



Corrective Action Plan

Newton, NH Fire Station

October 23, 2018

This corrective action plan is developed in conjunction with all stakeholders involved in the construction of the new Newton, NH Fire Station. During the final phases of construction of the facility, it was noted that some of the building elements need modifications to comply with applicable codes and standards adopted by the State of New Hampshire as well as the Americans with Disabilities Act construction standards.

In September of 2018, SFC Engineering Partnership was retained by the Town of Newton to assist in the preparation of this document as well as general code consulting during the final construction activities. This plan was developed based on the October 18, 2018 inspection by Ron Lemere of the Newton, NH Building Inspection Office. Refer to inspection report for details of each item. A copy of the inspection report is attached to this corrective action plan.

With the acceptance of this corrective action plan, the facility will be permitted to be used by the Newton Fire Department while work is completed. Additionally, the users of the building will need to make temporary accommodations for accessibility items that are not yet completed. This plan is not intended to provide the detailed designs of the solutions. The building design team will provide additional design documentation as needed to complete the tasks listed.

Work to be completed prior to operation on Thursday October 25, 2018.

1. Installation of drinking fountain for standing persons.
2. Provide start-up reports for HTP boiler and Modine heaters.
3. Modify hot water system to have a maximum water temperature of 110 degrees Fahrenheit.
4. Complete exterior paving.
5. Correct installation of HTP boiler relief valve.
6. Line parking lot to provide accessible parking and access aisle areas. (week of 10/21/18)
7. Fix windows in closed position in training room and conference room.
8. Modify discharge from water softener to terminate at an approved location.

Work to be completed prior to November 30, 2018.

9. Provide documentation that the PVC piping used for flues is approved.
10. Installation of accessible mirror in men's locker room. (bottom of reflecting surface will be a maximum of 4 inches above the floor.
11. Installation of urinal partition mounted to meet the minimum/maximum height requirement of not more than 12 inches from the floor and 60 inches minimum above the floor surface.
12. Installation of accessible signage at men's locker room.
13. Replacement of women's locker room floor drain with approved floor drain.
14. Installation of accessible signage at women's locker room.
15. Installation of accessible signage at public restroom.
16. Provide balancing report for mechanical room air handler.
17. Replacement of men's locker room floor drain with approved floor drain.
18. Installation of accessible sink in kitchen. Kitchen will not be used until all kitchen modifications are complete.
19. Installation of accessible kitchen work surface adjacent to oven. Kitchen will not be used until all kitchen modifications are complete.
20. Installation of accessible range and cooktop. Kitchen will not be used until all kitchen modifications are complete.
21. Installation of accessible refrigerator/freezer. Kitchen will not be used until all kitchen modifications are complete.
22. Installation of accessible locker in men's locker room.
23. Replacement of men's locker room shower floor with accessible assembly. New floor to be custom tile assembly.
24. Correction of men's shower grab bars to meet accessibility requirements.
25. Installation of hand shower and control in men's locker room shower.
26. Replacement of women's locker room shower floor with accessible assembly. New floor to be custom tile assembly. Correction of women's shower grab bars to meet accessibility requirements.
27. Installation of hand shower and control in women's locker room shower.
28. Modification of women's lavatory to achieve minimum clearances.
29. Installation of accessible locker in women's locker room.
30. Modification of public restroom lavatory to achieve minimum clearances.

31. Modification of public restroom water closet to achieve minimum clearances.
32. Verification of eye wash station water supply.
33. Modification to turnout gear extractor to include pump up drain.
34. Modify discharge from mechanical room air handler condensate line to terminate at an approved location.
35. Install insulation on HTP boiler hydronic piping in mechanical room.
36. Installation of neutralizer for HTP boiler condensate disposal and terminate at an approved location.
37. Provide water test report to verify potable water is present in the building.
38. Modify service counter/window at building entry to achieve accessibility compliance.
39. Provide a power door opener at building main entrance.
40. Acceptance of fire alarm system.

Work completed by August 31, 2019.

41. Installation of NFPA 13 compliant fire suppression system in the entire facility.
42. Installation of emergency generator for EOC. Until installed, the EOC will remain in its current location.


