



**CITY OF NEWTON, MASSACHUSETTS**  
**PUBLIC BUILDINGS DEPARTMENT**  
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November 18, 2020

Re: School HVAC Project Update

As previously reported, Newton Public Schools spent the summer making sure the HVAC systems in the school buildings were all operable, clean, and functional. At the request of the superintendent in September, the City of Newton Public Buildings Department was asked to help Newton Public Schools perform a targeted and aggressive service and maintenance initiative of all ventilation equipment throughout the district with a focus on maximizing air flow and fresh air introduction capacity. Our current estimate to complete this project is \$2,000,000. As of this update, invoiced costs are \$1,886,328.00.

**Over the past two weeks**, the City of Newton and Newton Public Schools have completed the following steps to address the ventilation systems in our school facilities:

1. Completed the service and maintenance of ventilation equipment at all School facilities.
2. Substantially completed the repairs found during servicing and maintenance of the ventilation equipment.
3. Substantially completed the service and maintenance of all exhaust fans in the district.
4. Substantially completed the engineering analysis and walk-through phase.
5. Initial Air Flow Testing and Balancing Phase was completed at: Countryside, Bowen, Memorial Spaulding, Ward, Peirce, Zervas, Burr, Cabot, Horace Mann, Franklin, Lincoln-Eliot, NECP, Mason Rice, Underwood, Williams, and Brown.

**Over the two next weeks**, the following will occur:

1. CA Crowley will complete the testing and balancing plans for the middle and high schools.
2. Air testing and Balancing firms will finish their work at Brown, Franklin and NECP. They will be starting their work at Angier, Oak Hill, Bigelow, FA Day, Ed Center, North High and South High.
3. Air testing and balancing reports will be submitted to CA Crowley by the air flow testing and balancing firms.
4. Contractors will complete any remedial work identified by the testing and balancing firms.
5. Retesting by the testing and balancing firms will be scheduled to confirm any remedial work has the intended impact.
6. Air flow testing and balancing reports and dashboards will be generated and posted to the NPS project website.

Under the direction of Crowley Engineering the air flow testing and balancing firms will confirm air flow rates and fresh air introduction are in line with applicable codes, and these reports will be made public as they become available. Contractors have been documenting all work performed in detail, with the aid of a 62-point unit ventilator service and maintenance checklist. All data will also be made available as it comes in. To complete this work, every school in the district has an assigned City and/or School project manager, and we are in direct contact with the principals and custodians. As the existing conditions reports from Crowley Engineering become available, these will also be made public and will be a valuable resource now and in the future.

Below is the latest schedule from Crowley Engineering for their existing conditions site visits, analysis, and reports which will be completed over the next several weeks. Their schedule shows the project schedule for the air flow testing and balancing firms. This work will also occur 7 days per week. Additionally, timelines for the required repairs to the ventilation equipment has been shown on the schedule as well.

