

TOWN MANAGER REPORT

01/07/19

Incorporated 1669
350 Years of Progress



**CRANBERRY CAPITAL
OF THE WORLD**



Town of Middleborough
Massachusetts

ROBERT G. NUNES
Town Manager

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Town Manager's Report

January 7, 2019

December 17th – January 4th

Team Meetings

1. Economic Development Team Meeting

- a. FY20 Budget
- b. Drive In Project
- c. Mass Works Grant
- d. Complete Streets
- e. OECD
 - Downtown
 - Beta Group Engineer
 - Cultural Facilities Fund Grant
 - Business Guide/40R Study
 - Veteran's Housing
 - Other
- f. Conservation Update
 - Open Space Plan
 - Oliver Mill Park
 - Developments/projects before Board
 - Other
- g. Health Department
 - Online Permitting Stats
 - Abandoned Housing Initiative
 - Other
- h. Planning
 - Subdivision Rules and Regulations Consultant
 - Current Projects
 - Other

2. DPW Team Meeting

- a. DPW Facility
 - Update
- b. Highway
 - Downtown Engineer
 - Snow Plowing
 - Complete Streets Program

- c. John Glass Square Sign
- d. FY20 Budget
- e. FY20 Capital Projects Requests
- f. Employee Contract Mediation
- g. Wastewater Plant
 - Punch list
 - Leachate
 - Electric vehicle
- h. Water Department
 - Treatment Plant Substantial Completion
 - Christina Estates
 - Projects

Meetings with Department Heads

1. IT Director
 - a. FY20 Budget Process
2. Town Accountant & Treasurer/Collector
 - a. Discussion with Lynch Marini & Associates (Outside Auditors)
 - b. FY18 Audit Kickoff
 - c. Audit Timeline
3. Director of Veteran's Services
 - a. Rotary Flagpole
 - b. Reimbursements
 - c. Caseload
 - d. Veteran Weekly Coffee Hour
 - e. Veteran Archery Day
4. Library Director
 - a. Friends
 - b. Parking lot
5. Park Superintendent, Conservation Agent, Director of the Housing Authority, Assistant to the Town Manager
 - a. Oliver Mill Park Renovations
 - Stonework and Bridge Bids
 - 2 Bids Received
 - Sum Co Eco-Contracting: \$193,500.00
 - R.M. Ryan: \$173,000.00
 - Bids will be reviewed for recommendation
 - \$217,691.00 is available with CPA funds and the PARC Grant

6. Town Accountant
 - a. FY20 Budget
7. Fire Chief
 - a. FY20 Budget
 - b. FY20 Capital Requests
8. Treasurer/Collector, Assistant Treasurer/Collector
 - a. Deposits for events of Boards and Commissions
9. Police Chief
 - a. FY20 Budget
10. Planner
 - a. FY20 Budget
11. OECD Director/Director of Veteran's Services
 - a. Veteran Housing, Town Owned Property at the corner of Fairview and East Grove
12. Director of Curriculum and Instruction, MPS
 - a. Middleborough Community Scholarship and Middleborough Dollars for Scholars

Building Committee Meetings

1. High School Building Committee 12/19/18
 - a. Project Status Update
 - b. Permitting Progress
 - c. Bidding Phase Progress
 - d. Subcontractor and General Contractor Prequalification
 - e. Schedule Milestones
 - 1/17/19 - Subcontractor Bids Due
 - 1/31/19 - General Contractor Bids Due
 - 2/15/19 - Notice to Proceed
2. Police Building Committee 12/20/18
 - a. Change Orders
 - b. Project Budget
 - c. Old Police Station Reuse

