

# FSILG Facilities Renewal

Community Meeting  
February 7, 2022



**Massachusetts Institute of Technology**  
**Association of Independent Living Groups**

# FSILG Facilities Renewal : Background

- **FSILG Facilities Renewal Committee** - Joint AILG/DSL committee approved as AILG ad-hoc committee in November 2018.
  - Committee Charge: To promote and support implementation of the physical renewal of the FSILGs to ensure they remain vital and vibrant resources to MIT students by implementing the the recommendations of the 2018 Facilities Assessments.
- **Our goal: To make it easy and affordable for organizations to make their houses safer for students.**
- Identified potential life-safety systems for community-wide projects (same model as Community Network Upgrade Program (CNUP))



## FSILG Facilities Renewal Committee

- Pam Gannon '84, Chair, Director of FSILG Alumni Programs, DSL, IRDF Grant Advisory Board
- Eric Cigan '83, AILG Treasurer
- Tom Stohlman '76, '77, MAR '78, AILG Facilities Committee Chair
- Bob Ferrara '67, AILG IT Committee Co-Chair, former Senior Director, DSL
- Scott Klemm, Executive Director, FSILG Cooperative, Inc. (FCI)
- Josh Schuler SM' '00, AILG Building Safety Facilitator, FCI Director of Facilities
- Brad Badgley, Associate Dean and Director of FSILGs, DSL
- David Friedrich, Sr. Associate Dean, Housing and Residential Services, DSL



**Massachusetts Institute of Technology**  
**Association of Independent Living Groups**

## FSILG Life-Safety Improvement Program (FLIP)

- Identified life-safety systems improvement opportunities common to all houses:
  - Phase 1: Doors and Egress
  - Phase 2: Fire alarm upgrades
  - Phase 3: Sprinkler system upgrades
- Program concept endorsed by AILG Board and IRDF Grant Advisory Board, and approved by the MIT Treasurer
- AILG hired consultant to complete detailed survey of each house and oversee Phase 1 program.

## Funding for FLIP Phase 1

- FLIP Phase 1 is a safety improvement program, so qualifies for support from the IRDF
- IRDF is covering 100% expense of project manager + surveys of each house
- IRDF is covering project cost at standard safety percentage: 75% IRDF, 25% house
  - > Houses will be invoiced after completion of work
- Improvements outside the scope of work or done independently may be considered for Minor Project Grants or Major Project Grants.



**Massachusetts Institute of Technology**  
**Association of Independent Living Groups**

# Review of Pilot Reports

Celeste Hynick, RA, LEED GA, MCPPO

Coast & Harbor Associates, Inc.

[www.coastandharbor.com](http://www.coastandharbor.com)



**Massachusetts Institute of Technology**  
**Association of Independent Living Groups**

# LIFE SAFETY RENOVATIONS

Phase I – Repair/Replace Egress Doors and Hardware



## Phase I – Repair/Replace Egress Doors and Hardware

### *Includes:*

- Entrances and exit doors
- Stair doors
- Hallway doors
- Doors to rooms where window egress is required

### *Does not include:*

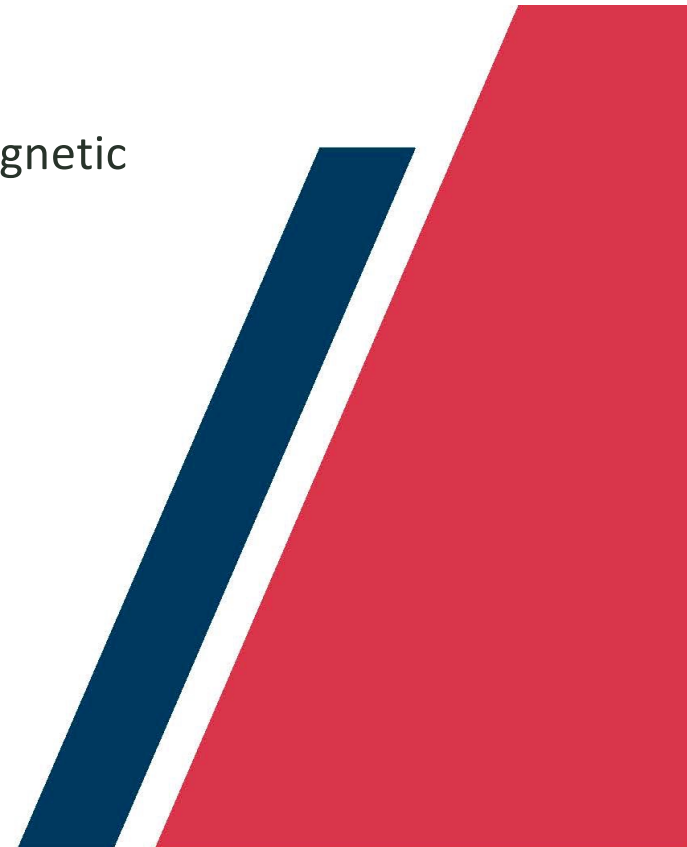
- Doors unrelated to egress
- Windows required for egress
- Pathways, stairs, and landings





