



City of Bath Morse High School Concept Development

TASK ONE , RESIDENTIAL ANALYSIS

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Harriman Project #21266

Summary

Task One of the Morse High School Concept Development is an analysis of the impact of the proposed fire station on existing and proposed residential program. The following is a summary of Harriman's analysis.

The City of Bath is unique in that its central fire station is located in a residential neighborhood. Review of similar municipalities indicate that most fire stations embedded within residential neighborhoods are substations with 2-3 apparatus bays rather than central stations which typically have between 3-5 apparatus bays. There are exceptions to the typical scenario that are similar to Bath. Harriman selected four as case studies: the municipalities of Biddeford, ME; Portland, ME; Exeter, NH; and Salem, NH.

Biddeford has a large central station surrounded by multi-family residential dwelling units.

Exeter has a central public safety facility with adjacency to multi-family residential dwelling units including a renovated historic brick building.

Salem has a substation with adjacency to single family housing and has plans to expand the facility.

Portland has several examples of urban redevelopment near fire stations. Examples in downtown Portland include middle-to-upper income residential apartments and condos, and boutique hotels. These examples are located in similar proximity to the proposed condition at the Morse High School property. Portland also has a substation with adjacency to a suburban condominium complex and single family residential.

One important consideration about the location of the Bath Fire Department is that it has one of the fastest response times in the state of Maine. One reason for this is the location on High Street provides quick access to Lincoln Street, Centre Street, and Washington Street. Immediate access to Green Street, Chestnut Street, and Winter Street further reduces travel time to the major connecting roads in the city. If the central fire station were located downtown, response times would likely slow due to required travel through congested areas.



Analysis

The following information represents existing and proposed Fire Station adjacency to residential buildings. The first shows distance offsets from the current and proposed Fire Stations. The second shows the amount of adjacent residential program. Precedent studies, beginning with the City of Bath, follow.

- A. **Proposed site showing development and distances to residential program:**
 - a. Fire Station is shown in red.
 - b. Redevelopment to residential program shown in green.
 - c. Right side of image shows existing fire station distances from residences.

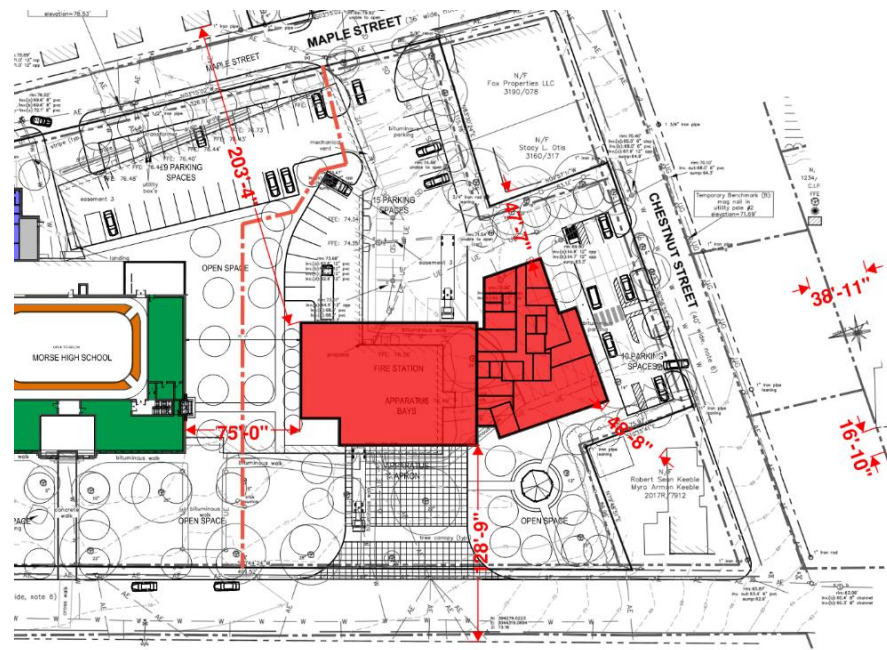


Figure A1: Diagram of existing and proposed fire station distances to residential program



- B. Proposed site showing proposed fire station impact to residential program:
 - a. Current fire station impacts 9 existing residential buildings.
 - b. Proposed fire station impacts 12 existing residential buildings.
 - c. Proposed fire station will impact the redeveloped Morse High School building.



