 | 20,000 | 19 | 20 | 1 | 21 | 41 | 61 | 1 | 2% | 20.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | |
| 2A | 01 | Mechanical Penthouse Roof | 1 | LS | 10,000.00 | 10,000 | 11 | 25 | 14 | 39 | 64 | 89 | 1 | 2% | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 13.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | |
| 2A | 02 | Main Tower Roof | 1 | LS | 140,000.00 | 140,000 | 19 | 20 | 1 | 21 | 41 | 61 | 1 | 2% | 140.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | |
| 2A | 03 | Main Roof Parapets | 1 | LS | 20,000.00 | 20,000 | 11 | 25 | 14 | 39 | 64 | 89 | 1 | 2% | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 26.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | |
| 2A | 04 | East Retail Roof | 1 | LS | 28,000.00 | 28,000 | 22 | 25 | 3 | 28 | 53 | 78 | 1 | 2% | 0.0 | 0.0 | 30.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | |
| 2A | 05 | West Retail Roof | 1 | LS | 24,000.00 | 24,000 | 6 | 25 | 19 | 44 | 69 | 94 | 1 | 2% | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 37.7 | 0.0 | |
| 2A | 07 | Penthouse Balcony Roofs | 1 | LS | 30,000.00 | 30,000 | 5 | 25 | 20 | 45 | 70 | 95 | 1 | 2% | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 48.2 | |
| 2B | 01 | Veneer Masonry | 1 | LS | 20,000.00 | 20,000 | 36 | 50 | 14 | 64 | ***** | 1 | 2% | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 27.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | |
| 2B | 04 | Stucco Fascias and Soffits | 1 | LS | 150,000.00 | 150,000 | 36 | 45 | 9 | 54 | 99 | ***** | 1 | 2% | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| 2B | 09 | Routine Waterproofing | 1 | LS** | 125,000.00 | 125,000 | 4 | 5 | 1 | 6 | 11 | 16 | 5 | 2% | 25.0 | 26.0 | 26.5 | 27.1 | 27.6 | 28.2 | 28.7 | 29.3 | 29.9 | 30.5 | 31.1 | 31.7 | 32.3 | 33.0 | 33.6 | 34.3 | 35.0 | 35.7 | 36.4 | 37.1 | 37.8 | 38.5 | | |
| 2B | 10 | Common Area Exterior Doors | 1 | EA | 1,250.00 | 1,250 | 1 | 3 | 2 | 5 | 8 | 11 | 1 | 2% | 0.0 | 1.3 | 0.0 | 0.0 | 1.3 | 0.0 | 0.0 | 1.4 | 0.0 | 0.0 | 1.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| 2B | 11 | Garage Overhead Door | 1 | EA | 2,500.00 | 2,500 | 2 | 6 | 4 | 10 | 16 | 22 | 1 | 2% | 0.0 | 0.0 | 0.0 | 2.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| 2C | 02 | Building-Attached Light Fixtures | 5 | EA*** | 200.00 | 1,000 | 10 | 20 | 10 | 30 | 50 | 70 | 1 | 2% | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| 3A | 01 | Lobby Finishes | 1 | LS | 10,000.00 | 10,000 | 4 | 11 | 7 | 18 | 29 | 40 | 1 | 2% | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 11.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 13.1 | 0.0 | 0.0 | 0.0 | |
| 3A | 02 | Mailboxes | 1 | LS | 10,000.00 | 10,000 | 7 | 25 | 18 | 43 | 68 | 93 | 1 | 2% | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| 3A | 03 | Reception Desk | 1 | LS | 7,500.00 | 7,500 | 7 | 25 | 18 | 43 | 68 | 93 | 1 | 2% | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| 3A | 04 | Lobby Storefront | 1 | LS | 15,000.00 | 15,000 | 5 | 20 | 15 | 35 | 55 | 75 | 1 | 2% | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| 3B | 01 | Corridor Finishes | 1 | LS | 97,500.00 | 97,500 | 5 | 13 | 8 | 21 | 34 | 47 | 3 | 2% | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3B | 04 | Stair Finishes | 1 | LS | 16,750.00 | 16,750 | 5 | 15 | 10 | 25 | 40 | 55 | 1 | 2% | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3B | 05 | Washers and Dryers | 1 | LS** | 7,750.00 | 7,750 | 4 | 5 | 1 | 6 | 11 | 16 | 5 | 2% | 1.6 | 1.6 | 1.7 | 1.7 | 1.7 | 1.8 | 1.8 | 1.9 | 1.9 | 2.0 | 2.0 | 2.1 | 2.1 | 2.2 | 2.2 | 2.3 | 2.3 | 2.4 | 2.4 | 2.5 | 2.5 | 2.6 | | |
| 3C | 02 | Retail Corridor Finishes | 1 | LS | 6,250.00 | 6,250 | 1 | 6 | 5 | 11 | 17 | 23 | 1 | 2% | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3C | 04 | Garage Light Fixtures | 25 | EA*** | 500.00 | 12,500 | 16 | 20 | 4 | 24 | 44 | 64 | 1 | 2% | 0.0 | 0.0 | 0.0 | 13.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4A | 01 | Intercom System Components | 1 | EA*** | 5,000.00 | 5,000 | 12 | 20 | 8 | 28 | 48 | 68 | 1 | 2% | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 6.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| 4B | 01 | Security/Card Reader System Comp | 1 | EA*** | 12,000.00 | 12,000 | 5 | 19 | 14 | 33 | 52 | 71 | 1 | 2% | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| 4B | 02 | Vestibule Heater | 1 | EA*** | 6,500.00 | 6,500 | 4 | 12 | 8 | 20 | 32 | 44 | 1 | 2% | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 7.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 10.4 |
| 4C | 01 | Elevator Cabs and Doors | 1 | LS | 43,000.00 | 43,000 | 4 | 15 | 11 | 26 | 41 | 56 | 1 | 2% | 0.0 | 0.0 | 0.0 | 45.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| 4C | 04 | Dryer Exhaust Fan Assembly | 1 | LS | 10,000.00 | 10,000 | 3 | 7 | 4 | 11 | 18 | 25 | 1 | 2% | 0.0 | 0.0 | 0.0 | 10.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| 4D | 01 | Water Circulator Booster Pumps | 1 | EA*** | 10,000.00 | 10,000 | 10 | 5 | 1 | 6 | 11 | 16 | 1</ | | | | | | | | | | | | | | | | | | | | | | | | | |

III. SUMMARY OF ANTICIPATED CAPITAL MAINTENANCE EXPENSES

Facilities Evaluation -- 1105 Massachusetts Avenue, Cambridge

B. Replacement Reserve Analysis

CAPITAL NEEDS WORKSHEET FOR MAIN BUILDING REPLACEMENT EXPENSES 04/25/11
 INCREASED CONTRIBUTIONS REQUIRED FOR 20 YEAR POSITIVE BALANCE

PROJECT: 1105 MASSACHUSETTS AVENUE PROJECT LOCATION: CAMBRIDGE, MASSACHUSETTS
 ADDRESS(ES): CAMBRIDGE, MASSACHUSETTS
 MHFA #: N/A # OF UNITS: 95 RETAIL: 1 RESIDENCE: 73 TOTAL DEVELOPMENT SIZE N/A Sq. Ft.
 AGE: 37 # BUILDINGS: 1 OFFICE/RES: 21 OTHER: 0 (including sq. ft. of building(s) & common area)
 FINANCING: N/A

| | \$/PROJECT | \$/BUILDING | \$/UNIT | #BLDG | RETAIL | OFFICE/RES. | 1BR RES. | 2BR RES. | 3BR RES. | 4BR RES. | |
|-------------------------------------|--------------|--------------|-----------|------------|--------|-------------|----------|----------|----------|----------|---|
| TOTAL REPLACEMENT COST IN 2000 \$ | \$12,919,441 | \$12,919,441 | \$135,994 | ELEVATOR | 1 | 1 | 21 | 27 | 42 | 4 | 0 |
| 20 YEAR REPLACEMENT | \$17,182,856 | \$17,182,856 | \$180,872 | WALK-UP | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | | TOWNHSE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BEGINNING REPL. RESERVE BALANCE (1) | \$615,077 | \$615,077 | \$6,474 | S.F.DET.,D | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| REPL. RESERVE BALANCE @ 20 YEARS | \$162,640 | \$162,640 | \$1,712 | TOTAL | 1 | 1 | 21 | 27 | 42 | 4 | 0 |

