



City of New Bedford

Department of Planning, Housing & Community Development

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PATRICK J. SULLIVAN
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STAFF REPORT

NEW BEDFORD HISTORICAL COMMISSION MEETING October 2, 2017

Case #2017.19: CERTIFICATE OF APROPRIATENESS

249 MacArthur Drive
Front Street Pumping Station
Map 53, Lot 70

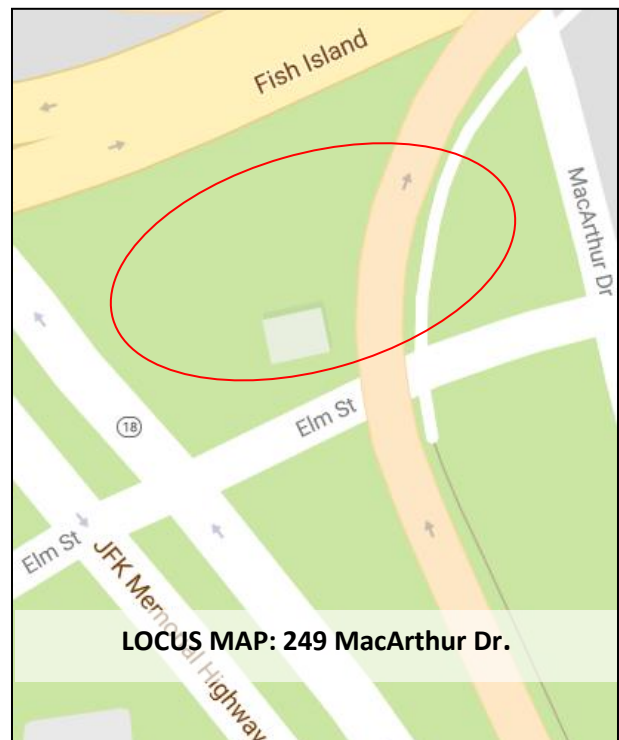
OWNER/ City of New Bedford
APPLICANT: Department of Public Infrastructure

APPLICANT'S Nicholas Safina R.A.
AGENT: CDM Smith, Inc.
75 State Street, Suite 701
Boston, MA 02109

**249 MacArthur Dr. - Pump Station Northeast Corner
of Elm St & Rt 18**



OVERVIEW: The project includes the replacement of the existing Front Street below grade pumping station and superstructure. Originally built in 1948 and last upgraded in the 1970s, the pumping station services the downtown business district and port areas. Recent inspections determined the station was past its useful life. In recent years the station has become increasingly susceptible to piping and pump failures. As part of this project, the existing building will be demolished and a new single-story building will be constructed to house critical mechanical, electrical, and odor control equipment. A new, separate, below-grade wet well will be constructed to house new pumps and controls. As part of the project, the site improvements will include new landscaping, re-grading, and the installation of a new sidewalk and retaining wall on the north side of Elm Street to better support pedestrian traffic in the area and mitigate current foot traffic across the existing site.



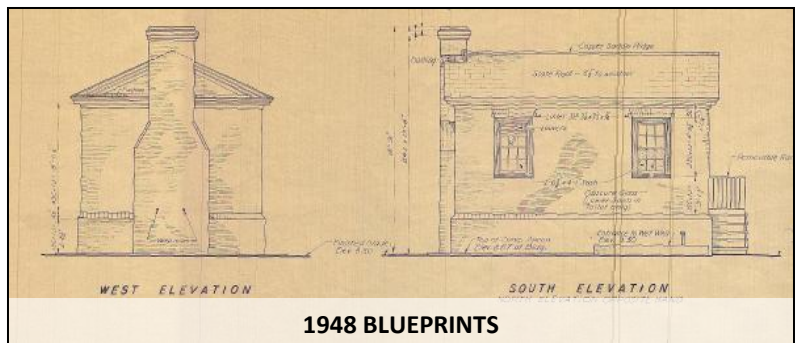
EXISTING CONDITIONS: The Front Street Pumping Station was constructed in 1948 and services the downtown restaurant and commercial district, as well as the State Pier area and several fish processing facilities. The existing building is a single story with multiple below grade levels and is accessible from MacArthur Drive via an asphalt driveway. The Colonial Revival style building consists of unreinforced brick walls and a slate roof. The original double hung (6 over 6) wood windows have been removed and infilled with glass block. Architectural detailing includes a shaped brick water table, a masonry chimney and wood trim along the cornice and gable ends.