Figure B1: Diagram of existing and proposed fire station impacts on residential program

- C. Existing precedents of fire stations in residential neighborhoods:

- a. Bath, ME

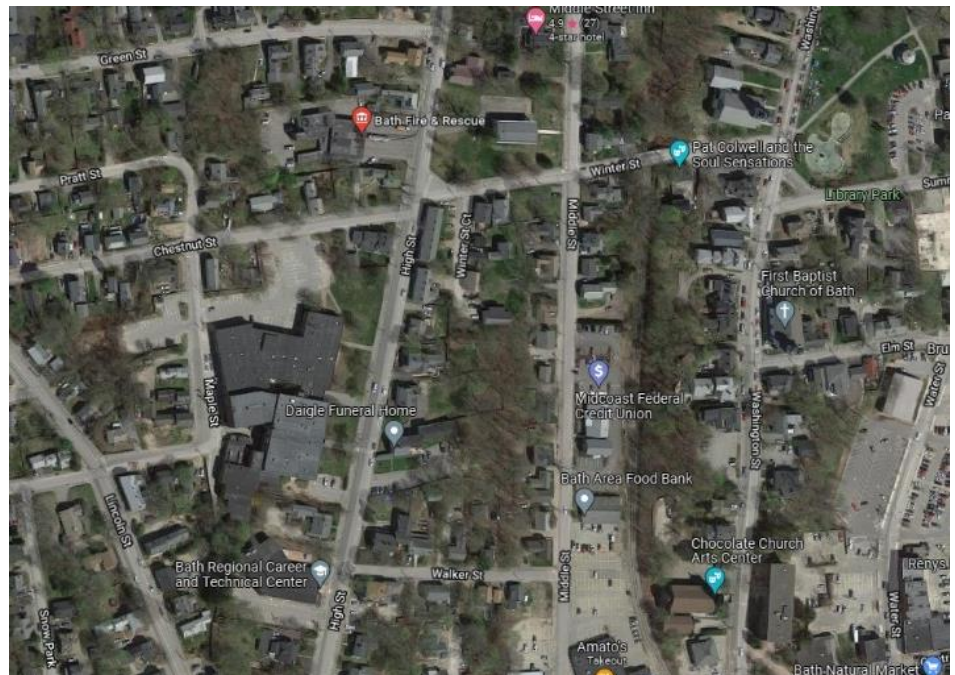


Figure Ca1: Aerial View of existing Bath central station and surrounding neighborhood



Figure Ca2: View of existing central station from High Street



Figure Ca3: View of existing central station from High Street

b. Biddeford, ME

- i. Central Fire Station, located at 125, Alfred St is surrounded by single and multi-family family housing on Alfred St, West Myrtle St, Graham St, and Birch St. Most buildings appear to be 2-3 units based on electric meters, mailboxes, and street numbering. Housing immediately surrounding the Central Fire Station can be generally categorized as lower-middle to middle income.



Figure Cb1: Aerial View of Biddeford existing central station and surrounding neighborhood



Figure Cb2: View of existing central station from Alfred Street



Figure Cb3: View of residential context from the corner of Alfred Street and West Myrtle Street



Figure Cb4: View of residential context from Birch Street



c. Exeter, NH



Figure Cc1: Aerial View of Exeter existing central station and surrounding neighborhood



Figure Cc2: View of residential context from Court Street



Figure Cc3: View of residential context from the corner of Clifford Street and Bow Street



d. Salem, NH

Although Station 2 in Salem, NH is a substation, it is included because a major addition is planned in the near future. Expansion will create a total of 3 apparatus bays facing Lawrence Street as well as additional equipment storage at the back of the station. The residential context can be generally categorized as middle to upper-middle income.

