

# 5.5 Saugatuck Elementary School

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## 5.0 Existing Facility Survey

### Master Plan Facility Study for Westport Public Schools

## SAUGATUCK ELEMENTARY SCHOOL

### 5.5.1 Architectural Conditions Analysis

**Existing Building** The Saugatuck Elementary School is a sprawling structure consisting of a central rectangular original building (two floors, plus a basement area) with a large addition to the northeast (primarily one floor, with a gymnasium, cafeteria, and a partial second floor) and a more recent larger addition to the southwest (primarily one floor, with an auditorium, courtyard, and a partial second floor).



Currently twenty-five (25)\* classrooms serving approximately 455 students are localized on the First Floor (around the Library / Media Center and into the Original Building) and throughout the Second Floor (not including a K-5 Science Lab). Classrooms are generally grouped by grade, with Kindergarten thru 3<sup>rd</sup> Grade on the First Floor and 3<sup>rd</sup> thru 5<sup>th</sup> Grades on the Second Floor including World Language. In addition to the classrooms, the students are served by an Auditorium with a large stage, Music Room and multiple Instrument Lesson areas, Art Room, TV Studio, Library with Computer & Media rooms, Gymnasium, and Cafeteria. Administrative offices, Student Services rooms, a Workshop, and a Health Suite (Nurse) are located near the main entrance in the Original Building and into the Northeast Addition. Several Intervention and Resource rooms, as well as teachers' work rooms/lounges, are distributed throughout the facility.

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### 5.5.1 Architectural Conditions Analysis



The first school building on this site (no longer exists) was built and opened on October 31, 1884 as Staples High School. A second building (the middle part of the current building) was built in 1936. Termed the “Original Building” for the sake of this report, this 2-story structure currently contains the main entrance to the facility (accessible via two ramps), Main Office, and various classrooms spread among the First and Second Floors and connected by two (2) stairwells.



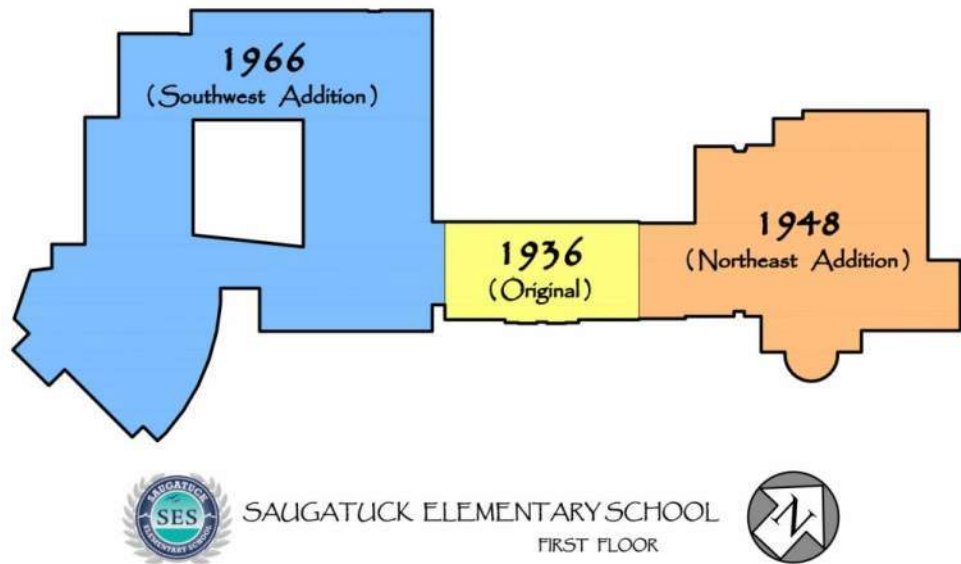
Added in 1948, the First Floor of the Northeast (NE) Addition houses the Gymnasium, Cafeteria / Kitchen, Health Suite (Nurse), Faculty Break Room, Custodial Area, and a loading dock (Receiving). The northeast end of this addition is currently

the main entrance for students who are dropped off by parents and is accessible via a ramp. The Second Floor of the Original Building was extended to include several classrooms and a Science Lab enroot to a large Mechanical room / attic that serves this addition. This expanded facility remained as Staples High School until 1958 when it became Bedford Junior High school and then ultimately Bedford Middle School.