In January 2017 the City conducted an Integrated Plan which included assessments of the City’s critical wastewater and stormwater infrastructure in order to prioritize system improvements to support continued reliable and safe conveyance of wastewater to the City wastewater treatment plant. The findings of the Integrated Plan prioritized the replacement of the Front Street Pumping Station as a critical need based on its importance in serving the downtown area and the poor condition of the station.

PROPOSAL: The Front Street Pumping Station Project includes the demolition of the existing building, and construction of a new building with underground infrastructure improvements and site improvements:

DEMOLITION: The Front Street Pumping Station was constructed in 1948, and therefore, because the building is not seventy five (75) years or more old, it is not regulated by the City’s Demolition Delay Ordinance. The building is within the Bedford-Landing Historic District and requires a Certificate of Appropriateness for demolition.

There is limited access inside and outside of the existing pumping station for removing/and or installing equipment, and alternatives to demolition were explored. Major issues with the station include the poor condition of the building’s masonry walls and roof, inoperable HVAC equipment, poor conditions of pipes and valves and floor hatches creating safety hazards. Modification to the existing structure for simply installing new equipment and providing maintenance access, as well as necessary repairs to the brick masonry walls would likely trigger building code requirements necessitating structural improvements that would be difficult and expensive to implement. Due to the size, age and condition of the building, the applicant is seeking demolition of the existing structure to be replaced with a new building.



NEW CONSTRUCTION: The proposed new building will be a single story masonry structure with a gabled roof approximately 16 feet high to the ridge and overall dimensions of 22 feet by 26 feet, 204 SF larger than the existing structure which is 16 feet wide by 23 feet long and 16 feet high. A chimney will be constructed to house required vent piping.

The design is intended to reference back to the original structure but will employ modern materials and simplified detailing for durability and maintenance. Cast stone, brick veneer and faux slate roofing materials are being proposed. **Please see Figures A-3 and A-4 for details.**

Double hung aluminum windows with insulated glazing and applied muntins are proposed. Security measures may require laminated or ballistic glass or other anti-intrusion screen. Several windows are shown on the rendering; however, additional windows or faux windows could be added if the Commission feels it is necessary.

Trim work would be constructed from cellular PVC or other composite materials for durability. The detailing would be simplified but would appear similar to the original building. Custom steel doors with embossed panels are proposed. Reinforced steel doors are recommended (over wood) for security and durability. Any security lighting fixtures on the exterior of the building would be reviewed and approved by the Commission.

SITE IMPROVEMENTS: Site improvements will include plantings, driveway improvements including “drivable grass,” and landscaping to enhance the site given its prominence in the downtown area. A new retaining wall at the back of a new sidewalk on the northerly side of Elm Street is also proposed. This allows for continuation of the sidewalk along Elm Street and in combination with plantings will help divert pedestrian traffic around the site which is a current safety and security issue.



STATEMENT OF APPLICABLE GUIDELINES: *The Bedford Landing District Design Guidelines* state the following relative to this proposal:

DEMOLITION: All requests for demolition within the District are reviewable by the Commission. The New Bedford Historical Commission can deny a demolition entirely and permanently in the local historic district.

NEW CONSTRUCTION: When considering a new structure within the District the designer shall study the appearance and character of the entire neighborhood and pay particular attention to immediate abutters. The District has a unique character based on its history and development patterns. These characteristics express themselves in the scale, setback, roof form and materials and detail of its historic buildings. A new building should be designed so that it shares and is compatible with these qualities. New construction should be in harmony with the old and at the same time be distinguishable from the old so that the evolution of the District can be interpreted correctly.

LANDSCAPING (HARDSCAPE): Retain historic hardscape features including, walkways, steps and sidewalks, in their original locations. When deteriorated, repair with materials that match or are compatible to the original.

- **SIDEWALKS:** Existing historic sidewalks should be retained and maintained. Replace only those portions that are deteriorated beyond repair. If replacement is necessary, the replacement shall replicate the original design. A new sidewalk should align with those that already exist along a block. Use materials that match existing in design and appearance to reinforce the historic character of the district’s features.
- **DRIVEWAYS:** Driveways in the District are currently constructed of asphalt or gravel. Repairs to driveways should duplicate the existing, using the same materials, colors, textures and designs. New driveways should be in keeping with adjacent properties and appropriate both to the District and to the style of the principle structure on the property. New paved areas should not be paved in asphalt, but rather in crushed stone, cobbles or pavers.
- **FENCES/GATES AND WALLS:** The few fences/gates and site retaining walls in the District are significant architectural features and should be repaired or replaced whenever possible with new materials that duplicate the original. Cast iron fences/gates shall be preserved. New fences and site walls should not prevent or restrict views of buildings from a public way. The design should be appropriate in scale, materials, and architectural style to the building, its site and the surrounding properties.