Construction Job Meetings

None

Project Review Committee Meeting

None

Downtown Improvement Committee Meeting 1/2/19

1. Downtown
 - a. G&E Grant Program
 - b. Downtown Lighting
 - c. Improved lighting at Kramer Park
 - d. Sidewalk Engineering
 - e. Branding/Wayfinding
 - f. Joint Advertising
 - g. Graffiti on the Old Benny's building
2. **Town Manager's Facebook Page (12-15 – 1-4)**
 1. 2,304 Likes
 2. 2,456 Followers
 3. 15,961 Posts reached
 4. 20 Posts e.g. Community Events, Town Government Information

Cannabis Host Community Agreement (HCA) Negotiations

1. Emerald Grove
 - a. Review of proposals with outside counsel
 - b. Agreement reached
 - c. HCA will be presented to the BOS on 1/14
2. ARL Healthcare
 - a. Review of proposals with outside counsel
 - b. Agreement reached
 - c. HCA will be presented to the BOS on 1/7
3. Holistic Health
 - a. Meeting with owner
 - b. General discussion on contract terms
4. Hidden Hemlock
 - a. Agreement reached
 - b. HCA will be presented to the BOS date TBD

Meetings with Businesses, Non-Profit Organizations

None

Communication with Government Agencies

1. Contacted the Executive Director of SRPEDD
 - a. Complete Streets Designation Assistance
2. Telephone discussion with MassDevelopment
 - a. Reuse of the old police station
 - b. Public/Private Partnership

FY19 Strategic Plan

Implementation ongoing

Technical Assistance

Attached is the HVAC Assessment of the old Police Station. The Assessment was conducted by Siemens Industry, Inc. at no cost to the Town.

Appointments/Reappointments

None

Contract Negotiations

None

This Town Manager's Report does not include a log for time spent interacting with residents/constituents, business owners, meeting prep time, day to day management issues or attendance at community events.

The top half of the image features a composite background. On the left, the Siemens logo is displayed in a white box. The background itself is a night-time aerial view of a city, likely Boston, with a prominent highway interchange. Overlaid on this are various digital elements: glowing blue and yellow lines representing data or network connections, binary code (0s and 1s) floating in the air, and a large, semi-transparent blue rectangular area. On the right side, a glass-walled observation deck of a skyscraper is visible, with silhouettes of people looking out at the city.

SIEMENS

Ingenuity for life

Submitted by: Siemens Industry, Inc.

Town of Middleboro - Old Police Station
99 North Main Street
Middleboro, MA 02346

HVAC Assessment

December 20, 2018

December 20, 2018

Siemens Building Technologies is pleased to present the results of our HVAC Assessment performed on Friday, December 7, 2018 at the Town of Middleboro's Old Police Station located at 99 North Main Street in Middleboro, MA 02346. The objective of this visit was to identify existing HVAC equipment, their respective conditions, and provide recommendations for repair on these systems.

Building Level Heating - Steam Boiler

The original boiler in the building was retrofit with a natural gas fired Smith manufactured steam boiler. (See **Figure 1**) This boiler is designed for 1,089,000 BTU/HR with an efficiency of 80% and supplies steam to throughout the building. (See **Figure 2**) The boiler is controlled by a Taco SR 501 that turns the boiler on/off. It was unclear during our investigation whether the boiler is controlled based on outside air temperature or inside space temperature. Overall, the boiler appears to be in good operating and visual condition. It is estimated to be about 10 years old and per American Society of Heating, Refrigeration, and Air Conditioning Engineers (ASHRAE) similar cast iron boilers have a life cycle of 30 years when maintained properly.



Figure 1 – Smith steam boiler located in basement level boiler room.

