Buildings 4-8-10

Façade renewal

Information Session | September 20, 2017
Agenda

- Introductions
  - MIT Campus Construction, project management team
  - Turner Construction
  - SGH (engineering firm)

- Scope of work

- Schedule goals

- Progress Photos

- Communications
  - Elevations

- Q&A
Updates:

- Ahead of Schedule on Window removal
- Project is about 40% complete!
- Planning ahead for 10-West
- Schedule compression for 10-West
Project Scope: Masonry and Window Repair

- Replace all windows in Buildings 4, 8, and 10 facing MIT.nano and President’s Courtyard
- Relocate Mechanical, Electrical and Plumbing (MEP) systems, required to remove/install windows
- Abate hazardous materials as required
- Repair damaged exterior masonry walls
- Rebuild building parapets
- Reconstruct stucco portion of Building 4 with brick
Facade restoration benefits

- Improve thermal performance of windows increasing comfort and energy efficiency
- Improved waterproofing
- Windows are operable
- No Screens
**Schedule goals**

**Step 1: Window measurement**
- Feb – April
- Complete

**Step 2: Scaffolding erection, window removal, masonry repair.**
- April – Nov
- 4, 8, 10 (facing Nano)
- 40%

**Step 3: Window replacement, masonry repair (cont.)**
- Nov – May
- 4, 8, 10 (facing Nano)

Note that dates are subject to change.

4-8-10 Façade renewal, update September 2017
STEP TWO (A)

Window Removal (Jun 2017 – Aug 2018)

Note that dates are subject to change
STEP TWO (B)

Masonry Repair (Jun 2017 – Nov 2018)

Noise will be impactful to occupants, however, not continuous.

- Building 4 stucco area structural steel and brick support Jul – Oct 2017
- Repair cracked and damaged brick
- Remove and rebuild brick parapet
- Repair and paint cast iron spandrels
- Replace steel lintels and relieving angles above window openings
- Construct structural frame and install new brick at stucco façade area
- Re-point entire brick façade
- Clean existing brick and stone masonry

Note that dates are subject to change
STEP TWO

Window Removal Procedure

Condition prior to commencing work

Prepared for work to start, items cleared

Occupants to remove sensitive equipment and personal belongings (computers, photos, books, and small appliances) prior to setting up interior protection for window removal.

• **Buildings 4 & 8**: will have protection installed that projects approximately 2-6 inches into the room from the interior wall surface

• **Building 10 east and west elevation**: will require temporary protection installed that projects approximately 8-10 feet into the room from the interior wall surface during this phase
Moves in Building 10

- As Window removal and structural support will require the construction team to occupy up to 10’ of space during the removal we will need to relocate the directly impacted occupants.

- East – Nano Facing
  - Relocations out of 10 start last week of May 2017
  - Move back starts August 2017 thru March 2018

- West – Presidents Court Yard Facing
  - Relocation out of 10 West starts April 2018
  - Move back starts around Fall 2018
What you can expect in 10-West:

- Complete relocation out of space into a swing space
- Temporary protection installed that projects approximately 8-10 feet into the room from the interior wall surface during this phase
- Windows will be removed, select interior walls will need to be demo’d in order to rebuild the piers between the windows
STEP THREE

Window Replacement (Nov 2017 – Nov 2018)

Note that dates are subject to change.
STEP THREE

Window Replacement Procedure

**Working area**
- Install new window
- Move personal Items

**Install window**
- Remove temporary plywood window insert
- Install plastic protection
- Patch, paint, install new millwork
- Install new window shade
Masonry façade staging schedule

• April 2017  Erect staging – NANO side
• June 2017-Nov 2018  Remove windows, repair masonry, replace windows
• May 2018  Remove staging – NANO side
• April 2018  Erect Staging – President Courtyard
• Nov 2018  Remove staging – President’s Courtyard side

Note that dates are subject to change

Staging: Building 8 Nano Courtyard
Scrim: Building 8/4 Nano Courtyard
Masonry Restoration (existing condition)
Masonry Restoration (typical condition)
Masonry Restoration
Masonry Restoration
Masonry Restoration
Masonry Restoration
Masonry Restoration
Masonry Restoration
Masonry restoration (Parapet)

Before

Demo'd

Rebuild underway
Masonry restoration (Parapet future conditions)
Court Yard – now
Court Yard – before and after

Before

After
Communications: keeping you in the loop

Our goal is to provide information about construction activities and their expected impacts (noise, vibration) to you in advance so you can plan your work and ask the team any questions.

