

The background of the cover is a photograph of a modern, multi-story building with a flat roof and large windows. A tall, black light pole stands in the foreground. A large, semi-transparent red triangle is overlaid on the right side of the image, pointing towards the bottom right corner.

MUNICIPAL AND SCHOOL FACILITIES STUDY AND MASTER PLAN

City of Brockton
Brockton, Massachusetts

Volume 1 — School Facilities Assessment

December 3, 2018

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Volume 1 SCHOOL FACILITIES STUDY

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ACKNOWLEDGEMENTS

This planning study was jointly managed by the Department of Planning and Economic Development and the School Department in the City of Brockton, Massachusetts.

The planning process for Volumes 1 and 2 of this study includes input, ideas, and feedback gathered from many School Administration staff that participated in Visioning Sessions, responded to surveys, participated in informal discussions, provided input during meetings, and offered data that shaped the findings contained in these reports.

The team was lead by:

MAYOR

Bill Carpenter

SCHOOL ADMINISTRATION

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Michael P. Thomas, Deputy Superintendent

DEPARTMENT OF PLANNING AND ECONOMIC DEVELOPMENT

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SCHOOL STUDY CONSULTANT TEAM

Arrowstreet Inc., Architecture and Planning
Frank Locker, Educational Planner
Ken Buckland, Urban Planner

During the planning process, the team referenced many preceding studies and reports that were provided to the consultant team. These previously conducted research and background resources were a springboard for this Municipal and Educational Facilities Master Plan.

The following preceding relevant documents were reviewed as part of this study:

2017—*State of the Schools*

Superintendent Kathleen A. Smith

2017—*A Blueprint For Brockton: Comprehensive Master Plan*

2016—*Brockton Public Schools Kindergarten Entry Age and Preschool Expansion*

2016—*Huntington and Goddard School Assessments*

2016—*New England School Development Council (NESDEC) Brockton, MA Historical Enrollment*

2015—*State of the Brockton Public Schools*
Superintendent Kathleen A. Smith

2014—*Brockton Public Schools Strategic Plan*
Superintendent Kathleen A. Smith

2014—*Whitman School Facility Assessment*

The over arching theme of these documents is that "Brockton will be valued and increasingly recognized as a high quality and affordable place to live, work, or visit because it offers all dimensions of a 21st century city". (A Blueprint for Brockton: Vision for Brockton, page 3, of the Comprehensive Master Plan)

While several of these planning efforts were directed towards downtown revitalization, this is the first plan undertaken for a comprehensive strategy towards municipal and educational facilities for the City of Brockton.

Section 1 EXECUTIVE SUMMARY

1.1 Introduction

INTRODUCTION

This Municipal and School Facilities Study and Master Plan is intended to understand the City of Brockton's current municipal and school building inventory, and develop recommendations for a Master Plan to address future growth, facility improvements, and long term visions to offer all dimensions of a 21st century city.

The study is divided into three phases which is documented in the following four Volumes:

SCHOOL FACILITY REPORT AND MASTER PLAN

Volume	Phase
1	Phase I—Inventory and Assessment
2	Phase II—Project Definition
	Phase III—Recommendation

MUNICIPAL FACILITY REPORT AND MASTER PLAN

Volume	Phase
3	Phase I—Inventory and Assessment
4	Phase II—Project Definition
	Phase III—Recommendation

1.2 Project Overview

SCHOOL FACILITIES ASSESSMENTS

Phase I—Inventory and Assessment is a critical first step in this study to assess and define the City's current existing school building inventory, determine the conditions and programmatic needs for each of the buildings, and evaluate the condition and capacity of the existing school portfolio in its entirety.

As stated in the June 2017— State of the Brockton Public Schools, this citywide Facilities Masterplan will study the short- and long-range plan to maintain, renovate, repair, and potentially replace school buildings.

The Brockton Public School District consists of 22 occupied schools that include pre-kindergarten, elementary, middle, one high school and alternative schooling programs. There are 2 additional school buildings that are currently not in operation and closed to students. As part of this study all 24 school buildings were assessed and evaluated.

SCHOOL BUILDING INVENTORY BY GRADE CONFIGURATION

Type	Quantity
Pre-School/ Pre-K	2
Elementary School (K-5th grade)	10
Elem & Middle School (K-8th grade)	1
Middle School (6th - 8th grade)	6
High School	1
Alternative High School	2
Closed building	2
Total School Building Inventory	24

1.3 Process

The School Facility Study and Master Plan team visited each of the twenty-four school buildings with the purpose to:

- Understand the common trends observed in facilities throughout the City of Brockton
- Determine the conditions of the existing facility inventory
- Assess the conformance of each school building to support 21st Century learning
- Identify and prioritize areas of potential improvement within the school building infrastructure

The following outline explains the process of collecting and understanding the current facility status:

PAINT THE PICTURE

The team began by collecting, compiling, and organizing a variety of background data for the City of Brockton Public Schools. The topics included: enrollment projections, academic space programs, demographics, building history, location, historical information, community zones, walkscore, and facility maintenance information.

GROUP AREAS

For purpose of grouping and identifying the facilities throughout this study, the design team utilized the pre-determined location of the school zones:

South,

NorthWest,

NorthEast,

and

Citywide

The facilities are identified throughout this document using these zones.

ANALYZE DATA

The collected data was interpreted, evaluated, and analyzed to discover themes and patterns observed throughout the school district.

VISIT FACILITIES

The team visited each of the twenty-four school facilities to observe and evaluate the physical condition. A through building review report was used to evaluate Life Safety Code, physical condition of each building, ADA/ MAAB compliance, site conditions, building configuration, security, and building system observations. The grading scale used in the report ranked the conditions from 'Good' to 'Poor'.

DETERMINE FACILITY PRIORITY

The building review report revealed building condition averages that determined priority ranking for each of the buildings. These are identified as:

Priority 1: Current Critical

Priority 2: Potentially Critical

Priority 3 and 4: Not yet Critical and For Consideration

The remainder of the Schools study is found in Volume 2 — School Master Plan Recommendations:

- STUDY OPTIONS
- RECOMMENDATIONS
- SCHOOL FACILITY MASTER PLAN

1.4 Assessment Criteria

ASSESSED AREAS

The assessment, analysis, and prioritization of the facilities were categorized as follows:

- **Site Assessment:** The quality, condition, and capacity of the parking and landscaping on site.
- **Building Assessment:** The quality and condition of the exterior envelope, interior spaces, life safety, building systems, and suggested code compliance of the facility.
- **Programming Effectiveness:** The facility serves the needs of the city in a functional way. An evaluation of the general efficiency of space, and fire/records storage evaluation.
- Environmental non-compliance
- Fire suppression non-compliance
- Open classroom configuration
- Student population above MSBA recommendation

Priority 3—Necessary / not yet critical

Conditions in this category require appropriate attention to preclude predictable deterioration or potential downtime and the associated damage or higher costs if deferred further.

- ADA/ MAAB non-compliance
- Student population meets MSBA recommendation

Priority 4—For Consideration

Conditions in this category include items that represent a sensible improvement to existing conditions. These are not required for the most basic function of the facility; however, Priority 4 projects will improve overall usability and/ or reduce long-term maintenance costs.

- Student population below MSBA recommendation

Priority 5—Does not meet current codes/ standards

Priority 5 was defined in the RFP, but was not categorized in the determination for the Priority Criteria Scale. Items may become triggered to Priority 5 if certain thresholds of work are met on existing buildings.

“Grand-fathered” conditions in this category include items that do not conform to existing codes, but are “grand-fathered” in their condition. No action is required at this time, however, should substantial work be undertaken in the contiguous area, certain existing conditions may require correction.

PRIORITY CRITERIA SCALE

Deficiencies have been categorized with the following scale, rating each facility, on a scale ranging from “critical” to “for consideration”, defined as follows in the Request for Proposal.

Priority 1—Current critical

Conditions require immediate action to:

- Correct a cited safety hazard
- Stop accelerated deterioration
- Return a facility to operation
- Correct an environmental/ Air quality hazard

Priority 2—Potentially critical

Conditions in this category, if not corrected expeditiously, will become critical within a year. Situations within this category include:

- Intermittent operations
- Rapid deterioration
- Potential life safety hazards

1.5 School Building Priority Rating

	Site		Building							Program		FACILITY AVERAGE
Early Childhood	Parking Lot	Landscaping	Safety and Security	Exterior (Roof, Facades)	Interior Finishes	Building Systems	ADA/ MAAB Compliance	Fire Suppression	Modular Classroom(s)	Storage and Bldg Configuration	MSBA Recommendations	
Adult Learning Center	2	3	4	3	3	2	3	2	n/a	2	n/a	2.7
Barrett Russell Early Childhood Center	4	4	4	4	4	4	4	2	n/a	1*	n/a	3.4

* Barrett Russell Early Childhood Center—There is no gym.

PRIORITY CRITERIA SCALE

Priority 1	Current critical
Priority 2	Potentially critical
Priority 3	Necessary / not yet critical
Priority 4	For consideration

LEGEND

n/a	Not Applicable. This item does not pertain to this building.
1*	See explanation at end of chart

	Site		Building							Program		FACILITY AVERAGE
	Parking Lot	Landscaping	Safety and Security	Exterior (Roof, Facades)	Interior Finishes	Building Systems	ADA/ MAAB Compliance	Fire Suppression	Modular Classroom(s)	Storage and Bldg Configuration	MSBA Recommendations	
Elementary Schools												
Angelo School	3	4	4	3	4	4	4	4	n/a	4	2	3.6
Arnone School	3	4	4	3	4	4	4	4	n/a	4	2	3.6
Mary E. Baker School	4	4	4	4	4	4	4	4	n/a	4	3	3.9
Brookfield School	4	4	4	4	3	4	3	2	2	4	2	3.2
Edgar B. Davis School (K-8)	3	4	1*	2	3	4	3	2	2	1*	2	2.5
Downey School	1*	1*	1*	4	2	1*	3	2	2	1*	4	2.0
George School	4	4	4	4	4	4	4	4	n/a	4	2	3.8
Gilmore Elementary School	1*	3	3	4	3	4	3	2	n/a	2	2	2.7
Hancock School	4	4	4	4	1*	2	3	2	2	3	2	2.8
Kennedy School	4	4	3	3	3	4	3	2	2	3	2	3.0
Oscar Raymond School	2	4	2	2	2	3	3	2	n/a	1*	2	2.3

PRIORITY CRITERIA SCALE

- Priority 1 Current critical
 Priority 2 Potentially critical
 Priority 3 Necessary / not yet critical
 Priority 4 For consideration

LEGEND

- n/a Not Applicable. This item does not pertain to this building.
 1* See explanation on next page

*** EDGAR B. DAVIS SCHOOL (K-8)**

Storage and Building Configuration: The open classroom does not meet the schools educational needs.

Building security and safety: Staff noted concern with compromised sight lines in the spaces, egress paths through occupied spaces, and obscured visibility to egress signage.

*** DOWNEY SCHOOL**

Parking Lot: The asphalt parking lot has inadequate drainage and does not have curbing. Potholes were observed surrounding the building. The asphalt sidewalks are crumbling, cracking, and uneven.

Landscaping: There are minimal amounts of trees and landscaping on site. Grass is sparse, and dirt/mud is dominate in the fields.

Safety and Security: The open classroom configuration of the building has caused concern for staff in regards to egress safety due to limited lock down options.

Building Systems: The heating system is operated by electricity. Staff reports that parts for the system are no longer available.

Storage and Building Configuration: The open classroom does not meet the schools educational needs. Classroom dividers are created with temporary partitions that do not go to the underside of the roof and therefore acoustics are difficult for teaching and learning.

*** GILMORE ELEMENTARY SCHOOL**

Parking Lot: The parking lot reportedly has sufficient traffic flow with parents arriving in the 'front', and busses arriving in the 'back'. There were significant pot holes observed.

*** HANCOCK SCHOOL**

Interior Finishes: The current interior finishes are observed to be in poor condition. Future upgrades should prioritize areas of failing floor, ceiling and wall finishes.

*** OSCAR RAYMOND SCHOOL**

Storage and Building Configuration: The open classroom does not meet the schools educational needs

	Site		Building							Program		FACILITY AVERAGE
	Parking Lot	Landscaping	Safety and Security	Exterior (Roof, Facades)	Interior Finishes	Building Systems	ADA/ MAAB Compliance	Fire Suppression	Modular Classroom(s)	Storage and Bldg Configuration	MSBA Recommendations	
Middle Schools												
Ashfield Middle School	3	1*	4	4	2	4	3	2	2	4	2	2.8
East Middle School	3	4	3	3	2	3	3	2	n/a	3	4	3.0
North Middle School	4	2	3	4	2	3	3	2	n/a	3	3	2.9
Plouffe Academy	3	4	4	3	4	4	4	4	n/a	3	2	3.5
South Middle School	1*	4	3	2	3	4	4	4	n/a	3	3	3.1
West Middle School	3	3	3	4	2	2	3	2	n/a	1*	3	2.6

* Ashfield Middle School—Landscaping: Muddy conditions without grass. Poor drainage.

* South Middle School—Parking Lot: Currently shared by snow plow storage. Asphalt crumbling, curbing missing.

* West Middle School—Storage: Older records and files are insecurely and improperly stored in the basement.

PRIORITY CRITERIA SCALE

Priority 1	Current critical
Priority 2	Potentially critical
Priority 3	Necessary / not yet critical
Priority 4	For consideration

LEGEND

n/a	Not Applicable. This item does not pertain to this building.
1*	See explanation at end of chart

	Site		Building							Program		FACILITY AVERAGE
High Schools	Parking Lot	Landscaping	Safety and Security	Exterior (Roof, Facades)	Interior Finishes	Building Systems	ADA/ MAAB Compliance	Fire Suppression	Modular Classroom(s)	Storage and Bldg Configuration	MSBA Recommendations	
Brockton High School	3	4	4	4	3	3	3	2	n/a	3	2	3.1
Huntington Alternative School	3	2	2	1*	2	2	3	2	n/a	3	4	2.4
Keith Center—Frederick Douglass Academy and Champion High School	2	2	4	4	3	4	3	2	n/a	3	4	3.0

* Huntington Alternative School—Exterior (Roof, Facades): The building has a history of water damage that needs to be addressed. Slate roof shows evidence of leaking.

PRIORITY CRITERIA SCALE

Priority 1	Current critical
Priority 2	Potentially critical
Priority 3	Necessary / not yet critical
Priority 4	For consideration

LEGEND

n/a	Not Applicable. This item does not pertain to this building.
1*	See explanation at end of chart

	Site		Building							Program		FACILITY AVERAGE
Closed Facilities	Parking Lot	Landscaping	Safety and Security	Exterior (Roof, Facades)	Interior Finishes	Building Systems	ADA/ MAAB Compliance	Fire Suppression	Modular Classroom(s)	Storage and Bldg Configuration	MSBA Recommendations	
Goddard Alternative School	1	1	1	1	2	2	3	2	n/a	1	n/a	1.5
Shaw School	1	1	3	1	1	1	1	1	n/a	1W	n/a	1.2

PRIORITY CRITERIA SCALE

- Priority 1 Current critical
 Priority 2 Potentially critical
 Priority 3 Necessary / not yet critical
 Priority 4 For consideration

LEGEND

- n/a Not Applicable. This item does not pertain to this building.

Section 2 DEMOGRAPHICS

The team worked closely with Brockton Public School Department and the City of Brockton to understand the current demographics to estimate the space needs of the district over the next 10 years, anticipate changes in housing patterns in Brockton, and to analyze where school-age children are likely to live over the coming decade. This information will be used to identify areas of population growth, as well as to inform potential school siting and feeder-pattern strategies for different areas of the City.

Based on data collection from the 2015 American Community Survey, U.S. Census, we observed the following demographic trends, which are graphically represented on the following pages.

YOUTH POPULATION (FIGURE 2.1)

- The Northwest Zone has pockets of youth population under 5 and over 14 years of age, but less of the population is in the 5-14 year old range.
- The Northeast Zone has a higher concentration of youth above 10 years of age.
- The South Zone has a consistent amount of youth population through all age group categories.
- The Citywide Zone has the lowest concentration of youth population under the age of 15 all districts.

WALKABLE DISTANCE TO/FROM BROCKTON SCHOOLS (FIGURE 2.2)

- The Elementary Schools have the highest concentration of walkability with a large percentage of the City within $\frac{3}{4}$ of a mile of an elementary school.

- The Middle Schools along an axis from the North-east corner (Ashfield Middle School) to the South (South Middle School) are most walkable. Areas in pockets in the South-West near the South/Northwest Zone border and along the North-East upper corner of the City have further walkability distances for Middle Schools.
- The High Schools have a concentration of walkability in the Citywide Zone and South Zone.
- There is only one school, Hancock School, located west of the MA Route 24 Fall River Expressway. The walking radius of this Elementary school does not overlap with those of other Elementary schools.

AGE OF SCHOOL BUILDINGS (FIGURE 2.3)

- The building ages for the K-8, Elementary, and Middle School buildings average between 36-54 years old.
- The building age for the Pre-K and High School buildings average between 91-97 years old.
- The building age for the closed school buildings average 133 years old.

SPECIAL EDUCATION PROGRAMS (FIGURE 2.4)

- The PreK school (Barrett Russell) has one Special Education program.
- At the Elementary School level, there are Special Education programs at seven of the eleven schools. Two schools in the Northwest Zone and two schools in the South Zone do not have Special Education programs.

- At the Middle School level, there are Special Education programs at six of the seven schools. Davis School is the only Middle School without a Special Education programs
- Each of the three High Schools have an Alternate Pathways to Graduation program
- There is one Spanish Language program at the elementary level in the Northwest Zone, however it appears that the one Spanish program at the middle school level is in the Citywide Zone.
- There are two Portuguese Language programs at the elementary school level, however it appears that there is no Portuguese Language program at the middle school level.

ETHNICITY (FIGURE 2.5)

- A majority of the population is Caucasian, with the highest density around the perimeter of the city.
- The largest percentage of the African American population is located close to the city center and toward the North of the city.
- The highest percentage of Hispanic Population is 20-49%. This is density located near the center of the city with small clusters of Hispanic population to the North, South, and West of the city center.
- Overall, the Asian population is less than 10% throughout the city. There is are several isolated clusters of Asian population in the Northeast, Southwest, and near center city.
- There appears to be no English Immersion Program at the high school level.

LANGUAGE POPULATION PER HOUSEHOLD (FIGURE 2.7)

- The population speaking French Creole appears to be primarily along the north-south axis of the city, with clusters of French Creole speaking population in the northeast and southwest.
- The concentration of the Portuguese speaking community population is located primarily in the city center with a greater than 20%. The surrounding areas have between 5 to 20% with some areas in the northeast, southwest, and west that have less than 5% Portuguese speaking population.
- The Spanish speaking population is less than 20% in the city, with the concentration at 15-20% northeast of the city center. Surrounding areas are 5-14%, with less than 5% along the entire west side of the city.
- The majority of the limited English speaking households are located along the central north south axis of the city, with clusters of limited English speaking population along the east and west.

SCHOOL LANGUAGE PROGRAMS (FIGURE 2.6)

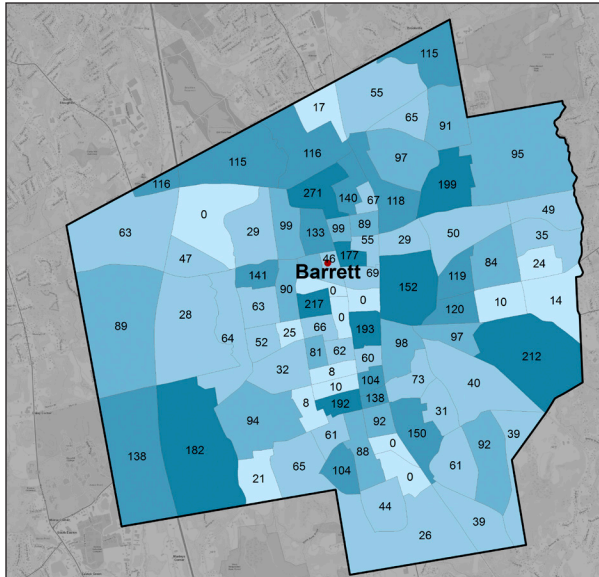
- The Language Programs for the elementary school level are located in the South, Northwest, and Northeast Zones. There appears to be no Language program at the elementary school level in the Citywide Zone.
- The Language Programs for the middle school levels are located in all four Zones.
- The Portuguese and Spanish language programs are only located in the Northwest Zone at the elementary level.

LEVEL OF COMPLETED EDUCATION (FIGURE 2.8)

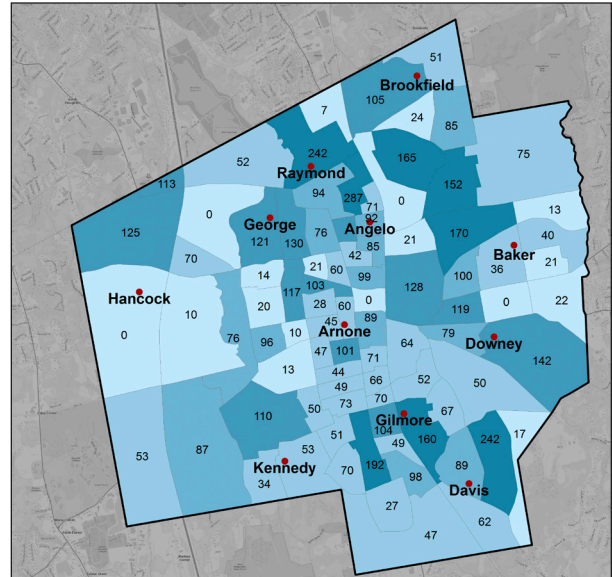
- The demographics of completed education appear that the north- south central axis , and clusters to the east, with a concentration of 10-59% of the population with no high school diploma.
- A majority of the city is showing that the percentage of the population that has a high school diploma as the highest degree is 10-49%. There are clusters above and below this percentage.
- A majority of the city is showing that the percentage of the population that has a some college education (but not a degree obtained) is 10-49%. There are clusters above and below this percentage.
- The demographics appear that the highest population to obtain a bachelor's degree or higher is in the 20-49% range. Simply put, less than 50% of the population has obtained a bachelor's degree or higher.
- The higher concentrations of higher education are along the east and west perimeter, with some concentrations along the north and south. The center of the city appears to have less than 10% that have a obtained bachelor's degree or higher.

2.1 Youth Population

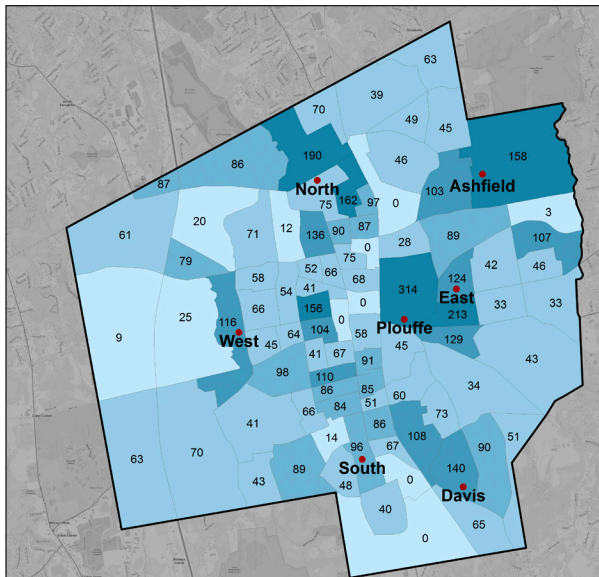
POPULATION UNDER 5 YEARS OLD



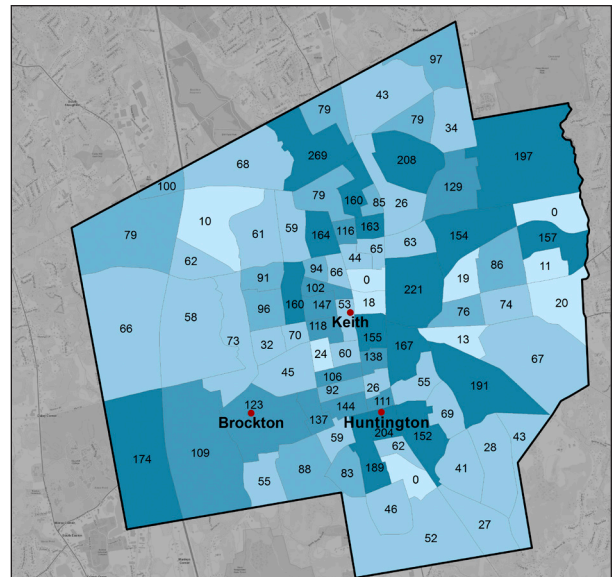
POPULATION 5-9 YEARS OLD



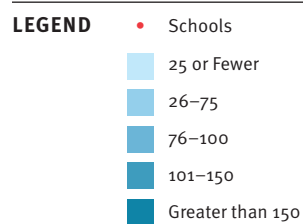
POPULATION 10-14 YEARS OLD



POPULATION 15-19 YEARS OLD

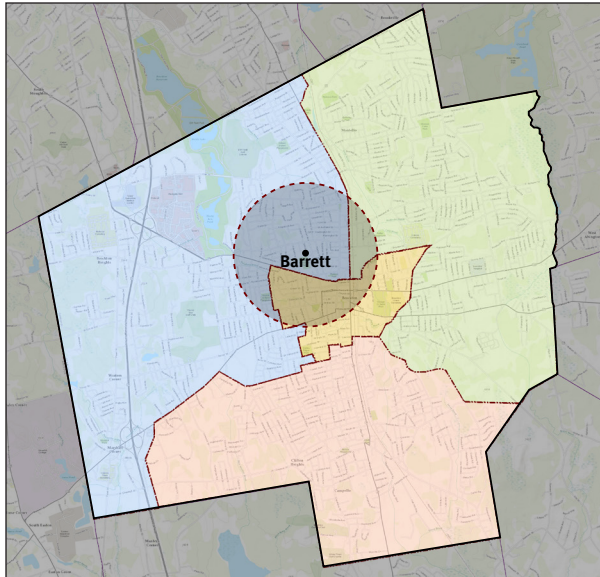


Source: 2015—American Community Survey, U.S. Census

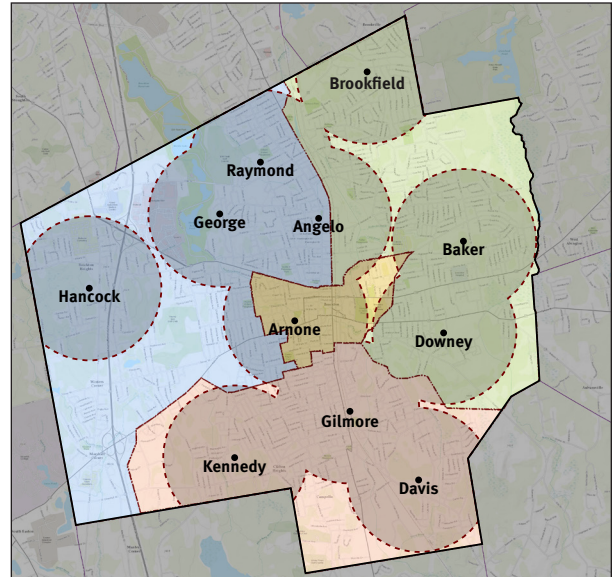


2.2 Walkable Distance to/from Brockton Schools

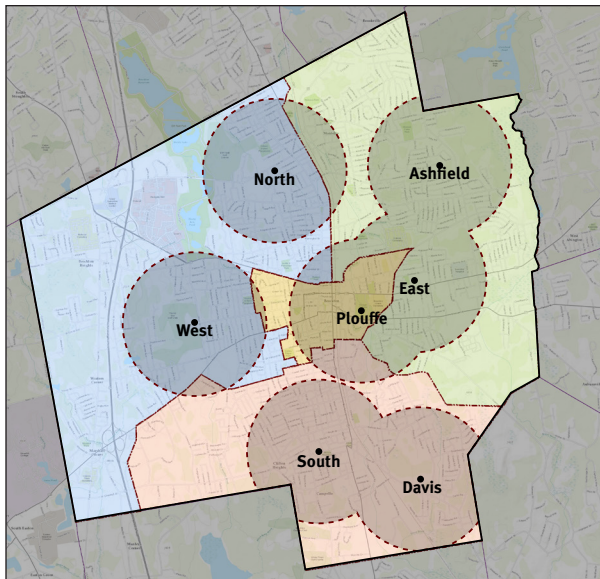
PRE-KINDERGARTEN SCHOOLS



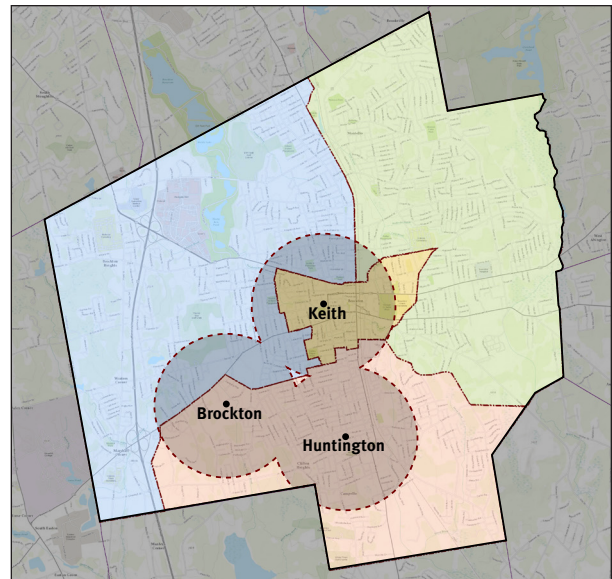
ELEMENTARY SCHOOLS



MIDDLE SCHOOLS



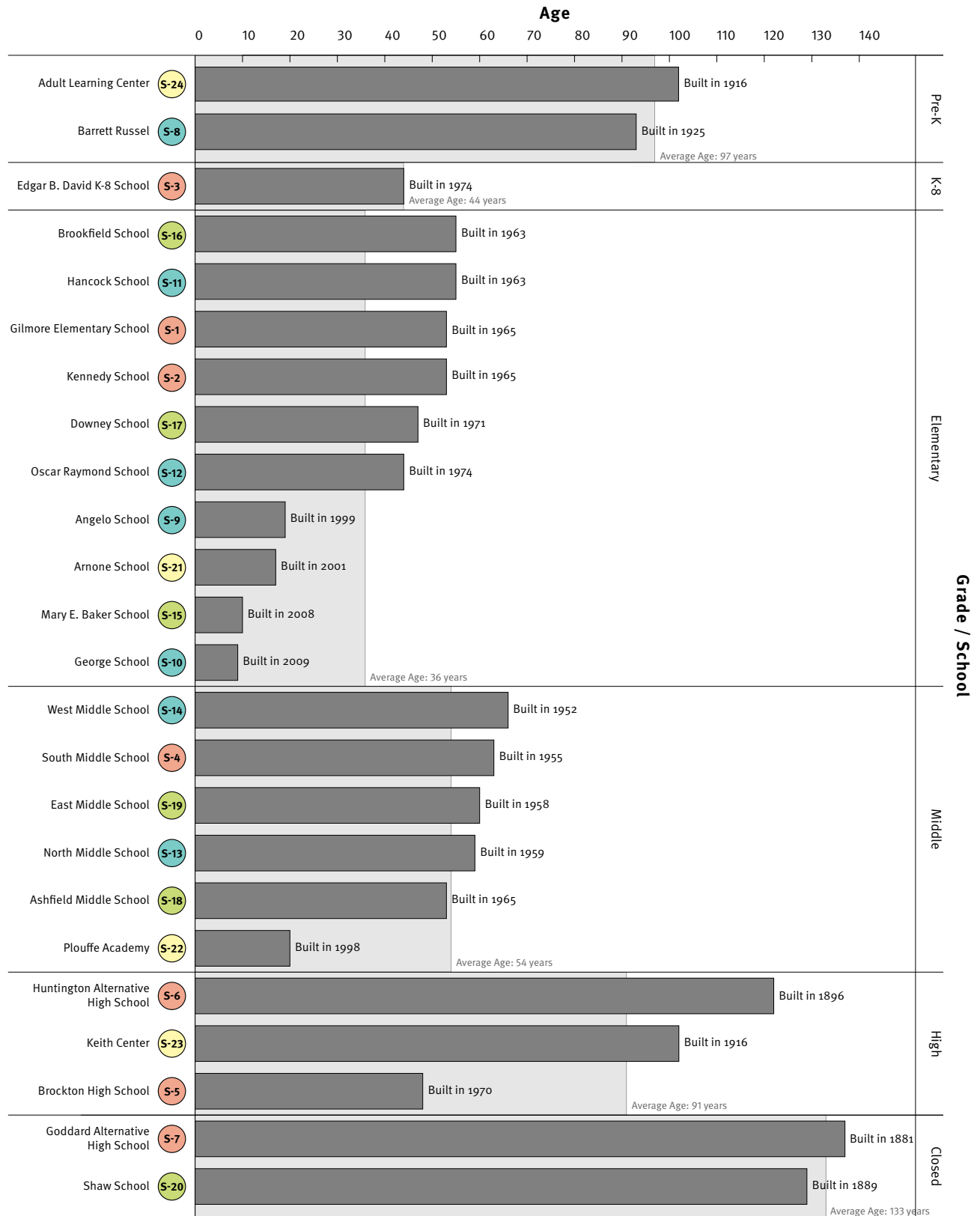
HIGH SCHOOL AND ALTERNATIVE HIGH SCHOOLS