This corrective action plan has been prepared by Jeffrey M Murphy, PE of SFC Engineering Partnership, Inc and is, to the best of my ability, complete and accurate. Upon acceptable completion of all items identified, the building will be complete and code compliant.



Jeffrey M Murphy, PE


Principal Engineer

Acceptance of corrective action plan


Signature
LISA L. GONYER


Newton Board of Selectman

Name


Signature
RONALD LEMERE


Newton Building Department

Name


Signature
MICHAEL DIOREO

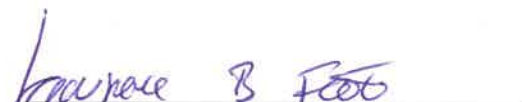
Construction Manager

Name


Signature
JOHN ALARID

Newton Fire Department

Name


Signature
LAWRENCE B. FOTT

Newton Emergency
Management

Name

Town of Newton
Department of Building Safety
Ronald LeMere
Chief Building Inspector

Building Department Compliance Report: 3

Newton Fire Station

8 Merrimac Road

Newton N.H.

012-006-011

Dated October 18, 2018

Electronically submitted

Plumbing Systems and Related Plumbing and appliance Accessibility Elements:

The following is a list of **violations or conditions** that were observed on October 18, 2018.

- 1. Drinking Fountain:** In Violation of the 2009 IBC Section 1109.5 Drinking Fountains. And the ICC ANSI A117.1-2003 Section 602. One drinking fountain shall comply for people who use a wheel chair and one for standing persons. (Unit installed but not placed into operation)
- 2. Kitchen Sink:** In Violation of the 2009 IBC Section 1109.4 Kitchens and Kitchenettes. And the ICC ANSI A117.1-2003 Section 606 as it pertains to forward approach, height, reach, exposed pipes and operable parts. Where kitchens are provided in assessable spaces, they shall be accessible. (Kitchen sink and counters removed, installation not complete)
- 3. Kitchen Work Counter:** In violation of the 2009 IBC Section 1101.2 Design. And the ICC ANSI A117.1-2003 Section 804.3 Work Surface and Section 902.3 Height. Tops of work surfaces shall be 28 inches Minimum and 34 inches Maximum. (Kitchen counters removed, installation not complete)
- 4. Range and Cooktop:** Confirm that the gas range is in compliance with the ICC ANSI A117.1-2003 Section 804.6.4 as it pertains to approach and control location. (Appliance not installed)

5. **Bottom Hinged Door Ovens:** Confirm that the required work surface is in compliance with the ICC ANSI A117.1-2003 Section 804.6.5.2 as it pertains work surfaces.
(Appliance not installed)
6. **Refrigerator/Freezer:** Confirm that the refrigerator/freezer is in compliance with the ICC ANSI A117.1-2003 Section 804.6.6 as it pertains to accessible freezer compartment shelves.
7. (Appliance not installed)
8. **Men's Room Mirror:** In violation of the 2009 IBC Section 1101.2 Design. And the ICC ANSI A117.1-2003 Section 603.3. The reflecting surface is mounted above the 40 inch maximum above the floor.
(Installed at 41 inches to reflecting surface)
9. **Men's Room Urinal Partitions:** In violation of the 2009 IPC Section 310.5 Urinal Partitions. The urinal partition is not mounted to meet the minimum/maximum height requirement of not more than 12 inches from the floor and 60 inches minimum above the floor surface.
(Not Corrected still at 12 and 53.5)
10. **Men's Room Locker Handle:** Confirm that the operable part (latch closure) meets the requirements of the ICC ANSI A117.1-2003 Section 309.4 as it pertains to being operable with one hand without grasping, pinching or twisting of the wrist.
(Not corrected)
11. **Men's room floor drain:** In Violation of the 2009 IPC Section 412 Floor drains and Trench Drains. The shower drain that was installed in lieu of an approved floor drain, shall be replaced with the approved drain.
(Not corrected)
12. **Men's Room Shower Stall:** In violation of the 2009 IBC Section 1101.2 Design. And the ICC ANSI A117.1-2003 Section 608.7 Thresholds. The shower stall threshold is 4 inches in height where ½ inch maximum in height is required for transfer type showers.
(Shower base removed. New shower base to be installed per the requirements of Section 417.5 of the 2009 International Plumbing Code.) The lining system is required to be inspected and tested per section 312.9 Shower Liner Test, prior to placing tile.
13. **Men's Room Shower Grab Bars:** In violation of the 2009 IBC Section 1101.2 Design. And the ICC ANSI A117.1-2003 Section 608.3 Grab Bars. The required horizontal grab bars are not installed per Section 608.3.1.1 and the vertical grab bar is installed in the wrong location and shall be corrected to meet the requirements of Section 608.3.1.2.
(Not corrected)