FOR BOARD MEMBER CONSIDERATION: The Front Street Pumping Station Project is being funded through a loan from MassDEP. In compliance with the funding, CDM Smith has submitted a Project Notification Form (PNF) to the Massachusetts Historical Commission (MHC) seeking their review of the proposed work. As such, in addition to the need to take action on a Certificate of Appropriateness, MHC will be seeking the NBHC's comments on the Project.

Material specifications are provided in the application but Commission members may wish to consider having staff and another member review and approve final material samples in the field. Staff recommends that exterior lighting also needs to be approved in the field.

STAFF RECOMMENDATION:
DEMOLITION

The Front Street Pump Station is a fine example of how a utilitarian structure was designed and built with craftsmanship to enhance its urban street setting. When the pumping station was constructed in 1948, Front Street continued northward to Bridge Street Park and the structure existed on the east side of Front Street amidst other waterfront buildings. Urban Renewal resulted in the realignment of the New Bedford Fairhaven Bridge entry and the construction of the Route 18 connector highway, terminating Front Street at Rodman Street.



**Northeast Corner of Elm St and Route 18: Before & After
Roadway Reconstruction**

The pump station retains its form, massing and most of its original materials except for the original wood windows which have been infilled with glass block and louvers. However, the Front Street Pumping Station is missing its original context, as the building site and nearby setting has evolved over the years; first with Urban Renewal, and a few years ago with the reconstruction of Route 18. Until 2014, the Front Street Pumping Station was almost invisible, tucked under the Fairhaven Bridge access ramp and not visible from Route 18 or the downtown. The reconstruction of Route 18 determined that Elm Street would run east under the bridge access ramp to MacArthur Drive, resulting in the current visibility of the pumping station.

The proposed demolition of the Front Street Pumping Station, in and of itself, without concern for the proposed reconstruction would most likely not be provided consideration. However, the proposed reconstruction must be judged in conjunction with the demolition, as it is respectful to the original pumping station and references its scale massing and materials in the original setting.

Staff recommends the demolition of the Front Street Pumping Station for the following reasons:

- The pumping station no longer retains its historical context of setting, as it is currently sited between two roadway embankments and a connector highway.
- The proposed pumping station reconstruction references the original building, is differentiated through the use of modern materials, and is compatible to the site and to the District.
- The pumping station was designed to perform a function that it no longer can adequately provide;
- Due to the necessary infrastructure equipment and upgrades it is in the public interest to allow the demolition and reconstruction of the Front Street Pump Station.