# Revised Project Schedule

## City of Newton - School Ventilation Improvements

November 18, 2020

| School                               | Oct 1-2 | Oct 5-9 | Oct 12-16 | Oct 19-23 | Oct 26-30 | Nov 2-6 | Nov 9-13 | Nov 16-20 | Nov 23-27 | Nov 30-Dec 4 | Dec 7-11 |
|--------------------------------------|---------|---------|-----------|-----------|-----------|---------|----------|-----------|-----------|--------------|----------|
| <b>Angier School</b>                 |         |         |           |           |           |         |          |           |           |              |          |
| Engineer's Evaluation                |         |         |           |           |           |         |          |           |           |              |          |
| Testing & Balancing                  |         |         |           |           |           |         |          |           |           |              |          |
| Corrective Work (if required)        |         |         |           |           |           |         |          |           |           |              |          |
| N/A                                  |         |         |           |           |           |         |          |           |           |              |          |
| <b>Bowen School</b>                  |         |         |           |           |           |         |          |           |           |              |          |
| Engineer's Evaluation                |         |         |           |           |           |         |          |           |           |              |          |
| Testing & Balancing                  |         |         |           |           |           |         |          |           |           |              |          |
| Corrective Work (if required)        |         |         |           |           |           |         |          |           |           |              |          |
| <b>Burr School</b>                   |         |         |           |           |           |         |          |           |           |              |          |
| Engineer's Evaluation                |         |         |           |           |           |         |          |           |           |              |          |
| Testing & Balancing                  |         |         |           |           |           |         |          |           |           |              |          |
| Corrective Work (if required)        |         |         |           |           |           |         |          |           |           |              |          |
| <b>Cabot School</b>                  |         |         |           |           |           |         |          |           |           |              |          |
| Engineer's Evaluation                |         |         |           |           |           |         |          |           |           |              |          |
| Testing & Balancing                  |         |         |           |           |           |         |          |           |           |              |          |
| Corrective Work (if required)        |         |         |           |           |           |         |          |           |           |              |          |
| N/A                                  |         |         |           |           |           |         |          |           |           |              |          |
| <b>Horace Mann School (aka Carr)</b> |         |         |           |           |           |         |          |           |           |              |          |
| Engineer's Evaluation                |         |         |           |           |           |         |          |           |           |              |          |
| Testing & Balancing                  |         |         |           |           |           |         |          |           |           |              |          |
| Corrective Work (if required)        |         |         |           |           |           |         |          |           |           |              |          |
| <b>Countryside School</b>            |         |         |           |           |           |         |          |           |           |              |          |
| Engineer's Evaluation                |         |         |           |           |           |         |          |           |           |              |          |
| Testing & Balancing                  |         |         |           |           |           |         |          |           |           |              |          |
| Corrective Work (if required)        |         |         |           |           |           |         |          |           |           |              |          |
| <b>Franklin School</b>               |         |         |           |           |           |         |          |           |           |              |          |
| Engineer's Evaluation                |         |         |           |           |           |         |          |           |           |              |          |
| Testing & Balancing                  |         |         |           |           |           |         |          |           |           |              |          |
| Corrective Work (if required)        |         |         |           |           |           |         |          |           |           |              |          |
| <b>Lincoln-Eliot School</b>          |         |         |           |           |           |         |          |           |           |              |          |
| Engineer's Evaluation                |         |         |           |           |           |         |          |           |           |              |          |
| Testing & Balancing                  |         |         |           |           |           |         |          |           |           |              |          |
| Corrective Work (if required)        |         |         |           |           |           |         |          |           |           |              |          |
| <b>NECP</b>                          |         |         |           |           |           |         |          |           |           |              |          |
| Engineer's Evaluation                |         |         |           |           |           |         |          |           |           |              |          |
| Testing & Balancing                  |         |         |           |           |           |         |          |           |           |              |          |
| Corrective Work (if required)        |         |         |           |           |           |         |          |           |           |              |          |
| <b>Pierce School</b>                 |         |         |           |           |           |         |          |           |           |              |          |
| Engineer's Evaluation                |         |         |           |           |           |         |          |           |           |              |          |
| Testing & Balancing                  |         |         |           |           |           |         |          |           |           |              |          |
| Corrective Work (if required)        |         |         |           |           |           |         |          |           |           |              |          |
| <b>Memorial Spaulding School</b>     |         |         |           |           |           |         |          |           |           |              |          |
| Engineer's Evaluation                |         |         |           |           |           |         |          |           |           |              |          |
| Testing & Balancing                  |         |         |           |           |           |         |          |           |           |              |          |
| Corrective Work (if required)        |         |         |           |           |           |         |          |           |           |              |          |
| <b>Mason Rice School</b>             |         |         |           |           |           |         |          |           |           |              |          |
| Engineer's Evaluation                |         |         |           |           |           |         |          |           |           |              |          |
| Testing & Balancing                  |         |         |           |           |           |         |          |           |           |              |          |
| Corrective Work (if required)        |         |         |           |           |           |         |          |           |           |              |          |
| <b>Underwood School</b>              |         |         |           |           |           |         |          |           |           |              |          |
| Engineer's Evaluation                |         |         |           |           |           |         |          |           |           |              |          |
| Testing & Balancing                  |         |         |           |           |           |         |          |           |           |              |          |
| Corrective Work (if required)        |         |         |           |           |           |         |          |           |           |              |          |
| <b>Ward School</b>                   |         |         |           |           |           |         |          |           |           |              |          |
| Engineer's Evaluation                |         |         |           |           |           |         |          |           |           |              |          |
| Testing & Balancing                  |         |         |           |           |           |         |          |           |           |              |          |
| Corrective Work (if required)        |         |         |           |           |           |         |          |           |           |              |          |
| <b>Williams School</b>               |         |         |           |           |           |         |          |           |           |              |          |
| Engineer's Evaluation                |         |         |           |           |           |         |          |           |           |              |          |
| Testing & Balancing                  |         |         |           |           |           |         |          |           |           |              |          |
| Corrective Work (if required)        |         |         |           |           |           |         |          |           |           |              |          |
| <b>Zervas School</b>                 |         |         |           |           |           |         |          |           |           |              |          |
| Engineer's Evaluation                |         |         |           |           |           |         |          |           |           |              |          |
| Testing & Balancing                  |         |         |           |           |           |         |          |           |           |              |          |
| Corrective Work (if required)        |         |         |           |           |           |         |          |           |           |              |          |
| N/A                                  |         |         |           |           |           |         |          |           |           |              |          |
| <b>Bigelow Middle School</b>         |         |         |           |           |           |         |          |           |           |              |          |
| Engineer's Evaluation                |         |         |           |           |           |         |          |           |           |              |          |
| Testing & Balancing                  |         |         |           |           |           |         |          |           |           |              |          |
| Corrective Work (if required)        |         |         |           |           |           |         |          |           |           |              |          |
| <b>Brown Middle School</b>           |         |         |           |           |           |         |          |           |           |              |          |
| Engineer's Evaluation                |         |         |           |           |           |         |          |           |           |              |          |
| Testing & Balancing                  |         |         |           |           |           |         |          |           |           |              |          |
| Corrective Work (if required)        |         |         |           |           |           |         |          |           |           |              |          |
| <b>Day Middle School</b>             |         |         |           |           |           |         |          |           |           |              |          |
| Engineer's Evaluation                |         |         |           |           |           |         |          |           |           |              |          |
| Testing & Balancing                  |         |         |           |           |           |         |          |           |           |              |          |
| Corrective Work (if required)        |         |         |           |           |           |         |          |           |           |              |          |
| <b>Oak Hill Middle School</b>        |         |         |           |           |           |         |          |           |           |              |          |
| Engineer's Evaluation                |         |         |           |           |           |         |          |           |           |              |          |
| Testing & Balancing                  |         |         |           |           |           |         |          |           |           |              |          |
| Corrective Work (if required)        |         |         |           |           |           |         |          |           |           |              |          |
| <b>Education Center</b>              |         |         |           |           |           |         |          |           |           |              |          |
| Engineer's Evaluation                |         |         |           |           |           |         |          |           |           |              |          |
| Testing & Balancing                  |         |         |           |           |           |         |          |           |           |              |          |
| Corrective Work (if required)        |         |         |           |           |           |         |          |           |           |              |          |
| <b>Newton North High School</b>      |         |         |           |           |           |         |          |           |           |              |          |
| Engineer's Evaluation                |         |         |           |           |           |         |          |           |           |              |          |
| Testing & Balancing                  |         |         |           |           |           |         |          |           |           |              |          |
| Corrective Work (if required)        |         |         |           |           |           |         |          |           |           |              |          |
| N/A                                  |         |         |           |           |           |         |          |           |           |              |          |
| <b>Newton South High School</b>      |         |         |           |           |           |         |          |           |           |              |          |
| Engineer's Evaluation                |         |         |           |           |           |         |          |           |           |              |          |
| Testing & Balancing                  |         |         |           |           |           |         |          |           |           |              |          |
| Corrective Work (if required)        |         |         |           |           |           |         |          |           |           |              |          |
|                                      | Oct 1-2 | Oct 5-9 | Oct 12-16 | Oct 19-23 | Oct 26-30 | Nov 2-6 | Nov 9-13 | Nov 16-20 | Nov 23-27 | Nov 30-Dec 4 |          |