Source: August 2017—Brockton Public Schools

- LEGEND**
- Schools
 - 3/4 Mile Buffer
 - Citywide Zone
 - Northeast Zone
 - South Zone
 - Northwest Zone

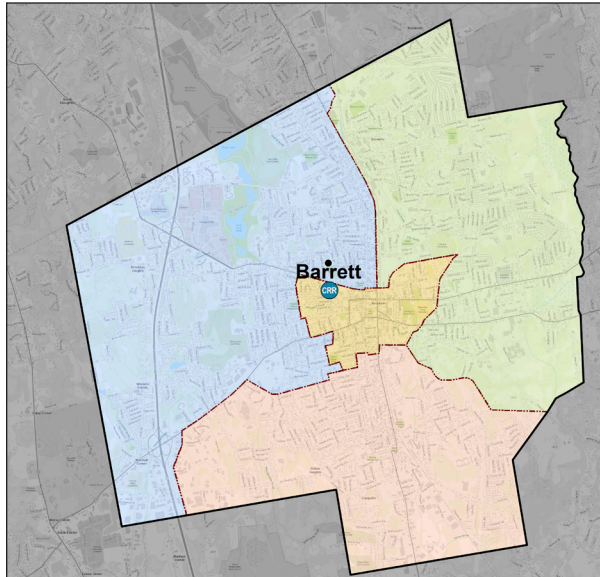
2.3 Age of School Buildings



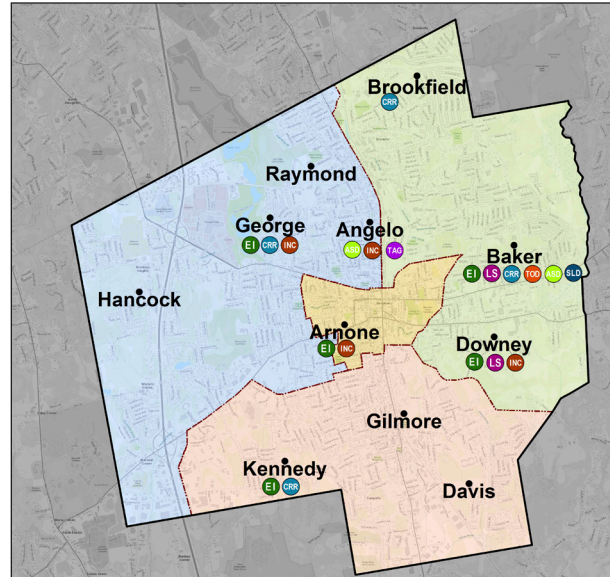
Source: City of Brockton—Department of Planning and Economic Community Development

2.4 Special Education Programs

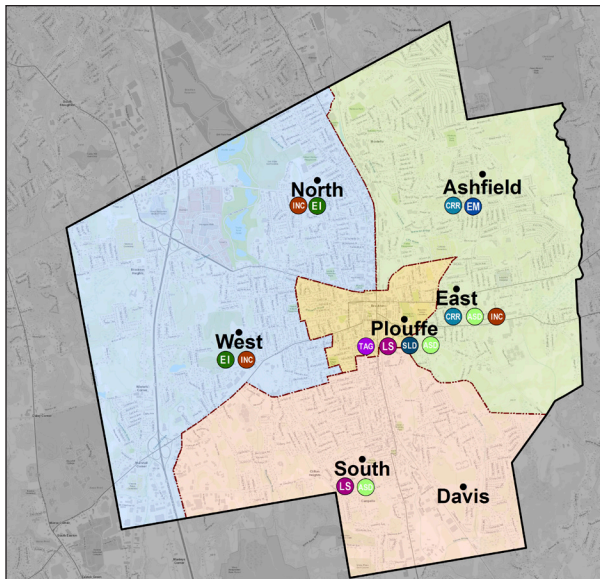
PRE-KINDERGARTEN SCHOOLS



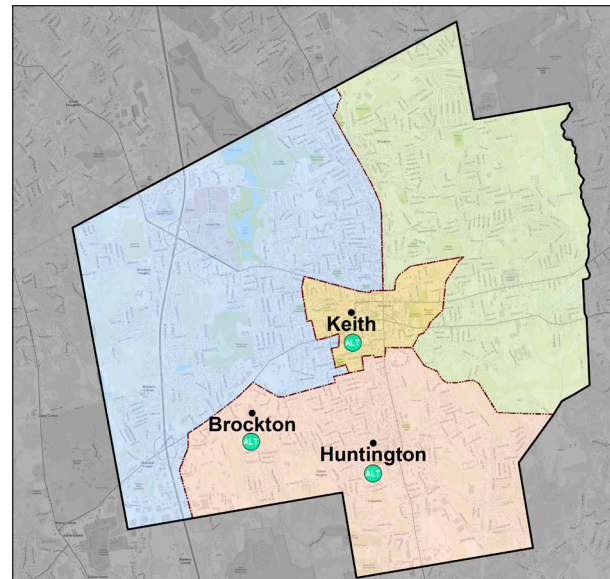
ELEMENTARY SCHOOLS



MIDDLE SCHOOLS



HIGH SCHOOLS

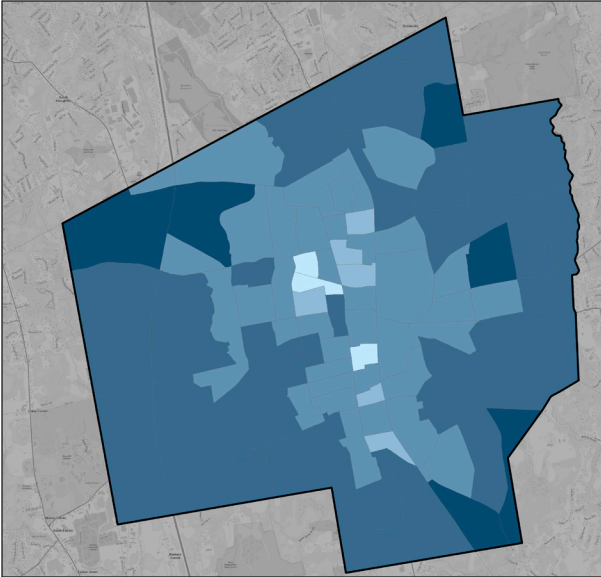


Source: August 2017—Brockton Public Schools

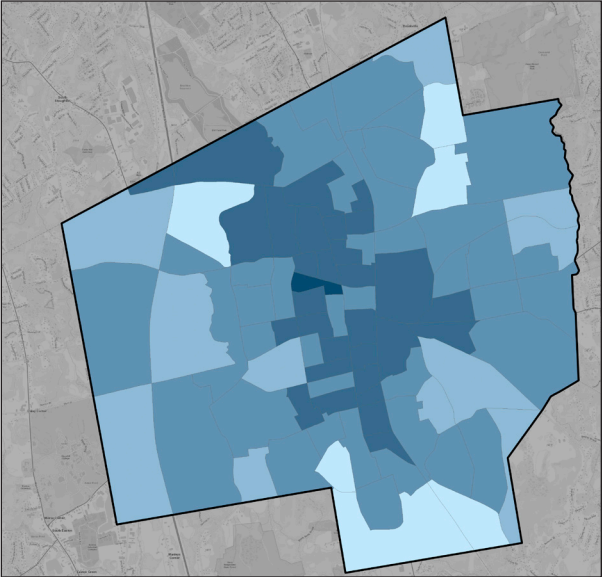
LEGEND			
• Schools	CRR City Resource Rooms	SLD Specific Learning Disability	Citywide Zone
ALT Alternative Pathways to Graduation	EM Emotional Inclusion	TAG Talented and Gifted	Northeast Zone
ASD Autism Spectrum Disorder	EI Emotionally Impaired	TOD Teacher of the Deaf	South Zone
	INC Inclusion Strands		Northwest Zone
	LS Life Skills Program		

2.5 Ethnicity

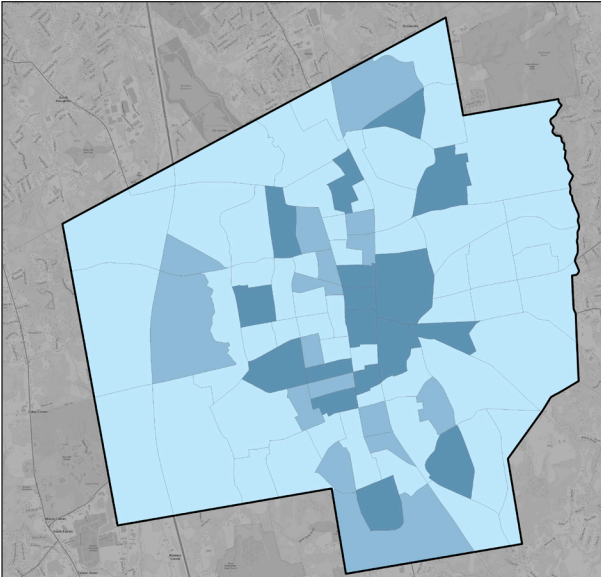
CAUCASIAN POPULATION PERCENTAGE



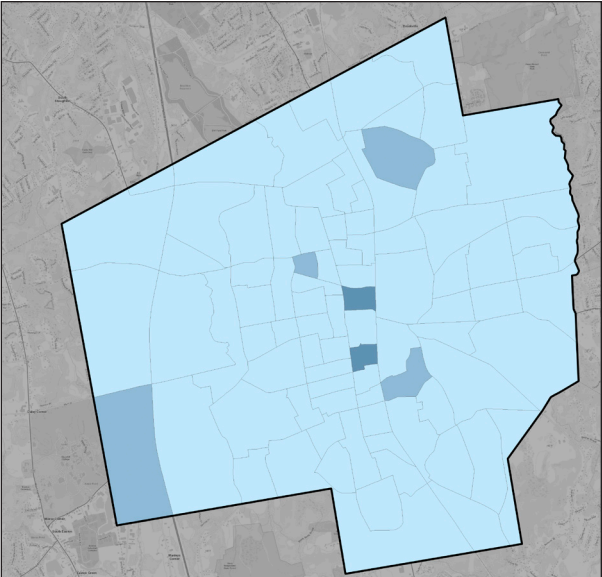
AFRICAN AMERICAN POPULATION PERCENTAGE



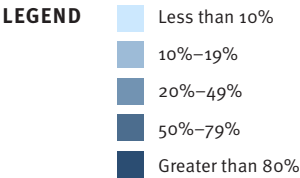
HISPANIC POPULATION PERCENTAGE



ASIAN POPULATION PERCENTAGE

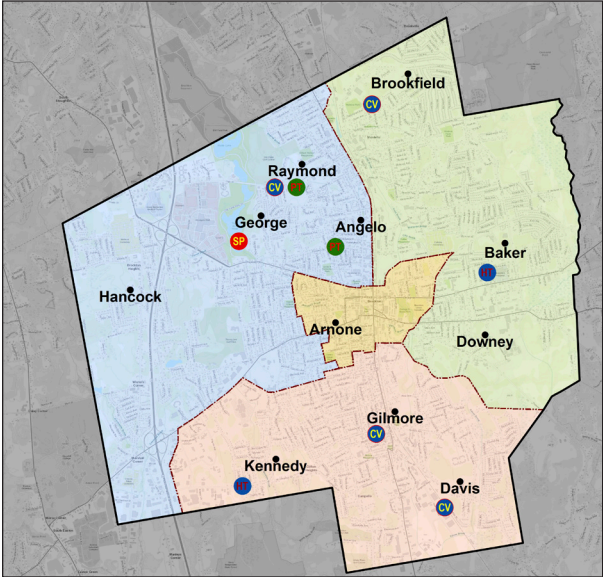


Source: 2015 —American Community Survey, U.S. Census



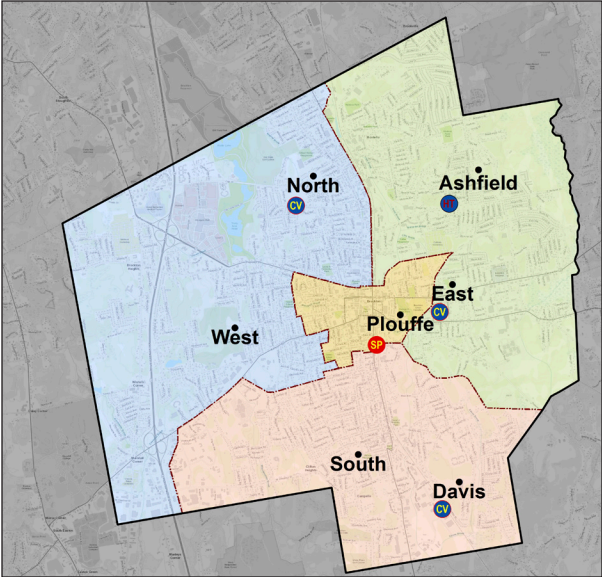
2.6 School Language Programs

ELEMENTARY SCHOOLS



Source: August 2017—Brockton Public Schools

MIDDLE SCHOOLS

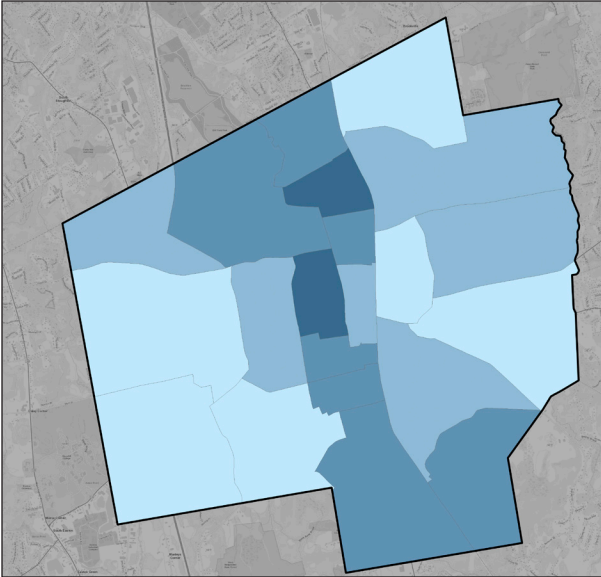


LEGEND

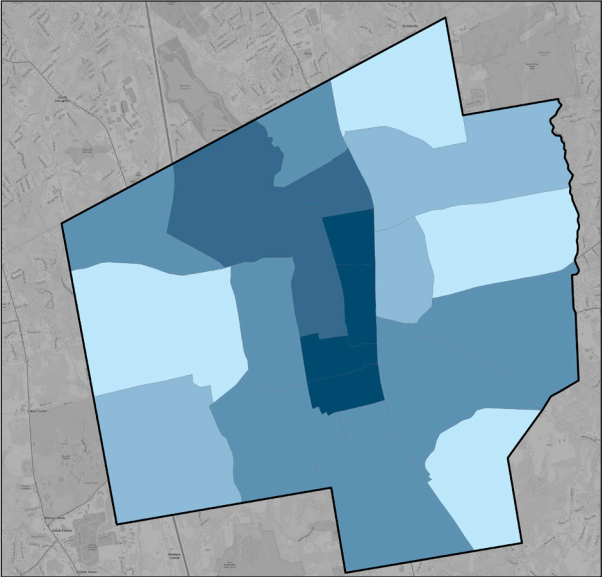
• Schools	Citywide Zone
Haitian Creole	Northeast Zone
Cape Verdean	South Zone
Spanish	Northwest Zone
Portuguese	

2.7 Language Population per Household

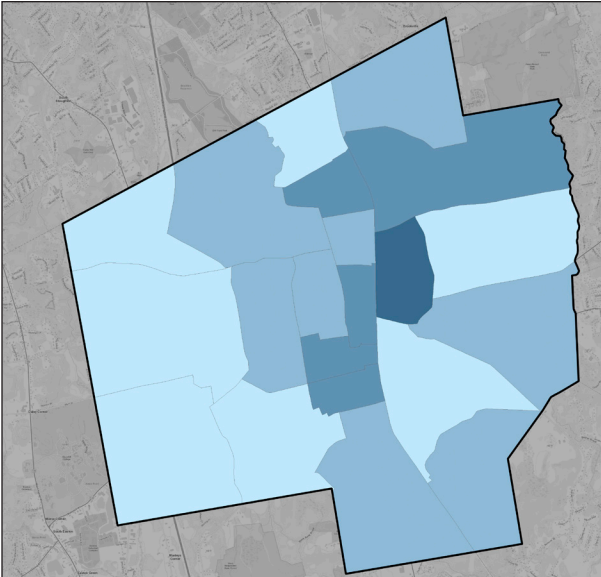
FRENCH CREOLE



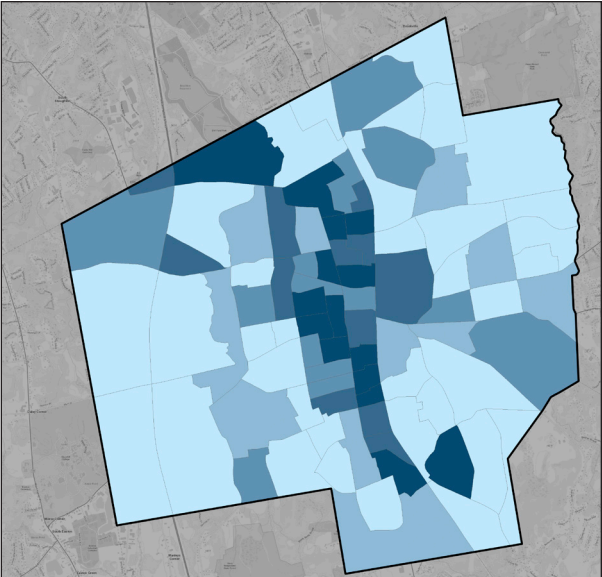
PORTUGUESE



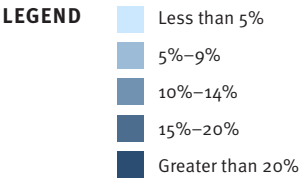
SPANISH



LIMITED ENGLISH SPEAKING ABILITY

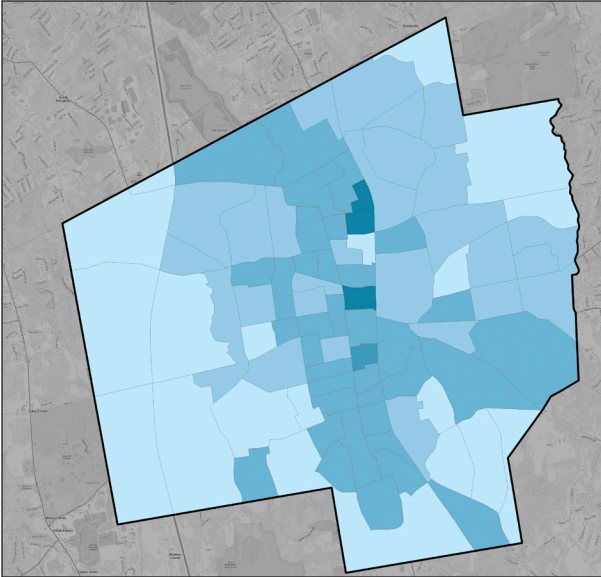


Source: 2015—American Community Survey, U.S. Census

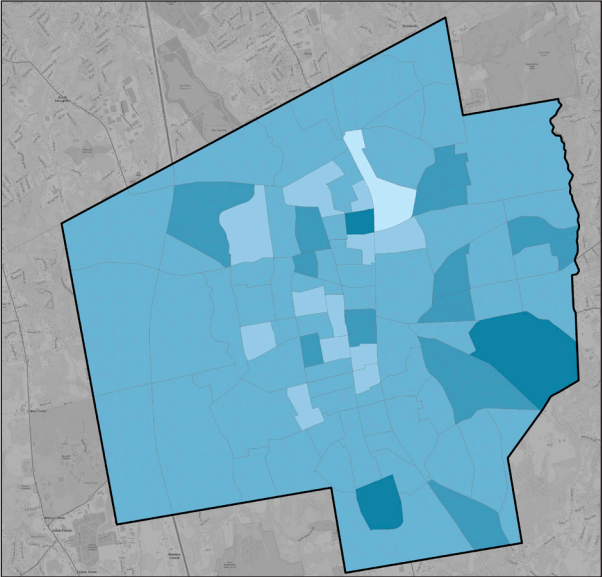


2.8 Level of Completed Education

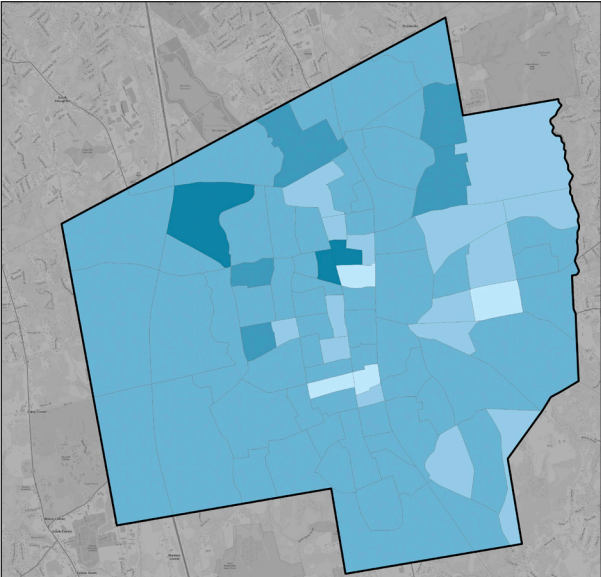
NO HIGH SCHOOL DIPLOMA



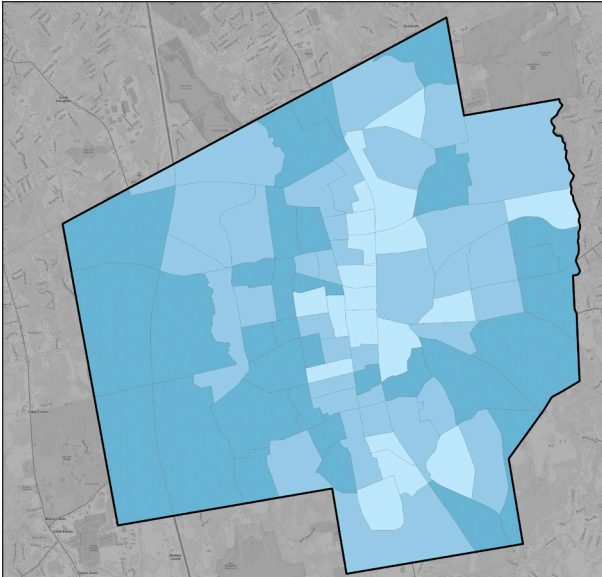
HIGH SCHOOL DIPLOMA AS HIGHEST DEGREE



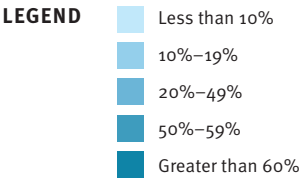
SOME COLLEGE EDUCATION



OBTAINED BACHELOR'S DEGREE OR HIGHER



Source: 2015—American Community Survey, U.S. Census



Section 3 ENROLLMENT FOR BROCKTON PUBLIC SCHOOLS

3.1 School Enrollment

2017-2018 ENROLLMENT DATA FOR STUDY

For purposes of this study, the school enrollment data used for this report was provided to the team in August 2017 for 2017-2018 student enrollment for the school district.

Note that these enrollment numbers were provided as a 'line in the sand' that the team coordinated their studies and research. Naturally, the enrollment numbers changed and evolved throughout the school year, however, these enrollment adjustments were not reflected in this report.

2017-2018 SCHOOL ENROLLMENT SUMMARY

Type	Population
Pre-School/ Pre-K	142
Elementary School (K-5th grade)	7,958
Middle School (6th - 8th grade)	3,824
High School	4,120
Alternative High School	213
Closed building	0
Total School District Enrollment	16,257

Source: August 2017—Brockton Public Schools

SCHOOL DISTRICT ENROLLMENT

HISTORY AND PREDICTIONS

The following tables and graphs are the historical enrollment and projected enrollment numbers for the Brockton Public Schools. These student enrollment graphs were generated by New England School Development Council (NESDEC) on December 8th, 2016.

The team reviewed current student population numbers, historical enrollment patterns, and projected enrollment through the 2026-27 school year.

In this Volume 1—School Facilities Assessment, we will present this information. Volume 2—School Master Plan Recommendations will interpret these findings and make observations and recommendations regarding the impact that these current and future enrollment numbers will have on the school district.

3.2 Historical and Projected Enrollment

HISTORICAL ENROLLMENT SUMMARY				HISTORICAL PERCENTAGE CHANGES	
Birth Year	Births	School Year	K - 12	Differ- ence	Percent change
2001	1,553	2006-07	15,464	0	0.0%
2002	1,537	2007-08	15,380	-84	-0.5%
2003	1,493	2008-09	15,038	-342	-2.2%
2004	1,592	2009-10	15,252	214	1.4%
2005	1,541	2010-11	15,551	299	2.0%
2006	1,538	2011-12	15,903	352	2.3%
2007	1,584	2012-13	16,321	418	2.6%
2008	1,552	2013-14	16,744	423	2.6%
2009	1,474	2014-15	16,941	197	1.2%
2010	1,416	2015-16	16,841	-100	-0.6%
2011	1,444	2016-17	16,708	-133	-0.8%
Change:				1,244	8.0%

PROJECTED ENROLLMENT SUMMARY				PROJECTED PERCENTAGE CHANGES	
Birth Year	Births	School Year	K - 12	Differ- ence	Percent change
2011	1,444	2016-17	16,708	0	0.0%
2012	1,354	2017-18	16,576	-132	-0.8%
2013	1,492	2018-19	16,641	65	0.4%
2014	1,468	2019-20	16,673	32	0.2%
2015	1,591	2020-21	16,809	136	0.8%
2016	1,470	2021-22	16,875	66	0.4%
2017	1,475	2022-23	16,951	76	0.5%
2018	1,499	2023-24	17,036	85	0.5%
2019	1,501	2024-25	17,077	41	0.2%
2020	1,507	2025-26	17,068	-9	-0.1%
2021	1,490	2026-27	17,092	24	0.1%
Change:				384	2.3%

Source: December 8, 2016—New England School Development Council

3.3 Square Feet per Student

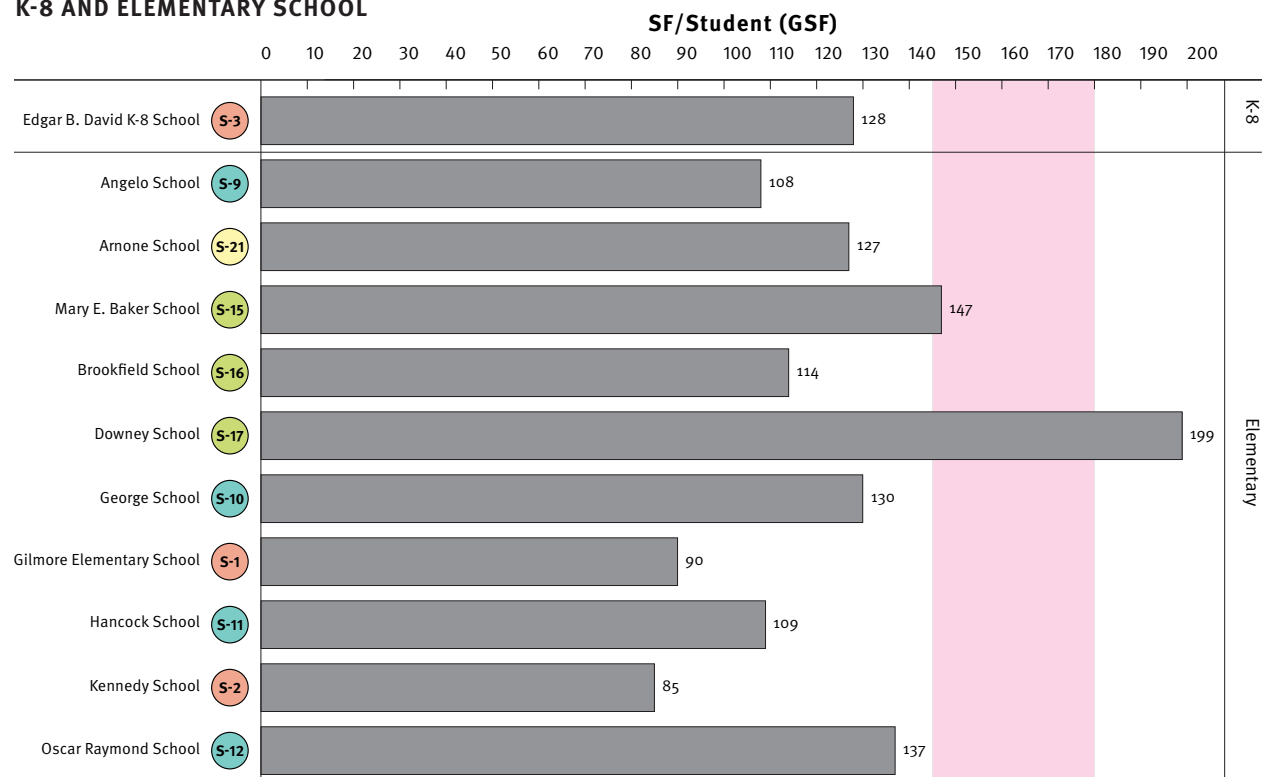
MASSACHUSETTS SCHOOL BUILDING AUTHORITY (MSBA) GUIDELINES

The MSBA works in partnership with cities, towns, and regional school districts throughout Massachusetts to provide valuable resources for creating affordable, sustainable, and energy efficient school buildings throughout Massachusetts. The MSBA also collaborates with municipalities to invest in finding the right-sized, most fiscally responsible and educationally appropriate solutions to create safe, sound, and sustainable learning environments.

MSBA Educational Program and Space Standard Guidelines contains an itemized list of educational spaces and square footages that comprise a model program and square foot per student (SF/Student) for an elementary school, middle school, and high school. (Note that sf/ student guidelines for Pre-K are not addressed by the MSBA.)

The following demonstrates the existing SF/ Student, in comparison to the MSBA guideline range.

