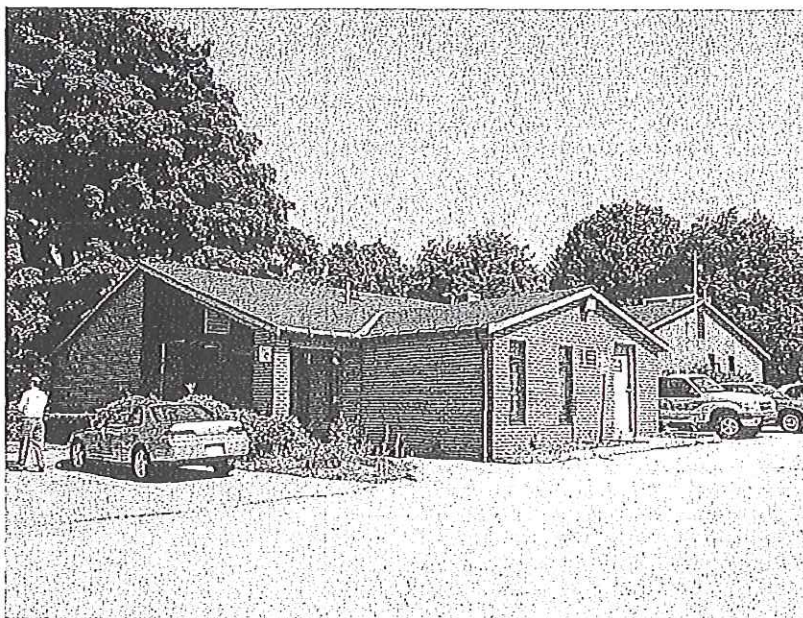


Police Station



Building Data Inventory:

Address: 415 Boston Post Road

Zoning:

Lot size:

Building type: Police station

Number of floors: 1 floor with attic

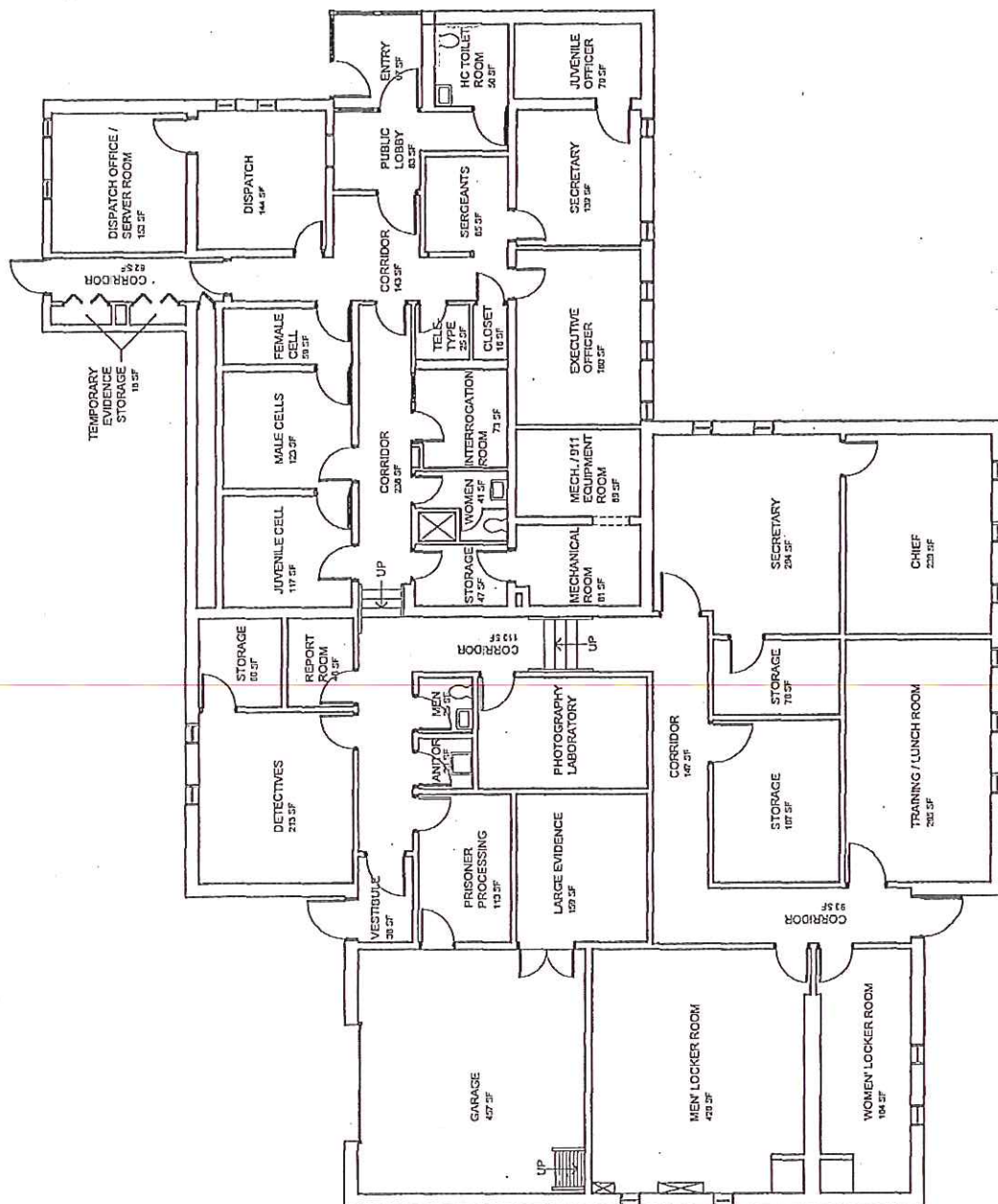
Year built: 1961

Additions: Doubled building size in 1981

Major renovations:

Occupancy groups: B, Business

Construction class: 3B



Police Station

Building Condition Overview:

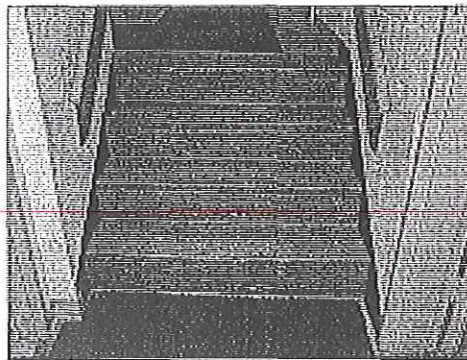
The Police Station was originally constructed in 1960 and a major addition was built in 1981. The addition contributed square footage to all sides of the building and could be said to engulf the small site. This building is one story tall with a partial attic. Constructed of brick veneer on concrete masonry unit (CMU) backup, the exterior walls are in good condition. The roof is gabled with asphalt shingles and copper gutters. Reported leaks in the roof have been repaired. Solar hot water panels located on the southwest corner of the roof are no longer in use.

Only a portion of this building is wheelchair-accessible. As part of the 1981 addition, a 2'-8" change in level was created between the old building and the new wing to the rear of the old building; the interior level change avoided extensive regrading and reflected the limited space available for parking and garage access. The stairs that create this level change fill the width of the corridor; unfortunately, no other means of accessing the offices exist in that part of the building. The interior walls are metal studs with painted gypsum wallboard (with the exception of the CMU walls that were formerly the exterior walls of the original building; a layer of painted gypsum wallboard was added to these walls to match the finishes of the addition). All interior finishes are in good condition.

There are reported electrical and HVAC problems throughout this building. An energy deficiency in the building is most evident in hot/humid weather conditions, when power is being consumed throughout the Town. The local electrical company is said to be attending to this energy deficiency. Wall unit air conditioners supply the cooling for most of the building. Centrally located, the interrogation room is one of several spaces with no means of cooling or ventilation (as required by code). The large meeting room also lacks air conditioning.



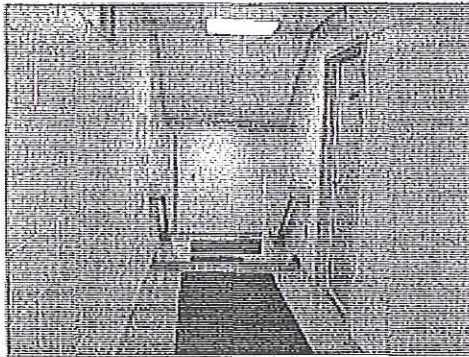
Single garage bay at the rear of the station.