NEW CONSTRUCTION

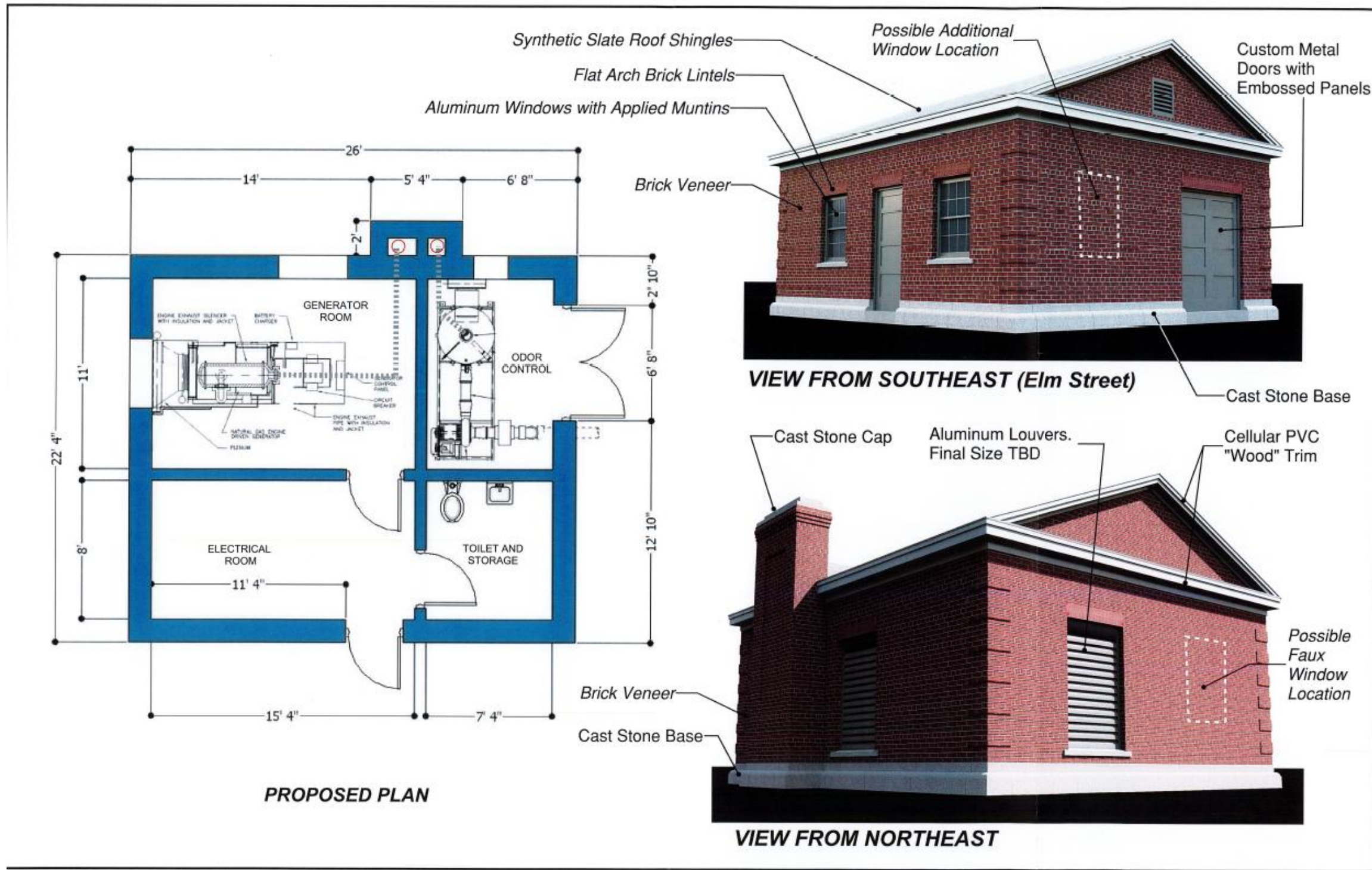
The new pumping station retains the scale, massing, roof form and material types of the original pumping station without being a literal replication. The original and new buildings share elements, composition, proportion, ornament, and character, but are differentiated through the use of modern materials. The referential design approach of the new pumping station continues its historic use and its style provides architectural continuity at the site. The design of the building also pays particular attention to façade details such as the quoins, brick lintels and cornices.

SITE IMPROVEMENTS

The proposed site improvements include a granite block retaining wall and the extension of existing sidewalks to improve pedestrian access to the waterfront. The construction of a new below-grade wet well and vault in the grassy area east of the pumping station will not be visible from the public way. The continued use of a driveway from MacArthur Drive will be enhanced by its material change from asphalt to reinforced turf. Brick piers and collapsible bollards will be utilized at the driveway entry.