| | YEAR 1 | YEAR 2 | YEAR 3 | YEAR 4 | YEAR 5 | YEAR 6 | YEAR 7 | YEAR 8 | YEAR 9 | YEAR 10 | |
|--|--------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|---------------|
| | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | |
| 20 YEAR REPLACEMENT, COST BY YEAR | | (\$714,390) | (\$609,045) | (\$586,466) | (\$567,176) | (\$533,092) | (\$537,097) | (\$533,099) | (\$586,820) | (\$766,156) | (\$690,982) |
| ANNUAL ESCROW CONTRIBUTION/UNIT (2) | 0.65% | \$6,141 | \$6,181 | \$6,221 | \$6,261 | \$6,302 | \$6,343 | \$6,384 | \$6,426 | \$6,467 | \$6,510 |
| ANNUAL ESCROW CONTRIBUTION, TOTAL | 0.65% | \$583,375 | \$587,167 | \$590,984 | \$594,825 | \$598,691 | \$602,583 | \$606,500 | \$610,442 | \$614,410 | \$618,403 |
| ANNUAL CONTRIBUTION LESS NEED (in real \$) | | (\$131,015) | (\$21,878) | \$4,517 | \$27,649 | \$65,600 | \$65,486 | \$73,400 | \$23,622 | (\$151,746) | (\$72,578.45) |
| ANNUAL CONTRIBUTION W/ INTEREST EARNED | | (\$131,015) | (\$21,878) | \$4,540 | \$27,787 | \$65,928 | \$65,813 | \$73,767 | \$23,740 | (\$151,746) | (\$72,578.45) |
| YEAR END INTEREST ON RR BALANCE, IF POSITIVE | 0.50% | \$0 | \$2,420 | \$2,323 | \$2,357 | \$2,508 | \$2,850 | \$3,194 | \$3,578 | \$3,715 | \$2,975 |
| REPL. RESERVE BALANCE, CUMULATIVE | 0.50% | \$484,062 | \$464,604 | \$471,467 | \$501,611 | \$570,047 | \$638,711 | \$715,672 | \$742,990 | \$594,959 | \$525,355 |

| | YEAR 11 | YEAR 12 | YEAR 13 | YEAR 14 | YEAR 15 | YEAR 16 | YEAR 17 | YEAR 18 | YEAR 19 | YEAR 20 | |
|--|---------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | |
| 20 YEAR REPLACEMENT, COST BY YEAR | | (\$701,180) | (\$583,017) | (\$587,907) | (\$683,859) | (\$633,084) | (\$657,978) | (\$702,717) | (\$765,095) | (\$746,241) | (\$734,040) |
| ANNUAL ESCROW CONTRIBUTION/UNIT (2) | 0.65% | \$6,552 | \$6,594 | \$6,637 | \$6,680 | \$6,724 | \$6,768 | \$6,812 | \$6,856 | \$6,900 | \$6,945 |
| ANNUAL ESCROW CONTRIBUTION, TOTAL | 0.65% | \$622,423 | \$626,469 | \$630,541 | \$634,639 | \$638,764 | \$642,916 | \$647,095 | \$651,301 | \$655,535 | \$659,796 |
| ANNUAL CONTRIBUTION LESS NEED (in real \$) | | (\$78,757) | \$43,452 | \$42,634 | (\$49,220) | \$5,680 | (\$15,061) | (\$55,622) | (\$113,794) | (\$90,706) | (\$74,245) |
| ANNUAL CONTRIBUTION W/ INTEREST EARNED | | (\$78,757) | \$43,669 | \$42,847 | (\$49,220) | \$5,709 | (\$15,061) | (\$55,622) | (\$113,794) | (\$90,706) | (\$74,245) |
| YEAR END INTEREST ON RR BALANCE, IF POSITIVE | 0.50% | \$2,627 | \$2,246 | \$2,476 | \$2,702 | \$2,470 | \$2,511 | \$2,448 | \$2,182 | \$1,624 | \$1,179 |
| REPL. RESERVE BALANCE, CUMULATIVE | | \$449,225 | \$495,140 | \$540,463 | \$493,946 | \$502,124 | \$489,573 | \$436,399 | \$324,788 | \$235,706 | \$162,640 |

| | \$/PROJECT | AVG\$/UNIT |
|------------------------------------|------------|------------|
| BEGINNING REPL. RESERVE BALANCE* | \$615,077 | \$6,474 |
| ADD'L \$ REQ FOR POSITIVE BALANCES | \$0 | \$0 |
| (1) TOTAL REPL. RESERVE BALANCE | \$615,077 | \$6,474 |
| PRESENT ANNUAL CONTRIBUTION** | \$583,375 | \$6,141 |
| ADD'L \$ REQ FOR POSITIVE BALANCES | \$0 | \$0 |
| (2) TOTAL ANNUAL CONTRIBUTION | \$583,375 | \$6,141 |

MANAGEMENT AGENT: ELN MANAGEMENT
 ADDRESS: POST OFFICE BOX 798 PHONE: (978) 440-8330
SUDBURY, MASSACHUSETTS 01776
 STUDY PREPARED BY: A.L. AYDELOTT AND ASSOCIATES, INC.
 ADDRESS: 251 BOSTON POST ROAD PHONE: (781) 891-9837
WESTON, MASSACHUSETTS 02493

NOTES: * The December 2010 financial report shows \$615,077 cash on hand, including \$548,399 in the reserve fund and \$44,000 in the operating account.
 ** 2010 operating budget = \$583,375. Contribution: 65% condominium fees, 35% garage rental and other Current garage rental = \$160/month x 102 spaces x 12 months = \$195,840/year.
 Present average annual fee contribution/unit is thus: $(\$583,375 \times 0.65) / 95 =$ \$3,991.51
 Present average annual garage/other contribution/unit is thus: $(\$583,375 \times 0.35) / 95 =$ \$2,149.28
 Present total average annual contribution/unit from all sources is thus: \$6,140.79

III. SUMMARY OF ANTICIPATED CAPITAL MAINTENANCE EXPENSES

Facilities Evaluation -- 1105 Massachusetts Avenue, Cambridge

C. Current and Projected Annual Contributions

Approximate Current Condominium Fees Allocated by Beneficial Interest Distribution
 (Total Fee Contribution = \$583,375 x .65)