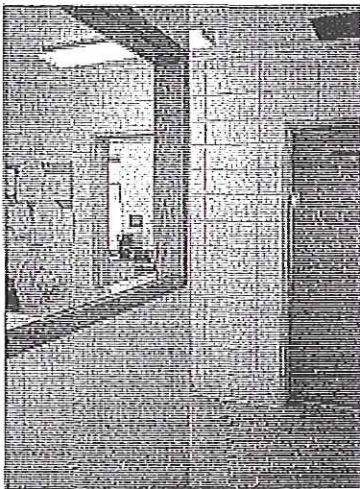
Stairs connecting original building to addition.

There is an overall lack of security at the building envelope. Doors to the exterior are equipped with combination keypad locks and doors are intended to close and lock automatically. However, the aging doors do not close automatically and, therefore, do not lock. The plumbing chase adjacent to the cellblock provides another security concern; this chase is accessible via two doors – one in the male cell and one in the corridor leading to the side exit.

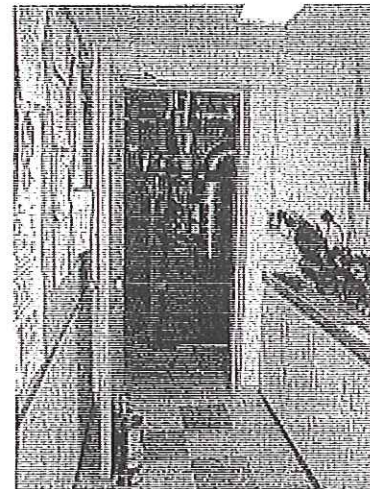
Sudbury Space Needs Study
Sudbury, MA



Corridor between original building and addition.



Sergeant's desk area (to left)



Equipment storage / mechanical room.

It appears that the Police Department has simply outgrown this facility. Because of the site constraints and the building's various problems, renovating and expanding the existing building may result in an unsatisfactory solution as inflexible as the current facility. Serious consideration should be given to erecting a new, state-of-the-art facility on a different site.



SAR Engineering, Inc.

FIELD REPORT

PROJECT: Sudbury Facilities Study – Police Station

FIELD REPORT NO.: 2

TRADE/DISCIPLINE: Plumbing/Fire Protection, Electrical

PROJECT NO.: 21092.00

DATE: 9/14/01

TIME: 2:30 PM

WEATHER:

TEMP. RANGE:

PRESENT AT SITE:

Steve Woodman – SAR Engineering, Inc.
Don Gamble – SAR Engineering, Inc.
Ahmad Moghni – SAR Engineering, Inc.

OBSERVATIONS:

- No sprinkler system. Sprinkler suggested.
- Water pressure unknown as of study date. Flow test suggested.

PLUMBING

- Wall hung fixtures that are adequate for their current use.
- Flushometers that appear to be working properly.
- Gas hot water heater Rudd 40 gallon.
- Boiler is gas fired.
- 1 ½ water service with water meter observed.
- Watts backflow preventer – watts 009 model.
- There is a sewer ejector for this building. Alarm controls are visible. Ejector is on the exterior.
- Lunch Room has stainless steel sink, older faucet. Update with newer fixture.
- Toilet Room / Locker Room has wall hung fixtures with flushometers.
- No handicap fixtures or access in this toilet room.
- Cells have institutional fixtures and one stainless steel sink.
- There is a slop sink with trap standard. Wood ford screw on style vacuum breaker on faucet.
- Miscellaneous brass floor clean outs observed.
- Lobby area has handicap toilet room.
 - 1 – water closet with flushometer
 - 1 – lavatory wall hung

Garage Area

- Floor drains in garage area observed.
- (2) cleanouts in floor to manholes in driveway and ejector. Ejector to be serviced.
- There is a shower in men's locker room. Up grade suggested.

HVAC

The Police Station has a 1982 Burnham gas fired boiler with three zone pumps. Its capacity is 316,000 BTU output. Hot water radiation heats all of the perimeter zones. Cooling is provided by means of window air conditioners for the exterior. There is no interior cooling.



FIELD REPORT

PROJECT: Sudbury Facilities Study – Police Station

FIELD REPORT NO.: 2

TRADE/DISCIPLINE: Plumbing/Fire Protection, Electrical

PROJECT NO.: 21092.00

DATE: 9/14/01

TIME: 2:30 PM

WEATHER:

TEMP. RANGE:

The boiler is approaching its life expectancy and will need replacement in three to six years.