## Looking at...

- Number of doors in each opening
- Door fire ratings
- Hardware types (handle, lock and lock type, deadbolt, magnetic hold, finish)
- Closer locations
- Accessibility compliance
- Door materials, trims, directions of swing, and conditions
- Threshold conditions (cracked, beveled, and height)



# Existing Conditions Survey

FSILG Facilities Renewal Committee

LIFE SAFETY RENOVATIONS

Phase I - Repair/Replace Egress Doors and Hardware

APPENDIX A: Existing Conditions Survey



| House | Door No. | No. Drs. | Door Type         | Room Name         | Rating        | Knob Type | Keyed | Lock Type   | Dead bolt | Mag. Hold | Closer | Accessible | Finish       | Swing                      | Trim  | Notes   |
|-------|----------|----------|-------------------|-------------------|---------------|-----------|-------|-------------|-----------|-----------|--------|------------|--------------|----------------------------|-------|---|
|       | 001a     | 1        | Wood - Solid Core | Hallway           | None          | Handle    | No    | None        | No        | No        | Closer | No         | Steel        | Impractical to Change      | Metal | replace handle with lever                                     |
|       | 001b     | 1        | Metal             | Boiler/Mechanical | A: 3 Hour     | Lever     | Yes   | None        | No        | No        | Closer | No         | Satin Nickel | In Direction of Travel     | Metal |   |
|       | 003      | 1        | Metal             | Storage           | None          | Lever     | No    | None        | No        | No        | None   | No         | Satin Nickel | In Direction of Travel     | Wood  | needs closer or reverse swing                                 |
|       | 004      | 1        | Metal             | Hallway           | B: 1 1/2 Hour | Lever     | No    | None        | No        | Yes       | Closer | No         | Satin Nickel | Not in Direction of Travel | Metal | in wrong direction but on holdback                            |
|       | 005 ext  | 1        | Metal             | Entrance/Exit     | None          | Lever     | Yes   | Push Button | No        | No        | Closer | No         | Satin Nickel | In Direction of Travel     | Metal | tighten lockset, patch holes, replace weatherstripping, paint |
|       | 006      | 1        | Metal             | Food Service      | B: 1 1/2 Hour | Lever     | No    | None        | No        | Yes       | Closer | No         | Satin Nickel | In Allowed Direction       | Metal |   |
|       | 008      | 1        | Wood - Solid Core | Bath              | None          | Knob      | Yes   | Turn Button | No        | No        | None   | No         | Brass        | In Allowed Direction       | Wood  | loose knob, needs closer                                      |



## What the codes say

Built in the 1800s as single-family houses, “grandfathered” with today’s code.

- As lawfully existing, non-conforming structures, do not need to meet today’s code requirements.
- Per IEBC, the residences *must be maintained, at a minimum, to their current level of compliance or improved to meet basic safety levels.*
- “Basic Safety Levels” arguably include remediation of issues that impede egress and safety to the extent feasible.
- Maintaining a facility to its “current level of compliance” implies that existing egress doors should maintain their level of fire resistance and safety.

## What do we do first?

### I – Most Urgent/Necessary

Issues with the egress doors and hardware that pose a threat to safety and security that should be addressed as soon as possible (i.e., within three months to a year).

### II – Less Urgent/Optional

Issues that pose a less significant threat to safety and security, which have less or no urgency.

### Most Urgent/Necessary

- Doors that do not close or open, are missing, or remain open in a direction that blocks egress travel
- Locks on egress doors (excluding sleeping rooms) or any inoperable locks on sleeping rooms
- Deadbolts on any door except sleeping rooms and closets
- Latches and hasps on any doors on the push side except closet doors
- Thresholds that a tripping hazard, such as those that are broken or not beveled
- Doors that have minor damage that impact fire resistance
- Missing closers
- Magnetic Holdback hardware where required
- Locks on doors to sleeping rooms that require repair or replacement
- Operable doors that require adjustment, repair, or replacement
- Operable doorknobs and levers that require tightening, adjusting, or replacement

### Less Urgent/Optional

- Grandfathered doors that do not swing in the direction of egress travel that can be reversed
- Magnetic Holdback hardware where desired but not required
- Cosmetic Improvements
- Minor threshold repairs



# Total Costs

## Costs

Refer to APPENDIX B: Prioritized Recommended Improvements with Costs for details on the improvement costs summarized by priority. The cost of the prioritized items:

|                                     |    |               |
|-------------------------------------|----|---------------|
| ■ Priority I: Most Urgent/Necessary | \$ | 14,906        |
| ■ Priority II: Less Urgent/Optional | \$ | 4,881         |
| Total Recommended Improvements      | \$ | <b>19,787</b> |
| Potential Cost                      | \$ | <b>4,947</b>  |

*Note: Costs may vary from this estimate due to inflation, supply issues, and/or further development of the scope of work at each door location.*