| Unit Number | Interest | Allocation | Unit Number | Interest | Allocation |
|-------------|----------|------------|-------------|-----------|------------|
| 1- 1A | 1.02180 | \$3,875 | 50- 8A | 1.07050 | \$4,059 |
| 2- 1B | 0.77850 | \$2,952 | 51- 8B | 0.82720 | \$3,137 |
| 3- 1C | 0.99750 | \$3,782 | 52- 8C | 1.04620 | \$3,967 |
| 4- 1D | 0.77850 | \$2,952 | 53- 8D | 0.80290 | \$3,045 |
| 5- 1E | 1.02180 | \$3,875 | 54- 8E | 1.16780 | \$4,428 |
| 6- 1F | 0.77850 | \$2,952 | 55- 8F | 0.92450 | \$3,506 |
| 7- 1G | 1.03400 | \$3,921 | 56- 8G | 1.07050 | \$4,059 |
| 8- 1H | 0.77850 | \$2,952 | 57- 8H | 0.85150 | \$3,229 |
| 9- 2A | 0.97320 | \$3,690 | 58- 9A | 1.07050 | \$4,059 |
| 10- 2B | 0.72990 | \$2,768 | 59- 9B | 0.82720 | \$3,137 |
| 11- 2C | 0.97320 | \$3,690 | 60- 9C | 1.07050 | \$4,059 |
| 12- 2D | 0.72990 | \$2,768 | 61- 9D | 0.80290 | \$3,045 |
| 13- 2E | 1.02180 | \$3,875 | 62- 9E | 1.16780 | \$4,428 |
| 14- 2F | 1.53280 | \$5,812 | 63- 9F | 0.92450 | \$3,506 |
| 15- 3A | 0.97320 | \$3,690 | 64- 9G | 1.07050 | \$4,059 |
| 16- 3B | 0.72990 | \$2,768 | 65- 9H | 0.85150 | \$3,229 |
| 17- 3C | 0.97320 | \$3,690 | 66- 10A | 1.07050 | \$4,059 |
| 18- 3D | 0.72990 | \$2,768 | 67- 10B | 0.82720 | \$3,137 |
| 19- 3E | 1.02180 | \$3,875 | 68- 10C | 1.09480 | \$4,151 |
| 20- 3F | 1.53280 | \$5,812 | 69- 10D | 0.80290 | \$3,045 |
| 21- 3G | 0.77850 | \$2,952 | 70- 10E | 1.16780 | \$4,428 |
| 22- 4A | 0.97320 | \$3,690 | 71- 10F | 0.92450 | \$3,506 |
| 23- 4B | 0.72990 | \$2,768 | 72- 10G | 1.09480 | \$4,151 |
| 24- 4C | 0.97320 | \$3,690 | 73- 10H | 0.85150 | \$3,229 |
| 25- 4D | 0.72990 | \$2,768 | 74- 11A | 1.07050 | \$4,059 |
| 26- 4E | 1.02180 | \$3,875 | 75- 11B | 0.82720 | \$3,137 |
| 27- 4F | 1.53280 | \$5,812 | 76- 11C | 1.09480 | \$4,151 |
| 28- 4G | 0.80290 | \$3,045 | 77- 11D | 0.85150 | \$3,229 |
| 29- 5A | 0.97320 | \$3,690 | 78- 11E | 1.16780 | \$4,428 |
| 30- 5B | 0.75420 | \$2,860 | 79- 11F | 0.92450 | \$3,506 |
| 31- 5C | 0.97320 | \$3,690 | 80- 11G | 1.14350 | \$4,336 |
| 32- 5D | 0.75420 | \$2,860 | 81- 11H | 0.90020 | \$3,414 |
| 33- 5E | 1.07050 | \$4,059 | 82- 12A | 1.07050 | \$4,059 |
| 34- 5F | 1.58150 | \$5,997 | 83- 12B | 0.82720 | \$3,137 |
| 35- 5G | 0.80290 | \$3,045 | 84- 12C | 1.09480 | \$4,151 |
| 36- 6A | 1.02180 | \$3,875 | 85- 12D | 0.85150 | \$3,229 |
| 37- 6B | 0.77850 | \$2,952 | 86- 12E | 1.16780 | \$4,428 |
| 38- 6C | 0.99750 | \$3,782 | 87- 12F | 0.92450 | \$3,506 |
| 39- 6D | 0.77850 | \$2,952 | 88- 12G | 1.14350 | \$4,336 |
| 40- 6E | 1.11920 | \$4,244 | 90- 12H | 0.90020 | \$3,414 |
| 41- 6F | 1.58150 | \$5,997 | 91- PH-A | 1.94640 | \$7,381 |
| 42- 6G | 0.80290 | \$3,045 | 92- PH-B | 1.70310 | \$6,458 |
| 43- 7A | 1.02180 | \$3,875 | 93- PH-C | 2.06810 | \$7,842 |
| 44- 7B | 0.77850 | \$2,952 | 94- PH-D | 1.82480 | \$6,920 |
| 45- 7C | 0.99750 | \$3,782 | 95- RETAIL | 5.08900 | \$19,297 |
| 46- 7D | 0.77850 | \$2,952 | | | |
| 47- 7E | 1.11920 | \$4,244 | TOTAL | 100.08350 | \$379,510 |
| 48- 7F | 0.90020 | \$3,414 | | | |
| 49- 7G | 1.07050 | \$4,059 | | | |
| 50- 7H | 0.80290 | \$3,045 | | | |

Current Income from Parking and Other Sources (\$583,375 x .35) = \$203,865

Projected Year 20 Condominium Fees Allocated by Beneficial Interest Distribution
 (Total Fee Contribution = \$659,796 x .65)

| Unit Number | Interest | Allocation | Unit Number | Interest | Allocation |
|-------------|----------|------------|-------------|-----------|------------|
| 1- 1A | 1.02180 | \$4,382 | 50- 8A | 1.07050 | \$4,591 |
| 2- 1B | 0.77850 | \$3,339 | 51- 8B | 0.82720 | \$3,548 |
| 3- 1C | 0.99750 | \$4,278 | 52- 8C | 1.04620 | \$4,487 |
| 4- 1D | 0.77850 | \$3,339 | 53- 8D | 0.80290 | \$3,443 |
| 5- 1E | 1.02180 | \$4,382 | 54- 8E | 1.16780 | \$5,008 |
| 6- 1F | 0.77850 | \$3,339 | 55- 8F | 0.92450 | \$3,965 |
| 7- 1G | 1.03400 | \$4,434 | 56- 8G | 1.07050 | \$4,591 |
| 8- 1H | 0.77850 | \$3,339 | 57- 8H | 0.85150 | \$3,652 |
| 9- 2A | 0.97320 | \$4,174 | 58- 9A | 1.07050 | \$4,591 |
| 10- 2B | 0.72990 | \$3,130 | 59- 9B | 0.82720 | \$3,548 |
| 11- 2C | 0.97320 | \$4,174 | 60- 9C | 1.07050 | \$4,591 |
| 12- 2D | 0.72990 | \$3,130 | 61- 9D | 0.80290 | \$3,443 |
| 13- 2E | 1.02180 | \$4,382 | 62- 9E | 1.16780 | \$5,008 |
| 14- 2F | 1.53280 | \$6,574 | 63- 9F | 0.92450 | \$3,965 |
| 15- 3A | 0.97320 | \$4,174 | 64- 9G | 1.07050 | \$4,591 |
| 16- 3B | 0.72990 | \$3,130 | 65- 9H | 0.85150 | \$3,652 |
| 17- 3C | 0.97320 | \$4,174 | 66- 10A | 1.07050 | \$4,591 |
| 18- 3D | 0.72990 | \$3,130 | 67- 10B | 0.82720 | \$3,548 |
| 19- 3E | 1.02180 | \$4,382 | 68- 10C | 1.09480 | \$4,695 |
| 20- 3F | 1.53280 | \$6,574 | 69- 10D | 0.80290 | \$3,443 |
| 21- 3G | 0.77850 | \$3,339 | 70- 10E | 1.16780 | \$5,008 |
| 22- 4A | 0.97320 | \$4,174 | 71- 10F | 0.92450 | \$3,965 |
| 23- 4B | 0.72990 | \$3,130 | 72- 10G | 1.09480 | \$4,695 |
| 24- 4C | 0.97320 | \$4,174 | 73- 10H | 0.85150 | \$3,652 |
| 25- 4D | 0.72990 | \$3,130 | 74- 11A | 1.07050 | \$4,591 |
| 26- 4E | 1.02180 | \$4,382 | 75- 11B | 0.82720 | \$3,548 |
| 27- 4F | 1.53280 | \$6,574 | 76- 11C | 1.09480 | \$4,695 |
| 28- 4G | 0.80290 | \$3,443 | 77- 11D | 0.85150 | \$3,652 |
| 29- 5A | 0.97320 | \$4,174 | 78- 11E | 1.16780 | \$5,008 |
| 30- 5B | 0.75420 | \$3,235 | 79- 11F | 0.92450 | \$3,965 |
| 31- 5C | 0.97320 | \$4,174 | 80- 11G | 1.14350 | \$4,904 |
| 32- 5D | 0.75420 | \$3,235 | 81- 11H | 0.90020 | \$3,861 |
| 33- 5E | 1.07050 | \$4,591 | 82- 12A | 1.07050 | \$4,591 |
| 34- 5F | 1.58150 | \$6,783 | 83- 12B | 0.82720 | \$3,548 |
| 35- 5G | 0.80290 | \$3,443 | 84- 12C | 1.09480 | \$4,695 |
| 36- 6A | 1.02180 | \$4,382 | 85- 12D | 0.85150 | \$3,652 |
| 37- 6B | 0.77850 | \$3,339 | 86- 12E | 1.16780 | \$5,008 |
| 38- 6C | 0.99750 | \$4,278 | 87- 12F | 0.92450 | \$3,965 |
| 39- 6D | 0.77850 | \$3,339 | 88- 12G | 1.14350 | \$4,904 |
| 40- 6E | 1.11920 | \$4,800 | 90- 12H | 0.90020 | \$3,861 |
| 41- 6F | 1.58150 | \$6,783 | 91- PH-A | 1.94640 | \$8,347 |
| 42- 6G | 0.80290 | \$3,443 | 92- PH-B | 1.70310 | \$7,304 |
| 43- 7A | 1.02180 | \$4,382 | 93- PH-C | 2.06810 | \$8,869 |
| 44- 7B | 0.77850 | \$3,339 | 94- PH-D | 1.82480 | \$7,826 |
| 45- 7C | 0.99750 | \$4,278 | 95- RETAIL | 5.08900 | \$21,825 |
| 46- 7D | 0.77850 | \$3,339 | | | |
| 47- 7E | 1.11920 | \$4,800 | TOTAL | 100.08350 | \$429,225 |
| 48- 7F | 0.90020 | \$3,861 | | | |
| 49- 7G | 1.07050 | \$4,591 | | | |
| 50- 7H | 0.80290 | \$3,443 | | | |