K-8 AND ELEMENTARY SCHOOL

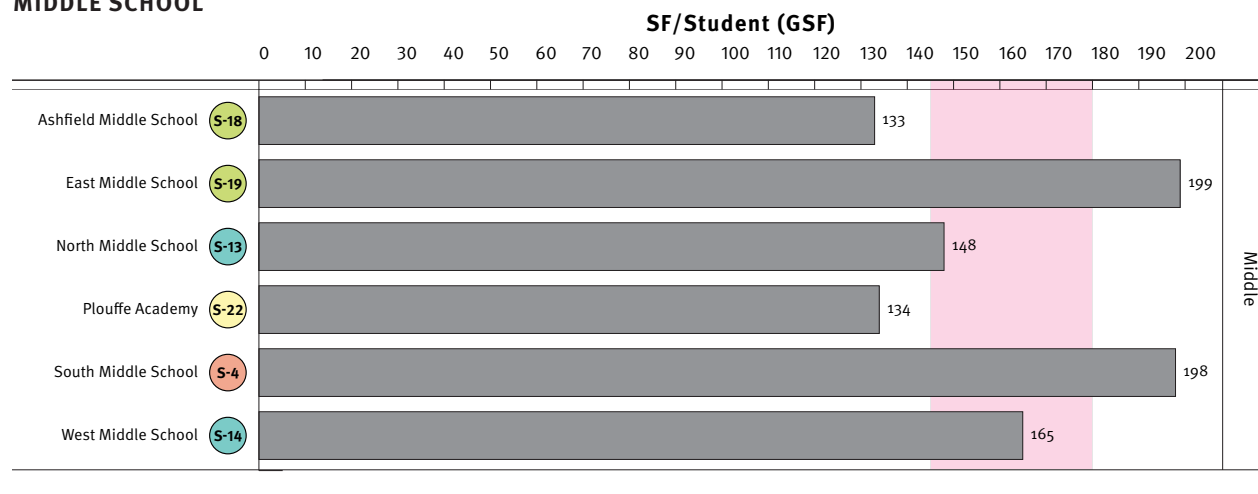


LEGEND Massachusetts School Building Authority (MSBA) K-8 Guideline Range (145–180 GSF per student)

*Data based on school year 2017–2018 enrollment dated August 2017.

The calculations used for determining the SF/Student were achieved by dividing the August 2017 enrollment per school (provided to the team by Brockton Public School) by the overall building gross square footage, including all parts of the permanent building and all temporary modular construction currently serving the facility. These results will be further analyzed in Volume 2— School Master Plan Recommendations, Section 2— Existing Space Analysis

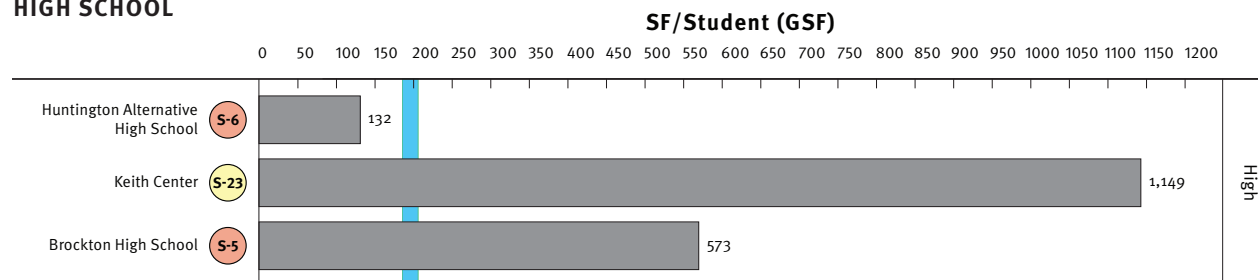
MIDDLE SCHOOL



LEGEND Massachusetts School Building Authority (MSBA) **K-8 Guideline Range** (145–180 GSF per student)

*Data based on school year 2017–2018 enrollment dated August 2017.

HIGH SCHOOL



LEGEND Massachusetts School Building Authority (MSBA) **High School Guideline Range** (185–205 GSF per student)

*Data based on school year 2017–2018 enrollment dated August 2017.

Section 4 SURVEY OF EXISTING SCHOOL FACILITIES

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S-2	Kennedy School	41
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S-4	South Middle School.....	51
S-5	Brockton High School.....	56
S-6	Huntington Alternative School	63
S-7	Goddard Alternative School (closed)	68
S-8	Barrett Russell Early Childhood Center	73
S-9	Angelo School.....	78
S-10	George School.....	84
S-11	Hancock School	89
S-12	Oscar Raymond School.....	94
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S-15	Mary E. Baker School.....	110
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S-21	Arnone School.....	141
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S-24	Adult Learning Center	159

4.1 Understanding the Evaluations

WHAT DOES THIS EVALUATION INCLUDE?

For each of the buildings, there was data reported for the school, information collected about the existing building, and a methodical assessment report of each of the school facilities. This research was catalogued in the following format for each of the buildings:

FIRST PAGE OF BUILDING EVALUATION

- A. Building name and address
- B. Building identity consistent throughout report, colored by Zone designation
- C. Building location map
- D. Aerial photo showing building location
- E. Exterior photo of building
- F. Facilities information including department, building use, school zone, year built, and classroom count provided by the Brockton Public School department
- G. Site area in acres, building area in gross square feet, and modular size, if applicable
- H. 2017/2018 School year enrollment data, provided by Brockton Public School department. Includes students per grade, classes per grade, and overall school enrollment
- I. Key programs offered at the school

SECOND PAGE OF BUILDING EVALUATION

- J. Summary of general building overview and observations
- K. Site information including topography, flood zone and wetlands data from the MASS GIS service OLIVER, historic designation as listed in the Massachusetts Cultural Resource Information System (MACRIS), primary orientation of the building, and Walk Score® criteria, described on page 32

SECTION 4 / Survey of Existing Educational Facilities

Gilmore Elementary School
150 Clinton Street
Brockton, MA 02301

A.

B. S-1

C.

D.

E.

F. FACILITIES INFORMATION

DEPARTMENT	School
BUILDING USE	Elementary K-5
SCHOOL ZONE	South
YEAR(S) BUILT	1965
NUMBER OF CLASSROOMS	23

G. SITE & BUILDING AREA

SITE AREA	3 Acres
BUILDING AREA	50,928 GSF
MODULAR CLASSROOMS	N/A
TOTAL SCHOOL AREA	50,928 GSF

H. SCHOOL YEAR 2017/18 ENROLLMENT DATA

	Students	Classes per grade
KINDERGARTEN	68	3
GRADE 1	104	4
GRADE 2	98	4
GRADE 3	100	4
GRADE 4	87	4
GRADE 5	112	4
TOTAL	569	23

I. KEY PROGRAMS

GRADES K-5	Cape Cod	Sheltered English
Immerse		
Summer		

SECTION 4 / Survey of Existing Educational Facilities

Gilmore Elementary School

S-1

J. BUILDING OVERVIEW

The Gilmore Elementary School is located in the South Zone neighborhood, previously housed a Pre-K and Kindergarten Program during the 2016/17 school year. Beginning in the 2017/18 school year, Gilmore Elementary School will serve a K-5 population.

The 1965 brick structure is a two story building with a one story structure containing the cafeteria and gymnasium. There is no elevator in the building to access the second floor. The building is similar in both age and layout to the J.F. Kennedy School located at 900 Ash Street, Brockton MA.

The Gilmore Elementary School site offers access for both drop/off and pick/up as well as a playground appropriate for elementary school use. Due to the level site, the existing field has poor drainage and is frequently unusable after rain events.

In Fiscal Year 2014, the Brockton School District submitted a Statement of Interest (SOI) to the MSBA for Gilmore Elementary School facility improvements and was invited into the Accelerated Repair Program. In 2016, the building received a new boiler and new roof.

The overall building is in good to adequate condition. While the roof is new, and there are no reported concerns, there are several areas with wear and tear on the interior. Consideration should be given to provide accessible access to the second floor, MAAB/ADA code compliance, and adding a fire suppression system.

K. SITE INFORMATION

TOPOGRAPHY	Flat
LOCATED IN A FLOOD ZONE	Yes, Building is located in a flood zone
WETLANDS ON SITE	No
HISTORIC DESIGNATION	No
ORIENTATION OF BUILDING	Main Entry faces South
NEIGHBORHOOD WALK SCORE	61
NEIGHBORHOOD TRANSIT SCORE	35
EST. COMMUTE TO DOWNTOWN BROCKTON	4 minutes by car 7 minutes by bicycle 23 minutes walking

THIRD PAGE OF BUILDING EVALUATION

- L. Summary of findings review key observations discovered during the building walk through, review of student enrollment numbers in comparison to MSBA guidelines, and possible future considerations for the facility

FOURTH PAGE OF BUILDING EVALUATION

- M. Facility priority rating and color identification
N. Facility assessment report used during the building evaluation walk through to determine the quality of the following items:

Site	Parking spaces and availability, vehicle paving condition, traffic flow, landscaping conditions, drainage adequacy, sidewalk condition, pedestrian and walkway access, appropriate play areas, fencing considerations, drop off & pickup efficiency, and site wall condition
Exterior	Condition of roofing and flashing, gutter/ downspout efficiency, window type and insulation (single or double pane), exterior wall material identification and condition, security adequacy
Interior	Physical and aesthetic conditions of the wall, floor and ceiling finishes, door conditions
Toilet Rooms	Toilet room fixture locations, types, and appearances. Maintenance and cleanliness of fixtures and flow of fixtures. Physical and aesthetic conditions of the wall, floor and ceiling finishes, and toilet partitions

SECTION 4 / Survey of Existing Educational Facilities

Gilmore Elementary School

S-1

L.

SUMMARY OF FINDINGS

- The MSBA Space summary guidelines indicate that elementary school general classroom sizes (Grades 1-5) should be in a range of 900 to 1,000 square feet with a maximum of 23 students per classroom. The Gilmore Elementary School for School Year 2017/18 has an enrollment between 23 to 29 students per classroom for grades 1-5. This demonstrates that the number of students per classroom exceeds the recommended count and suggests that the school is operating above MSBA recommended capacity.
- Due to the condition and age of several of the original interior finishes, an interior renovation would update existing and dated materials.
- The building currently is not fully ADA compliant. There is no accessible means to access the second floor and the student toilet rooms do not offer accessible stalls or fixtures. The addition of an elevator and renovation to the bathrooms would be required to meet ADA and MAAB compliance in these areas.
- At the South stairway, there is an evacuation chair available in the area of refuge. A two-way communication system and additional door latches on the stairway doors would enhance the safety features of this system.
- Interior 9" x 9" floor tiles located throughout the building are worn, chipping and patched. The flooring should be tested for asbestos prior to any renovation or maintenance that would disturb or remove the material.
- The building currently does not have a sprinkler system or any heat detection devices. Future upgrades to this building should consider adding a fire suppression system and heat detection devices to meet current codes.
- The bathroom plumbing fixtures are dated and are possibly original to the building. Future upgrades to the building should consider using low flow fixtures.
- Lighting is currently operated by wall mounted switches. Occupancy sensors in classrooms, offices, bathrooms, and storage areas can help with energy efficiency and operation.
- Stairways are currently being used for storage of classroom furniture under the stair landing. Storage in an exit enclosure, including stairwells, is not permitted per the current life safety code.
- The parking lot reportedly has sufficient traffic flow with parents arriving in the "front", and busses arriving in the "back". There were significant pot holes observed.

SECTION 4 / Survey of Existing Educational Facilities

Gilmore Elementary School

Facility Priority 2-7

S-1

M.

ITEM	DESCRIPTION	STATUS	COMMENTS
SITE	PAVING	✓	Asphalt, cracking, potholes, patched. Consider adding curbing where existing. Road traffic flow required for drop-off/pick-up
	LANDSCAPING	✓	Good access parking lot not used by school due to mobility, potholes, insufficient drainage
	SECURITY	✓	Concrete, retained
	DOOR	✓	New playground with age appropriate equipment, artificial turf, chain-link fence
EXTERIOR WALLS	DOOR	✓	New to steel, outdoor maintenance and cleaning noted
	GUTTERS/DOWNSPOUT	✓	New to steel, indoor storm drains
	WALLS	✓	Masonry bricks in good condition, masonry vent grilles
	WINDOWS	✓	Color original double pane windows, leveling, weather
EXTERIOR DOORS	DOOR	✓	Metal doors, two of them are original. Screen meeting, ADA accessible hardware.
	SECURITY	✓	Doors locked and alarmed. Exterior security cameras
	FOUNDATION	✓	Concrete, retained
	DOOR	✓	
INTERIOR WALLS	WALLS	✓	9" x 9" floor throughout, some areas
	WALLS	✓	9" x 9" floor throughout, some areas
	CEILING	✓	9" x 9" floor throughout, some areas
	DOOR	✓	9" x 9" floor throughout, some areas
INTERIOR FLOORS	WALLS	✓	9" x 9" floor throughout, some areas
	CEILING	✓	9" x 9" floor throughout, some areas
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	DOOR	✓	9" x 9" floor throughout, some areas
	DOOR	✓	9" x 9" floor throughout, some areas
TOILET ROOMS	WALLS	✓	9" x 9" floor throughout, some areas
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	DOOR	✓	9" x 9" floor throughout, some areas
TOILET ROOMS	WALLS	✓	9" x 9" floor throughout, some areas

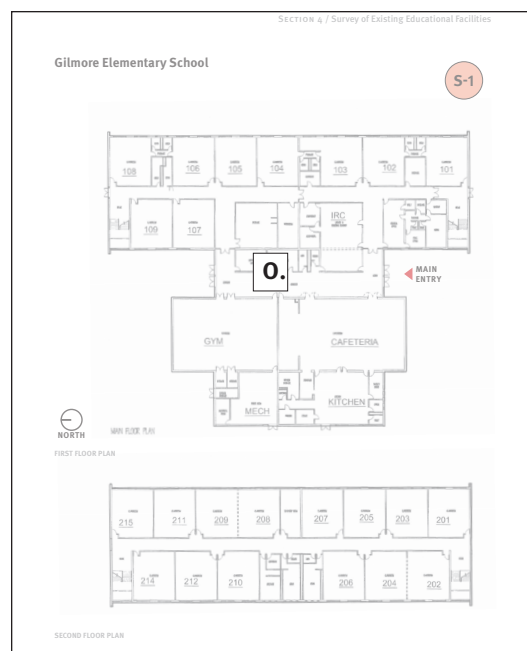
Kitchen	Physical and aesthetic conditions of the wall, floor and ceiling finishes, and kitchen equipment
Elec	Review of electrical service type, lighting type, lighting switching/occupancy sensors
HVAC	Condition and efficiency of heating distribution systems, ventilation distribution systems, location and appearance of air conditioning units, and boilers
Fire	Presence and condition of sprinklers, type and age of system and components.
Code	General compliance with the Americans with Disabilities Act, adequate ramps, available and right sized elevators, compliant door hardware, proper clearances, accessible water fountains, accessible toilet facilities and accessories, adequate and properly placed exit signage, path of egress direct and unencumbered exits

Common abbreviations used in report

- “ACT” Acoustical Ceiling Tile
- “CMU” Concrete Masonry Unit
- “GWB” Gypsum Wall Board
- “VCT” Vinyl Composition Tile

FIFTH PAGE OF BUILDING EVALUATION

- O. Building floor plans provided by the Brockton School Department



WALK SCORE® CRITERIA

www.walkscore.com

Walk Score measures the walkability of any address, Transit Score measures access to public transit, and Bike Score measures whether a location is good for biking.

For each address, Walk Score analyzes hundreds of walking routes to nearby amenities. Points are awarded based on the distance to amenities in each category. Amenities within a 5 minute walk (.25 miles) are given maximum points. A decay function is used to give points to more distant amenities, with no points given after a 30 minute walk.

Walk Score also measures pedestrian friendliness by analyzing population density and road metrics such as block length and intersection density. Data sources include Google, Education.com, Open Street Map, the U.S. Census, Localeze, and places added by the Walk Score user community.

WALK SCORE®	DESCRIPTION
90–100	Walker’s Paradise Daily Errands do not require a car
70–89	Very Walkable Most errands can be accomplished on foot
50–69	Somewhat Walkable Some errands can be accomplished on foot
25–49	Car-Dependent Most errands require a car
0–24	Car-Dependent Almost all errands require a car

TRANSIT SCORE

Transit Score is a patented measure of how well a location is served by public transit. Transit Score is based on data released in a standard format by public transit agencies.

To calculate a Transit Score, Walk Score® assigns a “usefulness” value to nearby transit routes based on the frequency, type of route (rail, bus, etc.), and distance to the nearest stop on the route. The “usefulness” of all nearby routes is summed and normalized to a score between 0 - 100.

TRANSIT SCORE	DESCRIPTION
90–100	Rider’s Paradise World-class public transportation
70–89	Excellent Transit Transit is convenient for most trips
50–69	Good Transit Many nearby public transportation options
25–49	Some Transit A few nearby public transportation options
0–24	Minimal Transit It is possible to get on a bus

WHAT DOES THIS EVALUATION NOT INCLUDE?

The facility assessment was performed by the architectural team walking the building and site with a facility member familiar with the history of the building. The facility assessment report was based solely on visual observations, comments from the maintenance staff, and occasional feedback gathered from the building users. There was no testing of systems or materials. There were no engineers present to review or assess existing building systems.

CODE ANALYSIS

The facility assessment does not include a code summary or through code review of the building. However, the team made visual observations for compliance of typical code conformance, such as ADA clearances, general handicap accessibility, egress compliance, and overall life safety criteria.

SPACES OBSERVED

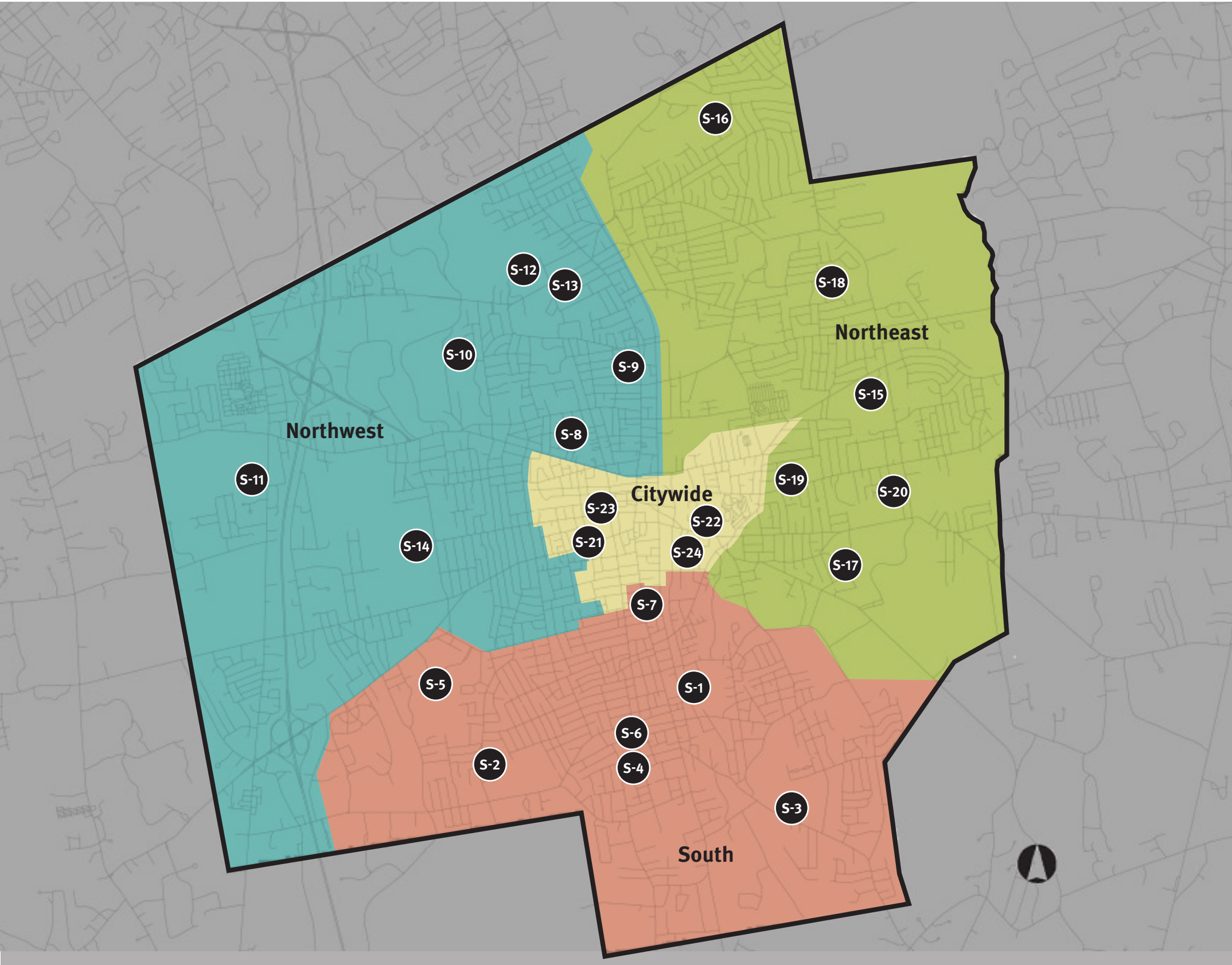
Each facility was walked through where available, and only those spaces that were accessible were observed. For example, the roof was not accessed. In facilities where there was redundancy in the program, for example school classrooms, only a selected sampling of the program spaces were observed to generate the findings.

DETERMINATION OF ASBESTOS

Until the 1970s, asbestos was widely used in construction industry in the United States. In 1989, asbestos was banned when the Environmental Protection Agency published the Asbestos Ban and Phase-Out Rule. As a general guideline, buildings built prior to the mid-1980's have a high likelihood to contain asbestos-containing products, between the mid-1980s and 1990 it is likely that the building has asbestos containing products, and after 1990 it is unlikely that the building has significant asbestos-containing products.

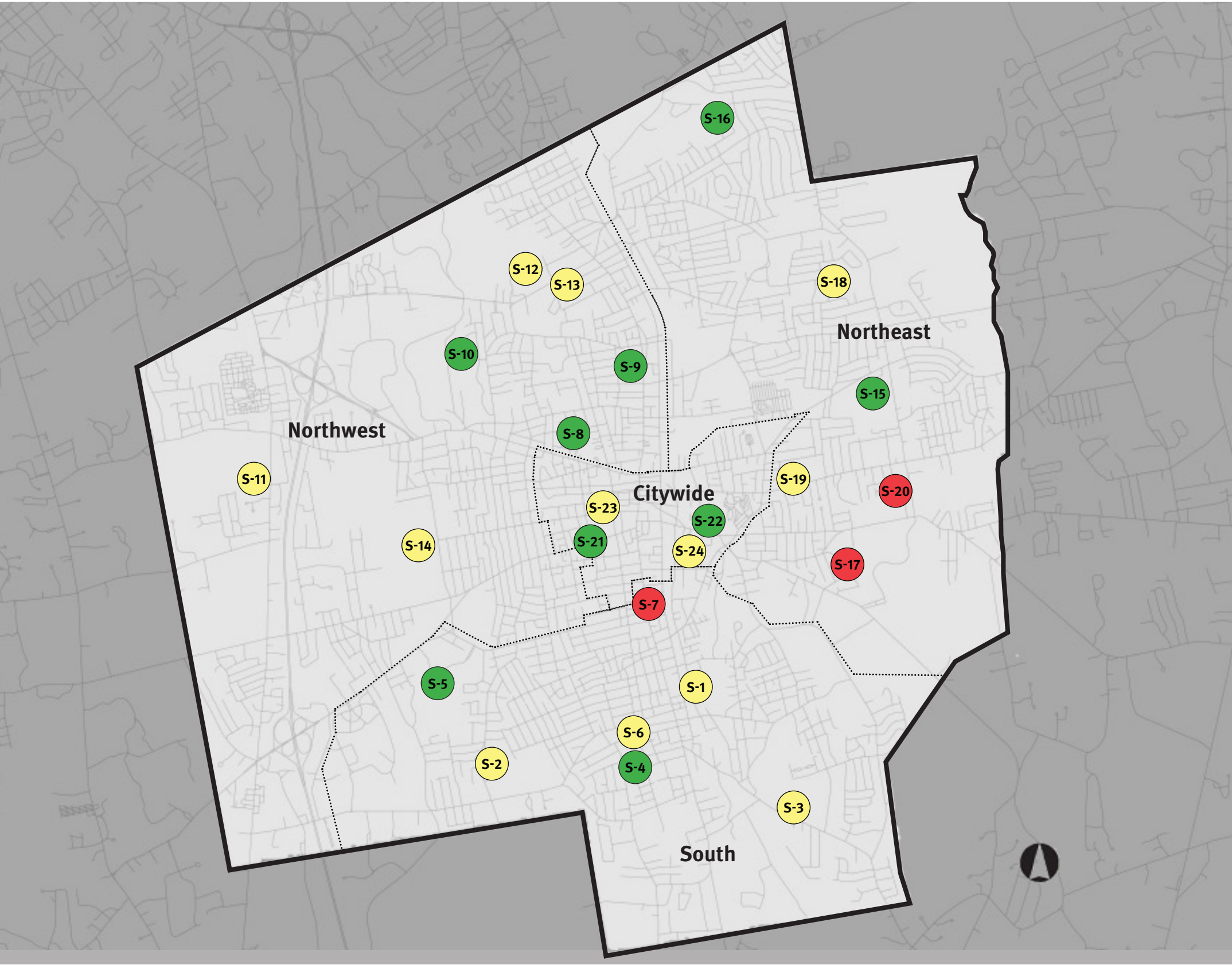
There was no asbestos testing performed for the facility assessment. Observations and assumptions were made based on age of the building, and common older building materials that typically have been identified to contain asbestos.

4.2 Location of School Buildings



Schools		
S-1	Gilmore Elementary School	150 Clinton Street
S-2	Kennedy School	900 Ash Street
S-3	Edgar B. Davis School	380 Plain Street
S-4	South Middle School	105 Keith Avenue
S-5	Brockton High School	470 Forest Avenue
S-6	Huntington Alternative School	1121 Warren Avenue
S-7	Goddard Alternative School (closed)	20 Union Street
S-8	Barrett Russell Early Childhood Center	45 Oakdale Street
S-9	Angelo School	478 North Main Street
S-10	George School	180 Colonel Bell Drive
S-11	Hancock School	125 Pearl Street
S-12	Oscar Raymond School	125 Oak Street
S-13	North Middle School	108 Oak Street
S-14	West Middle School	271 West Street
S-15	Mary E. Baker School	45 Quincy Street
S-16	Brookfield School	135 Jon Drive
S-17	Downey School	55 Electric Avenue
S-18	Ashfield Middle School	225 Coe Road
S-19	East Middle School	464 Centre Street
S-20	Shaw School (closed)	315 Quincy Street
S-21	Arnone School	135 Belmont Street
S-22	Plouffe Academy	250 Crescent Street
S-23	Keith Center—Frederick Douglass Academy and Champion High School	175 Warren Avenue
S-24	Adult Learning Center	211 Crescent Street

4.3 Priority Rating of School Buildings



Legend

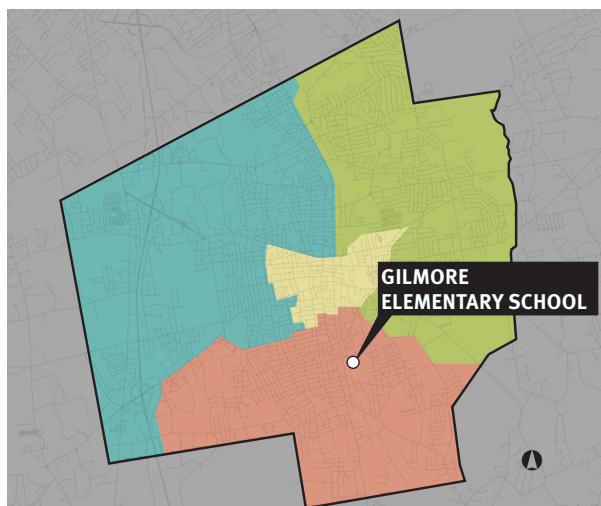
Priority 1: Current Critical	2.0 and Less	
Priority 2: Potentially Critical	2.1 - 3.0	
Priority 3, 4, and 5: Not yet Critical, For Consideration, and Does not meet current codes	3.1 and Greater	

Schools		Facility Priority
S-1	Gilmore Elementary School	2.7
S-2	Kennedy School	3.0
S-3	Edgar B. Davis School	2.5
S-4	South Middle School	3.1
S-5	Brockton High School	3.1
S-6	Huntington Alternative School	2.4
S-7	Goddard Alternative School (closed)	1.5
S-8	Barrett Russell Early Childhood Center	3.4
S-9	Angelo School	3.6
S-10	George School	3.8
S-11	Hancock School	2.8
S-12	Oscar Raymond School	2.3
S-13	North Middle School	2.9
S-14	West Middle School	2.6
S-15	Mary E. Baker School	3.9
S-16	Brookfield School	3.2
S-17	Downey School	2.0
S-18	Ashfield Middle School	2.8
S-19	East Middle School	3.0
S-20	Shaw School (closed)	1.2
S-21	Arnone School	3.6
S-22	Plouffe Academy	3.5
S-23	Keith Center—Frederick Douglass Academy and Champion High School	3.0
S-24	Adult Learning Center	2.7

Gilmore Elementary School

150 Clinton Street
Brockton, MA 02301

S-1



LOCATION MAP



AERIAL PHOTO



SOUTH ELEVATION

FACILITIES INFORMATION

DEPARTMENT	School
BUILDING USE	Elementary K-5
SCHOOL ZONE	South
YEAR(S) BUILT	1965
NUMBER OF CLASSROOMS	23

SITE & BUILDING AREA

SITE AREA	3 Acres
BUILDING AREA	50,928 GSF
MODULAR CLASSROOM AREA	N/A
TOTAL SCHOOL AREA	50,928 GSF

SCHOOL YEAR 2017/18

ENROLLMENT DATA	Students	Classes per grade
KINDERGARTEN	68	3
GRADE 1	104	4
GRADE 2	98	4
GRADE 3	100	4
GRADE 4	87	4
GRADE 5	112	4
TOTAL	569	23

KEY PROGRAMS

GRADES K-5	Cape Verdean Sheltered English Immersion (SEI)
	Summer program

Gilmore Elementary School


 S-1

BUILDING OVERVIEW

The Gilmore Elementary School, located in the South Zone neighborhood, previously housed a Pre-K and Kindergarten Program during the 2016/17 school year. Beginning in the 2017/18 school year, Gilmore Elementary School will serve a K–5 population.

The 1965 brick structure is a two story building with a one story structure containing the cafeteria and gymnasium. There is no elevator in the building to access the second floor. The building is similar in both age and layout to the J.F.Kennedy School located at 900 Ash Street, Brockton MA.

The Gilmore Elementary School site offers access for both drop/off and pick/up as well as a playground appropriate for elementary school use. Due to the level site, the existing field has poor drainage and is frequently unusable after rain events.

In Fiscal Year 2014, the Brockton School District submitted a Statement of Interest (SOI) to the MSBA for Gilmore Elementary School facility improvements and was invited into the Accelerated Repair Program. In 2016, the building received a new boiler and new roof.

The overall the building is in good to adequate condition. While the roof is new, and there are no reported concerns, there are several areas with wear and tear on the interior. Consideration should be given to provide accessible access to the second floor, MAAB/ADA code compliance, and adding a fire suppression system.

SITE INFORMATION

TOPOGRAPHY	Flat
LOCATED IN A FLOOD ZONE	Yes, Building is located in a flood zone
WETLANDS ON SITE	Yes
HISTORIC DESIGNATION	No
ORIENTATION OF BUILDING	Main Entry faces South
NEIGHBORHOOD WALK SCORE	61 Somewhat Walkable
NEIGHBORHOOD TRANSIT SCORE	35 Some Transit
EST. COMMUTE TO DOWNTOWN BROCKTON	4 minutes by car 7 minutes by bicycle 23 minutes walking

Gilmore Elementary School


 S-1

SUMMARY OF FINDINGS

- The MSBA Space summary template guidelines indicate that **elementary school general classroom sizes** (Grades 1–5) should be in a range of 900 to 1,000 square feet with a maximum of 23 students per classroom. The Gilmore Elementary School for School Year 2017/18 has an enrollment between 23 to 29 students per classroom for grades 1–5. This demonstrates that the number of students per classroom exceeds the recommended count and suggests that the school is operating above MSBA recommended capacity.
- Due to the condition and age of several of the original **interior finishes**, an interior renovation would update existing and dated materials.
- The building currently is not fully **ADA compliant**. There is no accessible means to access the second floor and the student toilet rooms do not offer accessible stalls or fixtures. The addition of an elevator and renovation to the bathrooms would be required to meet ADA and MAAB compliance in these areas.
- At the South stairway, there is an **evacuation chair** available in the area of refuge. A two-way communication system and additional door latches on the stairway doors would enhance the safety features of this system.
- Interior 9"x 9" **floor tiles** located throughout the building are worn, chipping and patched. The flooring should be tested for asbestos prior to any renovation or maintenance that would disturb or remove the material.
- The building currently does not have a **sprinkler system** or any heat detection devices. Future upgrades to this building should consider adding a fire suppression system and heat detection devices to meet current codes.
- The **bathroom plumbing fixtures** are dated and are possibly original to the building. Future upgrades to the building should consider using low flow fixtures.
- **Lighting** is currently operated by wall mounted switches. Occupancy sensors in classrooms, offices, bathrooms, and storage areas can help with energy efficiency and operation.
- Stairways are currently being used for **storage** of classroom furniture under the stair landing. Storage in an exit enclosure, including stairwells, is not permitted per the current life safety code.
- The **parking lot** reportedly has sufficient traffic flow with parents arriving in the 'front', and busses arriving in the 'back'. There were significant pot holes observed.