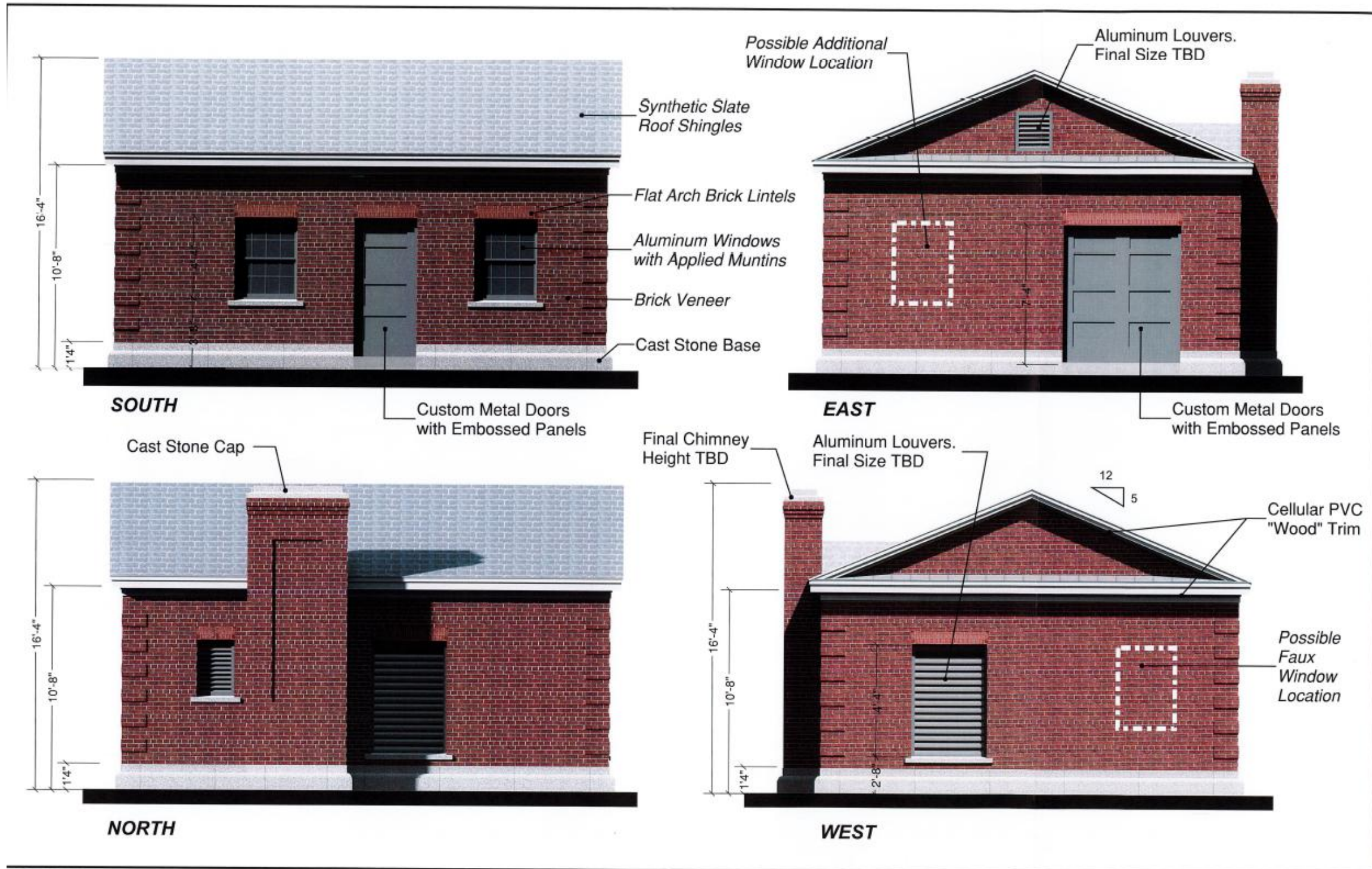
The new pumping station values the historic character of the original building and the associated site improvements strengthen the visual appeal of the site. The proposed new pumping station and site improvements are appropriate and compatible to the District.

For these reasons, staff recommends approval and the issuance of a Certificate of Appropriateness.



City of New Bedford, Massachusetts - Department of Public Infrastructure (DPI) Wastewater Division
FRONT STREET PUMPING STATION REPLACEMENT

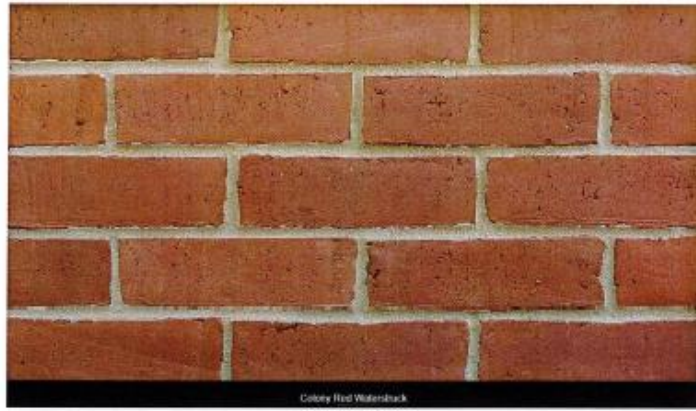
Figure A-1
 September 2017



City of New Bedford, Massachusetts - Department of Public Infrastructure (DPI) Wastewater Division
FRONT STREET PUMPING STATION REPLACEMENT