Year 20 Income from Parking and Other Sources (\$695,796 x .35) = \$230,570

IV. GENERAL LISTING AND DISCUSSION OF CAPITAL, OPERATIONS AND MAINTENANCE ITEMS

Facilities Evaluation -- 1105 Massachusetts Avenue, Cambridge

The following observations contributed to development of the Replacement Reserve Analysis in Section III of this report:

| 1.00 | SITWORK | | | | | |
|-------|---------------------------------|-----|---|-----------|--|---|
| 1A | PAVING AND CURBING | | | | | |
| 1A.01 | Garage Deck Membrane | X | | 7 Years | \$30,000 - \$35,000 | Garage deck scraped, patched and coated in 2007. Some chipping is evident from snowplow operations, which will require patching. Recoating required in year 3 - 4. |
| 1A.02 | Terra Cotta Pavers | X | | 20 Years | 750 SF @ \$30/SF = \$22,500 x 1.2 = \$27,000 | German tiles are at the end of their useful life and no longer available. Extensive patching is evident, and tiles are missing in several places. Replace entire finish near-term. |
| 1A.03 | Brick Pavers | X | | 20 Years | 2,500 SF @ \$35/SF = \$87,500 x 1.2 = \$105,000 | The surface is badly deteriorated, extensively patched and repaired over the years, and will require complete replacement near-term. |
| 1A.04 | Site Maintenance Equipment | | X | N/A | N/A | Purchase and maintain as required from yearly operations budget. |
| 1A.05 | Concrete Driveway Surfaces | | X | N/A | N/A | Maintain vehicular ramp and other concrete surfaces as required from yearly operations budget. |
| 1A.06 | Plow and Sweep Drives and Walks | | X | N/A | N/A | Maintain as required from yearly operations budget. |
| 1B | STAIRS, RAMPS AND RAILINGS | | | | | |
| 1B.01 | Concrete Finishes | | X | 30 Years | N/A | Stairs and ramps, including light fixtures and handrail painting, redone ca. 1995. Concrete finishes seem generally sound, with settlement cracks and patching in isolated locations. The west wall surface has been painted several times to counteract graffiti, and the paint is flaking. A light walnut shell sandblast treatment might be considered to effect some cosmetic improvement. Otherwise, continue to maintain as required from yearly operations budget. |
| 1B.02 | Guard Rails and Handrails | | X | 40 Years | N/A | See item 1B.01. Rails appear to be generally in sound condition and will likely not need replacement over the term. Paint and maintain as required from yearly operations budget. |
| 1B.03 | Vehicle Gates | | X | 40 Years | N/A | Gates were installed recently. Paint & maintain as required from yearly operations budget. |
| 1C | SITE UTILITIES | | | | | |
| 1C.01 | Pole Mounted Site Lighting | X | | 15 Years. | 2 Fixtures @ \$1,250 | Assume that the fixture will require replacement mid-term |
| 1C.02 | Wall Recessed Walkway Lighting | X | | 15 Years. | Approximately 10 Fixtures @ \$250 Each = \$2,500 | These fixtures are original and probably near the end of their useful life. Replace near-term. |
| 1C.03 | Terrace Storm Drains | X | | 30 Years. | Approximately 6 | Coordinate replacement with terrace replacement Item 1A.03. |
| 1C.04 | Storm Drain Lines | X | | 50 Years. | N/A | Assume proper installation requiring no replacement during the term. |
| 1C.05 | Electrical Transformer Grate | X | | 20 Years. | Allowance \$5,000 | Scheduled for replacement in 1985 report. Assume work done ca. 1990. |
| 1C.06 | Electrical Transformer | N/A | | N/A | N/A | Assume maintenance and replacement by power utility, if required. |

IV. GENERAL LISTING AND DISCUSSION OF CAPITAL, OPERATIONS AND MAINTENANCE ITEMS

Facilities Evaluation -- 1105 Massachusetts Avenue, Cambridge

| | | | | | | |
|-------------|--|-----|---|-----------|--|--|
| 1C.07 | Gas Meters and Piping | N/A | | N/A | N/A | Assume maintenance and replacement by gas company, if required. |
| 1C.08 | Light Fixture Bulbs/Ballasts | | X | As Needed | N/A | Replace and maintain as required from yearly operations budget. |
| 1C.09 | Water Supply System | | X | As Needed | N/A | Test and maintain as required from yearly operations budget. |
| | | | | | | |
| 1D | MISCELLANEOUS SITE FEATURES | | | | | |
| 1D.01 | Garage Ventilation Headhouse | | X | As Needed | N/A | Maintain as required from yearly operations budget. |
| 1D.02 | Garage Ventilation Louver | X | | 35 Years. | \$3,000 Allowance Anodized Aluminum | Original installed in 1974. Replace in coordination with garage ventilator fan replacement. |
| 1D.03 | Garage Egress Stair | X | | 35 Years. | \$20,000 Allowance | Open stairwell is a health and safety hazard and is subject to vandalism, excessive weathering, and other damage. It is an attractive nuisance. Suggest that the stairwell be enclosed near term with a headhouse constructed of secure, vandal-resistant materials. |
| 1D.04 | Maintain Trash Shed | N/A | | N/A | N/A | Responsibility of the retail condominium owner (1105B). |
| 1D.05 | Trash Collection: 1105B Condominium | N/A | | N/A | N/A | Responsibility of the retail condominium owner. |
| 1D.06 | Trash Collection: 1105 Condominium | | X | As Needed | N/A | Maintain as required from yearly operations budget. |
| 1D.07 | Pest Control | | X | As Needed | N/A | Maintain as required from yearly operations budget. |
| | | | | | | |
| 2.00 | BUILDING EXTERIOR | | | | | |
| 2A | ROOFING AND FLASHING | | | | | |
| 2A.01 | Mechanical Penthouse Roof | X | | 25 Years | \$10,000 Allowance | Ballasted membrane roof replaced in 2000 with adhered membrane. Assume new installation required late in the term. |
| 2A.02 | Main Tower Roof | X | | 25 Years. | \$100,000 - \$125,000 Roof and Disposal \$12,000 Materials Hoist Erection \$4,000/Month Hoist Rental | Ballasted roof installed in 1982 and at the end of its useful life. When penthouse roof was replaced, the surplus ballast from that operation was thrown onto this roof. Roof replacement cost must take disposition of the ballast into account. Suggest considering installation of a materials hoist secured to the north building wall, with ground transport of ballast via barrows to sidewalk dumpster. Assume new roof will be adhered membrane over insulation. |
| 2A.03 | Parapet and Rising Wall Membranes at Main Tower Roof | X | | 25 Years | Approximately \$20,000 | Membranes installed in 2000 to address infiltration issues. No report of leakage currently, although some evidence of infiltration behind the face brick is evident near the top of the north wall, east end. Suggest verifying that this infiltration occurred prior to the parapet membrane application. Assume existing membranes will be retained and tied into new tower roofing system, with replacement late in the term. |
| 2A.04 | East Retail Block Roof | X | | 25 Years | Approximately \$28,000 | Roof replaced in 1989 and nearing the end of its useful life. Assume replacement with system installed at the West Retail Block in the near term. |