**Massachusetts Institute of Technology**  
**Association of Independent Living Groups**

## Moving forward

- Existing conditions allowed to remain so long as they are maintained, at a minimum, to their current level of compliance, not made less in compliance, or improved to meet basic safety levels.
- Improvements must meet current IBC code standards to the extent feasible





## Next Steps

Pilot houses: Beta Theta Pi, Sigma Kappa, Theta Chi

- Review reports with organizations
- Bid projects
- Complete work

Goal: Use pilot houses to develop process and identify potential issues



**Massachusetts Institute of Technology**  
**Association of Independent Living Groups**

# Sample: Review Process

|     |    |   |  |            |
|-----|----|---|--|------------|
| 100 | SA | magnetic hold recommended, reverse swing, on evacuation route | Hold will be difficult to install. Reverse swing only unless magnetic hold can be installed without architectural impact | DISCUSS/GO |
| 101 |    | loose knob, on evacuation route, add closer                   |  | GO         |
| 102 |    | add closer  |  | GO         |
| 105 |    | add closer  |  | GO         |
| 106 |    | add door, lever, closer                                       | Entrance already too narrow; adding door would make more difficult to navigate   | NO         |
| 200 | CA | remove doors - block egress, on evacuation route              | Architectural features   | NO         |
| 200 | SA | adjust door, on evacuation route                              | This is not storage, but a door to the back stairs; closes OK  | NO         |
| 201 |    | on evacuation route, add closer                               | Architectural features   | NO         |
| 203 |    | add closer  |  | GO         |
| 204 |    | remove lock, on evacuation route, add closer                  | Yes to closer; Discuss installation of electronic lock; Will also need update exit signage                               | GO         |
| 207 |    | patch hole in door  |  | GO         |
| 208 |    | add closer  |  | GO         |
| 300 | SA | adjust door, on evacuation route, add closer                  | Door already has closer -- remove cost from spreadsheet  | -          |
| 301 |    | remove lock, reverse swing, on evacuation route, add closer   | Yes to closer; Discuss installation of electronic lock; Will also need update exit signage                               | GO         |
| 304 |    | add closer, blocks egress when opened                         |  | GO         |
| 305 |    | add closer  |  | GO         |

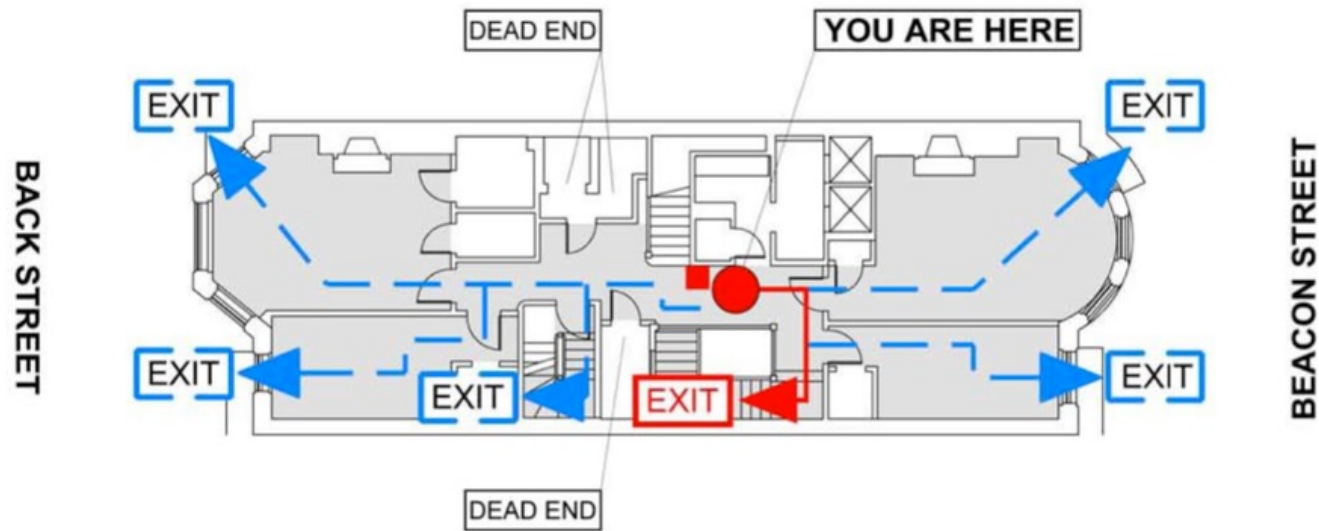


## Questions/Concerns

- Floor plans
- Altering historic details/architectural elements
- Door locks
- Door closers
- Holes in doors
- Removing doors; replacing doors
- Adding magnetic holdbacks (hold open)
- Adding electric lock connected to fire alarm (make open)
- Choices for hardware replacement and door replacement



# Special Situation: Door Locks



- Evacuation through locked sleeping rooms on the 3<sup>rd</sup>, 4<sup>th</sup>, and 5<sup>th</sup> floors poses the more significant and hardest issue to address.



What are your additional questions/concerns?



**Massachusetts Institute of Technology**  
**Association of Independent Living Groups**