- **Individual meetings**: with key contacts in offices to brief on scope of work, schedule, anticipated impacts.
- **Information sessions (like this one)** at major milestones.
- **Forecast emails**: projected activities and impacts, sent to key contacts.
- **Construction notifications**:
  - emailed to occupants in advance of work activity
  - Project Boards updated and posted by Café 4
  - Facilities’ Construction web page: [http://web.mit.edu/facilities/construction/updates.shtml#4-8-10](http://web.mit.edu/facilities/construction/updates.shtml#4-8-10)
    - Scope of Work Summary
    - Link to Flyer
    - **Link to Window Schedule**
    - Link to 2-week look ahead
Communications: Boards

Bldg 4

Bldg 10

Bldg 8

Bldg 8
4, 8, & 10 Window Removal and Replacement Schedule

*Planned construction dates are subject to change*
<table>
<thead>
<tr>
<th>Building 4 (BRICK SIDE)</th>
<th>30 days</th>
<th>Tue 12/8/17</th>
<th>Thu 12/25/17</th>
</tr>
</thead>
<tbody>
<tr>
<td>4th floor</td>
<td>10 days</td>
<td>Tue 12/18/17</td>
<td>Thu 12/26/17</td>
</tr>
<tr>
<td>3rd floor</td>
<td>5 days</td>
<td>Wed 12/27/17</td>
<td>Wed 1/3/18</td>
</tr>
<tr>
<td>2nd floor</td>
<td>5 days</td>
<td>Thu 1/4/18</td>
<td>Wed 1/10/18</td>
</tr>
<tr>
<td>1st floor</td>
<td>5 days</td>
<td>Thu 1/11/18</td>
<td>Thu 1/18/18</td>
</tr>
<tr>
<td>Basement / Floor 0</td>
<td>5 days</td>
<td>Fri 1/19/18</td>
<td>Thu 1/25/18</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Building 4 (STUCCO)</th>
<th>25 days</th>
<th>Fri 1/19/18</th>
<th>Thu 2/22/18</th>
</tr>
</thead>
<tbody>
<tr>
<td>4th floor</td>
<td>5 days</td>
<td>Fri 1/19/18</td>
<td>Thu 1/25/18</td>
</tr>
<tr>
<td>3rd floor</td>
<td>5 days</td>
<td>Fri 1/26/18</td>
<td>Thu 2/1/18</td>
</tr>
<tr>
<td>2nd floor</td>
<td>5 days</td>
<td>Fri 2/2/18</td>
<td>Thu 2/8/18</td>
</tr>
<tr>
<td>1st floor</td>
<td>5 days</td>
<td>Fri 2/9/18</td>
<td>Thu 2/15/18</td>
</tr>
<tr>
<td>Basement / Floor 0</td>
<td>5 days</td>
<td>Fri 2/16/18</td>
<td>Thu 2/22/18</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Building 10 WEST</th>
<th>48 days</th>
<th>Wed 6/22/18</th>
<th>Tue 10/30/18</th>
</tr>
</thead>
<tbody>
<tr>
<td>4th floor</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3rd floor</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2nd floor</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1st floor</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basement / Floor 0</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**10 West: Working to finalize an compressed schedule
Removal: April to Aug 2018**

*Planned construction dates are subject to change; the construction team will reach out if/when we are running ahead or behind schedule*
Building 8 NORTH
Construction/Window Schedule

Windows Removal Schedule:
- Material Science & Engineering
  - Wednesday, May 31st 2017 to Thursday, June 1st 2017
- Material Science & Engineering
  - Friday, June 15th 2017 to Thursday, June 22nd 2017
- Material Science & Engineering
  - Monday, July 10th 2017 to Friday, July 14th 2017
- Material Science & Engineering
  - Monday, June 12th 2017 to Wednesday, August 16th 2017