IV. GENERAL LISTING AND DISCUSSION OF CAPITAL, OPERATIONS AND MAINTENANCE ITEMS

Facilities Evaluation -- 1105 Massachusetts Avenue, Cambridge

| | | | | | | |
|-------|---------------------------------|---|---|------------|---|---|
| 2A.05 | West Retail Block Roof | X | | 25 Years | Approximately \$24,000 | Roof replaced in 2005. Assume new installation not required during the term, contingent verification of conditions described in 2B.03 and 2B.04 below. |
| 2A.06 | Garage Deck Membrane | X | | -- | -- | See Item 1A.01 |
| 2A.07 | Penthouse Balcony Roofs | X | | 25 Years | A Unit: \$,7,900; B Unit: Unknown; C Unit: \$6,300; D Unit: \$8,400. Avg. \$7,500 | Replacements 2004 (C), 2005 (D) & 2006 (A). Assume replacement late-term with adhered membrane. Wood deck responsibility of the condominium owner. |
| 2A.08 | Deteriorated Flashing | X | | 40 Years | Assume 50 LF @ \$300/LF = \$1,500 | Through-wall counter flashing and head flashing at wall openings is original and thus over 35 years old. This material may begin to fail and allow water infiltration during the term. If necessary, replacement will require costly dismantling of the veneer brick.. Budget for some replacement late in the term. Combine with veneer masonry repair 2B.01. |
| 2A.09 | Mechanical Grilles & Registers | X | | 40 Years | Lump Sum \$4,000 | Most are the age of the building. Assume that a few will deteriorate to the point of requiring replacement during the term. Combine with veneer masonry repair 2B.01. |
| 2A.10 | Roofing and Flashing | | X | As Needed. | N/A | Maintain systems as required from yearly operations budget. |
| 2B | WALL SYSTEMS AND SOFFITS | | | | | |
| 2B.01 | Veneer Masonry | X | | 50 Years | \$5,000 Allowance | The veneer brick appears to be in generally good condition and will likely not need serious attention over the term. A damaged area of face brick at the top of the north wall, east end, should be evaluated and repaired, if necessary. For purposes of this report, assume water infiltration into the cavity that apparently caused the damage has been satisfactorily addressed by the parapet membrane installation. Assume some repair will be required late in the term. |
| 2B.02 | Concrete Masonry | | X | 50 Years | N/A | No damage or deterioration reported or observed. Assume no major work required during the term. Repaint as required from yearly operations budget. |
| 2B.03 | Masonry Joints | X | | 40 Years | 2,000 SF (Estimated) @ \$5/SF = \$10,000 | Assume 50 years of grout erosion will require selective repointing beginning late in term. Combine with veneer masonry repair 2B.01. |
| 2B.04 | Stucco Fascias and Soffits | X | | 45 Years | Fascias: 1,850 SF (Approximately) Soffits: 2,250 SF (Approximately) Total Stucco: 4,100 SF Patching and Staining @ \$5.00/SF = \$20,500 Replacement Budget: \$150,000 | While there is evidence of some patching, stucco integrity generally does not appear to have been compromised, despite its age. From this perspective, wholesale replacement is therefore likely not required in the near term. However, there is considerable evidence of chronic water infiltration and consequent staining, particularly at the building west end. Observation during a recent rain event revealed dampness at the base of the upper fascias and into the soffits, suggesting a possible discontinuity in the west end roofing system. Since by contrast, dampness was not visible at the east end, testing of the west end roofing system to detect the origin of infiltration seems indicated. To address the unsightliness of the stained and patched areas, application of a semi-transparent stain might be considered as a less-costly alternative to wholesale replacement. Prior to wholesale staining, an area should be tested to verify compatibility with the fascia material. The material appears to be an epoxy-based, stucco-like system on fiberglass mesh, such as "Drivit". |

IV. GENERAL LISTING AND DISCUSSION OF CAPITAL, OPERATIONS AND MAINTENANCE ITEMS

Facilities Evaluation -- 1105 Massachusetts Avenue, Cambridge

| | | | | | | |
|-------------|---|-----|---|------------|--|--|
| 2B.05 | Drywall Soffits | X | | Yearly | -- | Paint is peeling and flaking off the substrate, especially at the lower levels. Continue yearly repainting program under the waterproofing regime discussed in 2B.09 below. |
| 2B.06 | Precast Sills and Spandrels | X | | 50 Years | N/A | No damage or deterioration reported or observed. Assume no major work required during the term, apart from routine joint sealing under 2B.09 below. |
| 2B.07 | Balcony Rails | | X | As Needed. | N/A | Maintain as required from yearly operations budget. These are reportedly in good condition and have never needed maintenance or replacement. Assume that major work will not be needed during the term. |
| 2B.08 | Corrugated Metal Fascia | | X | 50 Years | N/A | No damage or deterioration reported or observed. Assume no major work required during the term. Repaint as required from yearly operations budget. |
| 2B.09 | Routine Waterproofing: Seal Exterior Wall Surfaces and Replace Joint Sealants | X | | Yearly | \$25,000 Budget per Year | Previous studies identified joint and brick veneer integrity as highly important in averting water infiltration at this facility. They note a prevalence of through joints, where sealant is the only water barrier, and of chronic and pervasive water penetration behind the brick cladding into the interior. A yearly program of sealant replacement and masonry sealing has been successful in curing this problem and should be continued. |
| 2B.10 | Common Area Exterior Doors | X | | 6 Years | Assume One Replacement Every 3 Years Allow \$1,250 | Hard wear and tear on common area hollow metal doors will require regular replacement. |
| 2B.11 | Garage Overhead Door | X | | 3 Years | Allow \$2,500 | This door receives hard use and must be routinely replaced. |
| 2B.12 | Common Area Hardware | | X | As Needed. | N/A | Maintain as required from yearly operations budget. |
| 2B.13 | Exterior Unit Doors & Windows | N/A | | N/A | N/A | Responsibility of the condominium owner. |
| | | | | | | |
| 2C | MISCELLANEOUS EXTERIOR | | | | | |
| 2C.01 | Soffit Light Fixtures | X | | 10 Years | 32 Fixtures | See Item 1B.01. Replace as required from yearly operations budget. |
| 2C.02 | Building-Attached Area Light Fixtures (Metal Halide) | X | | 10 Years | 5 Fixtures Total @ \$200/Fixture = \$1,000 | Assume replacement needed once in the term. |
| 2C.03 | Building-Attached Can Light Fixtures | N/A | | N/A | 10 Fixtures | Assume replacement responsibility of the condominium owner. |
| 2C.04 | Advertising Signage | N/A | | N/A | N/A | Responsibility of the condominium owner. |
| 2C.05 | Storage Shed | N/A | | N/A | N/A | Responsibility of the condominium owner. |
| | | | | | | |
| 3.00 | BUILDING INTERIOR FINISHES | | | | | |
| 3A | LOBBY | | | | | |
| 3A.01 | Finishes | X | | 5 Years | Tile and Carpet Inset : \$3,750; Paint: \$1,000; Lighting : \$1,750; Accessories: \$1,500; Contingency: \$2,000 Total: \$10,000 | Constant wear and tear from heavy traffic will require regular and frequent cosmetic refurbishing. Current condition is good. Assume upgrade needed mid-term. Flooring budget includes carpet and vestibule entry mat. |