Gilmore Elementary School

● Facility Priority 2.7

S-1

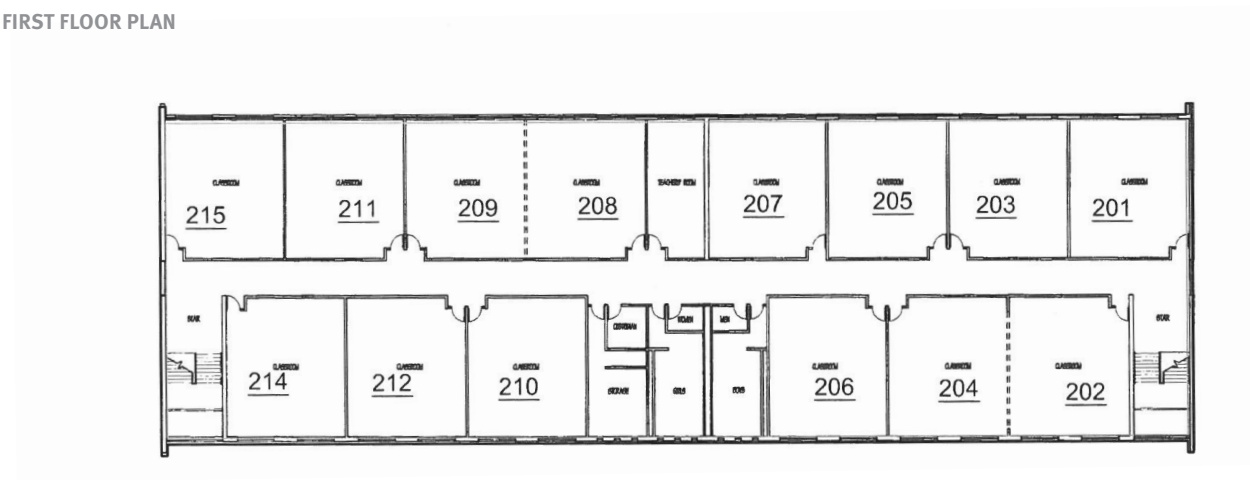
		PRIORITY	4	3	2	1	
		VISIT DATE: April 7, 2017	GOOD	ADEQUATE	MARGINAL	POOR	COMMENTS
SITE	PARKING					✓	Asphalt; cracking, potholes, patched. Consider adding curbing where missing. Good traffic flow reported for drop-off/ pick-up
	LANDSCAPING		✓				Field across parking lot not used by school due to muddy/ puddles, insufficient drainage
	SIDEWALKS		✓				Concrete, minimal
	OTHER		✓				One playground with age appropriate equipment, artificial turf, chain-link fence
EXTERIOR	ROOF		✓				New in 2016, rubber membrane and standing metal seam
	GUTTERS/DOWNSPOUT		✓				New in 2016, internal storm drains
	WALLS		✓		✓		Masonry brick in good condition, rusted vent grilles
	WINDOWS					✓	Older/ original double pane windows, awning, operable
	DOORS		✓				Metal doors; mix of newer and original. Frames rusting. ADA accessible hardware.
	SECURITY		✓				Doors locked and alarmed. Exterior security cameras
	FOUNDATIONS		✓				Concrete, minimal
	OTHER						
INTERIOR	FLOORS		✓			✓	9" x 9" tiles throughout, some areas secured and patched with tape. Wood floor at gym, stone at entry lobby in good condition.
	WALLS		✓				CMU painted, masonry brick
	CEILINGS		✓				2' x 4' ACT, no reported concerns, sagging in some areas.
	DOORS		✓				Wood hollow-core with hollow metal frames; mixture of ADA accessible and non-accessible door hardware
	OTHER						
TOILET ROOMS	FLOORS		✓				Mosaic tiles
	WALLS		✓				Painted and glazed masonry units
	CEILINGS					✓	2' x 4' ACT; sagging, stained
	FIXTURES		✓				Wall mounted, toilets and urinals manual flush. Sinks with non-ADA accessible handles.
	TOILET PARTITIONS		✓				Metal floor mounted with overhead supports; rusting
KITCHEN	FLOORS		✓				Terra cotta tiles in good condition
	WALLS		✓				Glazed CMU
	CEILINGS					✓	Painted GWB, washable 2' x 4' ACT; sagging, missing, stained
	GREASE TRAP		✓				Serviced twice per year
	KITCHEN EQUIPMENT		✓				In good working order
	OTHER						
ELEC	SERVICE/DISTRIB.		✓				Switchgear and circuit breaker panels
	LIGHTING/POWER				✓		2' x 4' recessed fixtures in corridors, surface mounted in cafeteria, restrooms, and classrooms
HVAC	SUPPLY/DISTRIB.		✓				Natural gas, forced hot air
	UNIT SOURCES		✓				Window heating. Some rooms have A/C window units. 2 new (2016) boilers. Ceiling fans/ window A/C units used in cafeteria.
FIRE	SPRINKLERS					✓	None, no sprinkler system observed
	DETECTION		✓			✓	Heat detectors were observed in corridor and some bathroom spaces, but not in classrooms
			POSSIBLE	NO	MAYBE	UNKNOWN	
CODE	ASBESTOS		✓				Assumed in 9" x 9" floor tiles throughout, potentially on pipes
	LEAD					✓	Unknown
	HANDICAP-ACCESSIBLE		✓	✓			No elevator to access 2nd floor. Student bathrooms do not have accessible stall or sinks. Some plumbing hardware is accessible.
	OTHER						

Gilmore Elementary School

S-1



FIRST FLOOR PLAN

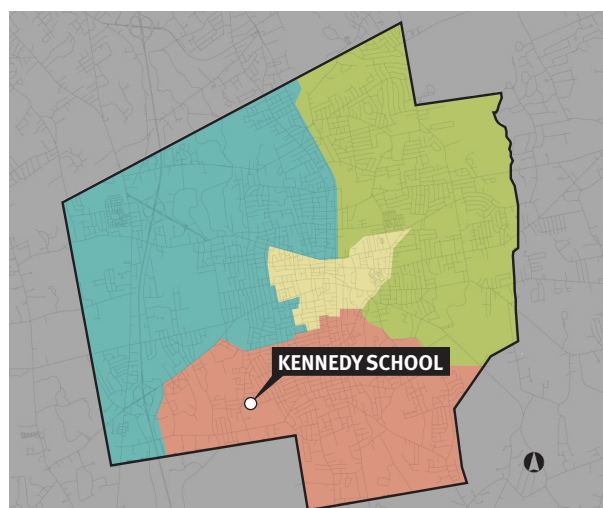


SECOND FLOOR PLAN

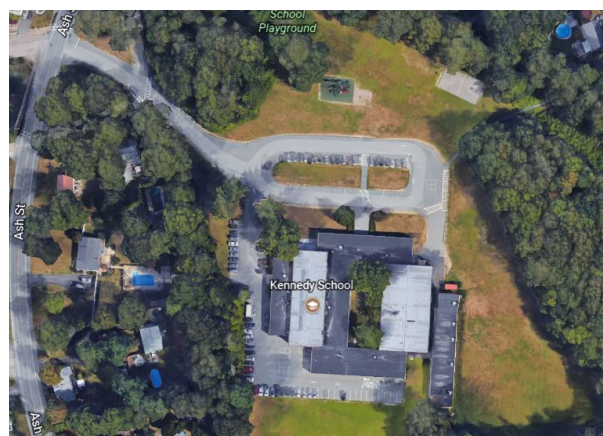
Kennedy School

900 Ash Street
Brockton, MA 02301

S-2



LOCATION MAP



AERIAL PHOTO



SOUTHWEST CORNER

FACILITIES INFORMATION

DEPARTMENT	School
BUILDING USE	Elementary K-5
SCHOOL ZONE	South
YEAR(S) BUILT	1965
NUMBER OF CLASSROOMS	28*

SITE & BUILDING AREA

SITE AREA	14 Acres
BUILDING AREA	46,746 GSF
MODULAR CLASSROOM AREA	5,375 GSF
TOTAL SCHOOL AREA	52,121 GSF

SCHOOL YEAR 2017/18

ENROLLMENT DATA	Students	Classes per grade
KINDERGARTEN	90	4
GRADE 1	99	4
GRADE 2	103	4
GRADE 3	113	5
GRADE 4	96	5
GRADE 5	114	5
TOTAL	615	27*

*includes 5 modular classrooms

KEY PROGRAMS

GRADE K-5	Haitian/Low-Incidence Sheltered English Immersion (SEI)
GRADE 2-3	Special Education Emotionally Impaired (EI) (one classroom)
GRADE 3-5	Special Education City Resource Room (CRR) (one classrooms)
	"Walk to School Wednesday"
	Massachusetts Program
	After-school program

Kennedy School



BUILDING OVERVIEW

The Kennedy School is located in the South Zone neighborhood and currently houses a K–5 elementary school population. Remotely set back from the street, the school has a comfortable buffer from vehicular street traffic and adjacent neighbors.

The 1965 structure is primarily a one-story structure on a sloping site; with a lower level on the West side used for classrooms, library, and mechanical rooms. The building has an operating elevator for access between levels. Additionally, there is a modular building east of the existing building that houses five classrooms and two bathrooms connected by a corridor. The modular structure is approximately 20 years old and was renovated in 2014. According to the document State of the Brockton Public Schools, March 2015, page 17, it was noted that at the time the cost to renovate the modular was 1/5th the cost to replace the square footage with an addition.

Overall, the site is in good condition. There is an interior courtyard that is utilized for outdoor learning and student projects. There are two exterior storage pods on site for classroom materials and supplies.

The original building is observed to be in good to adequate condition for its age with the exception of some failing interior finishes and exterior that are unsatisfactory. Consideration should be given to adding a fire suppression system.

SITE INFORMATION

TOPOGRAPHY	Sloped
LOCATED IN A FLOOD ZONE	No
WETLANDS ON SITE	Yes
HISTORIC DESIGNATION	No
ORIENTATION OF BUILDING	Main Entry faces North
NEIGHBORHOOD WALK SCORE	14 Car-Dependent
NEIGHBORHOOD TRANSIT SCORE	14 Minimal Transit
EST. COMMUTE TO DOWNTOWN BROCKTON	10 minutes by car 14 minutes by bicycle 60+ minutes walking

Kennedy School


 S-2

SUMMARY OF FINDINGS

- The MSBA Space summary template guidelines indicate that **elementary school general classroom sizes** (Grades 1–5) should be in a range of 900 to 1,000 square feet with a maximum of 23 students per classroom. The Kennedy School for School Year 2017/18 has an enrollment between 24 to 32 students per classroom for grades 1–5. This demonstrates that the number of students per classroom exceeds the recommended count and suggests that the school is operating above MSBA recommended capacity.
- The **modular building** has reached the end of its useful life and a more permanent building solution should be considered.
- Interior 9"x 9" **floor tiles** located throughout the building are worn and chipping. The flooring should be tested for asbestos prior to any renovation or maintenance that would disturb or remove the material
- **Music** is currently held in a room used for school supplies and storage, adjacent to the Gymnasium. The room was originally designed for storage, and lacks windows, adequate classroom lighting, finish materials, acoustics, or appropriate ventilation. These conditions do not provide an optimal learning environment for the Program.
- **Art** does not have a dedicated classroom and moves between classrooms with a cart. A designated room/area for Art class is required to meet current MSBA standards.
- The building currently does not have a **sprinkler system** or any heat detection devices observed. Future upgrades to this building should consider adding a fire suppression system and heat detection devices to meet current codes.
- It was observed during the visit that there is a shortage of adequate **support and collaboration spaces** for teachers and staff.
- The bathroom **plumbing fixtures** are dated and are possibly original to the building. Future upgrades to the building should consider using low flow fixtures.
- **Lighting** is currently operated by wall mounted switches. Occupancy sensors in classrooms, offices, bathrooms, and storage areas can help with energy efficiency and operation.

Kennedy School

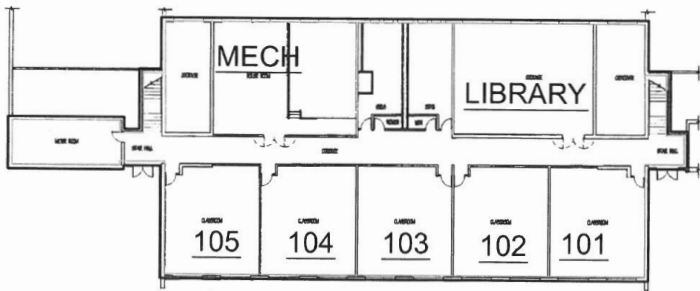
Facility Priority 3.0

S-2

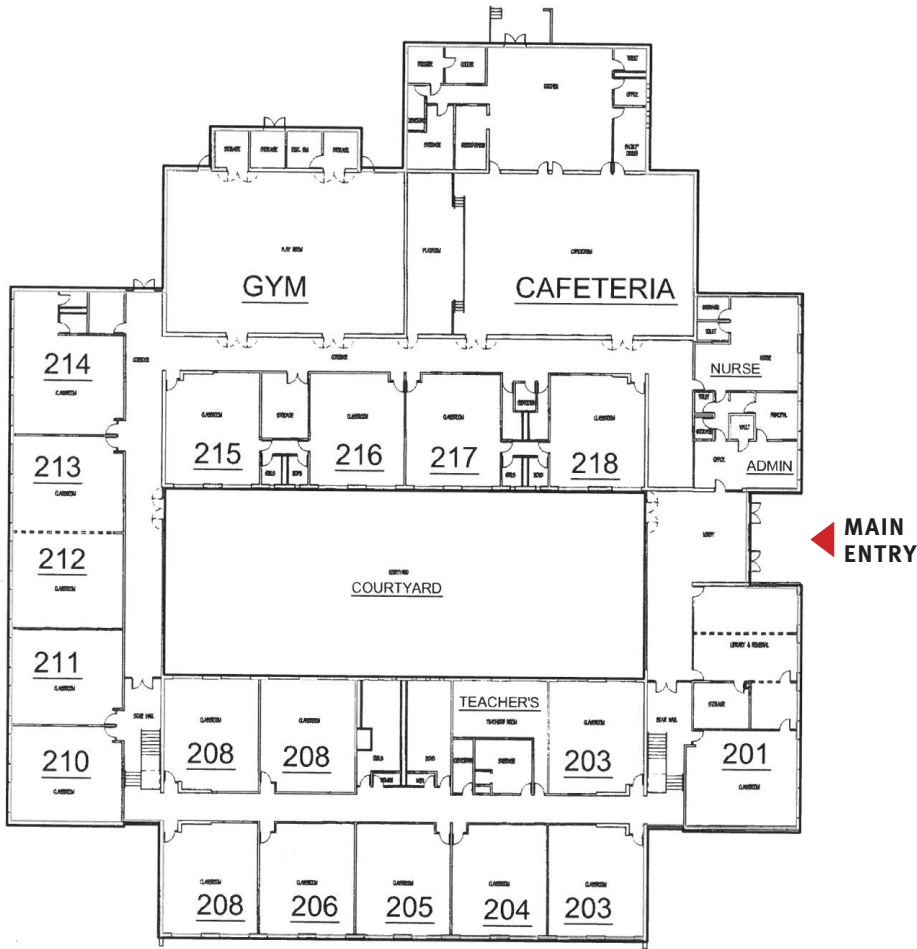
		PRIORITY	4	3	2	1	
		VISIT DATE: June 1, 2017	GOOD	ADEQUATE	MARGINAL	POOR	COMMENTS
SITE	PARKING	✓				✓	Asphalt, ample parking with clear striping. Consider adding curbing where missing.
	LANDSCAPING	✓					Grass, mature bushes and trees, inner courtyard, planter boxes, picnic tables, stone retaining wall
	SIDEWALKS	✓					Concrete, asphalt
	OTHER	✓					Age appropriate play structure, basketball court
EXTERIOR	ROOF	✓					Rubber membrane, no evidence of leaking observed
	GUTTERS/DOWNSPOUT	✓		✓			Internal at original building in good condition; Aluminum downspouts on modular, some appear damaged
	WALLS	✓				✓	Masonry brick; spalling, staining. Consideration to spot repoint bricks. Damaged mechanical vent grilles. Vinyl siding at modular.
	WINDOWS					✓	Aluminum double pane windows, awning; older/ original
	DOORS	✓				✓	Metal doors; mix of original and new. Some ADA accessible hardware.
	SECURITY	✓					Exterior lighting, exterior security cameras.
	FOUNDATIONS	✓					Concrete
	OTHER						Two exterior storage pods on site: one is used for building supplies (recycle bins, classroom science material kits)
INTERIOR	FLOORS	✓				✓	Carpet in Admin area and 12" x 12" VCT; some 9" x 9" tiles
	WALLS	✓					Wood panel in office, CMU painted, brick
	CEILINGS	✓				✓	2' x 4' ACT; older, sagging, missing. Wood plank in cafeteria in good condition
	DOORS	✓					Wood hollow-core with hollow metal frames; mixture of ADA accessible and non-accessible door hardware
	OTHER						
TOILET ROOMS	FLOORS	✓					Porcelain mosaic tile
	WALLS	✓					Painted and glazed masonry units
	CEILINGS					✓	2' x 4' ACT; sagging, stained, ripped
	FIXTURES	✓					Wall mounted, toilets and urinals with manual flush
	TOILET PARTITIONS					✓	Metal floor mounted with overhead supports; showing some signs of rusting
KITCHEN	FLOORS	✓					Terra cotta tiles in good condition
	WALLS	✓					Glazed CMU
	CEILINGS				✓		Painted GWB, assumed washable 2' x 4' ACT; sagging, missing, stained
	GREASE TRAP	✓					Serviced twice per year
	KITCHEN EQUIPMENT	✓					Newer ovens, kettle refurbished
	OTHER						All cooking done on site. No dish room; currently use Styrofoam trays
ELEC	SERVICE/DISTRIB.	✓					Switchgear and circuit breaker panels
	LIGHTING/POWER	✓					2' x 4' recessed fixtures in corridors, surface mounted in cafeteria, restrooms and classrooms. Energy efficient lamps reported.
HVAC	SUPPLY/DISTRIB.	✓					Natural gas, forced hot air
	UNIT SOURCES	✓					Window heating units. Some rooms have A/C window units. Two boilers. Ceiling fans and window A/C units used in cafeteria.
FIRE	SPRINKLERS					✓	None, no sprinkler system observed
	DETECTION	✓				✓	Heat detectors were observed in corridor spaces, however not in classrooms
			POSSIBLE	NO	MAYBE	UNKNOWN	
CODE	ASBESTOS	✓					Assumed in 9" x 9" floor tiles, possibly on pipes
	LEAD					✓	Unknown
	HANDICAP-ACCESSIBLE	✓	✓				Assumed: Elevator access to all floors. No: Door hardware and clearances not ADA accessible.
	OTHER						

Kennedy School

S-2



BASEMENT FLOOR PLAN



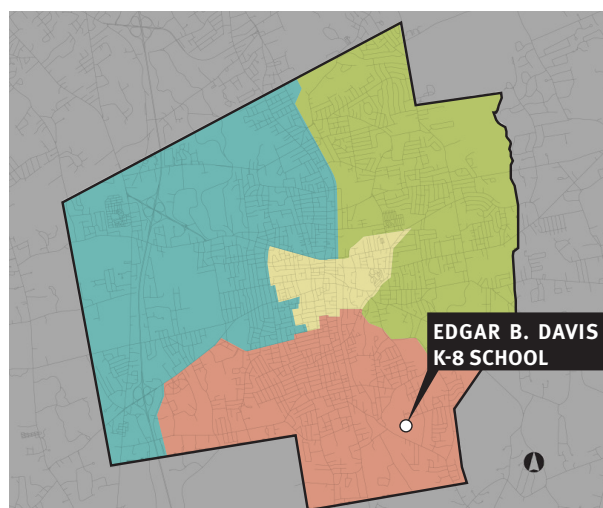
Note: Five modular classrooms, two bathrooms, and a corridor not shown in plan. Exiting Music addition adjacent to Gym not shown in plan.

FIRST FLOOR PLAN

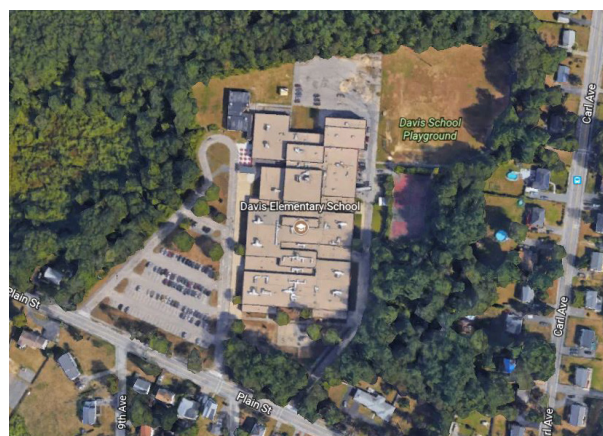
Edgar B. Davis School

380 Plain Street
Brockton, MA 02302

S-3



LOCATION MAP



AERIAL PHOTO



EAST ENTRY

FACILITIES INFORMATION

DEPARTMENT	School
BUILDING USE	Elem./Middle K-8
SCHOOL ZONE	South
YEAR(S) BUILT	1974, rehab 2012
NUMBER OF CLASSROOMS	42*

SITE & BUILDING AREA

SITE AREA	13.75 Acres
BUILDING AREA	123,336 GSF
MODULAR CLASSROOM AREA	4,375 GSF
TOTAL SCHOOL AREA	127,711 GSF

SCHOOL YEAR 2017/18

ENROLLMENT DATA	Students	Classes per grade
KINDERGARTEN	88	5
GRADE 1	125	5
GRADE 2	130	5
GRADE 3	119	5
GRADE 4	108	5
GRADE 5	118	5
TOTAL K-5	688	30
GRADE 6	108	4
GRADE 7	104	4
GRADE 8	96	4
TOTAL 6-8	308	12
TOTAL AT K-8	996	42*

*includes 4 modular classrooms

KEY PROGRAMS

GRADE K-5	Cape Verdean Sheltered English Immersion (SEI)
	After-school program
	Community programs in the summer

Edgar B. Davis School



BUILDING OVERVIEW

The Edgar B. Davis K–8 School is located in the South Zone neighborhood. It is the only K–8 school in Brockton; all of Brockton’s other elementary schools are K–5.

Built in 1974 and identical to the Raymond School in layout, the one-story building has three open classrooms along the east and four open classrooms along the west. The center section of the building houses common programs such the cafetorium, library, small gym, art program, and music program. All of the pods have been sub-divided into classrooms with walls. Due to the original mechanical layout, the walls between classrooms do not extend to the underside of the structure and are open. Noise transmission between classrooms is a concern.

In addition to the 1974 building, a modular structure estimated to be 20 years old, contains (four) 8th grade classrooms, bathrooms, and corridor circulation. It was recently renovated with new carpet and ceiling tiles.

Building security and safety is a noticeable concern with compromised sight lines in the spaces, egress paths through occupied spaces, and visibility to egress signage. Lighting, acoustics, and ventilation are not currently configured to serve the classroom spaces. Overall the building does not meet the school educational needs due to the outdated pod configuration.

SITE INFORMATION

TOPOGRAPHY	Flat
LOCATED IN A FLOOD ZONE	No
WETLANDS ON SITE	No
HISTORIC DESIGNATION	No
ORIENTATION OF BUILDING	Main Entry faces West
NEIGHBORHOOD WALK SCORE	22 Car-Dependent
NEIGHBORHOOD TRANSIT SCORE	30 Some Transit
EST. COMMUTE TO DOWNTOWN BROCKTON	12 minutes by car 15 minutes by bicycle 48 minutes walking

Edgar B. Davis School


 S-3

SUMMARY OF FINDINGS

- The MSBA Space summary template guidelines indicate that **Elementary school general classroom sizes** (Grades 1–5) should be in a range of 900 to 1,000 square feet with a maximum of 23 students per classroom. The Elementary School for School Year 2017/18 has an enrollment between 23 to 28 students per classroom for grades 1–5. This demonstrates that the number of students per classroom exceeds the recommended count and suggests that the school is operating above MSBA recommended capacity.
- The MSBA Space summary template guidelines indicate that **Middle school general classroom sizes** (Grades 6–8) should be in a range of 850 to 950 square feet with a maximum of 23 students per classroom. The Middle School for School Year 2017/18 has an enrollment between 21 to 32 students per classroom. This demonstrates that the number of students per classroom exceeds the recommended count and suggests that the school is operating above MSBA recommended capacity.
- The **open classroom configuration** of the building presents challenges with egress safety, acoustics, lighting, and air distribution. Some of the classrooms are in-bound in the sub-divided pods and do not have access to natural daylight and windows.
- Due to the condition and age of several of the original **interior finishes**, an interior renovation would update the existing, dated, and worn materials.
- The building currently does not have a **sprinkler system** or heat detection devices. Future upgrades to this building should consider adding a fire suppression system and heat detection devices to meet current codes.
- It was observed during the visit that there is a shortage of adequate **support and collaboration spaces** for teachers.
- The **bathroom plumbing fixtures** are dated and are possibly original to the building. Future upgrades to the building should consider using low flow fixtures. The student toilet rooms do not offer accessible stalls or fixtures, and the quantity of bathrooms for the population should be evaluated per current plumbing code.
- It was reported that Edgar B. Davis Elementary school has the largest **after-school program** in the city, and utilizes the gym and cafeteria spaces.
- The storage room adjacent to the mechanical space has an accumulated and abundance of **paper storage**. An evaluation of the current supply and storage inventory should take place to verify the best use of the building storage space.
- Original gym locker rooms and shower areas are now used for **storage**. Future upgrades to this building should consider creating appropriate spaces for storage.

Edgar B. Davis School

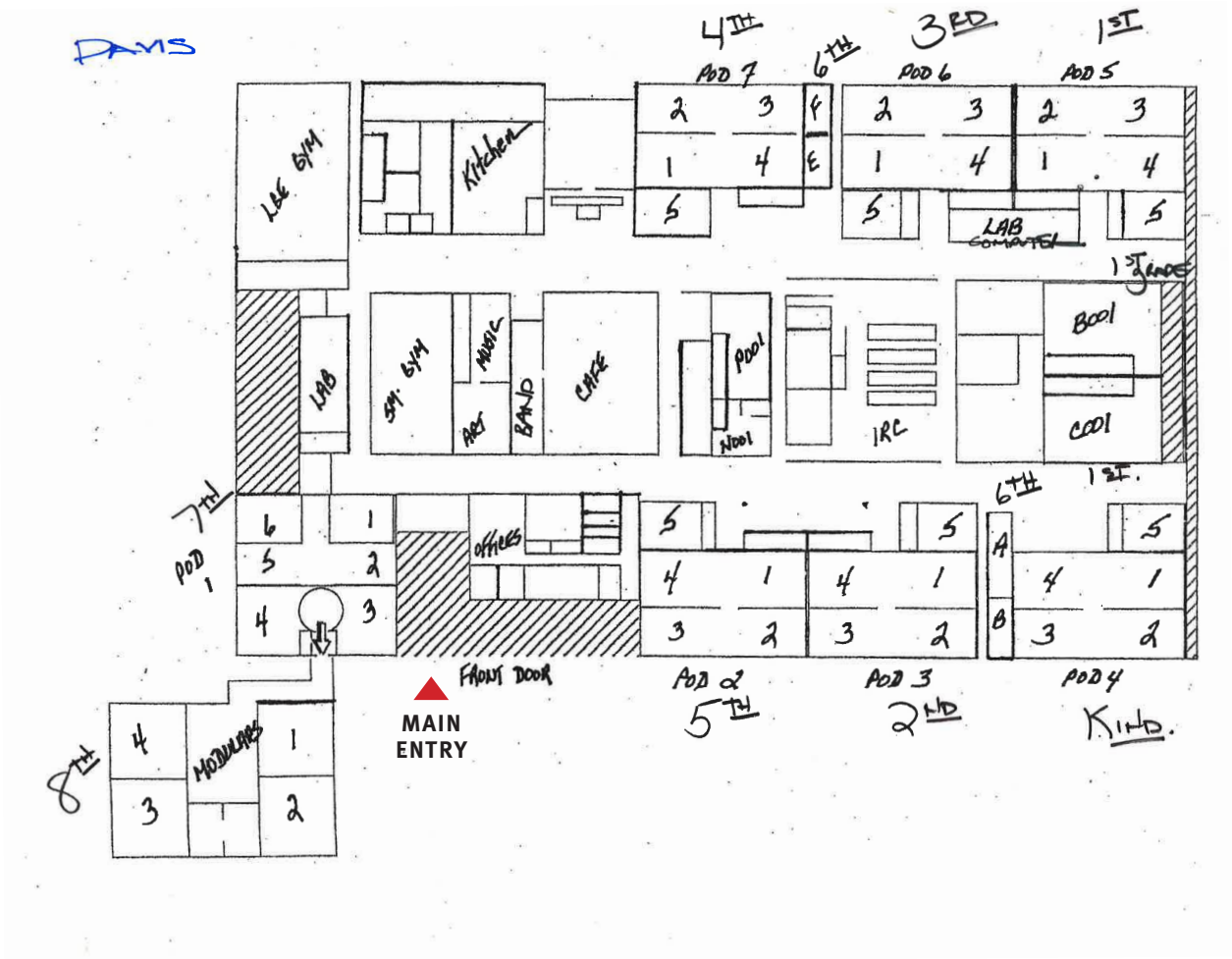
 Facility Priority 2.5

S-3

		PRIORITY	4	3	2	1	
		VISIT DATE: April 18, 2017	GOOD	ADEQUATE	MARGINAL	POOR	COMMENTS
SITE	PARKING		✓				Asphalt, ample parking. Consider adding curbing where missing.
	LANDSCAPING	✓			✓		Grass, plants, and trees. Old basketball courts have been abandoned, over grown.
	SIDEWALKS		✓				Concrete, some cracking and crumbling
	OTHER						
EXTERIOR	ROOF				✓		Rubber roof with evidence of leaks observed. Reportedly replaced in 2011
	GUTTERS/DOWNSPOUT	✓					Internal
	WALLS			✓			Masonry veneer missing in some locations. Metal panel; pitting, rusting
	WINDOWS	✓					Double pane windows, newer, no reports of leaking
	DOORS			✓			Older and/ or original. Hardware does not appear to be ADA accessible
	SECURITY			✓			Cameras only located outside. Reportedly only half are working, although are not viewing a preferred direction.
	FOUNDATIONS	✓					Small amount of concrete
	OTHER						
INTERIOR	FLOORS	✓			✓		12" x 12" VCT in good condition. Carpet in library and front office; older and worn
	WALLS	✓					Painted GWB and CMU
	CEILINGS			✓			2' x 4' ACT; some water staining and sagging observed throughout
	DOORS	✓					Metal, some with ADA accessible hardware
	OTHER						
TOILET ROOMS	FLOORS		✓				Tile
	WALLS		✓				Painted CMU
	CEILINGS		✓				2' x 4' ACT; sagging, stained, ripped, missing in some areas
	FIXTURES				✓		Floor mounted toilets, wall mounted sinks
	OTHER						Girls locker room has 8 showers; not used. Boys locker room has ganged showers; not used.
KITCHEN	FLOORS	✓					Painted concrete
	WALLS	✓					Painted CMU
	CEILINGS		✓				2' x 4' ACT
	GREASE TRAP	✓					Cleaned every 6 months
	KITCHEN EQUIPMENT	✓					New refrigerators March 2017
	OTHER						Kitchen is reported to be hot while cooking
ELEC	SERVICE/DISTRIB.	✓					Switchgear and circuit breaker panels
	LIGHTING/POWER	✓					Occupancy sensors observed in gym only. LED lamps outside. Energy efficient lamps.
HVAC	SUPPLY/DISTRIB.	✓					Natural gas, hot water heat. 2 boilers. Electric baseboard heat in the modular.
	UNIT SOURCES	✓					Gym has 3 ceiling fans, only 1 is reported operating. There is no A/C in the Gym or Kitchen.
FIRE	SPRINKLERS				✓		None, no sprinkler system observed
	DETECTION				✓		No heat detectors were observed in corridor spaces or classrooms
			POSSIBLE	NO	MAYBE	UNKNOWN	
CODE	ASBESTOS	✓					Assumed on pipes
	LEAD				✓		Unknown
	HANDICAP-ACCESSIBLE	✓	✓				Assumed: Ramps for access to Cafetorium and Library. No: Bathrooms not accessible (turning radius, door and fixture clearances/ thresholds, hardware, accessories). Door hardware not ADA accessible throughout
	OTHER						

Edgar B. Davis School

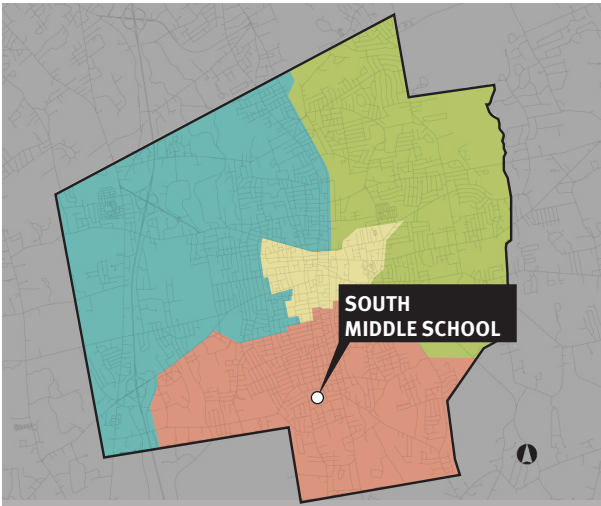
S-3



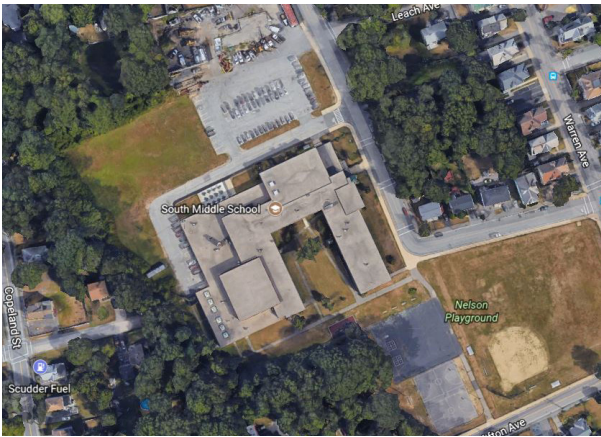
FIRST FLOOR PLAN

South Middle School

105 Keith Avenue
Brockton, MA 02301



LOCATION MAP



AERIAL PHOTO



NORTH ENTRY

FACILITIES INFORMATION

DEPARTMENT	School
BUILDING USE	Middle 6–8
SCHOOL ZONE	South
YEAR(S) BUILT	1955, rehab 2003
NUMBER OF CLASSROOMS	36

SITE & BUILDING AREA

SITE AREA	9.25 Acres
BUILDING AREA	103,500 GSF
MODULAR CLASSROOM AREA	N/A
TOTAL SCHOOL AREA	103,500 GSF

SCHOOL YEAR 2017/18

ENROLLMENT DATA	Students	Classes per grade
GRADE 6	183	8
GRADE 7	176	7
GRADE 8	163	7
TOTAL	522	22

KEY PROGRAMS

Special Education Life Skills (two classrooms)
Special Education Autism Spectrum Disorder (ASD)(one classroom)

South Middle School



BUILDING OVERVIEW

South Middle School, located in the South Zone neighborhood, houses a grade 6–8 population. The floor plan is similar to North Middle School with minor modifications.