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5.5.1 Architectural Conditions Analysis



The first school building on this site was torn down in 1966 during construction of the Southwest (SW) Addition. The main components of this wing are the prominent fan-shaped Auditorium and a courtyard surrounded by corridors, classrooms, and

the Library / Media Center (with adjacent Computer Lab and Media Work Room). The First Floor also contains the main Boiler Room, Generator Room, other Mechanical and Electrical rooms, Music Rooms, an Art Room, and various classrooms (including all the Kindergarten classrooms with egress doors directly to outside in each room). The Second Floor of the Original Building was again extended, adding four (4) more classrooms. A large vestibule near the Auditorium serves as the building's third main entrance when performances and activities are isolated to this portion of the facility, accessible by ramp.

**SAUGATUCK ELEMENTARY SCHOOL**

**5.5.1 Architectural Conditions Analysis**

A partial Basement exists in the Original Building, accessed by stairway from under Stair #2. With low headroom, this area is only used for custodial purposes and to service building systems such as the domestic and fire protection water mains. Note there are locked crawl tunnels under the Original Building and both Additions that begin in the Basement and provide access to under-floor utilities, etc.

In 2002, the entire facility was extensively renovated, including the installation of an elevator to provide better handicap accessibility. The school's name was changed to Saugatuck Elementary School, named after the school that existed from 1902 to 1983 on Bridge Street east of the Saugatuck River.

The current contiguous facility consists of approximately 91,236 square feet (inside face of exterior wall):

First Floor: 74,243 SF

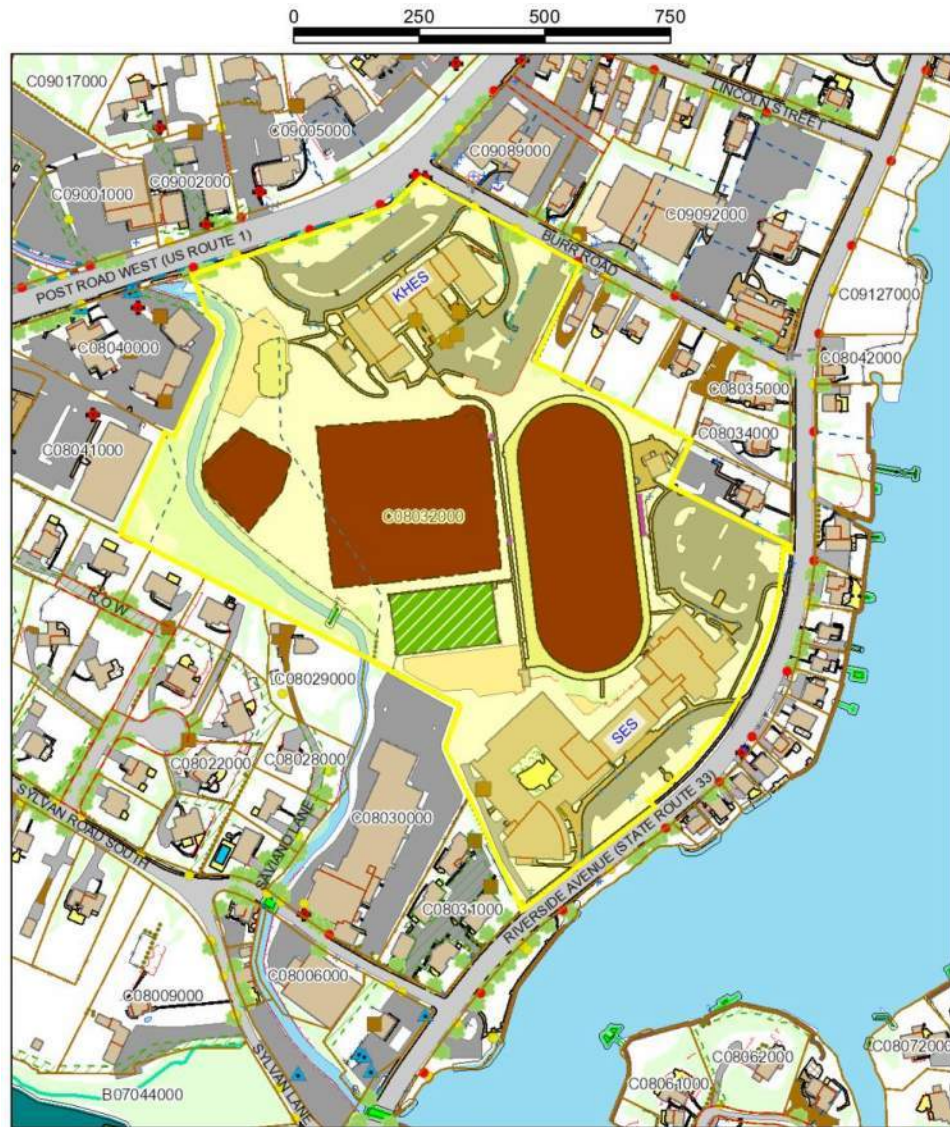
Second Floor: 16,993 SF

# 5.0 Existing Facility Survey

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#### 5.5.1 Architectural Conditions Analysis