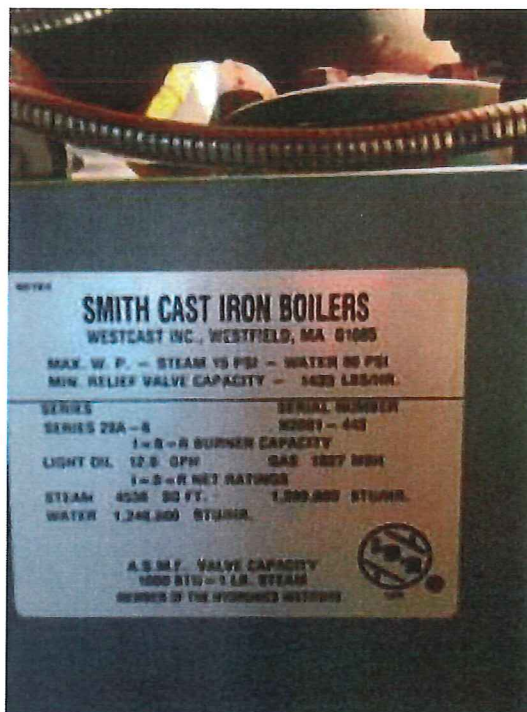


Figure 2 – Smith steam boiler nameplate.

Room Level Heating – Radiators and Fan Coils

Steam is sent from the boiler to approximately 18 radiators and 5 fan coils throughout the building for heating.

The radiators are cast iron steel and original. The units appear to be in good operating condition and do not have any moving pieces so life cycle is not a concern. There is a combination of both single and double pipe radiators in the building depending on the time of installation and location in the building.

Two pipe steam radiators are controlled by temperature sensors that send a signal to zone valves regulating steam flow through radiators. Temperature sensors in the space are original Honeywell mechanical non-programmable thermostats (See **Figure 3**) with no set back capabilities. The zone valve pictured in **Figure 4** is dated with an install date of 1995. It was mentioned that sometimes the heat does not turn on which signifies either a failing temperature sensor or bad valve actuators on zone valves. The temperature sensors and zone valves are the biggest risk for building control.



Figure 3 – Honeywell Temperature Sensor.



Figure 4 – Steam zone valve.

Single pipe steam radiators are controlled by a thermostatic vent valve that opens and regulates steam flow through the radiator by venting air. When the space meets its set point temperature, the thermostatic vent closes and allows no steam to enter the system. When steam is no longer allowed in the radiator, the steam then condenses to water and flows back into the steam piping. During our investigation, a single pipe steam radiator was identified with a zone valve controlled by space temperature. (See **Figure 5**) When the space calls for heat, the zone valve opens and allows steam to flow into the radiator. When the space reaches set point temperature, the zone valve closes leaving the radiator full of steam. The steam then condenses to water in the radiator but cannot return to the steam piping system because the zone valve is closed. The radiator remains flooded with water at all times. When the space calls for heat again, the steam then pushes the condensate water out of the radiator vent which is why a bucket is placed to catch the water.

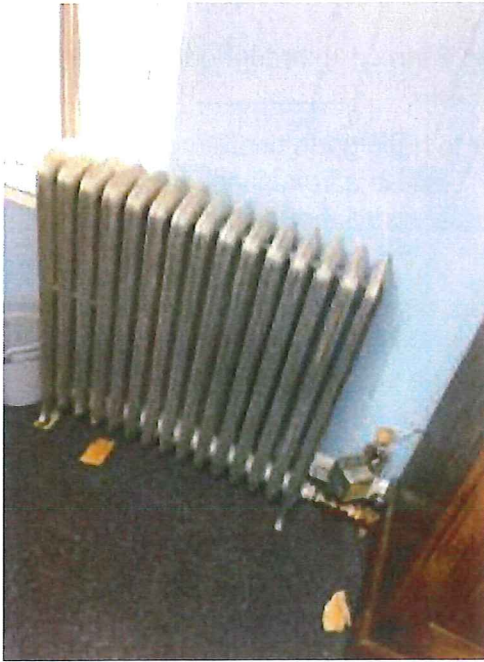


Figure 5 – Single pipe radiator with zone valve.



Figure 6 – Example of fan coil.

The fan coil units (as seen in **Figure 6**) are two pipe and appear original in good visual condition. The fan and motor capabilities of these units were not assessed so operating conditions are unknown. There were no visible leaks or issues with these units.