There have been several building improvements for South Middle School recently, including an elevator, retrofitting a sprinkler/fire alarm system, renovating bathrooms, and a new science lab. Additionally, the previous stationary desk classroom furniture has been replaced with new learning tables.

The Auditorium space, used by both the school and community, is an important resource to the neighborhood. The finishes and seating are original to the 1955 construction and could benefit from a renovation to bring the room to current Auditorium standards.

The classroom and corridor flooring at the school are 9" x 9" tile with areas throughout the school that have tiles missing, chipped, and worn. These tiles have been replaced on the second floor with new 12" x 12" tile. Prior to any renovation or replacement to the remaining floor, the existing tiles should be tested for hazardous materials.

The parking lot is currently shared by a private snow plow storage operation. There is considerable wear and tear on the site and parking.

The building is considered to be in moderate condition with only minor repairs and renovations needed.

SITE INFORMATION

TOPOGRAPHY	Flat
LOCATED IN A FLOOD ZONE	Yes, Property is located in a flood zone
WETLANDS ON SITE	No
HISTORIC DESIGNATION	No
ORIENTATION OF BUILDING	Main Entry faces East
NEIGHBORHOOD WALK SCORE	62 Somewhat Walkable
NEIGHBORHOOD TRANSIT SCORE	34 Some Transit
EST. COMMUTE TO DOWNTOWN BROCKTON	6 minutes by car 10 minutes by bicycle 34 minutes walking

South Middle School


 S-4

SUMMARY OF FINDINGS

- The MSBA Space summary template guidelines indicate that **Middle school general classroom sizes** (Grades 6–8) should be in a range of 850 to 950 square feet with a maximum of 23 students per classroom. The South Middle School for School Year 2017/18 has an average enrollment of 22 students per classroom for 6th grade, 25 students for 7th grade, and 23 students for 8th grade. This demonstrates that a select number of classrooms exceed the recommended student count and suggests that the school is partially operating at below the MSBA recommended capacity. However, the overall school building square footage divided by student population has the school operating better than MSBA recommended capacity. A review of one classrooms at South Middle School estimated the room to be approximately 800 sf (25' x 32') with 24 students. This demonstrates that the classrooms are possibly undersized for the population per MSBA standards.
- Due to the condition and age of the **Auditorium interior finishes**, future upgrades to the original seating and finishes should be considered.
- Interior 9"x 9" **floor tiles** located on the first floor of the building are worn and chipped. The flooring should be tested for asbestos prior to any renovation or maintenance that would disturb or remove the material.
- With the addition of a **new science lab** located on the first floor, the older science lab benches located in second floor classrooms are no longer used. The removal of these unused benches would provide more space in the classroom.
- The **bathroom plumbing fixtures** are newer and in good condition. Future upgrades to the building should consider using low flow fixtures. The quantity of bathrooms for the population should be evaluated per current plumbing code.
- The stair well located at the South-East corner continues to the basement of the building. For **egress code compliance**, and to prevent occupants from continuing to the basement in an emergency, future improvements should include installing a gate at the ground floor/egress landing.
- **Lighting** is currently operated by wall mounted switches. Occupancy sensors in classrooms, offices, bathrooms, and storage areas can help with energy efficiency and operation.

South Middle School

Facility Priority 3.1

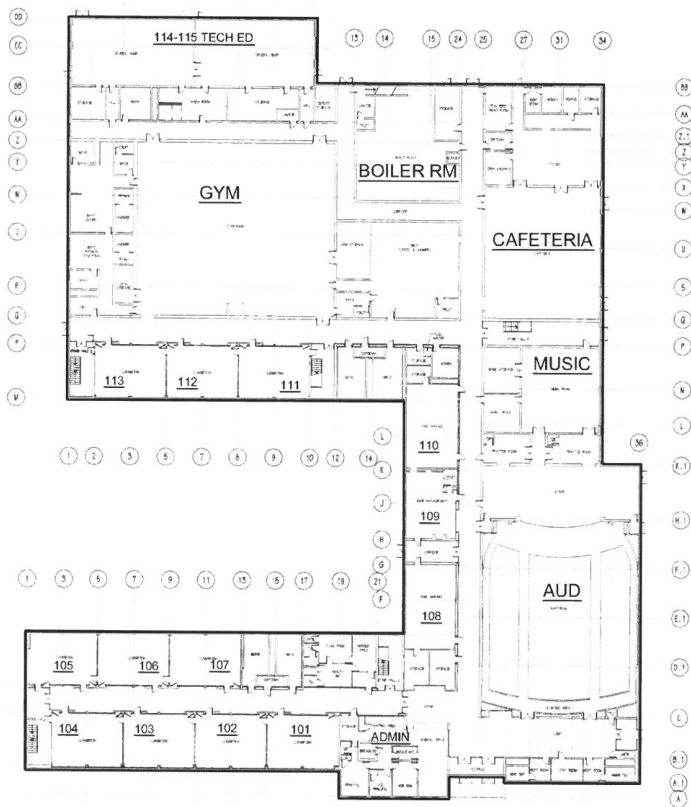
S-4

PRIORITY		4	3	2	1	COMMENTS
VISIT DATE: April 18, 2017		GOOD	ADEQUATE	MARGINAL	POOR	
SITE	PARKING				✓	Asphalt. Shared by snow plow storage. Cracking, small pot holes. Crumbling in some areas, missing curbing.
	LANDSCAPING	✓				Grass, mature trees and bushes. Inner open courtyard. Picnic tables near cafeteria.
	SIDEWALKS	✓			✓	Concrete, asphalt cracking/ crumbling.
	OTHER					
EXTERIOR	ROOF				✓	Ballasted flat roof with some leaks reported at roof flashing
	GUTTERS/DOWNSPOUT				✓	Internal storm drains within building wall cavities. Damaged pipes and walls due to reported blockage.
	WALLS				✓	Masonry brick; some cracking, spalling, staining, and efflorescence observed
	WINDOWS	✓				Double pane withoppers in lower third of window bay. Infill at top portion. Interior window roller shades appear missing/broken.
	DOORS		✓			Metal doors, original. Issues with door swelling and therefore only latches with assistance. Some sills in unsatisfactory condition.
	SECURITY				✓	One working camera is located at front door. Other 4 cameras reportedly are not working.
	FOUNDATIONS		✓			Concrete
	OTHER					
INTERIOR	FLOORS	✓	✓		✓	Newer VCT at half of 2nd floor in good condition. Terrazzo at entry; cracking. 9" x 9" tiles in corridors and classrooms; chipping, missing. Carpet in classrooms/ Auditorium; ripping and buckling.
	WALLS	✓				Glazed CMU and painted GWB in good condition. Metal lockers throughout corridors.
	CEILINGS	✓			✓	New 2'x4' ACT in corridors. Some areas with older, damaged ACT
	DOORS					
	OTHER					
TOILET ROOMS	FLOORS	✓				Newer mosaic tiles
	WALLS	✓				Newer glazed ceramic tile
	CEILINGS	✓				Newer 2' x 2' ACT
	FIXTURES	✓				Newer wall mounted sinks, toilets, and urinals. Newer solid toilet partitions.
	OTHER					Newer toilet rooms throughout, except gym locker rooms.
KITCHEN	FLOORS	✓				Terra cotta tiles
	WALLS	✓				Glazed CMU
	CEILINGS	✓				Painted
	GREASE TRAP	✓				Serviced in Feb. 2017
	KITCHEN EQUIPMENT	✓				New oven and steamer. Meals are prepared in the kitchen. Breakfast is served in the classroom.
	OTHER					
ELEC	SERVICE/DISTRIB.	✓				Switchgear and circuit breaker panels
	LIGHTING/POWER		✓			Mass Save energy efficient lamps installed throughout. No occupancy sensors were observed.
HVAC	SUPPLY/DISTRIB.	✓				Three natural gas boilers
	UNIT SOURCES	✓				Hot water heating system. Some rooms have A/C window units.
	OTHER				✓	Evidence of standing water on the Mechanical Room floor/ wet in the spring due to thawing ground and water table. Usually dry.
FIRE	SPRINKLERS	✓				Sprinklered throughout. Retrofitted +/- 10 years ago.
	DETECTION	✓				Fire alarm system installed in 2014
		POSSIBLE	NO	MAYBE	UNKNOWN	
CODE	ASBESTOS	✓				Assumed in 9" x 9" floor tiles, potentially on pipes
	LEAD				✓	Unknown
	HANDICAP-ACCESSIBLE	✓				Assumed at elevator, ramp at exterior door, and bathrooms
	OTHER					

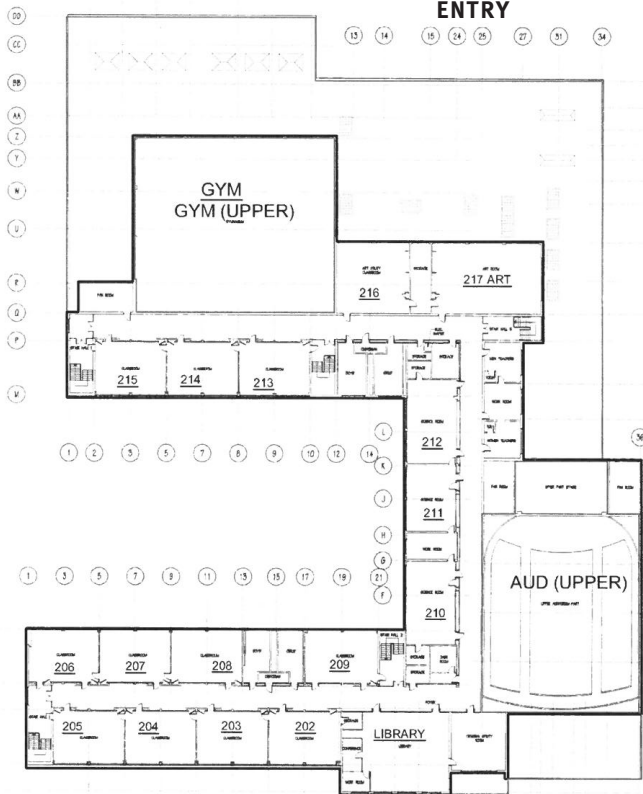
South Middle School

S-4


NORTH
FIRST FLOOR PLAN



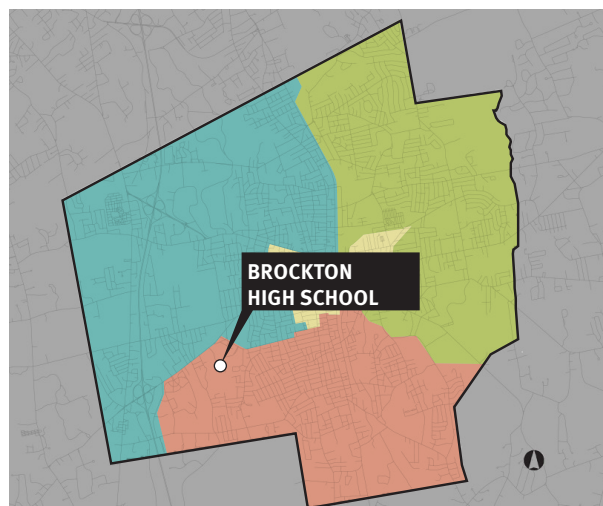
SECOND FLOOR PLAN



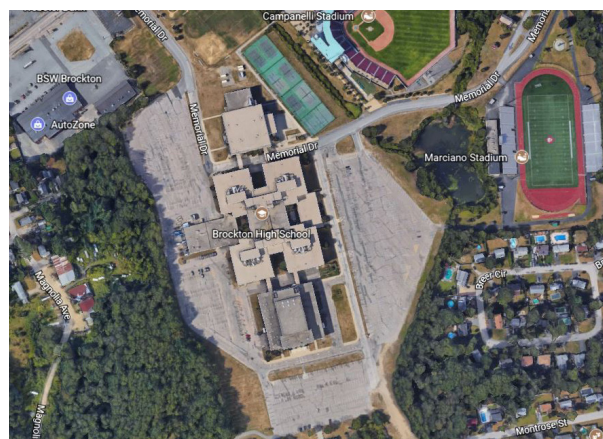
Brockton High School

470 Forest Avenue
Brockton, MA 02301

S-5



LOCATION MAP



AERIAL PHOTO



NORTH ENTRY

FACILITIES INFORMATION

DEPARTMENT	School
BUILDING USE	High School 9–12
SCHOOL ZONE	South
YEAR(S) BUILT	1970, reno 2012
NUMBER OF CLASSROOMS	246

SITE & BUILDING AREA

SITE AREA	67 Acres
BUILDING AREA	545,000 GSF
MODULAR CLASSROOM AREA	N/A
TOTAL SCHOOL AREA	545,000 GSF

SCHOOL YEAR 2017/18

ENROLLMENT DATA	Students per grade
GRADE 9	1036
GRADE 10	1077
GRADE 11	1015
GRADE 12	953
GRADE SP	39
EDISON ACADEMY	0
TOTAL	4120

KEY PROGRAMS

Extra-curricular activities/clubs
Vocational Tech Program
Restaurant
Athletics
Theater
Community use
Auto shop
Engineering
Childcare for students and staff

Brockton High School



BUILDING OVERVIEW

Brockton High School is located in the South Zone neighborhood and serves the Districts’ general high school population. It is the largest high school in Massachusetts with 4 distinct ‘houses’ referred by color: azure, green, red, and yellow. The facility includes a Gym Wing with a 25-yard swimming pool, and a Fine Arts Wing with a 1,600-seat capacity auditorium. Each house has their own cafeteria and resource centers (or library). Brockton High School offers a traditional comprehensive program.

The three-story building built in 1970 is located on a flat site and is surrounded by asphalt parking. The four houses are organized in a rectangle, with a window-less core that holds shared programs. The gym, pool, and fitness areas are located at the north end of the building, connected by two bridges. Similarly, the Fine Arts wing and Theater are at the south end, also connected by two bridges.

Each house has a dedicated student locker bay that currently does not serve the entire population. The current lockers are undersized for the current needs of the high school students.

The building is in poor condition due to significant repairs required to maintain the building and adapt to accommodate the large population and desired growth of the STEM program. There is significant wear and tear on the interior of the facility. The building is in need of a considerable interior renovation to provide adequate learning spaces with sufficient classroom space and daylight. Areas should be tested for asbestos containing material and if discovered, will need to be properly handled for any future renovation and maintenance.

SITE INFORMATION

TOPOGRAPHY	Flat/Vast
LOCATED IN A FLOOD ZONE	Yes, Property is located in a flood zone
WETLANDS ON SITE	Yes
HISTORIC DESIGNATION	No
ORIENTATION OF BUILDING	Primarily North/South with Entry on East
NEIGHBORHOOD WALK SCORE	42 Car-Dependent
NEIGHBORHOOD TRANSIT SCORE	25 Some Transit
EST. COMMUTE TO DOWNTOWN BROCKTON	7 minutes by car 12 minutes by bicycle 60+ minutes walking

Brockton High School

● Facility Priority 3.1

S-5

SUMMARY OF FINDINGS

- The MSBA Space summary template guidelines indicate that **High school general classroom sizes** (Grades 9–12) should be in a range of 825 to 950 square feet with a maximum of 23 students per classroom. A review of classroom capacity chair count determined that there are approximately 32 to 39 students in some classrooms. This demonstrates that the number of students per classroom exceeds the recommended count and suggests that the school is operating above MSBA recommended capacity.
- The **Auditorium** currently seats 1600 and is frequently used by the school for performances, as well as by the community. The sound system, seating and finishes could benefit from a renovation to bring the room to today's standards.
- **9"x9" floor tiles** located throughout the building are worn and chipped. The flooring should be tested for asbestos prior to any renovation or maintenance that would disturb or remove the material.
- There is one **kitchen** that services the four houses for meals. There are three lunchtime seatings per house for a total of 12 seatings with an additional one breakfast seating per house. Styrofoam trays are used for these meals. A more sustainable approach to lunch service could be reviewed district wide to increase the use of recyclable and/or compostable products.
- Due to the condition and age of several of the **interior finishes**, an interior renovation would update the existing, dated, and worn materials.
- There are several classrooms in the core that have **original lab benches** that are no longer used. The removal of these unused benches would provide more space in these classrooms.
- **Lighting** is currently operated by wall mounted switches. Occupancy sensors in classrooms, offices, bathrooms, and storage areas can help with energy efficiency and operation.
- The building currently does not have a **sprinkler system** or heat detection devices. Future upgrades to this building should consider adding a fire suppression system and heat detection devices to meet current codes.
- The **bathroom plumbing fixtures** are dated and are possibly original to the building. Future upgrades to the building should consider using low flow fixtures. The student toilet rooms do not offer accessible stalls or fixtures, and the quantity of bathrooms for the population should be evaluated per current plumbing code.
- The **kitchen is not currently air conditioned** and becomes very warm during use. Future upgrades to the building should consider adding air conditioning to this space.
- The possibility of creating a "9th Grade House" was discussed with the Principal of the High School. It was noted that this was not a successful model in the past as it is beneficial for **9th graders** to have upper-class students as role models.

Brockton High School

S-5

- Many unused or decommissioned **drinking fountains** were observed throughout the school. Future upgrades should consider replacing with new fixtures, or removal of these fixtures all together. The quantity of drinking fountains in the building should be verified with the current plumbing code requirements.

Brockton High School

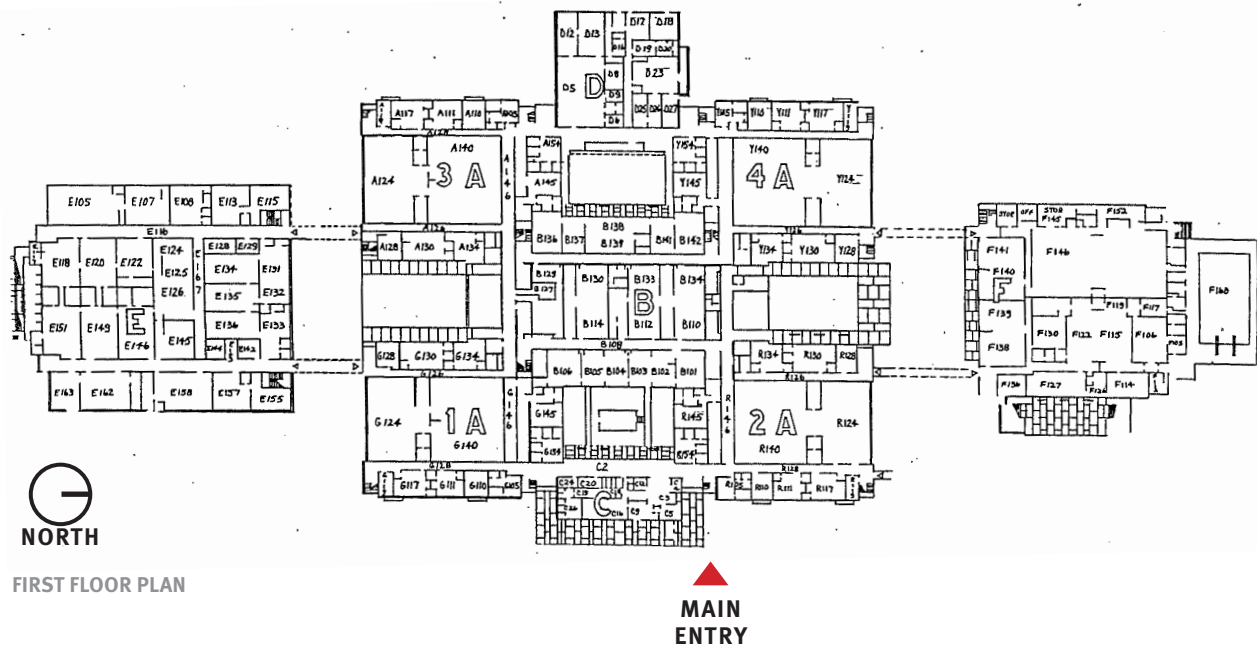
 Facility Priority 3.1

S-5

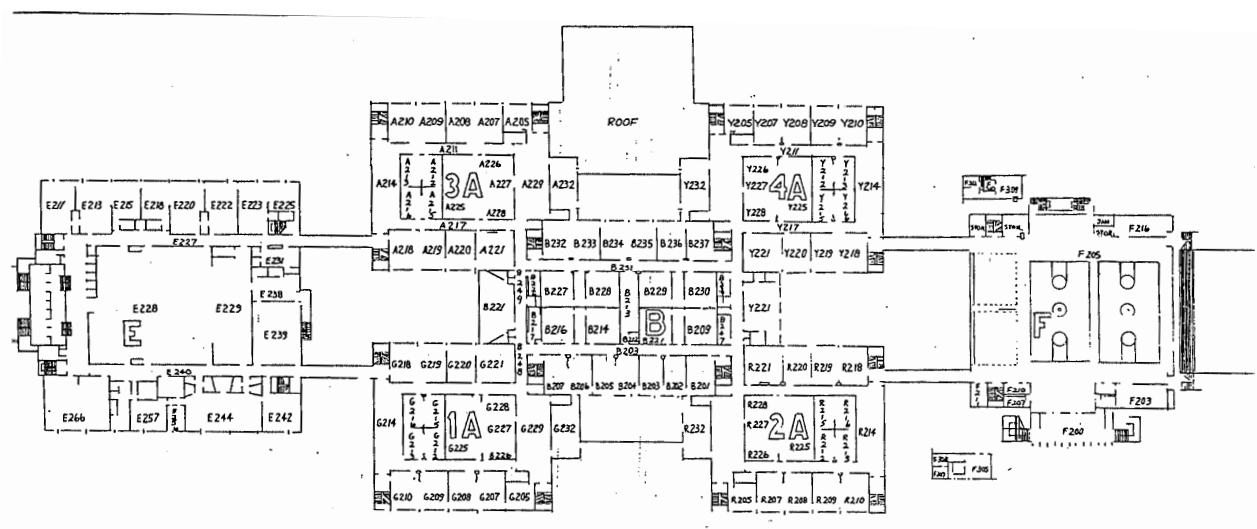
		PRIORITY	4	3	2	1	
		VISIT DATE: April 7, 2017	GOOD	ADEQUATE	MARGINAL	POOR	COMMENTS
SITE	PARKING	✓	✓				Asphalt with some potholes and cracking. Curbing missing in some areas. Parking and drive aisle surrounds building.
	LANDSCAPING	✓					Minimal grass, few trees
	SIDEWALKS				✓		Minimal concrete, cracking
	OTHER						Garden with planter boxes for student projects.
EXTERIOR	ROOF	✓					New in 2012, rubber membrane, no reported issues
	GUTTERS/DOWNSPOUT	✓					No reported issues
	WALLS	✓					Formed concrete and masonry brick, in good condition. Stone at entry
	WINDOWS				✓		Reported that window glue may contain asbestos and should be tested prior to disturbing or removing the windows
	DOORS	✓					Metal doors; mix of newer and original
	SECURITY	✓					School police on site during the day, cameras
	FOUNDATIONS	✓					Minimal concrete
	OTHER						
INTERIOR	FLOORS	✓			✓		9" x 9" tiles, possibly original, and 12" x 12" VCT. Wood floor in gym in good condition, older carpet in some areas
	WALLS	✓					Formed concrete
	CEILINGS				✓		2' x 4' ACT; sagging, stained
	DOORS	✓					Metal; durable. Some door hardware appears to be ADA accessible
	OTHER				✓		Metal lockers; reportedly too small for use and current needs
TOILET ROOMS	FLOORS			✓			Mosaic tile; stained
	WALLS			✓			Painted and ceramic tile
	CEILINGS				✓		2' x 4' ACT; sagging, stained
	FIXTURES				✓		Wall mounted toilets and urinals at student restrooms. Floor mounted toilets in single room restrooms.
	TOILET PARTITIONS		✓				Floor mounted
KITCHEN	FLOORS	✓					Terra cotta tiles in good condition
	WALLS	✓					Glazed CMU
	CEILINGS		✓				Painted GWB
	GREASE TRAP	✓					Serviced
	KITCHEN EQUIPMENT	✓					Reported in good and working order
	OTHER						
ELEC	SERVICE/DISTRIB.				✓		Switchgear and circuit breaker panels, older
	LIGHTING/POWER		✓				Classrooms are observed to have occupancy sensors. Fine Arts wing has LED lighting. Combination of recessed and surface mounted.
	OTHER						In Fine Arts wing, there is exposed caged wiring in corridor
HVAC	SUPPLY/DISTRIB.				✓		Electric heat used in the front office. Natural gas boilers heat the remainder of building.
	UNIT SOURCES			✓			Forced hot air, A/C
FIRE	SPRINKLERS				✓		None, no sprinkler system
	DETECTION				✓		None observed
			POSSIBLE	NO	MAYBE	UNKNOWN	
CODE	ASBESTOS	✓					Assumed in 9" x 9" floor tiles throughout, pipes, and in exterior window glue/ caulk
	LEAD	✓				✓	Lead reportedly found in the drinking water per <i>February 2017 State Water Test Results</i> . Unknown if there are other occurrences.
	HANDICAP-ACCESSIBLE	✓	✓				4 Elevators; 1 per House. Student bathrooms do not have accessible stalls, sinks, or door clearances. There is a lift at a level change in the Fine Arts wing.
	OTHER						

Brockton High School

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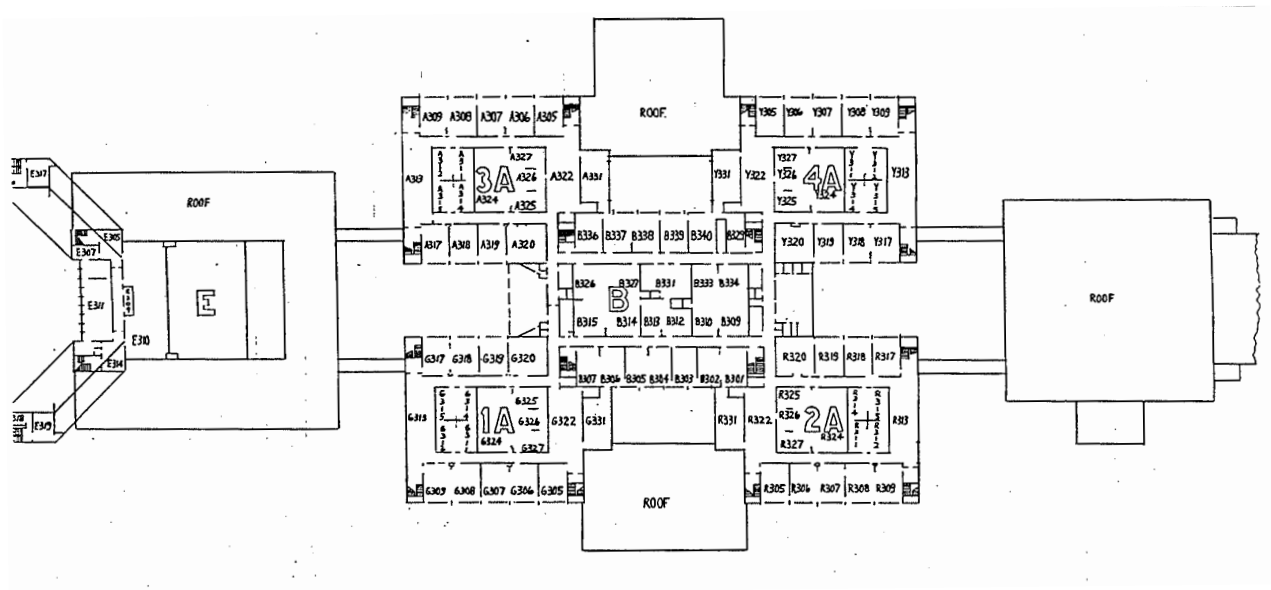
FIRST FLOOR PLAN



SECOND FLOOR PLAN

Brockton High School

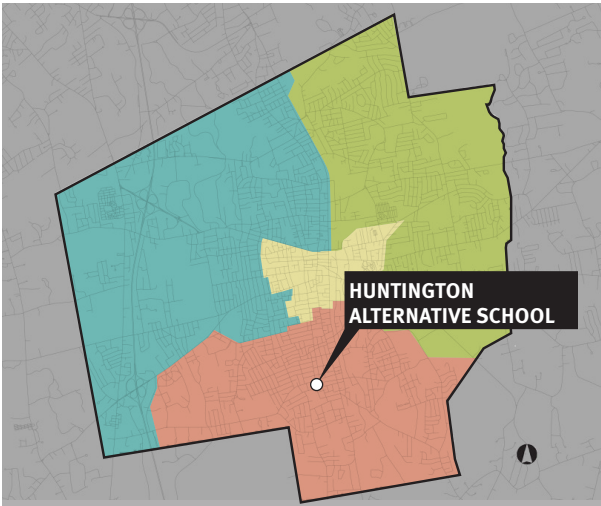
S-5



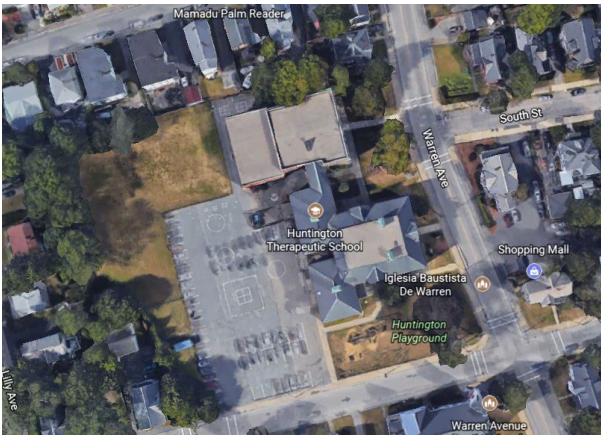
THIRD FLOOR PLAN

Huntington Alternative School

1121 Warren Avenue
Brockton, MA 02301



LOCATION MAP



AERIAL PHOTO



EAST ENTRY

FACILITIES INFORMATION

DEPARTMENT	School
BUILDING USE	Alternative High School 6–12
SCHOOL ZONE	South
YEAR(S) BUILT	1896, 1978
NUMBER OF CLASSROOMS	25

SITE & BUILDING AREA

SITE AREA	3 Acres
BUILDING AREA	66,657 GSF
MODULAR CLASSROOM AREA	N/A
TOTAL SCHOOL AREA	66,657 GSF

SCHOOL YEAR 2017/18

ENROLLMENT DATA	Students	Classes per grade
TOTAL	58	n/a

KEY PROGRAMS

Specialized instruction for special needs students
Comprehensive Psychological Services
Behavior support
Vocational Planning/Training

Huntington Alternative School


 S-6

BUILDING OVERVIEW

Huntington Alternative School is located in the South Zone neighborhood. It serves high school students in the Districts' alternative high school program. A school building assessment of the 'Huntington School' was performed by Tighe & Bond with a document produced on December 14, 2016. The findings in the report are consistent with the facilities assessment performed for this Survey of Existing Educational Facilities report.