The above efforts have been a coordinated effort of over a thousand City, School, and contractual employees. In addition to the efforts of Crowley Engineering, the following contractors have been working Sunday – Saturday, 12-16 hours a day in some cases, for the past six weeks to complete this initiative:

**HVAC Contractors**

- Associated Mechanical Services
- Cox Engineering Service Co.
- Fraser Engineering
- General Air Conditioning & Heating, Inc.
- Harold Brothers
- Mighty Duct
- NB Kenney Company
- Boston Mechanical Services
- Patrick J. Kennedy & Sons Inc
- Bay State Air
- Corporate Mechanical
- Enterprise Equipment
- R.P. O’Connell, Inc

Our Air Testing and Balancing firms are in the final stages of their initial testing work now that the HVAC contractors have completed their service and maintenance and begun repairs on the equipment.

**Air Flow Testing and Balancing Firms**

E.L. Barret  
Tekon Technical Consultants  
Leonhardt  
ATAB  
Thomas Young  
THB Company  
Precision Testing and Air Balancing  
Balancing Technologies

Our efforts thus far have shown promising and noticeable results, and we look forward to having Crowley Engineering and the independent air testing and balancing firms confirm the success of this project.

Additional information can be found at <https://www.newton.k12.ma.us/Page/3731> where we have now posted thousands of pages of service and maintenance data showing our work to date throughout the district.

Again, we would like to thank the principals, teachers, and custodians as they have all been extremely supportive and accommodating of our efforts.

Sincerely,



Josh Morse  
Public Buildings Commissioner