IV. GENERAL LISTING AND DISCUSSION OF CAPITAL, OPERATIONS AND MAINTENANCE ITEMS

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| 3A.02 | Mailboxes | X | | 25 Years | Allow \$10,00 | Current condition is good. Assume replacement will be required late in the term. |
| 3A.03 | Reception Desk | X | | 12 Years | Allow \$7,500 | Current condition is good. Assume upgrade will be required once in the term. |
| 3A.04 | Storefront | X | | 20 Years | Allow \$15,000 (\$7,500/Entry) | Current condition is good. Assume upgrade will be required late in the term with premium quality, heavy-duty system. |
| 3A.05 | Maintenance Office | | X | As Needed. | | Paint and upgrade as required from yearly operations budget. |
| 3B TYPICAL HALLWAY AND STAIR | | | | | | |
| 3B.01 | Corridor Finishes | X | | 8 Years | Carpet: \$2,000; Paint: \$1,000; Lighting : \$1,500; Contingency: \$1,500 Total: \$6,000 Avg./Fl. X 13 = \$78,000 | Current condition is fairly good. Carpets replaced in 2006 and repainting in 2010. Lighting fixtures, however, are dated. Wear and tear will require cosmetic refurbishing, beginning probably mid-term. |
| 3B.02 | Trash Room Finishes | X | | 8 Years | Flooring: \$100; Paint: \$250; Lighting : \$150; Contingency: \$150 Total: \$650 Avg./Fl. X 13 = \$8,450 | Current condition is fairly good. Wear and tear will require cosmetic refurbishing, beginning probably mid-term. Combine with 3B.01. |
| 3B.03 | Laundry Finishes | X | | 8 Years | Flooring: \$250; Paint: \$350; Lighting : \$200; Contingency: \$200 Total: \$1,000 Avg./Fl. X 11 = \$11,000 | Current condition is fairly good. Wear and tear will require cosmetic refurbishing, beginning probably mid-term. Combine with 3B.01. |
| 3B.04 | Stair Finishes | X | | 20 Years | Flooring: \$100; Paint: \$500; Lighting : \$150; Contingency: \$250 Total: \$1,000 Avg./Fl. X 15 = \$15,000 | Current condition is good. Very little wear and tear. Assume cosmetic refurbishing late term. Budget includes mechanical penthouse flights (2 floors). |
| 3B.05 | Laundry Washers and Dryers | X | | 10 Years | Washers: \$925 ea.; Dryers: \$625 ea. Total: \$1,550/Fl. X 11 = \$17,050 | Typical combination services 8 residential units (penthouse 4). Average age is about 10 years. Assume continuation of current replacement schedule of one combination/year. |
| 3C GARAGE LEVEL COMMON SPACES | | | | | | |
| 3C.01 | Stair Finishes | X | | 20 Years | Flooring: \$250; Paint: \$750; Lighting : \$250; Contingency: \$500 Total: \$1,750 | Current condition is good. Assume cosmetic refurbishing late term. Combine with 3B.04. |
| 3C.02 | Retail Corridor Finishes | X | | 5 Years | Flooring: \$100; Paint: \$500; Lighting : \$150; Contingency: \$500 Total: \$1,250 x 2 = \$2,500 | Current condition is good. Assume periodic cosmetic refurbishing required. Combine with deck level upgrade 3D.01. |
| 3C.03 | Garage and Utility Room Finishes | | X | N/A | N/A | Patch and repair, including filling eroded floor areas around ramp base, as required from yearly operations budget. Monitor ceiling structure for evidence of continuing water infiltration, in particular the electrical substation ceiling, which continues to spall concrete. Repair/replace utility room light fixtures as needed. Clean & maintain as necessary. |
| 3C.04 | Garage Light Fixtures | X | | 12 Years | Approximately 25 @ \$500 ea. = \$12,500 | Water infiltration has seriously impacted these fixtures and associated conduit. They appear to be at the end of their useful life. Replacement must address both the fixtures and the viability of the associated wiring and conduit. |

IV. GENERAL LISTING AND DISCUSSION OF CAPITAL, OPERATIONS AND MAINTENANCE ITEMS

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| 3C.05 | Utility Room Light Fixtures | | X | 15 Years | N/A | Replace as required from yearly operations budget. |
| 3D DECK LEVEL COMMON SPACES | | | | | | |
| 3D.01 | Retail Corridor Finishes | X | | 5 Years | Flooring: \$100; Paint: \$500; Lighting : \$150; Contingency: \$500 Total: \$1,250 | Current condition is good. Assume periodic cosmetic refurbishing required in coordination with garage level upgrade. See 3C.02 and 4E.01. |
| 3D.02 | Trash Compactor Room Finishes | | X | N/A | N/A | Maintain as required from yearly operations budget. Repair/replace light fixtures as req'd. |
| 3C.03 | Electric Room (Off Lobby) Finishes | | X | N/A | N/A | Maintain as required from yearly operations budget. Repair/replace light fixtures as req'd. |
| 3C.04 | Maintain Retail Bathrooms | N/A | | N/A | N/A | Responsibility of the retail condominium owner (1105B). |
| 3E PENTHOUSE UTILITY SPACES | | | | | | |
| 3E.01 | Utility Room Finishes | | X | N/A | N/A | Maintain as required from yearly operations budget. Repair/replace light fixtures as req'd. |
| 4.00 | INFRASTRUCTURE | | | | | |
| 4A GENERAL | | | | | | |
| 4A.01 | Intercom System Components | X | | 15 Years | Main Panel: \$1,500; 95 Unit Panels: \$3,000 | Main panel was recently replaced, allowing units to determine which lobby door to activate. Unit panels and wiring probably original. Assume some replacement mid-term. |
| 4A.02 | Sprinkler System Siamese Connection | X | | 50 Years | N/A | Replacement not anticipated during the term. |
| 4A.03 | Gas Distribution Piping | X | | 50 Years | N/A | Replacement not anticipated during the term. |
| 4A.04 | Fire Alarm System | | X | 35 Years with Upgrades | Annunciator Panel: Allow \$2,500; 15 Fire Alarm PC Boards @ \$100 ea. Smoke Detectors: \$50 ea.; Horns & Lights: \$75 ea. | System is largely original but reportedly code-compliant. Annunciator panel replaced about 10 years ago. Assume other components replaced as needed from operations budget. |
| 4A.05 | Plumbing Supply and Drain System | | X | 50 Years | N/A | Maintain as required from yearly operations budget. |
| 4A.06 | Telephone & Cable Service | N/A | | N/A | N/A | Responsibility of the telecommunications companies. |
| 4B LOBBY | | | | | | |
| 4B.01 | Security System Components | X | | 15 Years | Cameras (13): \$1,000 ea.; Monitors (2): \$250 ea.; CPU: \$5,000 | System installed ca. 2000. Assume some replacement required over the term. Coordinate with card reader system replacement in 4B.03. |
| 4B.02 | Electric Vestibule Heater | X | | 10 Years | Allow \$6,500 | Original heater was apparently removed in an upgrade, but excessive air infiltration into the lobby suggests that it be re-installed. Best option is probably a ceiling-mounted unit. |
| 4B.03 | Entry Door Card Reader System | X | | 17 Years | Allow \$5,000 | Assume replacement of the current basic system will be required mid-term. Coordinate with security system replacement in 4B.01. |