14. **Men's Room Shower Control Valve:** In violation of the 2009 IBC Section 1101.2 Design. And the ICC ANSI A117.1-2003 Section 608.5.1 Transfer type showers and 608.6 Hand showers. The additionally required control and hand shower is not installed. The additional hand shower and control is required to be installed.
(Not corrected)
15. **Mems Room Signage:** Required accessible elements shall be identified by the International Symbol of Accessibility per the 2009 IBC Section 1110 and the ICC ANSI A117.1-2003 Chapter 7.
(Not installed)
16. **Women's Room floor drain:** In Violation of the 2009 IPC Section 412 Floor drains and Trench Drains. The shower drain that was installed in lieu of an approved floor drain, shall be replaced with the approved drain.
(Not corrected)
17. **Women's Room Shower Stall:** In violation of the 2009 IBC Section 1101.2 Design. And the ICC ANSI A117.1-2003 Section 608.7 Thresholds. The shower stall threshold is 4 inches in height where ½ inch maximum in height is required for transfer type showers.
(Shower base removed. New shower base to be installed per the requirements of Section 417.5 of the 2009 International Plumbing Code.) The lining system is required to be inspected and tested per section 312.9 Shower Liner Test, prior to placing tile.
18. **Women's Room Shower Grab Bars:** In violation of the 2009 IBC Section 1101.2 Design. And the ICC ANSI A117.1-2003 Section 608.3 Grab Bars. The required horizontal grab bars are not installed per Section 608.3.1.1 and the vertical grab bar is installed in the wrong location and shall be corrected to meet the requirements of Section 608.3.1.2.
(Not corrected)
19. **Women's Room Shower Control Valve:** In violation of the 2009 IBC Section 1101.2 Design. And the ICC ANSI A117.1-2003 Section 608.5.1 Transfer type showers and 608.6 Hand showers. The additionally required control and hand shower is not installed. The additional hand shower and control is required to be installed.
(Not Corrected)
20. **Women's Room Lavatory Location:** In violation of the 2009 IBC Section 1101.2 Design. And the ICC ANSI A117.1-2003 Section 604.3.1 Size. A clearance around a water closet 60 inches minimum, measured perpendicular from the side wall shall be provided. The clearance provided is 58 inches and is obstructed by the lavatory in violation of 604.3.2 overlap.
(Not corrected)

21. **Women's Room Locker Handle:** *Confirm that the operable part (latch closure) meets the requirements of the ICC ANSI A117.1-2003 Section 309.4 as it pertains to being operable with one hand without grasping, pinching or twisting of the wrist.*

(Not corrected)

22. **Women's Room Signage:** *Required accessible elements shall be identified by the International Symbol of Accessibility per the 2009 IBC Section 1110 and the ICC ANSI A117.1-2003 Chapter 7.*

(Not installed)

23. **Public Rest Room Water Closet Location:** In violation of the 2009 IBC Section 1101.2 Design. And the ICC ANSI A117.1-2003 Section 604.2 Location. *The water closet is located at 18.75 inches centerline from the side wall. The distance is limited to 18 inches maximum from the side wall.*

(Not corrected, the front portion only was moved, measure centerline from rear)

24. **Public Rest Room Lavatory Location:** In violation of the 2009 IBC Section 1101.2 Design. And the ICC ANSI A117.1-2003 Section 604.3.1 Size. *A clearance around a water closet 60 inches minimum, measured perpendicular from the side wall shall be provided. The clearance provided is 57.5 inches and is obstructed by the lavatory in violation of 604.3.2 overlap.*