The Saugatuck Elementary School (SES) building shares its large site with the Kings Highway Elementary School building and a Police Athletic League (PAL) building, both to the north. The southeastern property line runs parallel to the Saugatuck River. The two schools are separated by athletic fields consisting of a softball field, baseball field, artificial turf football / lacrosse field with track, and tennis courts. A small parking area off SES's north parking lot provides access to the PAL building and a gray house (136 Riverside Ave.; separate property owned by the Town of Westport) but neither building is maintained by the Board of Education.

**SAUGATUCK ELEMENTARY SCHOOL**

**5.5.1 Architectural Conditions Analysis**

Student bus drop-off/pick-up occurs at a loop across the front of the School (facing Riverside Avenue – Route 33) with adjacent faculty/visitor and accessible parking. All visitors and students that walk to school must use this main entrance in the Original Building which is accessible via ramps. A parent drop-off/pick-up loop, faculty parking, additional accessible parking, a loading dock, and dumpster enclosure are provided at the north parking lot at the side of the school. This secondary entrance into the NE Addition is also accessible.

The School has several dedicated play equipment areas and a hard surface play area (including a basketball half court). See site/Civil facility survey for more information.

This report includes descriptions of the various systems, the areas they serve, system capacities, existing conditions, areas of concern, and recommendations for each system. Existing Code-related items and issues are reviewed for conformance with building codes presently in effect at the time of this Study.

**\* Represents physical room count. Actual classroom space uses may differ in practice.**

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SAUGATUCK ELEMENTARY SCHOOL

5.5.1 Architectural Conditions Analysis

**Building Profile**

Saugatuck Elementary School  
170 Riverside Avenue  
Westport, CT 06880

Grades:	Kindergarten – 5th Grade
Original Construction:	1936
Former Name(s):	Staples High School Bedford Junior High School Bedford Middle School
NE Gym/Cafeteria Addition:	1948
SW Auditorium/Courtyard Addition:	1966
Major Renovations:	2002
Lot Size:	23.15 acres* (combined with KHES)
Zoning:	Zone A*
Number of Parking Spaces:	See site/Civil facility survey
Building Facade:	Combination of brick, stone and wood accents/trim, stucco panels
Roof Construction:	Gabled Roofs – synthetic slate shingles Flat Roofs – EPDM; 2-layer SBS Roof System
Occupancy Classification:	E, Educational (primary) A-1 & A-3, Assembly (secondary)
Construction Type:	Varies (multiple additions)
Fire Protection System:	Sprinkler system throughout. Water service in Basement of Original Building via Stair #2; FD connection at NE Addition near Kitchen.
Emergency Generator:	Yes, but school is not used as an emergency shelter
Handicap Accessible:	Yes (elevator) but 2002 drawings state “Non-Designated” and note pending related Code Modifications
Number of floors:	2, + Lower Level (Basement) + Attic
Existing Total Floor Area:	Approx. 99,914* Gross Square Feet

\* Data from Town of Westport Assessor's Office – Online Assessment Database.

## 5.0 Existing Facility Survey

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### SAUGATUCK ELEMENTARY SCHOOL

#### 5.5.1 Architectural Conditions Analysis

The rooftop screen fence that obscures the large mechanical units is in good condition.



Building expansion joints are in moderate condition throughout. The facility has lightning protection cables, rods, and anchors around most perimeter roof edges, but the cables and anchors are disconnected or loose in multiple areas.



SAUGATUCK ELEMENTARY SCHOOL

5.5.4 Mechanical, Electrical, Plumbing, and Fire Protection

**Mechanical**

Boiler Plant / Chiller Plant

- I. The building is heated by (2) dual fuel, hot water boilers. Both boilers are Smith 28A-S/W-12 models installed in 2002 and were observed to be in good condition. Each boiler's burner is a Powerflame model C3-G0-25, installed in 2002 and observed to be in good condition. Two (2) fuel oil pumps were observed to be in fair condition.



2. Boiler Room Accessories:
  - a. One (1) shell and tube, hot water to glycol hot water heat exchanger was observed to be in good condition. There are also two (2) Bell & Gossett glycol/hot water pumps which were installed in 2002 and appear in good condition.
  - b. The boiler plant also included two “hydronic pumps” which serve the two pipe distribution. These pumps are Bell & Gossett pumps and were observed to be in good condition.