ELECTRICAL

Electrical System

The building is fed from overhead service providing 200A, 120/240, 1 phase, 3 wire system. The various distribution board and panelboard make up the electrical distribution system. However, service may not support increase in load. The panelboards are in fair condition.

Lighting

The lighting throughout the building is fluorescent fixture with T-12 lamps. The fixtures are in good condition. Energy efficient fixtures are required.

Emergency Lights

The building has battery pack emergency lights.

Exit Lights

The building has LED exit lights.

Fire Alarm System

The building has "Fire Lite" fire alarm system. However, the initiating and notification devices are not adequate.

Miscellaneous

1. The building is on 15 KVA "Onan" 120/240A generator with automatic transfer switch.
2. The building has its own telephone, computer, and emergency call system.

ITEMS TO VERIFY

ACTION REQUIRED:

REPORTED BY: Steve Woodman – SAR Engineering, Inc.
Don Gamble – SAR Engineering, Inc.
Alumad Moghni – SAR Engineering, Inc.

SUDBURY FACILITIES STUDY

UPGRADE RECOMMENDATIONS FOR POLICE STATION

HVAC

1. If a new Police Station were to be built, the cost of the new HVAC system is estimated at \$100,000, including a separate cooling system for the Control and/or the Radio Room with independent office heating and cooling zone controls. The heating and cooling systems should be designed with the highest possible energy efficient equipment.
2. The holding cells should be designed with air conditioning as a means to reduce prisoner irritation on long weekend stays when the Courts are closed for a long weekend. The cell cooling cost is included within the \$100,000 estimate.
3. If the existing Police Station were to remain as is for another ten years, it may be necessary to replace the boiler. Estimated cost is \$4,000.

PLUMBING/FIRE PROTECTION

1. The present building is not sprinklered. If an addition or major renovations are planned, it would be recommended that the building be fully sprinklered. Estimated cost is \$2.75/sq. ft.
2. The overall condition of the plumbing system appears to be in fair to good condition with no code violations observed.

ELECTRICAL

1. The existing electrical systems are in fair condition. However, for any increase in load, new distribution equipments are recommended.
2. New addressable fire alarm system for ADA compliance is recommended.
3. Lighting fixtures with electronic ballast and T-8 lamps is recommended.

The approximate cost to replace the above items will be \$50,000.

Police Station

Department Overview:

The Police Department provides the citizens of Sudbury with police protection including addressing motor vehicle, civil, and criminal incidents. The Department operates 7 days per week, 24 hours per day. Staffing currently includes 27 sworn officers, 4 dispatchers and 2 secretaries. The department expects to hire an additional 2-3 officers over the next 4-5 years. At this time there are no female officers. The Department currently uses 9 police cruisers and 1 motorcycle for patrolling.

Program Needs Overview:

The existing police facility is too small to accommodate current space demands. The 1981 addition added square footage to accommodate needs at that time, but this department has since outgrown the facility, and the designed in 1981 is no longer suitable. For example, the design of the addition created a 2'-8" change in level that renders most of the office spaces inaccessible to wheelchairs. Further, the one interview / interrogation room in the building is located off of the same corridor as the cellblock; ideally, this room would be located remotely from the cellblock so that there is no chance that a prisoner will pass a victim in the corridor. The cellblock should also be located closer to where prisoners are brought into the building and the booking area. Many office spaces are undersized. In the design of this station, an office space for the sergeants was not included. The 5 sergeants presently share one desk in an open office area. The sergeants should each have their own desk in a shared office. This office should be large enough for or adjacent to a space for the sergeants to conduct roll call at the change of shifts. A storage closet has become an office space for the Juvenile Officer. Obviously, it was not designed with proper ventilation for its use. Three detectives share one office space that is too small for all of the equipment that they require.

Storage is lacking overall for this department. Additional storage for equipment, records, and supplies is needed. A larger and more secure space is needed for temporary evidence storage. The training room is the only meeting room in the building and is used for training, lunch, meetings, and roll call. This room is especially undersized for staff meetings when all officers are in attendance. The current configuration of the public lobby space is too small and uninviting. The dispatch window is not secure. A combined dispatch with the Fire Department is desired, but the existing space is too small to accommodate it. There is a need to improve security of the building perimeter; doors that should close and lock automatically do not. The existing garage bay is inadequate for the current department needs. There is a severe shortage of parking spaces, especially at the change of shifts and during full staff meetings.