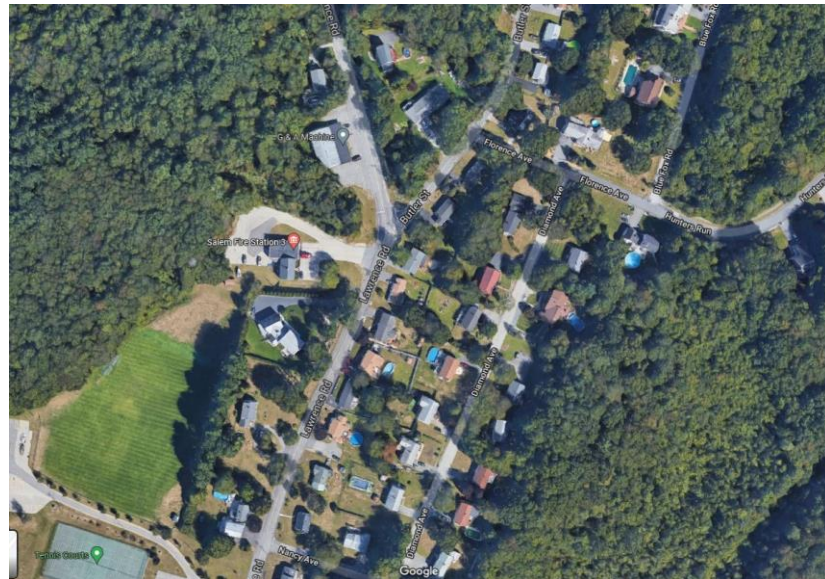


Figure Cd1: Aerial View of Salem existing Station 2 and surrounding neighborhood



Figure Cd2: View of residential context from Lawrence Road



Figure Cd3: View of residential context from Lawrence Road



e. Portland, ME

The Rosemont Station at 212 Stevens Ave is a substation with adjacencies to a suburban condominium complex located at Stoneledge Drive and single family residential on surrounding streets. The residential context can be generally categorized as middle to upper-middle income. The station is also closely situated to a main road on Brighton Ave.

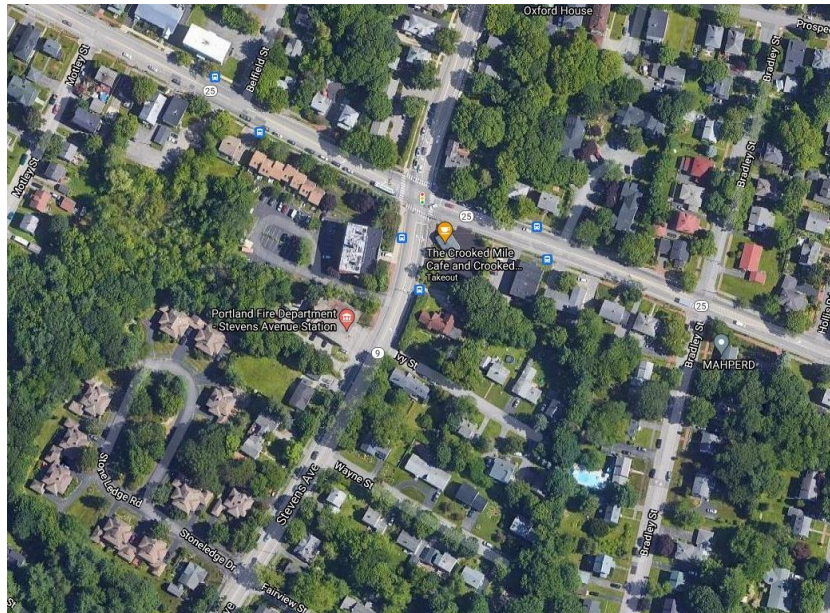


Figure Ce1: Aerial View of Portland existing Stevens Ave substation and surrounding neighborhood



Figure Ce2: View of residential context from Stoneledge Drive.



Figure Ce3: View of residential context from Stevens Ave towards Ivy St.



Figure Ce4: View of residential context from Stevens Ave.



f. Portland, ME

Central Station, located at 380 Congress, houses numerous services for the city and is the most active. While located directly in the Old Port, there are primarily commercial examples, but the most relevant is a high-end hotel located directly to the west. The hotel is located in a renovated historic brick building that used to house the Portland Press Herald offices. It was renovated into a high-end boutique hotel with an upscale restaurant on the ground level. While different than the Morse condition, the direct adjacency of the programs makes it as similar application. A new high-rise residential building is currently under construction nearby on Federal Street, and several luxury condo's have also built within a few blocks. Many of the surrounding commercial buildings are also mixed used, with apartments or condominiums on the upper levels. The residential context can be generally categorized as middle to upper-middle income.