(Not corrected)

25. **Public Rest Room Signage:** *Required accessible elements shall be identified by the International Symbol of Accessibility per the 2009 IBC Section 1110 and the ICC ANSI A117.1-2003 Chapter 7.*

(Not installed)

Apparatus Bay:

26. **The Eye Wash station is required to have tepid water supplied at 3 GPM for 20 Minutes. Only cold water was supplied and verify flow rate.**

(The eye wash was required by the insurance company, if an element is installed it should be compliant)

27. **The washer drain line is not installed to manufactures specification. The washer requires a gravity drain with lint interception. The drain presently installed is for a pumped drain system.**

(The washer system is approved for a pumped drain if lint interception is installed.)

Mechanical room air handler:

28. **Balancing Report.** *The contractor is to provide the required balancing report for the air handler to confirm proper distribution.*

(Not provided)

- 29. Condensate disposal.** *The condensate for the air handler is not discharging to an approved location. The plumbing contractor to provide a location for the discharge of all clear water waste, per chapter 8 of the 2009 International Plumbing Code.*

(Not Corrected)

HTP Boiler:

- 30. The Hydronic piping located in the mechanical room is required to be insulated.** *The piping shall be insulated per the requirements of the 2009 IMC and related references.*

(Not insulated)

- 31. Backflow discharge piping.** *The discharge piping for the Watts 9D and system relief valve is not installed as required.*

(Not corrected)

- 32. Condensate Disposal.** *The condensate disposal from the HTP Boiler is required to be treated to prevent acidic waste from being discharged to the approved point of disposal. A neutralizer is required to be installed.*

(Not installed, condensate tubing is removed and is discharging onto the floor.)

- 33. Condensate disposal.** *The condensate is not discharging to an approved location. The plumbing contractor to provide a location for the discharge of all clear water waste.*

(Not installed)

- 34. Start-Up Reports.** *Start-up reports are required for the HTP Boiled and Modine Heaters. The HTP Boiler report shall indicate that the high limit control is set for 140 degrees maximum flue gas temperature.*

(The start-up report as provided for the HTP does not represent the high limit control set point as requested to confirm that venting material will not be subjected to temperatures greater than 140 degrees.)

- 35. PVC Venting.** *Provide documentation from the PVC Piping manufacturer that the piping material is approved for the discharge of flue gas.*

(Not provided)

- 36. Water softener.** *The discharge from the water softener shall discharge to an approved location and discharge with an air gap fitting.*

(The system discharged is piped to the kitchen sink and is not complete.)

- 37. Water test report.** *Provide test report.*

(Not provided)

- 38. Tempered water for public hand washing.** *The restroom lavatories are required to have tempered water (85 to 110) 120 was supplied.*

(Provide tempered water to all lavatories)

39. **Changes in Level.** *Changes in level greater than ½" in height at the accessible exterior location shall be ramped and shall comply with Section 405 or 406 of the 2003 ICC ANSI A117.1.*
(Not installed)
40. **Parking Spaces.** *Accessible car and van parking spaces shall comply with section 502 of the 2003 ICC ANSI A117.1. Also see Section 1106 of the 2009 IBC.*
(Not installed)
41. **Windows.** *Accessible windows shall have operable parts and complying with Section 309 and 308 of the 2003 ICC ANSI A117.1. Also see Section 1109.12.1 Operable windows of the 2009 IBC.*
(Not accessible)
42. **Service Counter/Window.** *The service counter shall comply with section 904 as applicable. The counter surface is at 41.5 inches. 36 inches maximum is required.*
(Not corrected)
43. **Power operated door.** *The power operated door shall comply with section 1008 of the 2009 IBC.*
(Not Installed)

The Building Department will be conducting a final inspection on Wednesday October 24, 2018 at 2:00 pm. Please have all parties available.

The aforementioned list of violations are related to Plumbing elements, mechanical systems and components including balancing reports, Apparatus bay plumbing systems, Hot water, Tempered water and Tepid water requirements, domestic water disinfection, , door and window accessibility and interior and exterior site conditions.

Ronald LeMere
Chief Building Inspector.