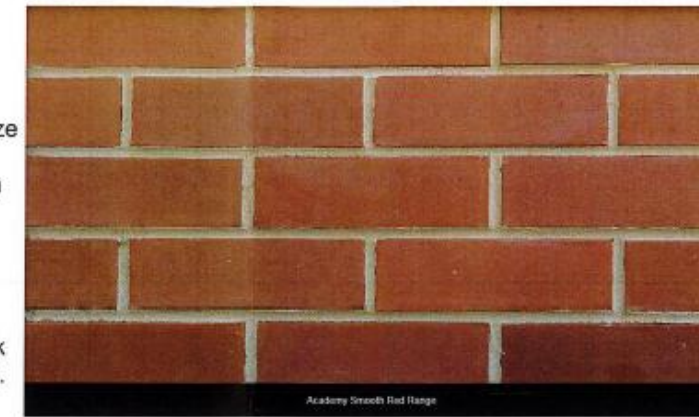
Figure A-2
 September 2017

BRICK OPTIONS



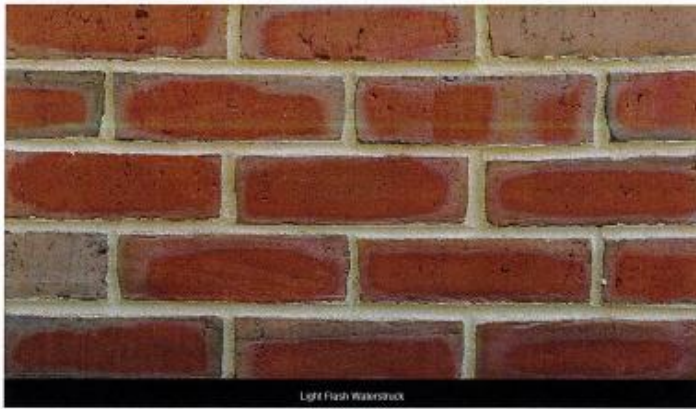
"FBS" brick have a more irregular shape (edges), which can give an aged appearance or help soften the building lines. Brick durability is not affected

Monochromatic brick may help the building feel more contemporary

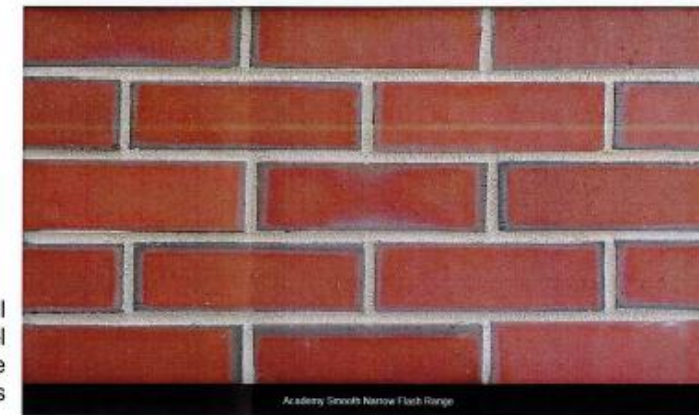


"FBX" brick has very stringent limits on brick size producing a very regular shaped brick. This gives a more contemporary appearance

Monochromatic FBX brick has a very modern feel.



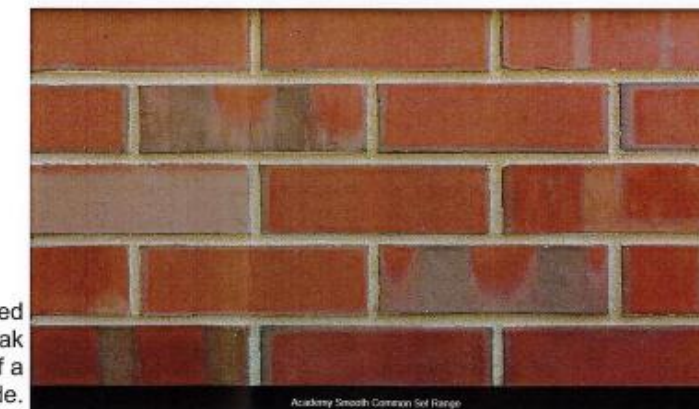
"Flashed" brick helps to soften the look of the building face and can make a building appear older. Flashing occurs during the firing process and is integral to the brick color



"Flashed" FBX brick still retains its contemporary feel but helps to reduce the monochromatic mass



"Blended" brick helps to break down the mass of a facade and, depending on the mix, can also make a building appear older.



"Blended" or Flashed FBX brick helps to break down the mass of a facade.