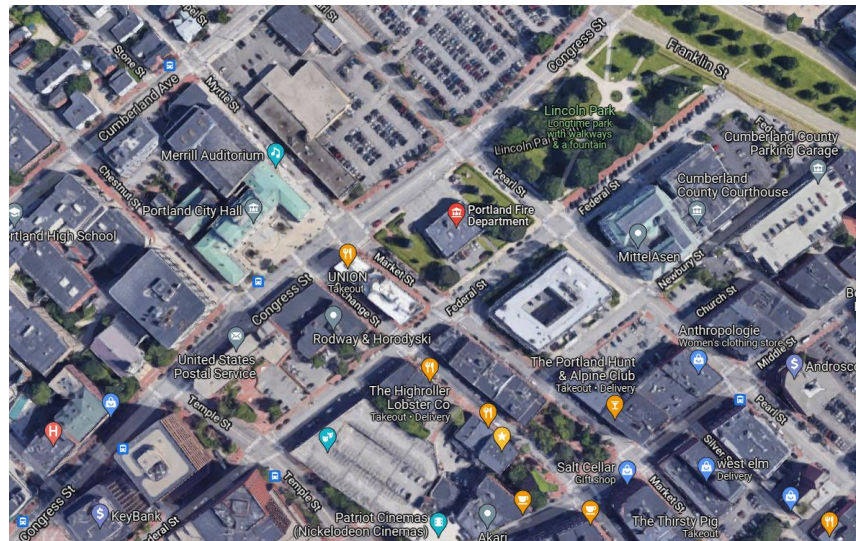


Figure Cf1: Aerial View of Portland Congress St Central Station and surrounding neighborhood



Figure Cf2: View of redevelopment context from Congress Street towards Exchange St..



Figure Cf3: View of redevelopment context along Federal Street.

g. Portland, ME

Portland's Munjoy Station is a substation on the East End of the city at 134 Congress. Located in the middle of single and multi-family homes, there's been a recent surge of upper-middle class condominium buildings being built throughout Munjoy Hill. One example is directly adjacent to the station on Congress Street. The residential context can be generally categorized as a mix between lower income homes and rental properties, and middle to upper-middle income residential redevelopment.

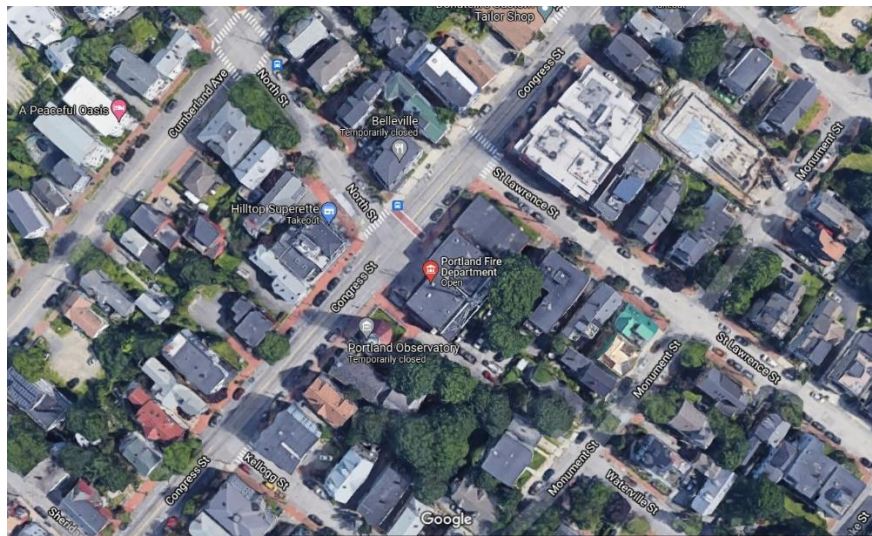


Figure Cf4: Aerial View of Portland Congress St East End Station and surrounding neighborhood



Figure Cf5: View of residential context along Congress Street. New Condominium building on corner of Congress and St. Lawrence, adjacent to fire station.



Figure Cf6: View of residential context along St. Lawrence towards Congress.



Figure Cf7View of residential context along Congress Street.



Figure Cf8: View of residential context along North Street towards Congress.

D. Conclusion:

- a. Bath has a unique situation with its central fire station being located in the middle of a residential neighborhood but benefits from this with its quick response times. Similar contextual examples, such as Salem, NH, have middle income residential surrounding fire stations. More populated areas will see lower to middle income rental properties, often with multiple apartments within larger, older homes. More recent redevelopment has seen trends of middle to upper income residential developments being located next to fire stations, as can be seen in multiple cases in Portland, ME. These locations should be considered precedents on which to base the Bath Redevelopment concepts.