The Huntington School is a two-story building with two distinct structures. The older section of the building constructed in 1896 is located on the south; the north section was constructed in 1914 contains the gym and cafeteria.

The overall condition of the building is poor. Major repair to the roof, gutters, exterior masonry, and doors are needed to restore the integrity of building. The building has a history of water damage that needs to be addressed. The building is not equipped with a fire suppression system.

SITE INFORMATION

TOPOGRAPHY	Flat
LOCATED IN A FLOOD ZONE	Yes, Property is located in a flood zone
WETLANDS ON SITE	No
HISTORIC DESIGNATION	No; possibly eligible
ORIENTATION OF BUILDING	Entry on East
NEIGHBORHOOD WALK SCORE	67 Somewhat Walkable
NEIGHBORHOOD TRANSIT SCORE	34 Some Transit
EST. COMMUTE TO DOWNTOWN BROCKTON	5 minutes by car 9 minutes by bicycle 31 minutes walking

Huntington Alternative School


 S-6

SUMMARY OF FINDINGS

- The current **interior finishes** are observed to be in poor condition. Future upgrades should prioritize areas of water damage and failing floor, ceiling and wall finishes.
- As observed on site and also as reported in the December 14, 2016 Tighe & Bond Huntington School Assessment document, the **roof, gutters, flashing, and downspouts** are in severe disrepair and at risk for failure.
- **Exterior doors and frames** are possibly original and show evidence of rusting. Consideration should be given to replacing.
- Currently, the only **student toilets** are located in the Northern section of the building on the second floor. The bathroom plumbing fixtures appear to be newer and in good condition. Future upgrades should consider ADA compliant fixture fittings and new water conservation features. The quantity of plumbing fixtures and location of fixtures within the building should be evaluated for the population and current plumbing code requirements.
- It was observed that the generator room has **unused equipment**. Consider removing and dispose of all non- operational equipment.
- The building currently does not have a **sprinkler system** or heat detection devices. Future upgrades to this building should consider adding a fire suppression system and heat detection devices to meet current codes.
- **Lighting** is currently operated by wall mounted switches. Occupancy sensors in classrooms, offices, bathrooms, and storage areas can help with energy efficiency and operation.
- The **handrails at the stairs** do not comply with current code and are unsafe due to large gaps at the spindles.

Huntington Alternative School

● Facility Priority 2.4

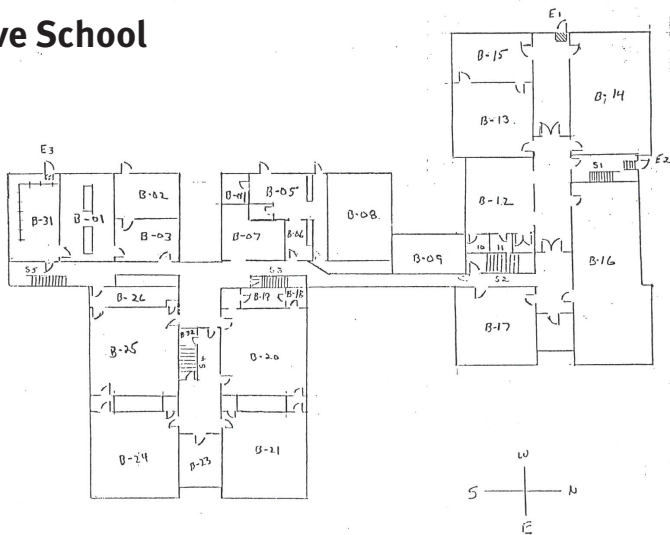
S-6

		PRIORITY	4	3	2	1	
		VISIT DATE: April 4, 2017	GOOD	ADEQUATE	MARGINAL	POOR	COMMENTS
SITE	PARKING		✓			✓	Parking lot is used for play space; hopscotch. Uneven resurfacing and poor drainage
	LANDSCAPING			✓			Grass and fenced area. Poor drainage with puddles and mud. Fields currently used for play space.
	SIDEWALKS				✓		Asphalt with steep pitch in some locations, does not appear to be ADA accessible
	OTHER						
EXTERIOR	ROOF					✓	Slate, leaking observed. Damaged lath and plaster observed in the attic. Trash barrels observed in the attic to collect water leaks from roof
	GUTTERS/DOWNSPOUT					✓	Poor condition, in disrepair, damaged, missing
	WALLS					✓	Brick masonry, some spalling and cracking. Mold and efflorescence observed with the possibility of water inside the wall cavity
	WINDOWS	✓					Newer, double pane insulated windows. Interior hopper opening window, some operable.
	DOORS	✓				✓	Original metal; rusting. Some doors are newer.
	SECURITY					✓	One front door camera. Exterior lighting.
	FOUNDATIONS	✓					Stone
	OTHER						
INTERIOR	FLOORS					✓	Carpet in upper floors; worn, older. Tile in basement; cracking, older
	WALLS					✓	Painted wood wainscot in upper floors. Water damage observed throughout.
	CEILINGS					✓	2' x 4' ACT; staining, sagging, damaged
	DOORS						
	OTHER						
TOILET ROOMS	FLOORS					✓	Mosaic tiles; leaking to floor below (Kitchen). Possibly due to plumbing obstructions.
	WALLS		✓				Newer mosaic tiles
	CEILINGS					✓	2' x 4' ACT; staining, sagging
	FIXTURES					✓	Older wall mounted fixtures
	TOILET PARTITIONS					✓	Floor mounted; rusting observed
KITCHEN	FLOORS	✓					Older 12" x 12" VCT tile
	WALLS					✓	Painted brick
	CEILINGS					✓	2' x 4' ACT; staining, sagging
	GREASE TRAP						Unconfirmed
	KITCHEN EQUIPMENT	✓					Warming ovens and refrigerators
	OTHER						
ELEC	SERVICE/DISTRIB.		✓				Older electric panels with circuit breakers, stacked vertically through building
	LIGHTING/POWER			✓			Lamps have been changed to energy efficient. Lights on switches, no occupancy sensors observed
HVAC	SUPPLY/DISTRIB.	✓					Natural gas fuel. Boiler reportedly replaced in 2003. Domestic hot water replaced in 2016 with energy efficient unit.
	UNIT SOURCES					✓	Window unit heating, observed to be rusting in the bathrooms. Some window A/C units
FIRE	SPRINKLERS					✓	None, no sprinkler system observed
	DETECTION	✓					Pull stations, smoke detectors, exit signage and alarm strobes observed
			POSSIBLE	NO	MAYBE	UNKNOWN	
CODE	ASBESTOS	✓					Assumed in 9" x 9" floor tiles throughout, potentially on pipes
	LEAD					✓	Unknown
	HANDICAP-ACCESSIBLE	✓	✓				Evacuation chair at stair. Non-accessible elevator in building. Door hardware and bathrooms not ADA accessible (turning radius, door and fixture clearances/ thresholds, hardware, accessories)
	OTHER						

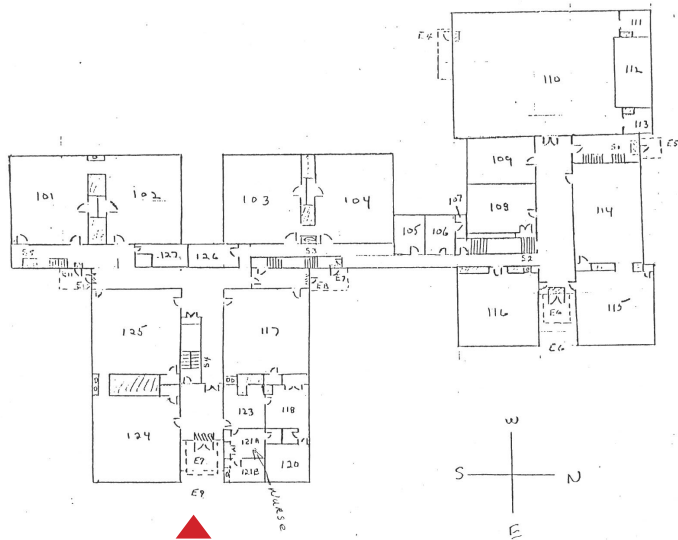
Huntington Alternative School

S-6


NORTH
BASEMENT FLOOR PLAN

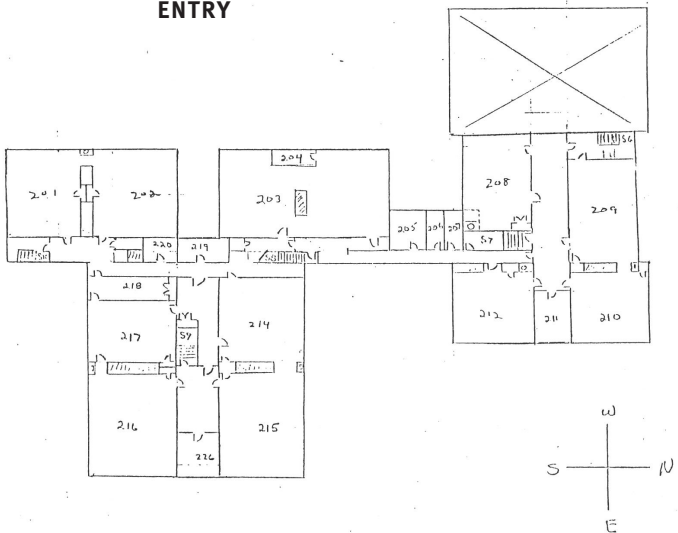


FIRST FLOOR PLAN



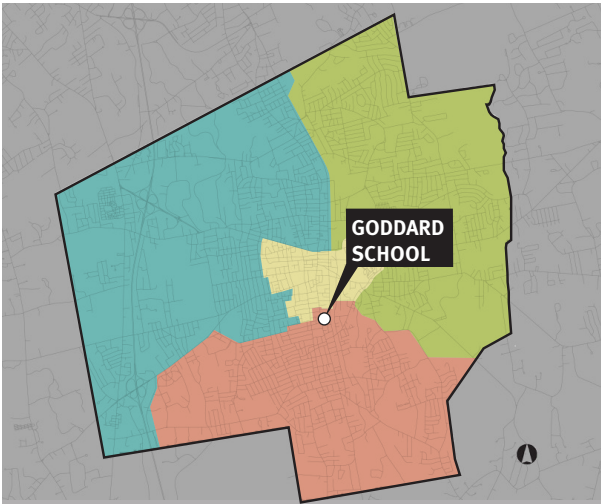
▲
MAIN
ENTRY

SECOND FLOOR PLAN



Goddard Alternative School (closed)

20 Union Street
Brockton, MA 02301



LOCATION MAP



AERIAL PHOTO



SOUTH ENTRY

FACILITIES INFORMATION

DEPARTMENT	School
BUILDING USE	Former Alternative High School 6–12
SCHOOL ZONE	South
YEAR(S) BUILT	1881, 1975
NUMBER OF CLASSROOMS	12

SITE & BUILDING AREA

SITE AREA	1 Acre
BUILDING AREA	28,212 GSF
MODULAR CLASSROOM AREA	N/A
TOTAL SCHOOL AREA	28,212 GSF

SCHOOL YEAR 2017/18		
ENROLLMENT DATA	Students	Classes per grade
TOTAL	0	

KEY PROGRAMS

None

Goddard Alternative School (closed)


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BUILDING OVERVIEW

Goddard School is located in the South Zone neighborhood. At the close of School Year 2016/17, the alternative high school program housed at Goddard moved into the Huntington Alternative School. Similar to Huntington School, a school building assessment of ‘Goddard School’ was performed by Tighe & Bond with a document produced on December 14, 2016. The findings in the report are consistent with the facilities assessment performed for this Survey of Existing Conditions report.

Goddard School is a two-story building on a flat site with two distinct structures. The original building was constructed in 1881, with additions in 1891 and 1911.

The overall condition of the building is unsatisfactory. Major repairs to be addressed include observed issues with the exterior masonry, localized leaking with the current roof, lack of a fire suppression system, ADA accessibility upgrades, and condition of the existing parking lot surface.

SITE INFORMATION

TOPOGRAPHY	Flat
LOCATED IN A FLOOD ZONE	No
WETLANDS ON SITE	No
HISTORIC DESIGNATION	No; possibly eligible
ORIENTATION OF BUILDING	Entry on South
NEIGHBORHOOD WALK SCORE	72 Very Walkable
NEIGHBORHOOD TRANSIT SCORE	41 Some Transit
EST. COMMUTE TO DOWNTOWN BROCKTON	2 minutes by car 4 minutes by bicycle 13 minutes walking

Goddard Alternative School (closed)


 S-7

SUMMARY OF FINDINGS

- The current **interior finishes** are in poor condition. Future upgrades should prioritize areas of water damage and failing floor, ceiling and wall finishes. Due to the condition and age of several of the materials, an interior renovation would update the existing, dated, and worn materials.
- The building currently is not **ADA compliant** as there is no accessible means to access the second floor classrooms or lower level cafeteria.
- As observed on site and also as reported in the December 14, 2016 Tighe & Bond Huntington School Assessment document, the **roof system, accessibility, parking lot, and heating system**, are in a state of disrepair and should be addressed.
- The building currently does not have a **sprinkler system**, nor heat detection throughout. Consideration should be given to adding a fire suppression system. At a minimum, smoke/heat detectors should be installed in all areas.
- A majority of the **bathroom plumbing fixtures** are dated and are possibly original to the building. Future upgrades to the building should consider using low flow fixtures. The student toilet rooms do not offer accessible stalls or fixtures, and the quantity of bathrooms for the population should be evaluated per current plumbing code.
- **Lighting** is currently operated by wall mounted switches. Occupancy sensors in classrooms, offices, bathrooms, and storage areas can help with energy efficiency and operation.
- The **handrails at the stairs** do not comply with current code due to large gaps at the spindles.
- An evaluation of the current **supply and storage inventory** should take place to verify the best use of building storage space.

Goddard Alternative School (closed)

● Facility Priority 1.5

S-7

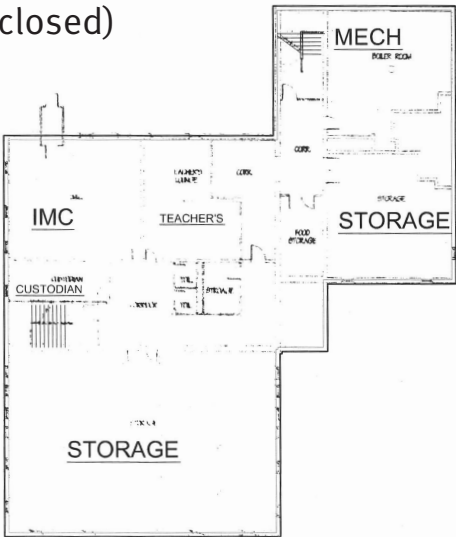
		PRIORITY	4	3	2	1	
		VISIT DATE: April 18, 2017	GOOD	ADEQUATE	MARGINAL	POOR	COMMENTS
SITE	PARKING					✓	Asphalt; large potholes, cracking, in poor condition
	LANDSCAPING				✓		Minimal grass. New trees and plantings along entry
	SIDEWALKS				✓		Concrete; cracking
	OTHER						
EXTERIOR	ROOF					✓	Asphalt shingles (Building assessment report from Tighe & Bond notes slate). Some evidence of leaking/ damage on ceilings
	GUTTERS/DOWNSPOUT					✓	Wood fascia and soffits damaged, rotting, holes observed, missing
	WALLS					✓	Brick masonry, spalling, cracking, crumbling in some locations
	WINDOWS	✓					Newer double pane, insulated. No leaking observed.
	DOORS	✓					Newer metal doors
	SECURITY					✓	One 'globe style' camera at the exterior front corner. One camera at the front door monitored by front admin. Students enter through a metal detector
	FOUNDATIONS						None
	OTHER						
INTERIOR	FLOORS					✓	Rolled carpet; rips, pulls, torn, older, buckling in some locations
	WALLS					✓	Painted; holes in some locations
	CEILINGS					✓	2' x 4' ACT; staining, sagging, damaged
	DOORS						
	OTHER						
TOILET ROOMS	FLOORS					✓	Mosaic tile; older, cracked. Some 12"x 12" VCT
	WALLS					✓	Glazed tile
	CEILINGS					✓	2' x 4' ACT; staining, sagging
	FIXTURES		✓				Wall mounted sinks and toilets
	TOILET PARTITIONS						
KITCHEN	FLOORS						Meals are delivered and kept warm/ cool in portable insulated coolers. No kitchen facilities.
	WALLS						
	CEILINGS						
	GREASE TRAP						
	KITCHEN EQUIPMENT		✓				Refrigerator, freezer, warmer
	OTHER						
ELEC	SERVICE/DISTRIB.		✓				Circuit breaker panels throughout
	LIGHTING/POWER					✓	Lighting is on switches, or keyed for some rooms. Unknown if bulbs are energy efficient
HVAC	SUPPLY/DISTRIB.			✓			Natural gas boilers, tag shows new in 1999. Window A/C units in most classrooms. Multiple water heaters on each floor.
	UNIT SOURCES			✓			Window heating units and ceiling mounted distribution system
FIRE	SPRINKLERS					✓	None, no sprinklers
	DETECTION					✓	Heat detectors
			POSSIBLE	NO	MAYBE	UNKNOWN	
CODE	ASBESTOS					✓	Unknown
	LEAD					✓	Unknown
	HANDICAP-ACCESSIBLE		✓				No Elevator. Ramp at the exterior to enter/ access the building 1st floor only. Bathrooms not ADA accessible (turning radius, door and fixture clearances/ thresholds, hardware, accessories). No accessible route to the Cafeteria (lower level) or 2nd floor classrooms.
	OTHER						

Goddard Alternative School (closed)

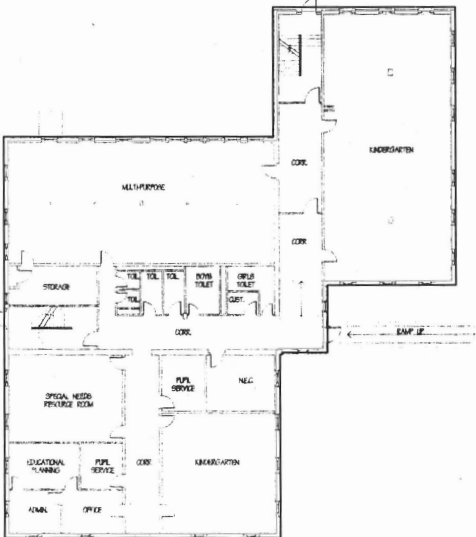
S-7



BASEMENT FLOOR PLAN

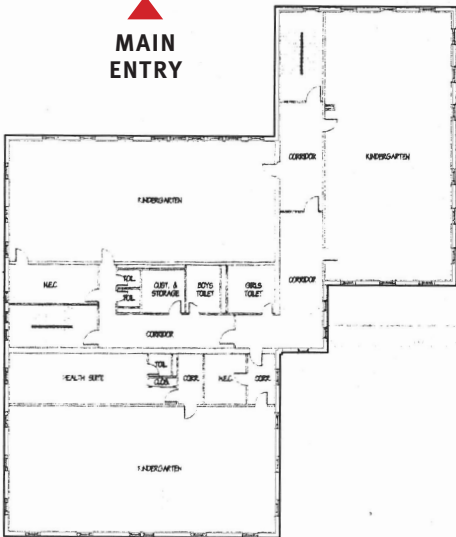


FIRST FLOOR PLAN



MAIN ENTRY

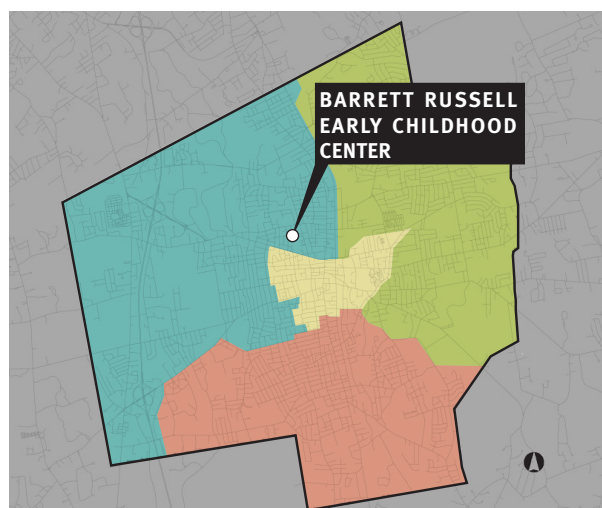
SECOND FLOOR PLAN



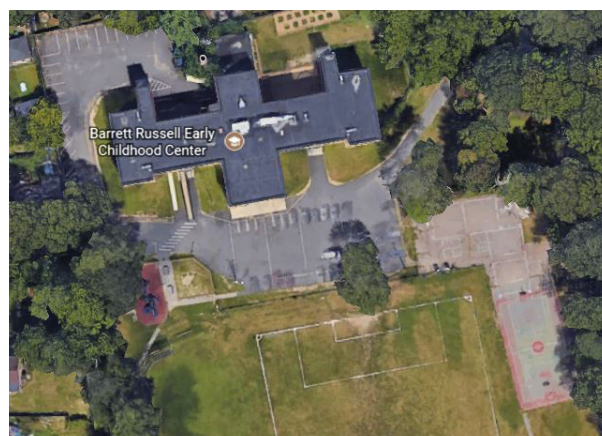
Barrett Russell Early Childhood Center

45 Oakdale Street
Brockton, MA 02301

S-8



LOCATION MAP



AERIAL PHOTO



SOUTH ELEVATION

FACILITIES INFORMATION

DEPARTMENT	School
BUILDING USE	Pre-K
SCHOOL ZONE	Northwest
YEAR(S) BUILT	1925, Reno 2013
NUMBER OF CLASSROOMS	13

SITE & BUILDING AREA

SITE AREA	1.75 Acres
BUILDING AREA	37,350 GSF
MODULAR CLASSROOM AREA	N/A
TOTAL SCHOOL AREA	37,350 GSF

SCHOOL YEAR 2017/18

ENROLLMENT DATA	Students	Classes per grade
PRE-K A.M. SESSION	52	11
PRE-K P.M. SESSION	46	
FULL DAY	12	2
NO HOMEROOM	17	
TOTAL	127	13

KEY PROGRAMS

PRE-K	Special Education City Resource Classroom (one classroom)
	After-school program

Barrett Russell Pre-Kindergarten Center



BUILDING OVERVIEW

The Barrett Russell Early Childhood Center is located in the Northwest Zone neighborhood of Brockton and is the only Pre-Kindergarten program in the City of Brockton.

The 1925 building is two-stories on a relatively flat site. The school is set back from the street with a side entry from the west, allowing a comfortable buffer from vehicular street traffic. The south facing front of the building paved with asphalt is used as a play space for the students. An age appropriate play structure, grass, and garden are at the rear of the building. The main entry is accessible by an ADA compliant ramp.

The interior of Barrett Russell was recently renovated maintaining much of its original detail and character, including tin ceilings, wood stairs, auditorium stage (modified to a room), wood flooring, and high ceilings.

In 2014 the Brockton School District submitted a Statement of Interest (SOI) to the MSBA for the Accelerated Repair Program and received a successful invitation. In 2016, new windows and doors were installed as part of this grant. Custodial staff noted that a new boiler was installed in 2007 and new electrical system in 2012. The hydraulic elevator was installed in 1999.

The kitchen and cafeteria are in a shared space originally designed as an auditorium with a balcony. Due to this limited space, meals are brought in from an off-site kitchen and warmed at this facility. This is the only school that utilizes on-site dish-washing rather than disposable Styrofoam trays.

The building is in excellent condition and well maintained. Accessibility and ADA compliance has been achieved. Consideration should be given to installing a fire suppression system.

SITE INFORMATION

TOPOGRAPHY	Flat
LOCATED IN A FLOOD ZONE	No
WETLANDS ON SITE	No
HISTORIC DESIGNATION	No; possibly eligible
ORIENTATION OF BUILDING	East- West orientation with Main Entry facing South
NEIGHBORHOOD WALK SCORE	65 Somewhat Walkable
NEIGHBORHOOD TRANSIT SCORE	44 Some Transit
EST. COMMUTE TO DOWNTOWN BROCKTON	2 minutes by car 4 minutes by bicycle 17 minutes walking

Barrett Russell Pre-Kindergarten Center

S-8

SUMMARY OF FINDINGS

- The building currently does not have a **sprinkler system** or heat detection devices. Future upgrades to this building should consider adding a fire suppression system and heat detection devices to meet current codes.
- There is currently one **boiler** servicing the building. Future upgrades should consider a second boiler be installed for back up.
- **Lighting** is currently operated by wall mounted switches. Occupancy sensors in classrooms, offices, bathrooms, and storage areas can help with energy efficiency and operation.
- Currently there is no **gym space** in the building. This may limit future programming that can be assigned to this building.