Space Needs Summary:

- Air conditioning and heating improvements are required to make full use of the facility
- Accessible corridors are required to make all areas in the facility wheelchair accessible
- Storage space is needed for general supplies and records
- Larger, alarmed and ventilated storage space for evidence and lost articles
- Larger public lobby space
- Larger dispatch area
- Secure plexi-glass dispatch window
- Separate training and lunch rooms
- Space for officers to congregate at the start of shifts (for roll call, receipt of assignments, etc.) that is part of or adjacent to the sergeant's office.
- Larger office space for the sergeants
- Office space for juvenile officer
- Larger office space for three detectives
- Exercise / weight room
- Larger interview / interrogation room separate from the cellblock
- Cellblock located adjacent to booking area
- Additional garage bays for vehicle maintenance, speed trailer and motorcycle storage
- Additional parking spaces to accommodate change in shift or training session traffic

POLICE STATION PROGRAM ANALYSIS SUMMARY REPORT

<u>ROOM #</u>	<u>SPACE DESIGNATION</u>	<u>CURRENT SF</u>	<u>NECESSARY SF</u>
<u>FIRST LEVEL</u>			
100	ENTRY	67 SF	67 SF
101	PUBLIC LOBBY	83 SF	150 SF
102	CORRIDOR	143 SF	143 SF
103	SERGEANT'S OFFICE	65 SF	200 SF
104	HC TOILET ROOM	50 SF	50 SF
105	JUVENILE OFFICER	79 SF	120 SF
106	SECRETARY	139 SF	139 SF
107	EXECUTIVE OFFICER	180 SF	180 SF
108	CLOSET	16 SF	16 SF
109	TELETYPE	25 SF	25 SF
110	CORRIDOR	238 SF	238 SF
111	INTERROGATION ROOM	73 SF	120 SF
112	WOMEN'S ROOM	41 SF	50 SF
113	STORAGE	47 SF	75 SF
114	MECHANICAL ROOM	81 SF	81 SF
115	MECHANICAL / 911 EQUIPMENT ROOM	89 SF	89 SF
116	CORRIDOR	110 SF	110 SF
117	PHOTOGRAPHY LABORATORY	155 SF	155 SF
118	SECRETARY	294 SF	294 SF
119	RECORD STORAGE	78 SF	100 SF
120	CHIEF	239 SF	239 SF
121	LUNCH ROOM	295 SF	250 SF
NEW	TRAINING ROOM	0 SF	400 SF
NEW	EXERCISE / WEIGHT ROOM	0 SF	400 SF
122	RECORD STORAGE	167 SF	250 SF
123	CORRIDOR	147 SF	147 SF
124	CORRIDOR	93 SF	93 SF
125	WOMEN'S LOCKER ROOM	184 SF	200 SF
126	MEN'S LOCKER ROOM	428 SF	500 SF
127	GARAGE	457 SF	1000 SF
128	LARGE EVIDENCE ROOM	159 SF	250 SF
129	PRISONER PROCESSING	113 SF	150 SF
130	VESTIBULE	38 SF	38 SF
131	JANITOR	23 SF	25 SF
132	MEN'S ROOM	25 SF	50 SF
133	DETECTIVES' OFFICE	213 SF	300 SF
134	EQUIPMENT STORAGE	60 SF	100 SF
135	REPORT ROOM	48 SF	100 SF ¹
136	JUVENILE CELL	117 SF	117 SF
137	MALE CELLS	123 SF	123 SF
138	FEMALE CELL	59 SF	59 SF

POLICE STATION CON'T.

139	TEMPORARY EVIDENCE STORAGE	18 SF	50 SF
140	CORRIDOR	62 SF	62 SF
141	DISPATCH OFFICE / SERVER ROOM	153 SF	153 SF
142	DISPATCH	144 SF	200 SF
200	ATTIC STORAGE	647 SF	800 SF
201	ATTIC STORAGE (ABOVE LOCKER ROOM)	335 SF	335 SF

CURRENT SF TOTAL

6,400 SF

NECESSARY SF TOTAL

8,793 SF

ADDITIONAL SPACE REQUIRED TO MEET NEEDS

2,393 SF

¹ INCREASED TO ACCOMMODATE TWO OFFICERS.