The detective area located on the second level is heated independently of the steam system and uses electric heat. There are two electric baseboard radiators located on the perimeter of the space and utilize local control. The electric heaters are known to be in good operating condition with no issues.

Window AC Units

The building is cooled by approximately 12 window AC units that have local control only. The units are extremely inefficient, cool unoccupied areas, and have no setbacks for unoccupied modes. The units also limit the insulation factor of the windows requiring a larger heat load in the space during winter.

HVAC Issues

1. Boiler needs to be reset constantly

Explanation: A common issue mentioned was the continuous need to reset the boiler. The boiler make-up water feed was not operating properly causing the boiler to trip off on low water level. When the make-up water valve was reset, the boiler water would fill to its set level and operate as designed.

Resolution: This issue was resolved in the spring and has not been an issue this year.

2. Pipes are making loud bang noises

Explanation: It was mentioned a major concern with the heating system is the banging pipes when heat is turned on. This is common for steam systems; when steam comes in contact with condensate water in the pipes, the water flashes to steam causing a bang noise.

Resolution: No resolution. This noise is common for steam systems.

3. Chief's office gets extremely cold

Explanation: It was mentioned that the Chief's office would be extremely cold during winter months and heat was not working properly. When the boiler was having issues related to **Issue 1**, the Chief would be the first to notice due to lack of insulation in that particular office area. When onsite for investigation, the space temperature was raised and heat turned on in this particular area.

Resolution: This issue needs to be investigated further. There is potential for a bad temperature sensor or zone valve.

4. Zone Valves on single pipe radiators

Explanation: On our walk through, it was noted a zone valve on a single pipe radiator was causing the radiator to be continuously flooded with water. The zone valve was not allowing condensate to flow back into the steam piping system and instead pushing condensate water out of the vent.

Resolution: Remove zone valve and install thermostatic radiator vent for designed operation.

Recommendations

1. Do not turn off the boiler system

If the boiler system is turned off, drained down, and abandoned in place, the existing heating system will never be in working capacity again without a complete overhaul. On top of that, the interior conditions of the building will rapidly deteriorate. It is recommended to maintain minimum temperature in the space during heating season.

2. Commission the existing heating system

All existing heating equipment is in good operating condition, but the devices controlling the flow of heat need to be investigated and repaired to achieve the building's design operation.

Thermostats: It is recommended to replace all temperature sensors in the space with battery operated programmable thermostats with scheduling for occupied and unoccupied temperature set back. The building is no longer operated 24/7 and does not need to be heated to comfort temperature 24/7. Spaces that will be occupied should have an occupied set point of 70 degrees and an unoccupied set point of 65 degrees. Spaces that will not be utilized should have a constant temperature set point of 55 degrees to maintain above freezing temperatures. Zoning will have to be investigated.

Valves: Once all temperature sensors are replaced, it should be investigated whether the corresponding zone valve is operating as it should. If valves and actuators are identified as no longer working, they should be replaced to maintain set point temperature of the space.

Steam Traps: A steam trap assessment should be performed to ensure all steam traps are in good working order. Improper operating steam traps allow for major loss of steam energy contributing to high energy bills. All failed steam traps should be replaced.

Single Pipe Radiators: Single pipe radiators should be repaired with the proper thermostatic valves and vents for proper operation. This repair will also cut back on water hammer causing piping to bang and allow for better control of space temperature.

3. Air conditioned spaces

Occupied space in the building should be air conditioned and unoccupied spaces should be isolated from conditioned areas. Window units are not efficient and are an eye sore to the buildings historic value. It is recommended to install ductless split air conditioning units in occupied areas only for cooling.

The ductless split unit has an outdoor unit with refrigeration lines and an indoor unit for each room for optimal cooling. This is the most cost effective and efficient solution for temperature control of the space. These units can also be specified to have a heat pump option for additional heating during the winter months for optimal comfort.

End Report