Barrett Russell Pre-Kindergarten Center

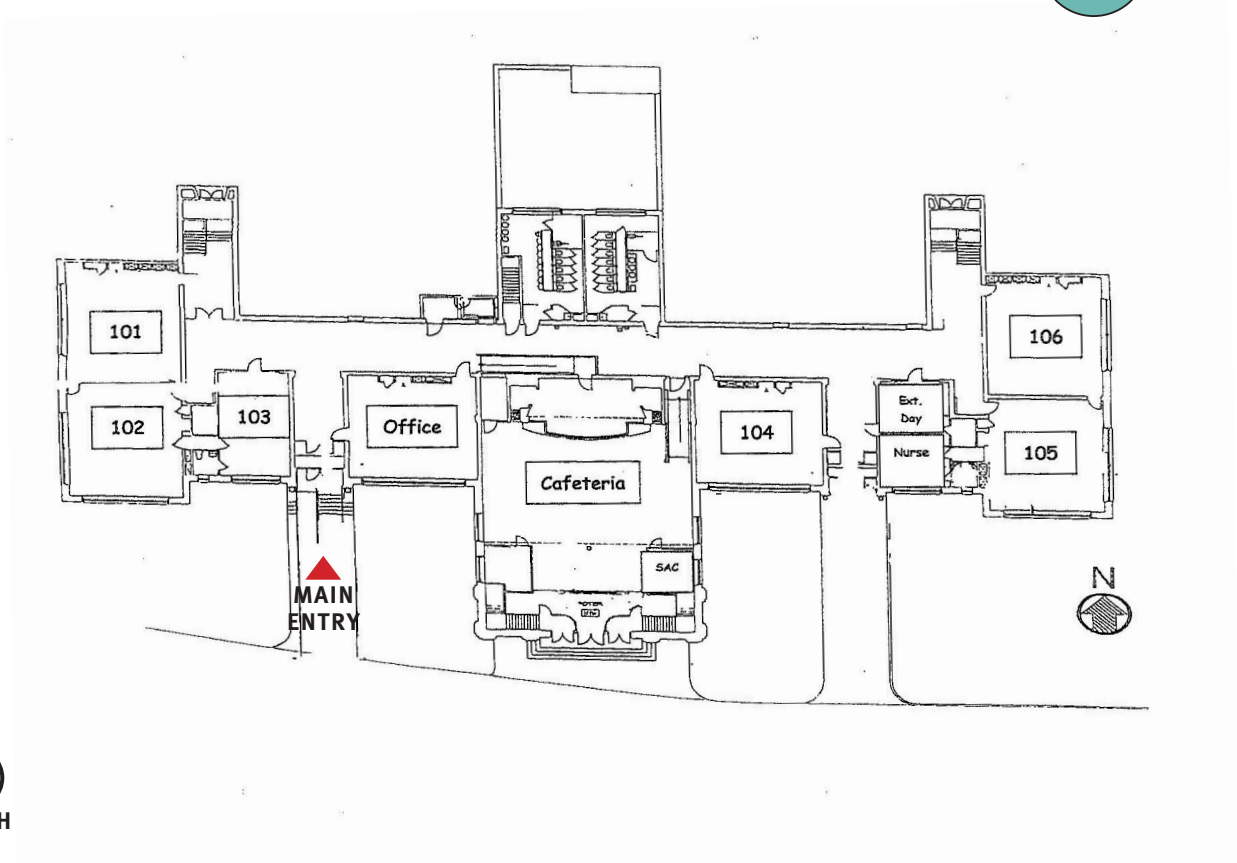
● Facility Priority 3-4

S-8

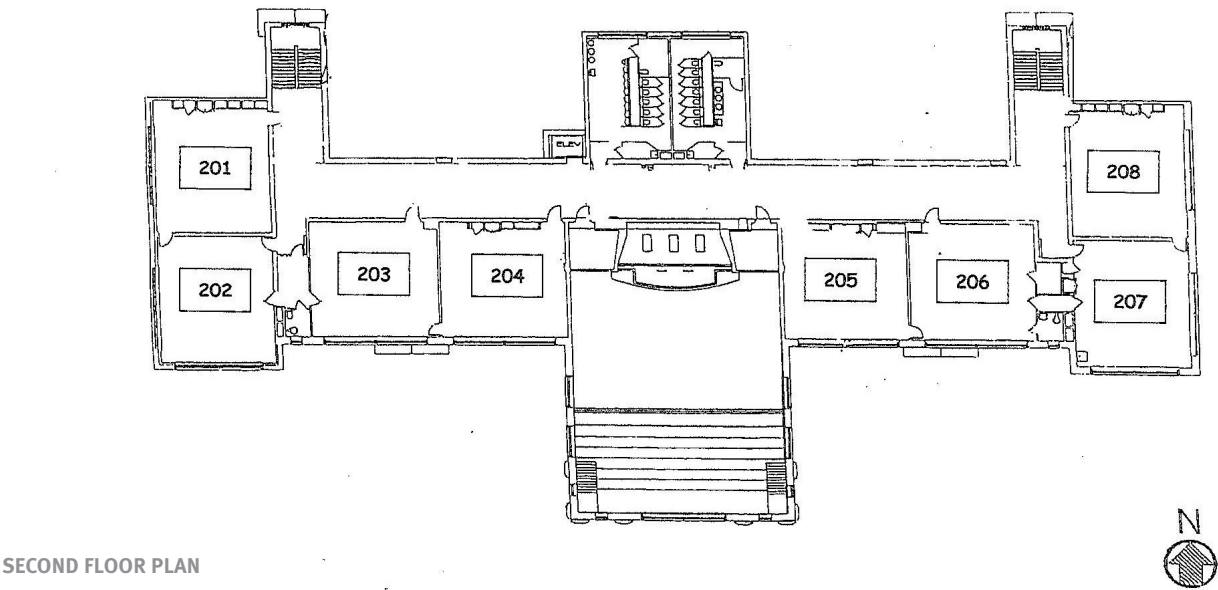
		PRIORITY	4	3	2	1	
		VISIT DATE: April 18, 2017	GOOD	ADEQUATE	MARGINAL	POOR	COMMENTS
SITE	PARKING	✓					Asphalt, no noticed cracking
	LANDSCAPING	✓					Grass, well maintained, play area, planter boxes
	SIDEWALKS						None
	PLAY GROUND	✓					Age appropriate, newer. Wood tree stumps and picnic tables. Chain link fence enclosure
EXTERIOR	ROOF	✓					No leaks reported
	GUTTERS/DOWNSPOUT	✓					Internal, no reported concerns
	WALLS	✓					Brick masonry, good condition. Painted mural. Some evidence of efflorescence.
	WINDOWS	✓					New double hung, double pane insulated hopper windows; replaced in 2016 from a SY2014 SOI
	DOORS	✓					New; replaced in 2016 from a SY2014 SOI
	SECURITY	✓					Procedures in place in each classroom. Exterior lighting, exterior cameras
	FOUNDATIONS	✓					Concrete painted
	OTHER						
INTERIOR	FLOORS	✓					Carpet, newer. Walk-off mat at entry.
	WALLS	✓					Painted
	CEILINGS	✓					Painted tin in stairwells and 2nd floor classrooms. Newer 2' x 2' ACT and 2' x 4' ACT
	DOORS						
	OTHER	✓					Metal doors with ADA hardware, 3-hr fire listed
TOILET ROOMS	FLOORS	✓					Sealed concrete
	WALLS	✓					Painted CMU
	CEILINGS	✓					Newer 2'x2' ACT
	FIXTURES	✓					Floor mounted. Some with automatic flush.
	TOILET PARTITIONS		✓				Metal; some rusting
KITCHEN	FLOORS	✓					Newer 12" x 12" VCT
	WALLS	✓					Painted
	CEILINGS	✓					Painted tin
	GREASE TRAP	✓					Cleaned and maintained every 6 months
	KITCHEN EQUIPMENT	✓					Good working condition
	OTHER						Kitchen is in the same space as the cafeteria
ELEC	SERVICE/DISTRIB.	✓					Circuit breakers
	LIGHTING/POWER		✓				Energy efficient lamps. No occupancy sensors observed.
HVAC	SUPPLY/DISTRIB.		✓				Natural gas service. One boiler (no backup). Hot water distribution.
	UNIT SOURCES		✓				A/C window units throughout. Unit ventilators for heat distribution.
FIRE	SPRINKLERS					✓	None, no sprinkler system
	DETECTION	✓					Fire Alarm system tied into detection. Recently serviced. Smoke/ heat detectors only in some spaces.
		POSSIBLE	NO	MAYBE	UNKNOWN		
CODE	ASBESTOS					✓	Unknown
	LEAD					✓	Unknown
	HANDICAP-ACCESSIBLE	✓					Concrete ramp to building front entry. Assumed ADA accessible hardware and bathroom fixtures throughout. Elevator access to 1st and 2nd floor (no cafeteria balcony access).
	OTHER						

Barrett Russell Pre-Kindergarten Center

S-8



FIRST FLOOR PLAN

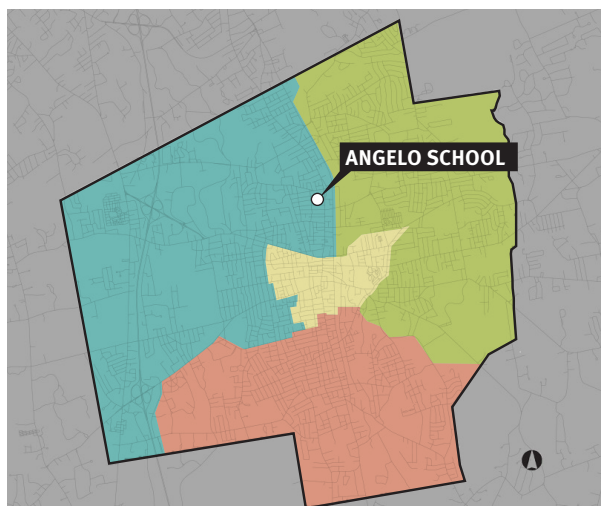


SECOND FLOOR PLAN

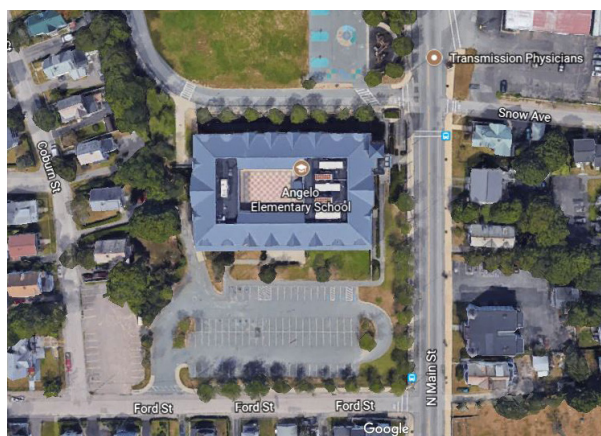
Angelo School

478 North Main Street
Brockton, MA 02301

S-9



LOCATION MAP



AERIAL PHOTO



EAST ELEVATION

FACILITIES INFORMATION

DEPARTMENT	School
BUILDING USE	Elementary K-5
SCHOOL ZONE	Northwest
YEAR(S) BUILT	1999
NUMBER OF CLASSROOMS	40

SITE & BUILDING AREA

SITE AREA	5.06 Acres
BUILDING AREA	95,500 GSF
MODULAR CLASSROOM AREA	N/A
TOTAL SCHOOL AREA	95,500 GSF

SCHOOL YEAR 2017/18

ENROLLMENT DATA	Students	Classes per grade
KINDERGARTEN	95	5
GRADE 1	113	6
GRADE 2	133	6
GRADE 3	131	6
GRADE 4	209	7
GRADE 5	205	7
TOTAL	886	37

KEY PROGRAMS

GRADES K-5	Portuguese/Low Incidence Sheltered English Immersion (SEI)
	Special Education Autism Spectrum Disorder (four classrooms)
GRADES K-5	Special Education Inclusion Classrooms (six classrooms)

Angelo School



BUILDING OVERVIEW

The Angelo School is in the Northwest Zone neighborhood of Brockton. It has a K–5 elementary age population. Built in 1999, this is one of the District’s newer schools. The architecture, square footage, floor plan configuration, building age, and design is very similar to the Plouffe Academy and the Arnone School, both located in the Citywide Zone neighborhood.

The structure is three-stories, with the main entry located on the second floor of the east elevation, along North Main Street. On the first and second floors, the floor plan is configured with a double-loaded corridor loop with support spaces, a bathroom core, and the gym located in the middle. The third floor has a double loaded corridor configuration with a central courtyard/patio. The cafeteria is located on the first floor and opens outside to the south.

The building is in excellent condition and well maintained.

SITE INFORMATION

TOPOGRAPHY	Sloped
LOCATED IN A FLOOD ZONE	No
WETLANDS ON SITE	No
HISTORIC DESIGNATION	No
ORIENTATION OF BUILDING	Main Entry faces East with and East-West orientation
NEIGHBORHOOD WALK SCORE	67 Somewhat Walkable
NEIGHBORHOOD TRANSIT SCORE	36 Some Transit
EST. COMMUTE TO DOWNTOWN BROCKTON	3 minutes by car 6 minutes by bicycle 20 minutes walking

Angelo School



SUMMARY OF FINDINGS

- The MSBA Space summary template guidelines indicate that **Elementary school general classroom sizes** (Grades 1–5) should be in a range of 900 to 1,000 square feet with a maximum of 23 students per classroom. The Angelo School for School Year 2017/18 has an enrollment between 19 to 29 students per classroom for grades 1–5. This demonstrates that a select number of classrooms exceeds the recommended count and suggests that the school is partially operating above full capacity per MSBA recommendations
- There are original **drinking fountains** throughout the school. With the addition of newer Elkay filtered water stations, the original drinking fountains could be removed as long as the quantity meets current plumbing code requirements.
- The **brick masonry site wall** at the exterior entry ramp appears to be missing grout and cracking. Recommend to repoint these areas.
- The broad loom **carpet** in the Administration area is assumed to be original and showing signs of wear and tear. Consider replacing the carpet in these areas.
- The existing **toilet partitions** are currently metal which is observed to be rusting, or new CMU with temporary wood doors. Future upgrades should consider using vandal-resistant HDPE (high-Density Polyethylene) partitions.
- There are reported **occasional leaks** in the roof on the second and third floor of the east elevation when there is wind driven rain. Consider investigating the location of the water penetration.
- The **bathroom plumbing fixtures** are newer and in excellent condition. Future upgrades should consider using water conservation fixture fittings.

Angelo School

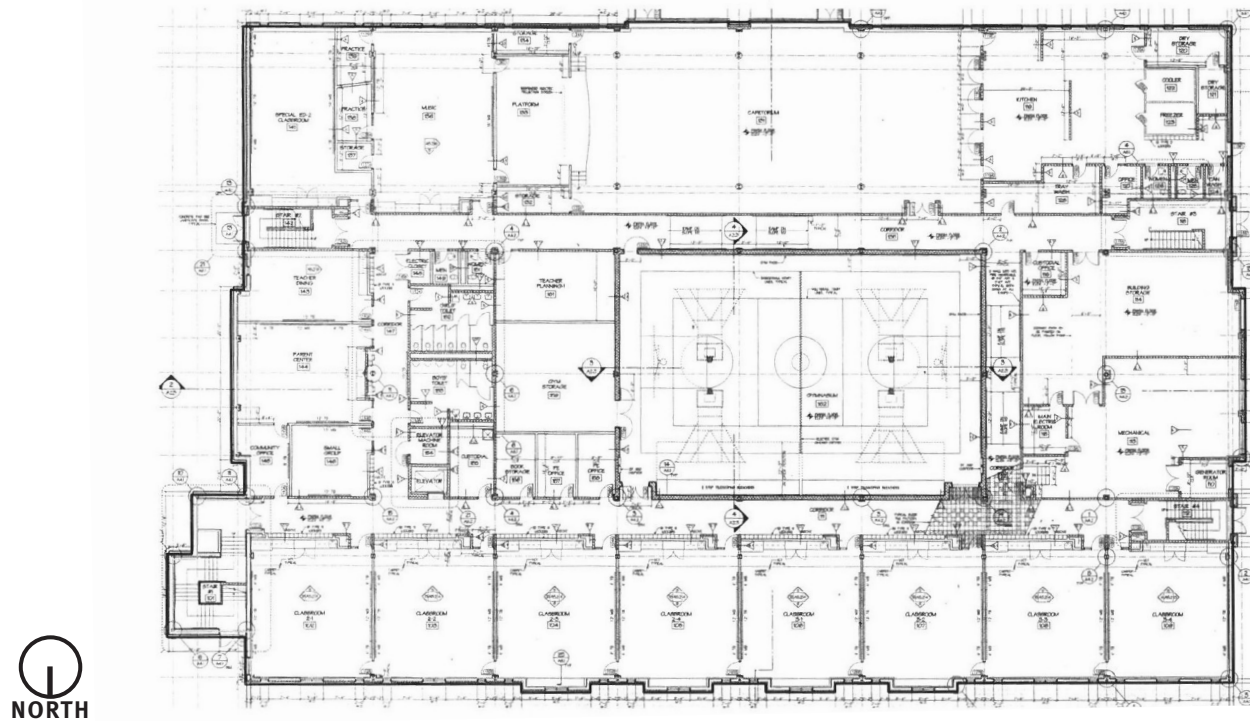
Facility Priority 3.6

S-9

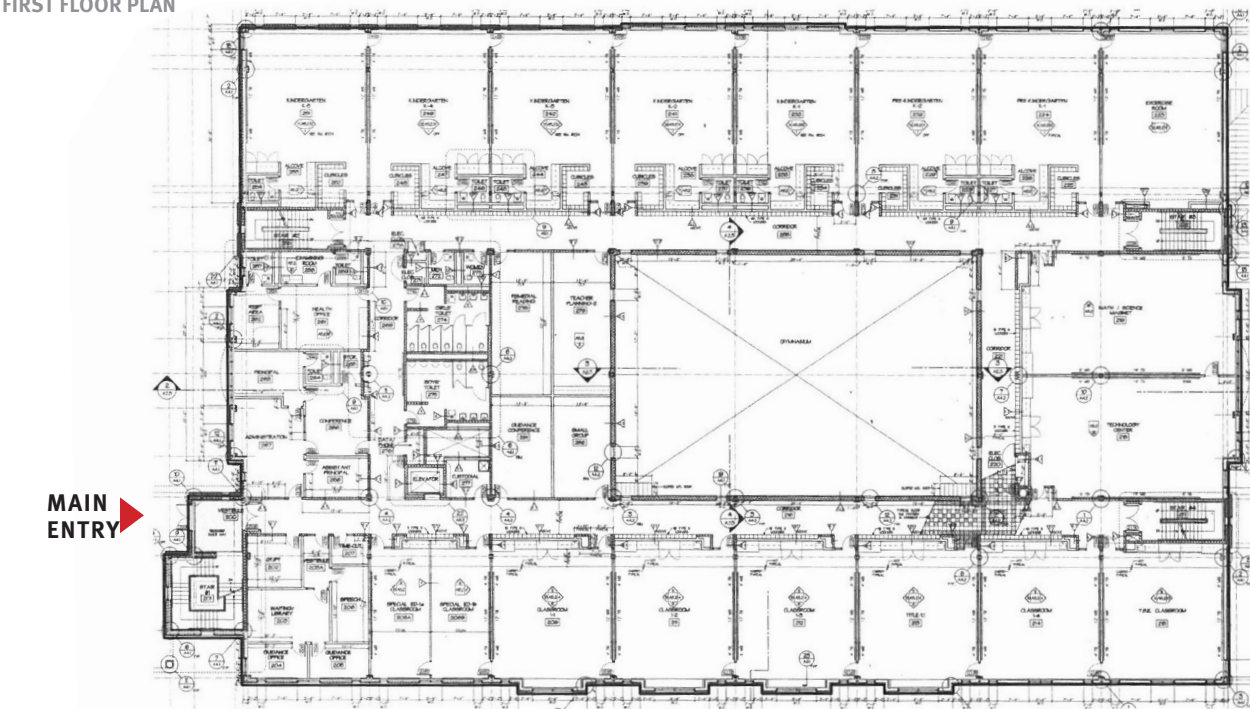
		PRIORITY	4	3	2	1	
		GOOD	ADEQUATE	MARGINAL	POOR		
VISIT DATE: March 10, 2017							COMMENTS
SITE	PARKING		✓				Asphalt; some potholes, cracking
	LANDSCAPING	✓		✓			Summer irrigation with sprinklers. Mortar missing at brick site walls.
	SIDEWALKS	✓					Concrete, good condition
	OTHER						All site lighting is reportedly scheduled to be upgraded to LED
EXTERIOR	ROOF		✓				Newer metal roof. Leaks reported on the East elevation with wind driven rain
	GUTTERS/DOWNSPOUT	✓					Newer metal, good/ working
	WALLS		✓				Newer masonry brick. Mortar missing in some locations along east facade.
	WINDOWS	✓		✓			Reported leaks along 2nd and 3rd floor on east with wind driven rain
	DOORS	✓					Newer metal doors
	SECURITY	✓					Exterior cameras
	FOUNDATIONS	✓					Concrete
	OTHER						
INTERIOR	FLOORS	✓			✓		Newer 12"x 12" VCT, rubber stair treads in good condition. Carpet in admin area is worn.
	WALLS	✓					Newer painted CMU
	CEILINGS	✓					Newer 2' x 4' ACT
	DOORS	✓					Newer wood with HM frames and sidelights
	OTHER						
TOILET ROOMS	FLOORS	✓					Newer mosaic tile
	WALLS	✓					Newer painted CMU
	CEILINGS	✓					Newer 2' x 4' ACT
	FIXTURES	✓					Newer wall mounted sinks, toilets, and urinals. Some toilet rooms have counter mounted sinks.
	TOILET PARTITIONS				✓		Wood doors, CMU partitions. Some have metal partitions and doors that are scheduled to be replaced with wood and CMU.
KITCHEN	FLOORS	✓					Newer Epoxy
	WALLS	✓					Newer painted
	CEILINGS	✓					Newer washable 2' x 4' ACT
	GREASE TRAP	✓					Serviced
	KITCHEN EQUIPMENT	✓					Newer appliances all in good working order
	OTHER						
ELEC	SERVICE/DISTRIB.	✓					Switchgear and circuit breaker panels. Emergency generator.
	LIGHTING/POWER	✓					All switches are on occupancy sensors. Pendant LED lighting in classrooms.
HVAC	SUPPLY/DISTRIB.	✓					Newer Boilers. #1 always on, #2 is the backup. Natural gas fuel.
	UNIT SOURCES	✓					Forced hot air, A/C
FIRE	SPRINKLERS	✓					Located throughout
	DETECTION	✓					Fire panel. Heat/ smoke detectors observed throughout.
		POSSIBLE	NO	MAYBE	UNKNOWN		
CODE	ASBESTOS	✓					No
	LEAD	✓					No
	HANDICAP-ACCESSIBLE	✓					Elevator and bathrooms assumed to be ADA accessible
	OTHER						

Angelo School

S-9



FIRST FLOOR PLAN

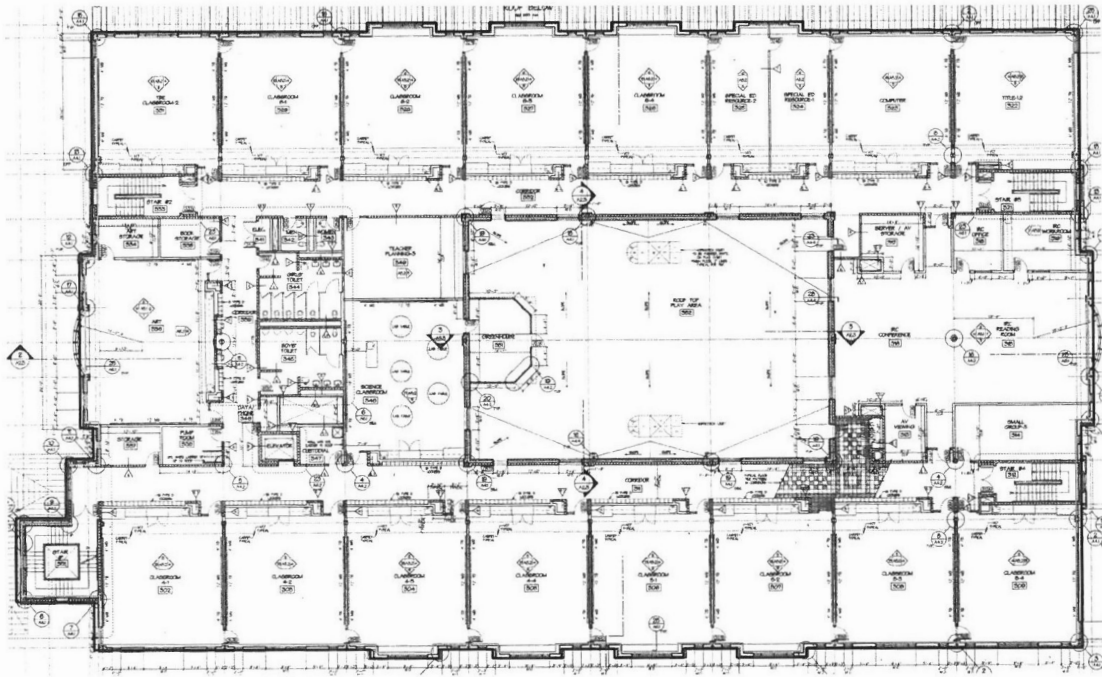


SECOND FLOOR PLAN

Angelo School

S-9

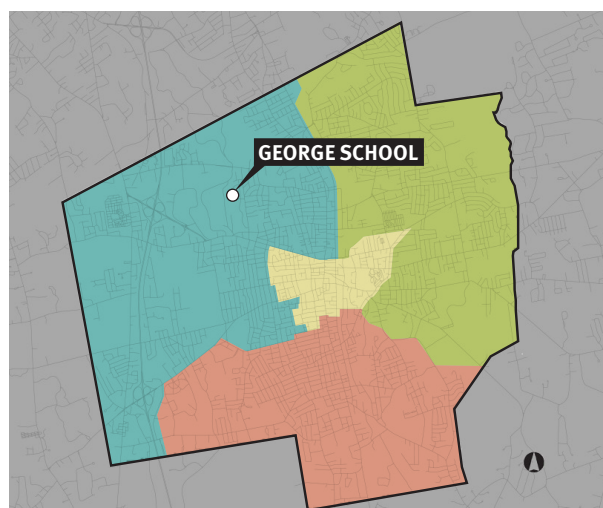

NORTH
THIRD FLOOR PLAN



George School

180 Colonel Bell Drive
Brockton, MA 02301

S-10



LOCATION MAP



AERIAL PHOTO



NORTHEAST CORNER

FACILITIES INFORMATION

DEPARTMENT	School
BUILDING USE	Elementary K-5
SCHOOL ZONE	Northwest
YEAR(S) BUILT	2009
NUMBER OF CLASSROOMS	45

SITE & BUILDING AREA

SITE AREA	12.31 Acres
BUILDING AREA	116,000 GSF
MODULAR CLASSROOM AREA	N/A
TOTAL SCHOOL AREA	116,000 GSF

SCHOOL YEAR 2017/18

ENROLLMENT DATA	Students	Classes per grade
KINDERGARTEN	135	6
GRADE 1	151	7
GRADE 2	155	7
GRADE 3	140	7
GRADE 4	148	7
GRADE 5	166	8
TOTAL	895	42

KEY PROGRAMS

GRADES K-5	Spanish Sheltered English Immersion (SEI)
GRADES K-5	Two-way Immersion Program
GRADES 4-5	Special Education Emotionally Impaired Classroom (EI) (two classrooms)
GRADES 3-5	Special Education City Resource Room (CRR) (one classroom)
GRADES K-5	Special Education Inclusion Classrooms (six classrooms)

George School



BUILDING OVERVIEW

The George School is located in the Northwest Zone. It has a K–5 Elementary age population. Built in 2009, it is one of two recent schools. The architecture, area, floor plan configuration, building age, and complete design is very similar to Baker School, located in the Northeast neighborhood.

The structure is three-stories, with the main entry located on the east elevation along Colonel Bell Drive.

The building and site are in excellent condition and well maintained.

SITE INFORMATION

TOPOGRAPHY	Flat
LOCATED IN A FLOOD ZONE	No
WETLANDS ON SITE	Yes, property is located on a wetland
HISTORIC DESIGNATION	No
ORIENTATION OF BUILDING	Main Entry faces South
NEIGHBORHOOD WALK SCORE	43 Car-Dependent
NEIGHBORHOOD TRANSIT SCORE	29 Some Transit
EST. COMMUTE TO DOWNTOWN BROCKTON	6 minutes by car 10 minutes by bicycle 36 minutes walking

George School



SUMMARY OF FINDINGS

- The MSBA Space summary template guidelines indicate that **Elementary school general classroom sizes** (Grades 1–5) should be in a range of 900 to 1,000 square feet with a maximum of 23 students per classroom. The George School for School Year 2017/18 has an enrollment between 19 to 29 students per classroom for grades 1–5. This demonstrates that a select number of classrooms exceeds the recommended count and suggests that the school is partially operating above full capacity per MSBA recommendations
- The **vehicular traffic flow** is successful with the existing loop and parking lot located around the building perimeter.
- The **bathroom plumbing fixtures** are new to the 2009 construction and in excellent condition.
- The staff noted that the **science benches** located in the classrooms are no longer used for the Science program. To provide more flexible space in these classrooms, the benches could be removed and services capped.

George School

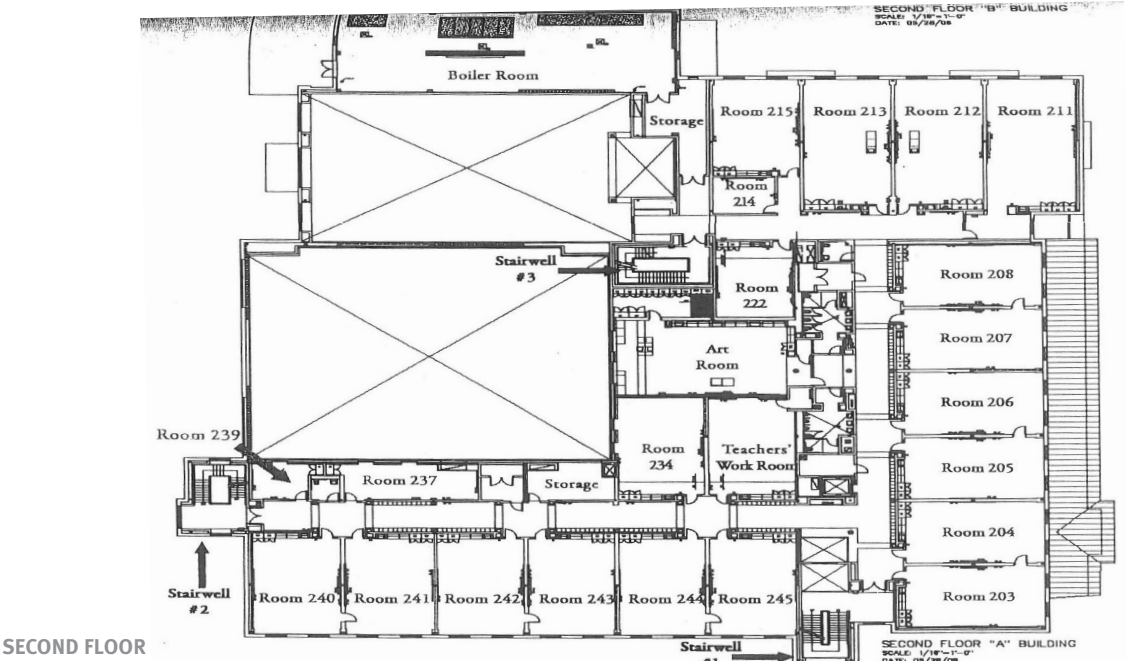
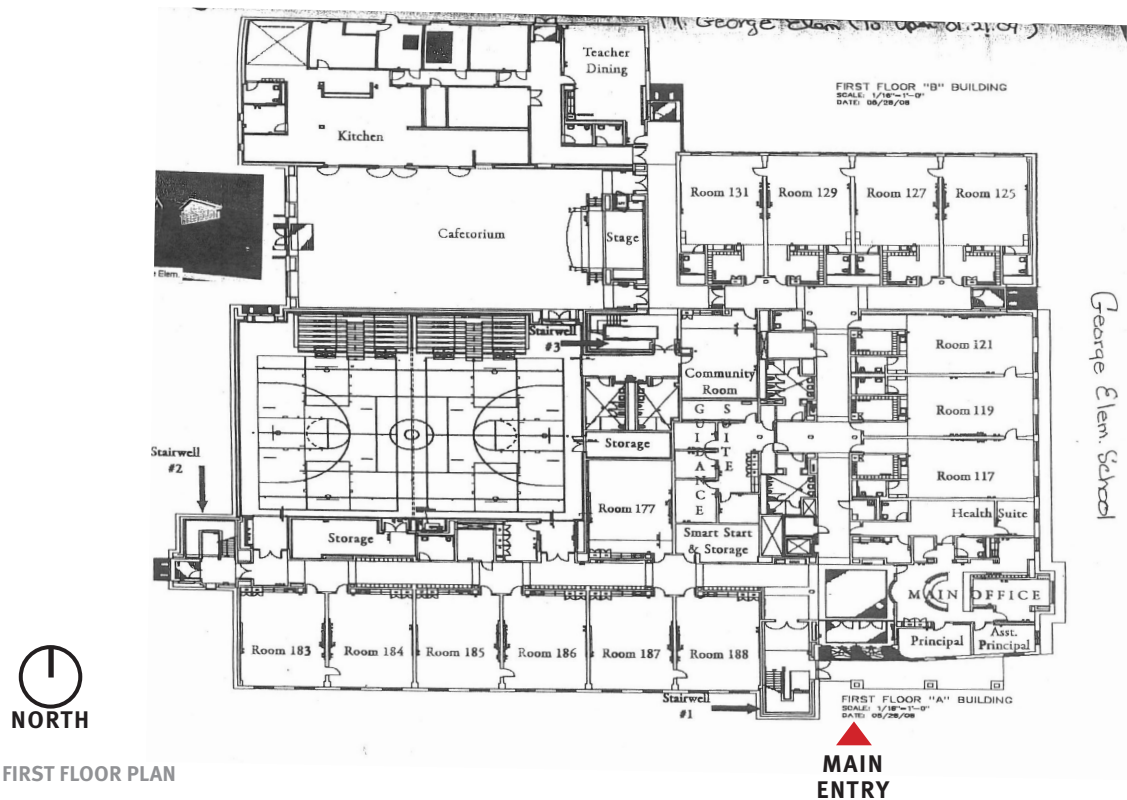
● Facility Priority 3.8

S-10

		PRIORITY	4	3	2	1	
		VISIT DATE: April 19, 2017	GOOD	ADEQUATE	MARGINAL	POOR	COMMENTS
SITE	PARKING	✓					New asphalt, painted parking lines
	LANDSCAPING	✓					New grass, trees, bushes, community garden with shed and picnic tables
	SIDEWALKS	✓					New concrete
	PLAY GROUND	✓					Two new playgrounds, age appropriate
EXTERIOR	ROOF	✓					New rubber membrane roof
	GUTTERS/DOWNSPOUT	✓					New external metal storm drains
	WALLS	✓					New brick masonry, standing metal seam
	WINDOWS	✓					New double pane double hung insulated windows
	DOORS	✓					New metal with ADA accessible hardware
	SECURITY	✓					Camera at every door
	FOUNDATIONS						None
	OTHER						
INTERIOR	FLOORS	✓					New 12" x 12" VCT throughout, carpet in the library
	WALLS	✓					New glazed tile wainscot, paint above
	CEILINGS	✓					New 2' x 2' ACT
	DOORS	✓					New metal lockers throughout
	OTHER						
TOILET ROOMS	FLOORS	✓					New mosaic tile
	WALLS	✓					New glazed tile wainscot, paint above
	CEILINGS	✓					New 2' x 2' ACT
	FIXTURES	✓					New wall mounted
	TOILET PARTITIONS	✓					New HDPE (High Density Polyethylene)
KITCHEN	FLOORS	✓					New epoxy, some cracking that has been patched
	WALLS	✓					New painted CMU
	CEILINGS	✓					New washable ACT
	GREASE TRAP	✓					2 grease traps: 1 in dish room, 1 at sink
	KITCHEN EQUIPMENT	✓					In good working condition
	OTHER						
ELEC	SERVICE/DISTRIB.	✓					Switchgear and circuit breakers/ panel boards
	LIGHTING/POWER	✓					Classrooms have occupancy sensors. Energy efficient lamps.
HVAC	SUPPLY/DISTRIB.	✓					Natural gas, three boilers
	UNIT SOURCES	✓					Forced hot air ceiling registers/ Air conditioning. Heating and cooling is controlled remotely by central.
FIRE	SPRINKLERS	✓					Sprinkler system throughout
	DETECTION	✓					Fire panel serviced Feb., 2017. Checked 2 times/ year
			POSSIBLE	NO	MAYBE	UNKNOWN	
CODE	ASBESTOS	✓					
	LEAD	✓					
	HANDICAP-ACCESSIBLE	✓					Assumed to be ADA accessible throughout. Evacuation chair located at top of stairs.
	OTHER						

George School

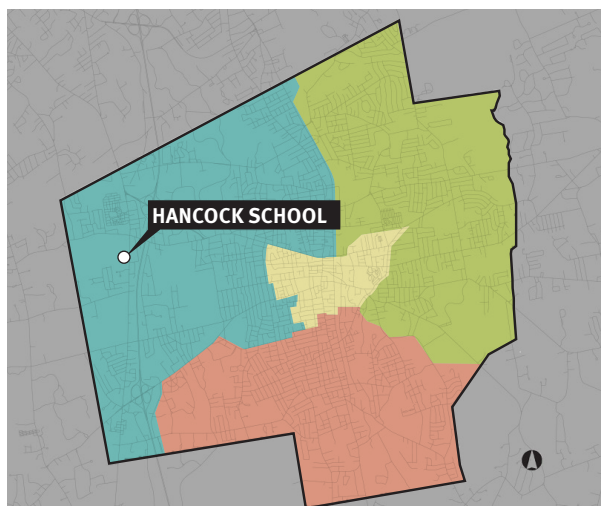
S-10



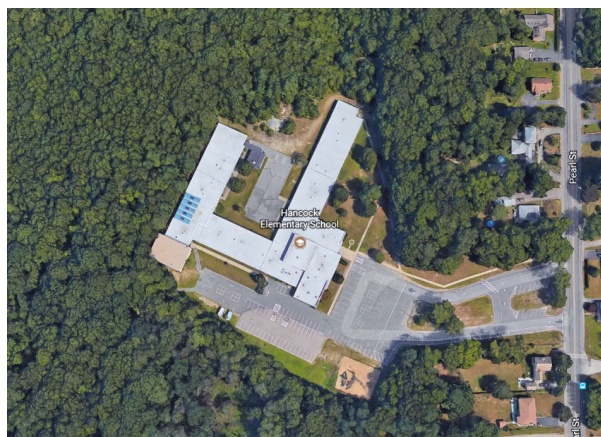
Hancock School

125 Pearl Street
Brockton, MA 02301

S-11



LOCATION MAP



AERIAL PHOTO



EAST ELEVATION

FACILITIES INFORMATION

DEPARTMENT	School
BUILDING USE	Elementary K-5
SCHOOL ZONE	Northwest
YEAR(S) BUILT	1963, 2012
NUMBER OF CLASSROOMS	25

SITE & BUILDING AREA

SITE AREA	32 Acres
BUILDING AREA	68,261 GSF
MODULAR CLASSROOM AREA	1,400 GSF
TOTAL SCHOOL AREA	69,661 GSF

SCHOOL YEAR 2017/18

ENROLLMENT DATA	Students	Classes per grade
KINDERGARTEN	88	4
GRADE 1	109	5
GRADE 2	109	4
GRADE 3	115	4
GRADE 4	107	4
GRADE 5	112	4
TOTAL	640	25*

*includes 1 modular classroom

KEY PROGRAMS

"Walk to School Wednesday"
Massachusetts Program
Smart Start Extended Day
Before school/After school

Hancock School



BUILDING OVERVIEW

The Hancock School is in the Northwest Zone neighborhood. It has a K–5 elementary age population. Constructed in 1963, the building is similar in area, floor plan configuration, building age, and design to the Brookfield School and Ashfield School.