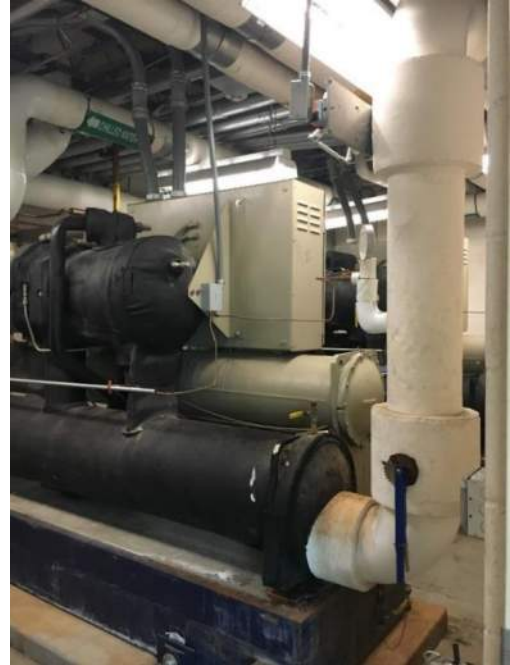
**SAUGATUCK ELEMENTARY SCHOOL**

**5.5.4 Mechanical, Electrical, Plumbing, and Fire Protection**

3. Specific Spaces: At entrance to Vestibule 25, there is hot water piping with damaged insulation. Insulation should be replaced and a PVC or stainless steel jacket be installed.

Chiller Plant

1. There are two (2) Trane Model RTHB150 chillers for this building. Each were installed in 2002 and in good condition.



2. There are two (2) Baltimore Air Coil blow through cooling towers for the chiller plant; both installed in 2002 and are in fair condition. Corrosion was observed at each tower.



3. There are two (2) Bell and Gossett 1510 Series pumps for the cooling towers. Each of these pumps were installed in 2002 and are in fair condition.

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**5.5.4 Mechanical, Electrical, Plumbing, and Fire Protection**

Air Systems

1. Indoor Air Handling Units: There are a total of thirteen (13) indoor air handling units. These units were observed to be in good condition.



2. Outdoor Air Handling Units: There are two roof-mounted air handling units in fair shape.
3. Fan Coil Units: There are five (5) fan coil units located within the building; observed to be in good condition.
4. Makeup Air Unit: There is one (1) makeup air unit dedicated to the kitchen in fair condition.
5. Ventilation Units:  
There are a total of two (2) indoor ventilation units and four (4) outdoor ventilation units. The indoor units were observed to be in good condition. The outdoor roof mounted units were observed to be in fair condition.



**5.0 Existing Facility Survey**  
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**5.5.4 Mechanical, Electrical, Plumbing, and Fire Protection**

**Electrical**

Existing Systems

1. The building is served by General Electric switchgear at the service entrance which is rated at 4000 amperes, 208Y/120V, 3-phase, 4 wire; observed to be in good condition.



2. The generator is a Cummins Model 4000-DFCE-5551514 which is rated at 4000 KW, 208Y/120V, 3-phase, 4 wire. It was installed in the generator room in 2002 and was observed to be in good condition.



**SAUGATUCK ELEMENTARY SCHOOL**

**5.5.4 Mechanical, Electrical, Plumbing, and Fire Protection**

3. There are a number of electrical power panels located throughout the building. They are primarily General Electric panels fed from overhead panels and in good condition.
4. The fire alarm system is a Notifier zoned system and is in excellent condition.
5. The PA system is a Telecor system in excellent condition. The head end and most of the end devices are in good to excellent condition.
6. Access control and Security System is a Sonitrol and is in excellent condition.
7. The clock system is a Telecor system and is in excellent condition.
8. Lighting at classrooms and offices is primarily LED fixtures as replaced as part of NORESKO's energy improvement programs. Overall, light fixtures are in good condition. There are still some fixtures will need to be updated and we recommend these be scheduled for replacement with LED fixtures
9. Some rooms have ceiling mounted occupancy/vacancy sensors.
10. Lighting at offices consist of fluorescent fixtures controlled with line voltage toggle switches and is in good condition.
11. Emergency lighting is handled by single and dual head incandescent lights. All fixtures are battery backed; some fixtures have integral battery packs while others have battery packs on the wall nearby. The emergency lighting was observed to be in good condition
12. Exit signs are battery backed LED and were observed to be in good condition.