Single-Width Slate

SYNTHETIC SLATE OPTIONS



Brownstone-VariBlend



European-VariBlend



Canyon-VariBlend



Sonora-VariBlend



Slate Black-VariBlend



Slate Gray-VariBlend



Evergreen-VariBlend



Castle Gray-VariBlend



Smokey Gray-VariBlend



East Elevation



North Elevation



West Elevation

Photos of Existing Structure



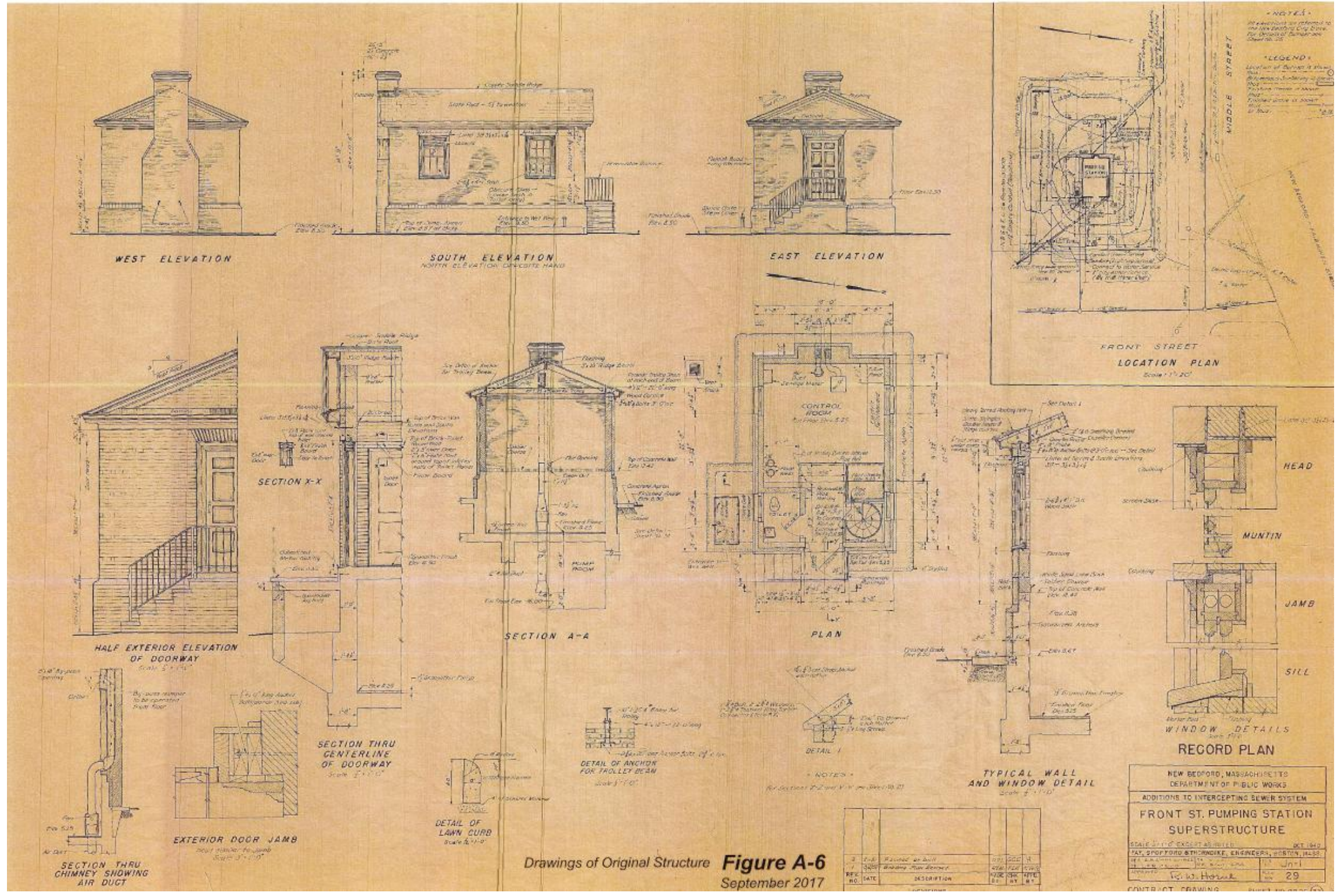
Looking West from MacArthur Drive



South Elevation (Elm Street)



South Elevation (Elm Street)