Windows Installation Schedule:
- Friday, February 9th 2018 to Thursday, February 15th 2018
- Friday, February 16th 2018 to Thursday, February 22nd 2018
- Friday, March 2nd 2018 to Thursday, March 8th 2018
- Friday, March 9th 2018 to Thursday, March 15th 2018

Building 8 WEST
Construction/Window Schedule

Windows Removal Schedule:
- Material Science & Engineering
  - Wednesday, May 31st 2017 to Thursday, June 1st 2017
- Material Science & Engineering
  - Friday, June 15th 2017 to Thursday, June 22nd 2017
- Material Science & Engineering
  - Monday, July 10th 2017 to Friday, July 14th 2017
- Material Science & Engineering
  - Monday, June 12th 2017 to Wednesday, August 16th 2017

Windows Installation Schedule:
- Friday, February 9th 2018 to Thursday, February 15th 2018
- Friday, February 16th 2018 to Thursday, February 22nd 2018
- Friday, March 2nd 2018 to Thursday, March 8th 2018
- Friday, March 9th 2018 to Thursday, March 15th 2018

*PIanned construction dates are subject to change*
32 | 4-8-10 Façade renewal, update September 2017
Building 4 NORTH
Construction/Window Schedule

Stucco Section
Window Removal/Install

Material Science & Engineering
REMOVAL:
08/17/17 to 08/26/17
INSTALL:
01/19/18 to 01/25/18

Physics
REMOVAL:
08/21/17 to 08/29/17
INSTALL:
01/26/18 to 01/31/18

MS&E and MTA
REMOVAL:
09/28/17 to 09/30/17
INSTALL:
02/05/18 to 02/08/18

MS&E, Cafe, and OME
REMOVAL:
08/28/17 to 08/31/17
INSTALL:
02/09/18 to 02/15/18

Audio/Visual Services
REMOVAL:
09/19/17 to 10/02/17
INSTALL:
02/16/18 to 02/22/18

Brick Section
Window Removal/Install

Edgeron Center
REMOVAL:
06/20/17 to 07/14/17
INSTALL:
11/27/17 to 01/03/18

Physics
REMOVAL:
06/29/17 to 06/30/17
INSTALL:
11/26/17 to 12/16/17

MS&E and EVF
REMOVAL:
07/10/17 to 07/14/17
INSTALL:
03/01/18 to 03/10/18

CME and Provost
REMOVAL:
07/24/17 to 07/28/17
INSTALL:
03/11/18 to 03/16/18

Audio/Visual Services
REMOVAL:
07/21/17 to 08/11/17
INSTALL:
03/19/18 to 03/25/18

*Planned construction dates are subject to change
Building 10 East (Nano) Construction/Window Schedule

**WINDOW REMOVAL SCHEDULE**
- Wednesday, June 7th 2017 to Thursday, August 24th 2017
- Tuesday, June 20th 2017 to Tuesday, September 5th 2017
- Monday, June 19th 2017 to Tuesday, September 5th 2017
- Thursday, June 22nd 2017 to Tuesday, September 5th 2017

**WINDOW INSTALL SCHEDULE**
- Friday, December 22nd 2017 to Friday, January 29th 2018
- Tuesday, November 28th 2017 to Monday, January 29th 2018
- Tuesday, November 28th 2017 to Monday, January 29th 2018
- Tuesday, November 28th 2017 to Monday, January 29th 2018

35 | 4-8-10 Façade renewal, update September 2017
10 West: Working to finalize an compressed schedule
Removal: April to Aug 2018

Install: Aug to Oct 2018

*Planned construction dates are subject to change.
Contacts

Construction questions:

- Gerhard Sinani (sinanig@mit.edu, 617-233-1413)
  PRIMARY CONTACT

Space questions:

- John Dunbar (dunbar@mit.edu, 617-253-4014)

Team includes:

- Brian Healy (healyb@mit.edu, 617-258-8565)
- Daina Allison (dainaa@mit.edu, 857-500-2429)
- Sarah MacDonald (smacd@mit.edu, 857-320-7009)
Questions & answers