IV. GENERAL LISTING AND DISCUSSION OF CAPITAL, OPERATIONS AND MAINTENANCE ITEMS

Facilities Evaluation -- 1105 Massachusetts Avenue, Cambridge

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| 4B.04 | Telephone Rm, (OffLobby) Panel Board | | X | N/A | N/A | Maintain and upgrade as required from yearly operations budget. |
| 4C | TYPICAL HALLWAY AND STAIR | | | | | |
| 4C.01 | Elevator Cabs and Doors | X | | 15 Years | Cabs: 2 @ \$7,500 = \$15,000 Doors: 26 @ \$1,100 = \$28,600 | The system was upgraded in 2007, but receives fairly heavy usage. Assume upgrade or replacement will be required mid-term. |
| 4C.02 | Sprinkler Standpipes | | X | 50 Years | N/A | Replacement not anticipated during the term. Maintain and upgrade as required from yearly operations budget. |
| 4C.03 | Common Area HVAC Distribution | | X | 50 Years | N/A | Duct replacement not anticipated during the term. Maintain as required from yearly operations budget. Include register replacement as required in 3B.01 budget. Refer to 4F.04 for discussion of fan assembly replacement. |
| 4C.04 | Common Area Dryer Exhaust | X | | Fans: 5 Years Duct: 50 Years | Assembly Evaluation & Replacement: Allow \$10,000. Exhaust motor @ \$250 Duct fans and motors (2 each) | Exhaust motors replaced 2008. Motors are frequently replaced, suggesting that investigation into a more reliable system is warranted. Assume installation of the new system near-term. Duct replacement not anticipated during the term. Clean and maintain ductwork as required from yearly operations budget. |
| 4D | GARAGE LEVEL | | | | | |
| 4D.01 | Water Circulator Booster Pumps (2) | X | | 10 Years | Allow \$10,000 per pump. | One pump was installed in 1974 and at the end of its useful life. |
| 4D.02 | Water Circulator Drive Motors (2) | X | | 5 Years | Allow \$500 per motor. | |
| 4D.03 | Ejector/Sump Pumps (2) | X | | 8 Years | \$3,500 per pump. | One pump installed in 2002, the other in 2008. The older pump should be replaced soon, with periodic replacement of both over the term. |
| 4D.04 | Emergency Power UPS | X | | 12 Years | Budget \$5,000. | System installed in 2007 for \$30,000. Assume some component replacement will be required mid-term |
| 4D.05 | Garage Exhaust Fan | X | | 35 Years | Budget \$25,000 for complete replacement. | This installation is original to the building and at the end of its useful life. |
| 4D.06 | Trench Drains | X | | 40 Years | Allow: \$12,500 each | Drains appear to be original and while maintained regularly, are showing their age. Schedule replacement mid-term. This will likely be a difficult and costly job. |
| 4D.07 | Sprinkler System Components | X | | 10 Years | Pump: \$13,000; Drive Motors (2): \$1,500; Compressor: \$2,000; Miscellaneous: \$3,500 Total: Allow \$20,000 | Fire pump replaced in 2005. Assume that additional replacement will be required once in the term, as well as replacement of other system components. At the same time, dry system heads rotated up to eliminate condensation in the drops. |
| 4D.08 | Sprinkler System Adjustments | X | | N/A | Budget \$7,500 for system adjustments | Rectify deficiencies identified in the 11/8/2010 report, including installing a check valve in the drain line, control valve signage, and a spare head box; and adjustments to the supply gauge, tamper switch, sprinkler position, escutcheons and plugs/caps. Otherwise, assume capital work not required during the term and maintain as required from operations budget. |
| 4D.09 | Electrical Substation | X | | 50 Years | N/A | Signs of past flooding apparent, but no current deficiencies reported or observed. This installation is unlikely to need major overhaul during the term. |

IV. GENERAL LISTING AND DISCUSSION OF CAPITAL, OPERATIONS AND MAINTENANCE ITEMS

Facilities Evaluation -- 1105 Massachusetts Avenue, Cambridge

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| 4D.10 | Meter Banks | | X | N/A | N/A | Assume major replacement or modification not required during the term. Maintain as required from yearly operations budget. |
| 4E DECK LEVEL | | | | | | |
| 4E.01 | Retail Corridor Heaters | X | | 5 Years | Budget \$2,500 | Electric baseboard heating exposed to damage & requiring frequent repair or replacement. Combine with 3D.01. |
| 4E.02 | Trash Compactor | X | | 20 Years | Budget \$3,500 | This equipment was replaced in 2009 for \$14,000. Assume some component replacement may be necessary late in the term. |
| 4E.03 | Sprinkler System Piping & Components | X | | 30 Years | N/A | Assume major replacement or modification of the glycol system not required during the term. Maintain as required from yearly operations budget. |
| 4F UTILITY PENTHOUSE & ROOF | | | | | | |
| 4F.01 | Elevator Machinery | X | | 20 Years | Motors (2) = \$8,000; Cables (2) = \$7,000 Generators (2): \$6,000; Controls: \$6,000 Condenser: \$3,000; Miscellaneous: \$5,000 Total: \$35,000 | The original installation was replaced with a Stanley system in 2007 for \$450,000. The work included new cabs, doors, cables and air conditioning of the machine room. Some component replacement may be required late in the term. |
| 4F.02 | Hot Water System | X | | 8 Years | Heaters (2): \$15,000; Tanks (4): \$10,000; Mixing Valve: \$2,000; Miscellaneous: \$1,000 Total: \$28,500 | One heater was replaced in 2005, one in 2010. This is the 3rd round of replacements in the past 25 years. Holding tanks (500 gal.) installed in 2003 with new piping and controls to replace original single tank. Water quality will require frequent component replacement. |
| 4F.03 | Common Area HVAC | X | | 20 Years | Air Handling Unit: \$12,000; Motors (9): \$1,000. Component Replacement: Allow \$5,000 | Reznor system installed in 2003. Assume replacement of some components will likely be required middle to late term. |
| 4F.04 | Common Area Exhaust System | X | | 25 Years | Fan Assembly: Allow \$8,000 Each (Fan Motor: \$2,000) | Two ducted exhausts are located near the air handling unit and the generator. The motors have reportedly been replaced, but the fans are original. Assume both fan assemblies will require replacement mid-term. See 4C.03 for discussion of ducts and registers. |
| 4F.05 | Roof Ventilator Fans | X | | 20 Years | 6 Fans @ \$1,500 = \$9,000 | Five fans installed 1974 and at the end of their useful life. One fan replaced 2007. |
| 4F.06 | Roof Ventilator Fan Motors | | X | 10 Years | 6 Motors @ \$100 = \$600 | All motors replaced 2007. Additional replacements required during the term.. Assume funding from yearly operations budget. |
| 4F.07 | Emergency Generator | X | | 50 Years | | Generator should not need to be replaced over the term. |
| 5A OPERATIONS AND MAINTENANCE | | | | | | |
| 5A.01 | 2010 Repairs and Maintenance Budget | | X | N/A | 100,900 | Assume budget is adequate and will not materially change over the term, beyond current 2% yearly inflation increase. |
| 5A.01 | 2010 Expenses Budget | | X | N/A | Utilities: \$123,000; Operating Expenses: \$155,240; Administration: \$48,700; Total: \$326,940 | Assume budget is adequate and will not materially change over the term, beyond adjustment for inflation. |

V. PROJECT REFERENCE DOCUMENTATION

Facilities Evaluation -- 1105 Massachusetts Avenue, Cambridge

EXISTING CONDITIONS PHOTOGRAPHS:



Site Photograph



Entry Level Terrace Northwest



Entry Level Terrace Looking Northwest



Entry Level Terrace Looking Southeast



Entry Level Terrace Detail



Lower Level Terrace at Stair



Lower Level Terrace at Ramp Looking Northwest



Lower Level Terrace and Sidewalk



Lower Level Terrace Detail at Sidewalk Wall



Lower Level Terrace Detail at Drain



Lower Level Terrace Detail at Drain



Lower Level Terrace Detail



Lower Level Terrace Detail at Stair Support



Steps at Terrace Northwest End



Steps at Terrace Southeast End



Step Support at Terrace Southeast End



Ramp from Sidewalk to Lower Terrace



Ramp Base Detail



Fascia, Lighting and Signage at Stair



Lower Level Terrace Storefront and Soffit



Lower Level Terrace Soffit, Fascia, Lighting & Signage



Lower Level Soffit and Lighting Detail



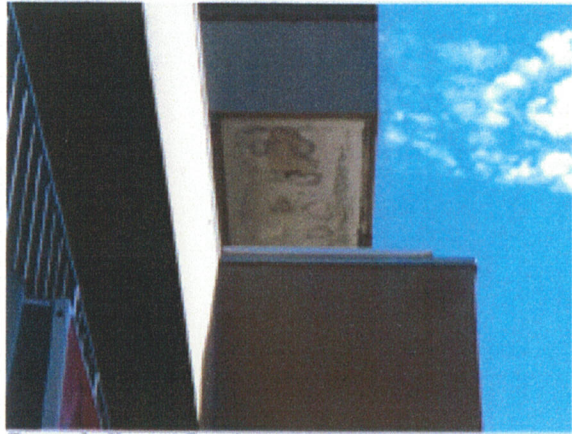
Upper Level Soffit and Lighting Detail



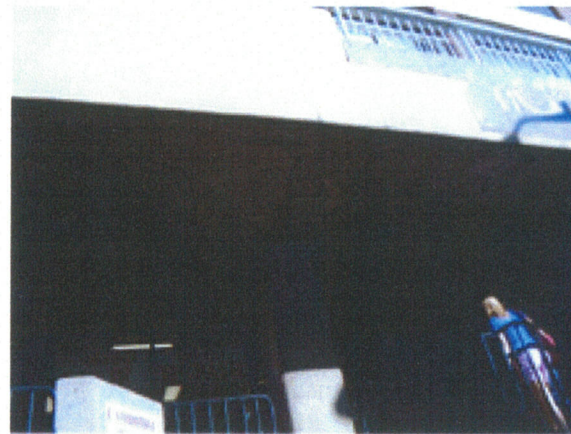
Upper Level Soffit and Signage Detail



Sidewalk Storefront Soffit and Fascia



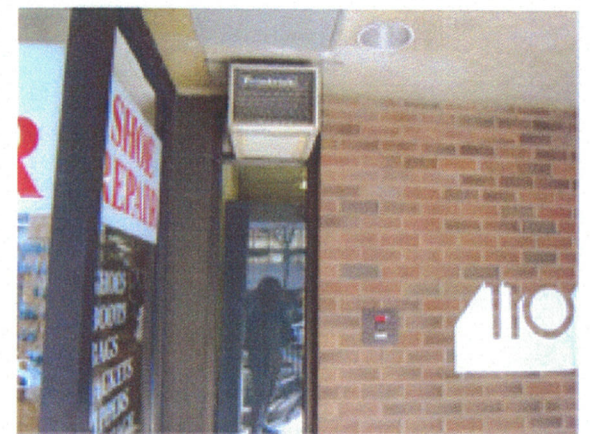
Tower Soffit and Fascias



Entry Soffit and Fascia



Lobby Entry Door



Lobby Entry Detail at Facility Manager's Office



Storefront Masonry Cladding, Soffits and Fascias



Tower Masonry Cladding, Fascias and Rails



Counterflashing at Masonry and Roof



Masonry Weep Detail at Counterflashing



Rooftop Equipment, Ballast, & Parapet Flashing



Rooftop Equipment at Mechanical Penthouse



Skylight Detail



Antennae at Mechanical Penthouse



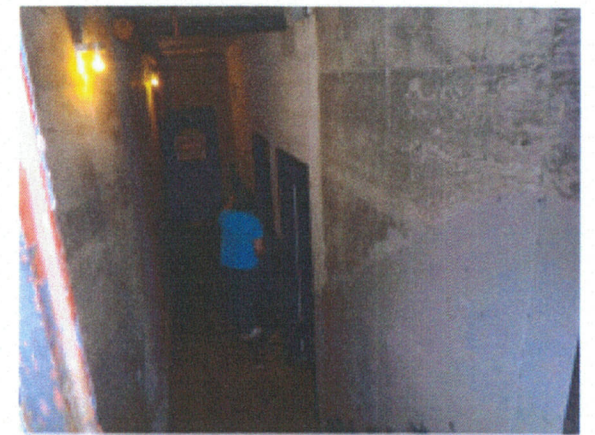
Garage Level Retail Access Hallway



Garage Level Store Room



Garage Overhead Door



Garage Level Passage to Electric Substation



Garage Level Bicycle Storage



Garage Level Grounds equipment Storage



Garage Exit Stair to Lobby



Garage Exit Door to Street



Garage Door Trench Drain and Pavement



Garage Sprinkler Lines and Lighting



Lobby Front Entrance



Lobby and Rear Door



Lobby Mailboxes and Desk



Typical Stair



Typical Hallway



Typical Hallway Hardware



Typical Hallway Doors



Hallway Ceiling with Smoke Detector



Typical Trash Room Interior



Typical Laundry Room



Typical Fire Hose Cabinet



Hallway Ceiling with HVAC Register and Light



Elevator Control Room



Elevator Motors and Switchgear



Common Area HVAC Unit



Generator



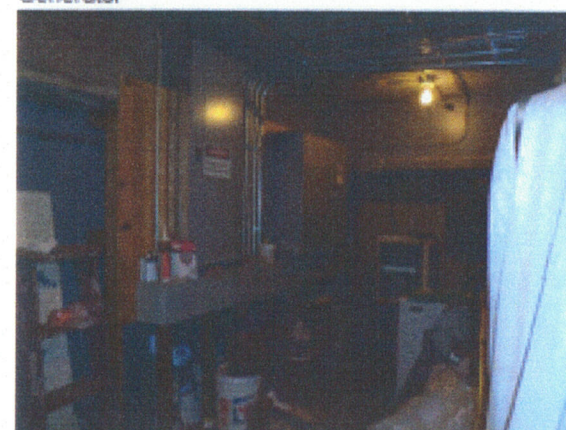
Hot Water Heaters



Water Storage Tanks



Utility Room Ventilator Fan



Emergency Power Panel



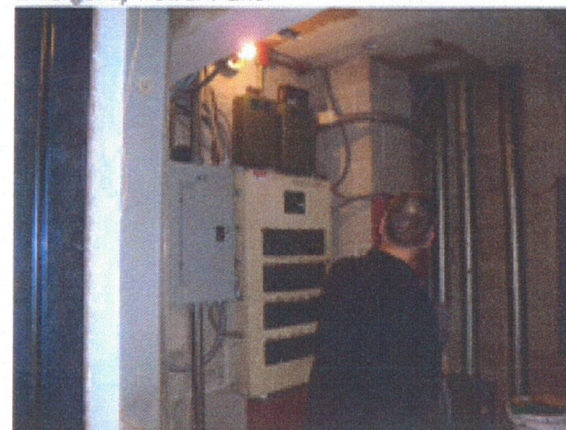
Fire Pump



Fire Pump Controller



Water Booster Pump Control



Main Circuit Panel



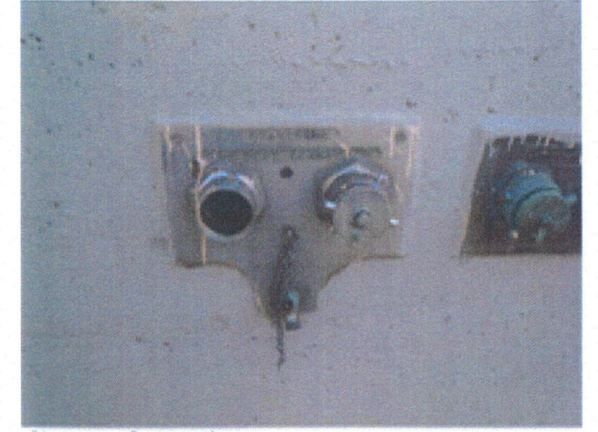
Electrical Substation



Substation Ceiling



Washroom



Siamese Connections



Meter Room Circuit Panels



Trash Compactor



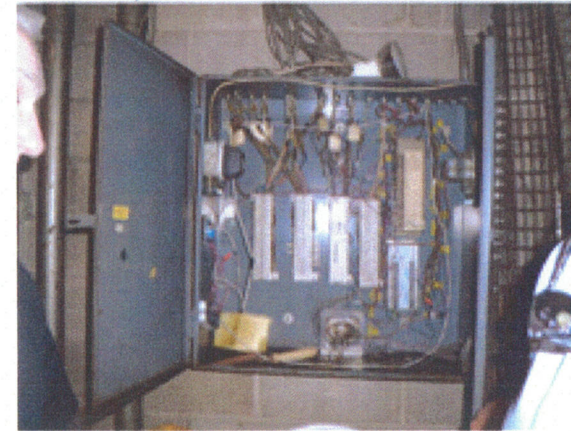
Emergency Power Battery Array



Sewage Ejector



Electrical Meters



Telephone Panel



Security System Panel