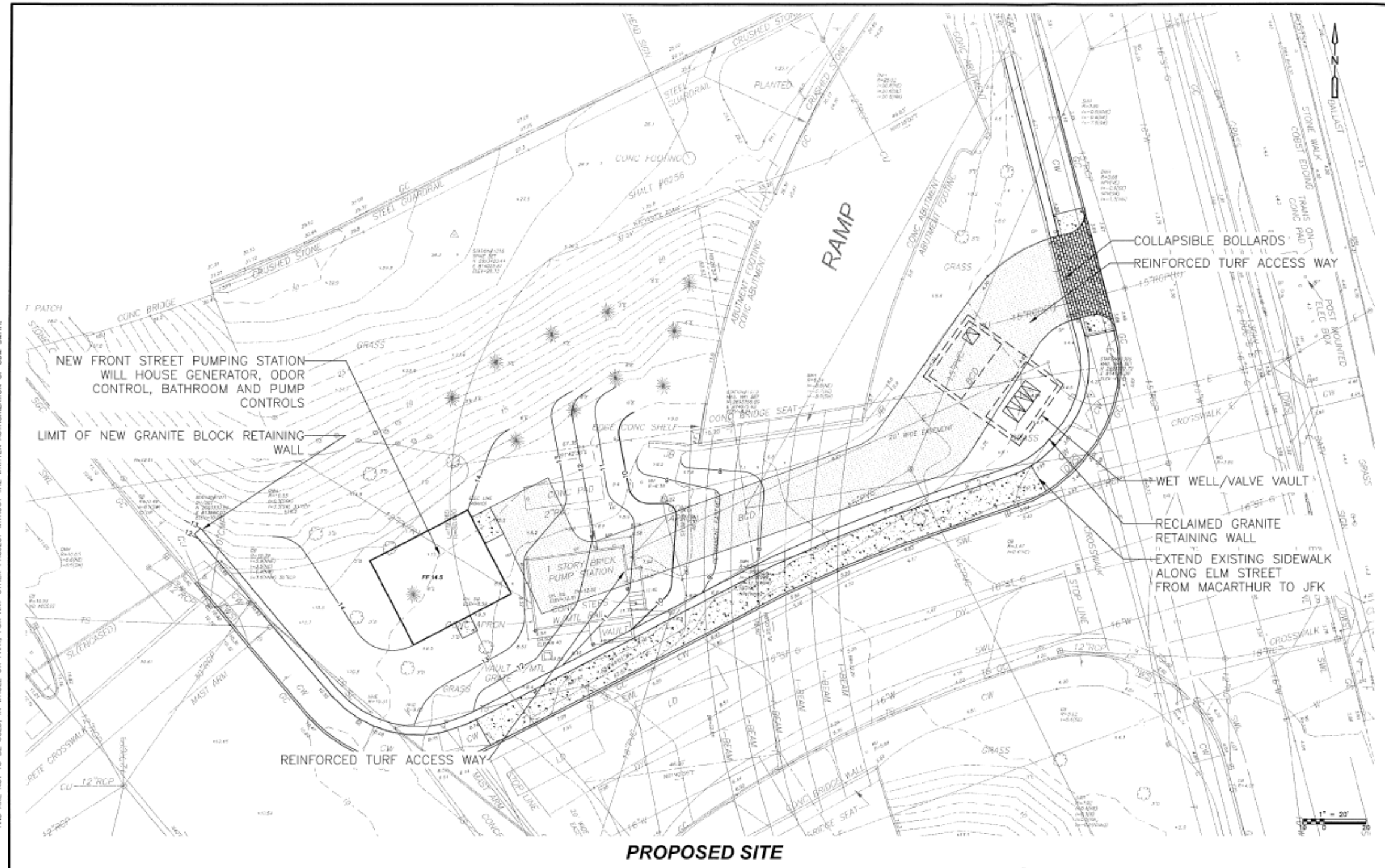
Drawings of Original Structure **Figure A-6**
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EXISTING SITE PLAN
 City of New Bedford, Massachusetts - Department of Public Infrastructure (DPI) Wastewater Division
FRONT STREET PUMPING STATION REPLACEMENT

Figure C-1
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PLAN AND ELEVATION NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECTS WITHOUT THE WRITTEN AUTHORIZATION OF CDM SMITH.



City of New Bedford, Massachusetts - Department of Public Infrastructure (DPI) Wastewater Division
FRONT STREET PUMPING STATION REPLACEMENT

Figure C-2
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PROPOSED SITE RENDERING



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FRONT STREET PUMPING STATION REPLACEMENT

Figure C-3
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STAINED CONCRETE AND BRICK SIDEWALKS



REINFORCED GRASS TURF



STAINED AND STAMPED CONCRETE SIDEWALKS



SITE MATERIALS



COLLAPSIBLE BOLLARD



GRANITE BLOCK RETAINING WALL



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FRONT STREET PUMPING STATION REPLACEMENT

Figure C-4
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