The structure is one-story on a flat site, with the main entry located on east elevation adjacent to the asphalt play area and parking lot. The school is remotely set back from the street allowing for a comfortable buffer from vehicular street traffic. The perimeter of the site is surrounded by a heavily wooded area with residential neighbors adjacent to the long driveway entry on Pearl Street.

There have been recent updates to the building, including a new roof (2012), electrical switch gear (2012), new water heater (2014), and new library skylights (2017).

The building currently has a single modular classroom that is reported to be at least 20 years old and is reaching the end of its useful life. The Music program is currently located in this structure.

The overall building is in poor condition with moderate to significant wear and tear on the interior. The building is in need of a considerable interior renovation, ADA upgrades, and a fire suppression system.

SITE INFORMATION

TOPOGRAPHY	Flat
LOCATED IN A FLOOD ZONE	No
WETLANDS ON SITE	Yes
HISTORIC DESIGNATION	No
ORIENTATION OF BUILDING	Main Entry faces East
NEIGHBORHOOD WALK SCORE	43 Car-Dependent
NEIGHBORHOOD TRANSIT SCORE	29 Some Transit
EST. COMMUTE TO DOWNTOWN BROCKTON	11 minutes by car 17 minutes by bicycle 59 minutes walking

Hancock School


 S-11

SUMMARY OF FINDINGS

- The MSBA Space summary template guidelines indicate that **Elementary school general classroom sizes** (Grades 1–5) should be in a range of 900 to 1,000 square feet with a maximum of 23 students per classroom. The Hancock School for School Year 2017/18 has an enrollment between 21 to 29 students per classroom for grades 1–5. This demonstrates that a select number of classrooms exceeds the recommended count and suggests that the school is partially operating above full capacity per MSBA recommendations
- The current **interior finishes** are observed to be in poor condition. Future upgrades should prioritize areas of failing floor, ceiling and wall finishes.
- Due to the condition and age of the **modular classroom**, a permanent solution for the facility should be reviewed.
- The building currently is not **ADA compliant** due to clearances, door hardware, bathroom fixtures and layouts. Future upgrades should address these conditions.
- Interior 9"x 9" **floor tiles** located throughout the building are worn and chipped. The flooring should be tested for asbestos prior to any renovation or maintenance that would disturb or remove the material.
- The building currently does not have a **sprinkler system** or heat detection devices. Future upgrades to this building should consider adding a fire suppression system and heat detection devices to meet current codes.
- The **bathroom plumbing fixtures** are dated and are possibly original to the building. Future upgrades to the building should consider using low flow fixtures. The student toilet rooms do not offer accessible stalls or fixtures, and the quantity of bathrooms for the population should be evaluated per current plumbing code.
- **Lighting** is currently operated by wall mounted switches. Occupancy sensors in classrooms, offices, bathrooms, and storage areas can help with energy efficiency and operation.

Hancock School

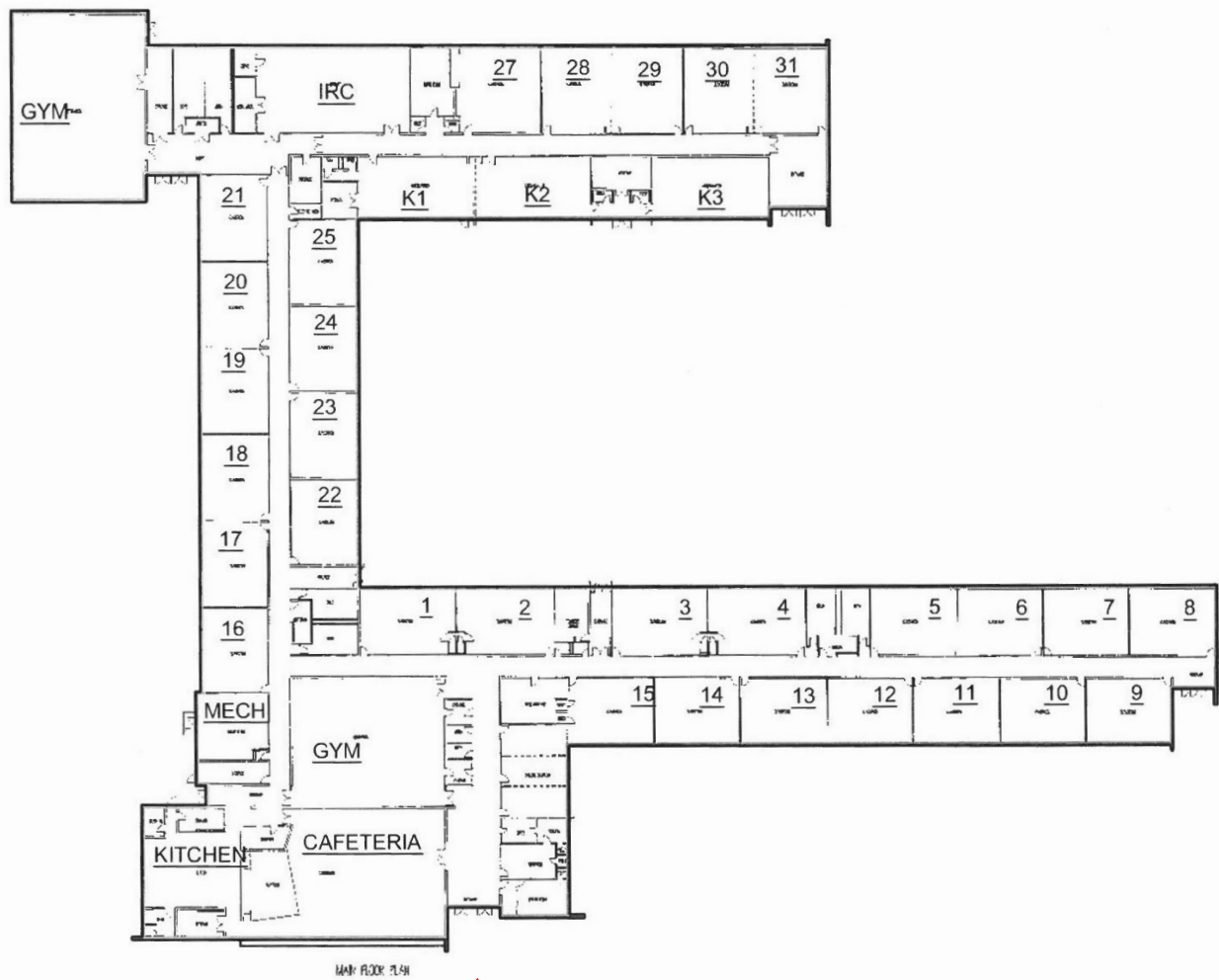
Facility Priority 2.8

S-11

		PRIORITY	4	3	2	1	
		VISIT DATE: April 19, 2017	GOOD	ADEQUATE	MARGINAL	POOR	COMMENTS
SITE	PARKING	✓					Asphalt; few pot holes, some patched/ filled
	LANDSCAPING	✓					Grass, trees, bushes, picnic area.
	SIDEWALKS		✓				Concrete; some cracking
	PLAY GROUND				✓		Asphalt in the courtyard; cracking, poor condition. Sectioned area in front parking lot used for outdoor activity. Age appropriate playground
EXTERIOR	ROOF	✓					Rubber membrane; no reported leaks, new 2012
	GUTTERS/DOWNSPOUT	✓					New 2012; no issues reported
	WALLS	✓					Masonry brick, flagstone at entry
	WINDOWS	✓					Double pane, newer insulated hopper windows
	DOORS	✓					Good condition
	SECURITY	✓					Exterior cameras
	FOUNDATIONS						
	OTHER						
INTERIOR	FLOORS	✓			✓		9" x 9" tiles; cracking, missing, chipping. Some areas have newer 12" x 12" VCT and newer carpet.
	WALLS		✓				Painted CMU
	CEILINGS	✓			✓		Newer 2' x 2' ACT in some corridors. Classrooms have older 9"x 9" surface mounted acoustical tiles
	DOORS				✓		Older, assumed original. Hardware and clearances do not appear to be ADA accessible.
	OTHER						
TOILET ROOMS	FLOORS				✓		9" x 9" tiles; older, cracking, crumbling, missing.
	WALLS				✓		Glazed CMU; cracking, patched
	CEILINGS				✓		2' x 4' ACT; sagging. Some newer 2' x 2' ACT
	FIXTURES				✓		Original floor mounted toilets and urinals, wall mounted sinks
	TOILET PARTITIONS	✓			✓		Newer metal partitions in some areas. Some old wood laminate
KITCHEN	FLOORS	✓					Terra cotta tile
	WALLS	✓					Glazed CMU
	CEILINGS				✓		Older 9" x 9" tiles; cracking, crumbling, missing
	GREASE TRAP	✓					Serviced and cleaned
	KITCHEN EQUIPMENT	✓					Newer, reportedly within the past 2 years
	OTHER						
ELEC	SERVICE/DISTRIB.	✓					Switch gear with circuit breakers and panel boards
	LIGHTING/POWER	✓			✓		Some lighting replaced with LEDs. Others are surface mounted with recessed fluorescent
HVAC	SUPPLY/DISTRIB.						Natural gas heating, 2 boilers, new water heater in 2014
	UNIT SOURCES						A/C window units in most rooms, window heating units
FIRE	SPRINKLERS				✓		None
	DETECTION	✓					Fire Alarm panel located at front lobby
			POSSIBLE	NO	MAYBE	UNKNOWN	
CODE	ASBESTOS	✓					Assumed in 9" x 9" tiles
	LEAD				✓		Unknown
	HANDICAP-ACCESSIBLE		✓				Assumed ADA accessible toilet room at Lobby. Student bathrooms not accessible (turning radius, door and fixture clearances/ thresholds, hardware, fixtures, accessories)
	OTHER						

Hancock School

S-11

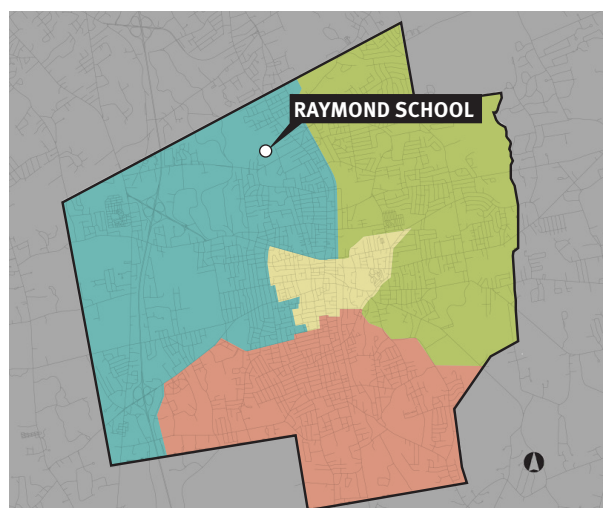


FIRST FLOOR PLAN

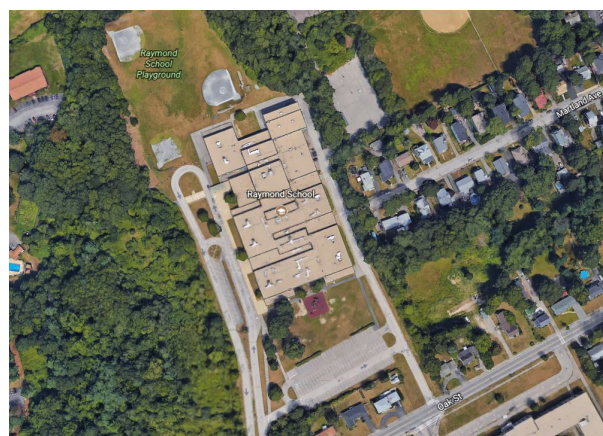
Oscar Raymond School

125 Oak Street
Brockton, MA 02301

S-12



LOCATION MAP



AERIAL PHOTO



WEST ENTRY

FACILITIES INFORMATION

DEPARTMENT	School
BUILDING USE	Elementary K-5
SCHOOL ZONE	Northwest
YEAR(S) BUILT	1974, 2012
NUMBER OF CLASSROOMS	42

SITE & BUILDING AREA

SITE AREA	21.3 Acres
BUILDING AREA	123,336 GSF
MODULAR CLASSROOM AREA	N/A
TOTAL SCHOOL AREA	123,336 GSF

SCHOOL YEAR 2017/18

ENROLLMENT DATA	Students	Classes per grade
KINDERGARTEN	150	7
GRADE 1	172	8
GRADE 2	149	6
GRADE 3	140	6
GRADE 4	132	5
GRADE 5	159	5
TOTAL	902	37

KEY PROGRAMS

GRADES K-5	Cape Verdean Sheltered English Immersion (SEI)
GRADES K-1	UNIDOS (One Way Language Immersion Program)
	City voting precinct

Oscar Raymond School



BUILDING OVERVIEW

The Oscar Raymond School is located in the Northwest Zone neighborhood. It has a K–5 Elementary population. The building has a configuration of seven open pods which have been modified and subdivided to 5-6 classes per pod.

Built in 1974 and very similar to the Edgar B. Davis School in size, area, floor plan configuration, building age, and design. The one-story building organization has open classroom pods along the east and west. Unlike the Davis School, there are no modular classrooms at Raymond School. The center section of the building houses common programs such the cafeteria, library, small gym, art program, and music program. All of the pods have been sub-divided into classrooms with walls. Current staff have noted that the pod configuration creates challenges for learning.

In 2014 the Brockton School District submitted a Statement of Interest (SOI) to the MSBA and was successfully invited for the Accelerated Repair Program. As part of this grant, one boiler was rebuilt, however the second building boiler is currently offline leaving the school with no redundancy.

Overall, the building does not meet the schools education needs due to the outdated pod configuration.

SITE INFORMATION

TOPOGRAPHY	Flat
LOCATED IN A FLOOD ZONE	Yes
WETLANDS ON SITE	Yes
HISTORIC DESIGNATION	No
ORIENTATION OF BUILDING	Main Entry faces West with a North-South building orientation
NEIGHBORHOOD WALK SCORE	64 Somewhat Walkable
NEIGHBORHOOD TRANSIT SCORE	39 Some Transit
EST. COMMUTE TO DOWNTOWN BROCKTON	6 minutes by car 10 minutes by bicycle 34 minutes walking

Oscar Raymond School



SUMMARY OF FINDINGS

- The MSBA Space summary template guidelines indicate that **Elementary school general classroom sizes** (Grades 1–5) should be in a range of 900 to 1,000 square feet with a maximum of 23 students per classroom. The Oscar Raymond School for School Year 2017/18 has an enrollment between 23 to 34 students per classroom for grades 1–5. This demonstrates that the number of students per classroom exceeds the recommended count and suggests that the school is operating above MSBA recommended capacity.
- The **pod configuration** of the building has caused concern for staff in regards to learning and focus. It was observed that not all pods have walls that go to the underside of the roof and therefore acoustics are difficult for teaching and learning.
- The current **interior finishes** are observed to be in poor condition. Future upgrades should prioritize areas of failing floor, ceiling and wall finishes.
- The building currently does not have a **sprinkler system**. Future upgrades to this building should consider adding a fire suppression system and heat detection devices to meet current codes.
- It was observed during the visit that there is a shortage of adequate **support and collaboration spaces** for teachers and staff as available space is now otherwise programmed.
- Original gym locker rooms and shower areas are now used for **storage**. Future upgrades to this building should consider creating appropriate spaces for storage.
- The **bathroom plumbing fixtures** are dated and are possibly original to the building. Future upgrades to the building should consider using low flow fixtures. The student toilet rooms do not offer accessible stalls or fixtures, and the quantity of bathrooms for the population should be evaluated per current plumbing code.
- Custodian staff reported that the **roof leaks** when there is wind driven rain. Mold was observed on the ceiling of the Art Room closet near the area of potential leaking. Future upgrades should investigate the location of the water penetration.
- **Lighting** is currently operated by wall mounted switches. Occupancy sensors in classrooms, offices, bathrooms, and storage areas can help with energy efficiency and operation

Oscar Raymond School

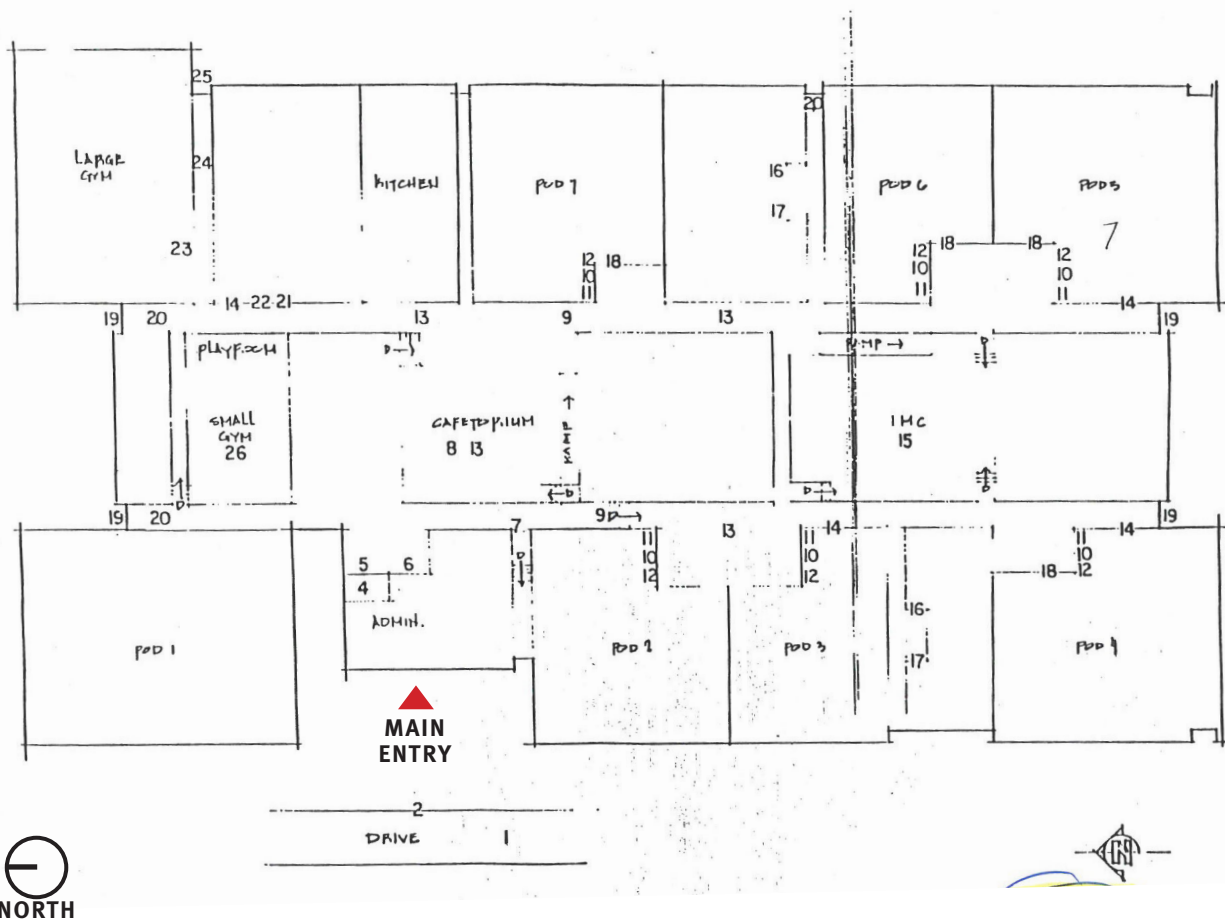
● Facility Priority 2.3

S-12

		PRIORITY	4	3	2	1	
		VISIT DATE: March 10, 2017	GOOD	ADEQUATE	MARGINAL	POOR	COMMENTS
SITE	PARKING				✓		Asphalt with potholes
	LANDSCAPING	✓					Grass and trees, low brick site walls
	SIDEWALKS		✓				Cement and asphalt, some cracking observed
	PLAY GROUND	✓					Age appropriate play and materials
EXTERIOR	ROOF	✓			✓		Roof reportedly leaks in some areas during wind driven rain
	GUTTERS/DOWNSPOUT	✓					Internal, no issues reported
	WALLS		✓	✓			Masonry brick in adequate condition. Rusting at fasteners observed on metal panels
	WINDOWS		✓				No issues reported
	DOORS			✓			Metal doors; older, possibly original. Non-ADA accessible hardware
	SECURITY			✓			Cameras
	FOUNDATIONS		✓				Minimal concrete
	OTHER						
INTERIOR	FLOORS	✓			✓		12" x 12" VCT; good condition. Carpet in library and front office; older, worn
	WALLS	✓					Painted CMU, temporary wall partitions in Pods
	CEILINGS			✓			2' x 4' ACT; some water staining, sagging
	DOORS		✓				Metal, some with ADA accessible hardware
	OTHER						
TOILET ROOMS	FLOORS				✓		Ceramic mosaics
	WALLS				✓		Painted CMU with holes remaining from previous fixtures
	CEILINGS				✓		Older 2' x 4' ACT
	FIXTURES				✓		Wall mounted sinks, floor mounted toilets. Some sinks stainless steel surface mounted. Some toilets floor mounted.
	OTHER				✓		Painted CMU
KITCHEN	FLOORS	✓					Terracotta tiles
	WALLS	✓					Glazed CMU
	CEILINGS	✓					2' x 4' ACT
	GREASE TRAP	✓					Cleaned every 6 months
	KITCHEN EQUIPMENT	✓					New Freezer, new cold storage
	OTHER	✓					Garage door for deliveries
ELEC	SERVICE/DISTRIB.	✓					Switchgear and circuit breaker panels. Emergency generator
	LIGHTING/POWER	✓					Occupancy sensors in gym only. LED lamps outside. Energy efficient lamps.
HVAC	SUPPLY/DISTRIB.		✓				Some electric fin tube radiators which not used/ abandoned
	UNIT SOURCES						Window heating units
FIRE	SPRINKLERS				✓		None, no sprinkler system
	DETECTION	✓					Heat/ smoke detectors
			POSSIBLE	NO	MAYBE	UNKNOWN	
CODE	ASBESTOS	✓					Assumed in the boiler room pipes
	LEAD				✓		Unknown
	HANDICAP-ACCESSIBLE	✓	✓				Some ramps throughout assumed to be accessible. Bathrooms not accessible (turning radius, door and fixture clearances/ thresholds, hardware, accessories)
	OTHER						

Oscar Raymond School

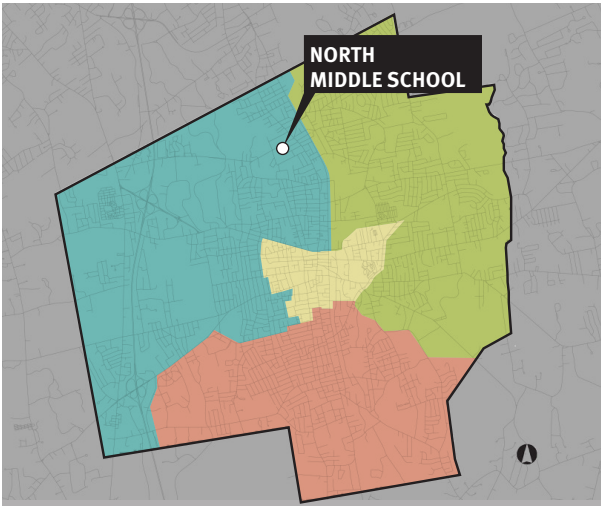
S-12



FIRST FLOOR PLAN

North Middle School

108 Oak Street
Brockton, MA 02301



LOCATION MAP



AERIAL PHOTO



NORTH ELEVATION

FACILITIES INFORMATION

DEPARTMENT	School
BUILDING USE	Middle 6–8
SCHOOL ZONE	Northwest
YEAR(S) BUILT	1959, reno 2012
NUMBER OF CLASSROOMS	35

SITE & BUILDING AREA

SITE AREA	5.75 Acres
BUILDING AREA	92,061 GSF
MODULAR CLASSROOM AREA	N/A
TOTAL SCHOOL AREA	92,061 GSF

SCHOOL YEAR 2017/18

ENROLLMENT DATA	Students	Classes per grade
GRADE 6	225	8
GRADE 7	200	8
GRADE 8	199	9
TOTAL	624	25

KEY PROGRAMS

	Cape Verdean Sheltered English Immersion (SEI)/TBE
	Special Education Emotionally Impaired Classroom (EI) (two classrooms)
GRADES 6–8	Special Education Inclusion Strands (three classrooms)

North Middle School



BUILDING OVERVIEW

North Middle School is located in the Northwest Zone neighborhood. It has a Grade 6–8 population. North Middle School has a very similar floor plan to South Middle School with minor modifications.

In 2010 the Brockton School District submitted a Statement of Interest (SOI) to the MSBA. It was successfully invited to the Accelerated Repair Program for a new roof and new boilers.

During the site assessment, there was opportunity to discuss the configuration and operational flow of the building with senior staff. The layout is favorable for the ease of public access to the Auditorium and Gym. Some concerns were expressed regarding the U-shape layout of the floor plan, which makes circulation paths longer than ideal. Additionally, the shape creates blind corners at intersections and congestion when students are switching classes.

It was noted that room temperatures are often inconsistent throughout the building, resulting in the hopper windows being opened due to the excessive heat.

While the exterior of North Middle School is on good condition, the interior is in poor condition with significant wear and tear. The building is in need of a considerable interior finishes renovation, ADA upgrades, a fire suppression system, and elevator access the second floor.

SITE INFORMATION

TOPOGRAPHY	Flat
LOCATED IN A FLOOD ZONE	Yes, Building is located in a flood zone
WETLANDS ON SITE	No
HISTORIC DESIGNATION	No
SITE AREA AVAILABLE FOR ADDITIONS OR REPLACEMENT OF EXISTING FACILITY	158,409 SF
ORIENTATION OF BUILDING	Main Entry faces North
NEIGHBORHOOD WALK SCORE	56 Somewhat Walkable
NEIGHBORHOOD TRANSIT SCORE	39 Some Transit
EST. COMMUTE TO DOWNTOWN BROCKTON	6 minutes by car 10 minutes by bicycle 35 minutes walking

North Middle School



SUMMARY OF FINDINGS

- The MSBA Space summary template guidelines indicate that **Middle school general classroom sizes** (Grades 6–8) should be in a range of 850 to 950 square feet with a maximum of 23 students per classroom. The North Middle School for School Year 2017/18 has an average enrollment of 28 students per classroom for 6th grade, 25 students for 7th grade, and 22 students for 8th grade. This demonstrates that the number of students per classroom exceeds the recommended count and suggests that the school is operating above MSBA recommended capacity. North Middle School is projected to have 100 more students than South Middle school that is the same size building.
- Due to the condition and age of the **Auditorium interior finishes**, future upgrades to the original seating and finishes should be considered.
- Due to the condition and age of the **interior finishes and materials** throughout, future upgrades to the facility should consider an interior renovation.
- Interior 9"x 9" **floor tiles** located throughout the building are worn and chipped. The flooring should be tested for asbestos prior to any renovation or maintenance that would disturb or remove the material.
- The **bathroom plumbing fixtures** are dated and possibly original. Future upgrades to the building should consider using low flow fixtures. The student toilet rooms do not offer accessible stalls or fixtures and the quantity of bathrooms for the population should be evaluated per current plumbing code.
- **Lighting** is currently operated by wall mounted switches. Occupancy sensors in classrooms, offices, bathrooms, and storage areas can help with energy efficiency and operation
- The building currently does not have a **sprinkler system** or heat detection devices. Future upgrades to this building should consider adding a fire suppression system and heat detection devices to meet current codes.
- There were several classrooms where the staff noted needing to rearrange the seating due to the **heating system** being hot. Consideration should be given to evaluating the heating systems efficiency.
- The existing **overhang at the front entry** shows signs of wear from the outside elements.
- **Site and sidewalk curbing** is in poor condition with major cracking and uneven surfaces.

North Middle School

● Facility Priority 2.9

S-13

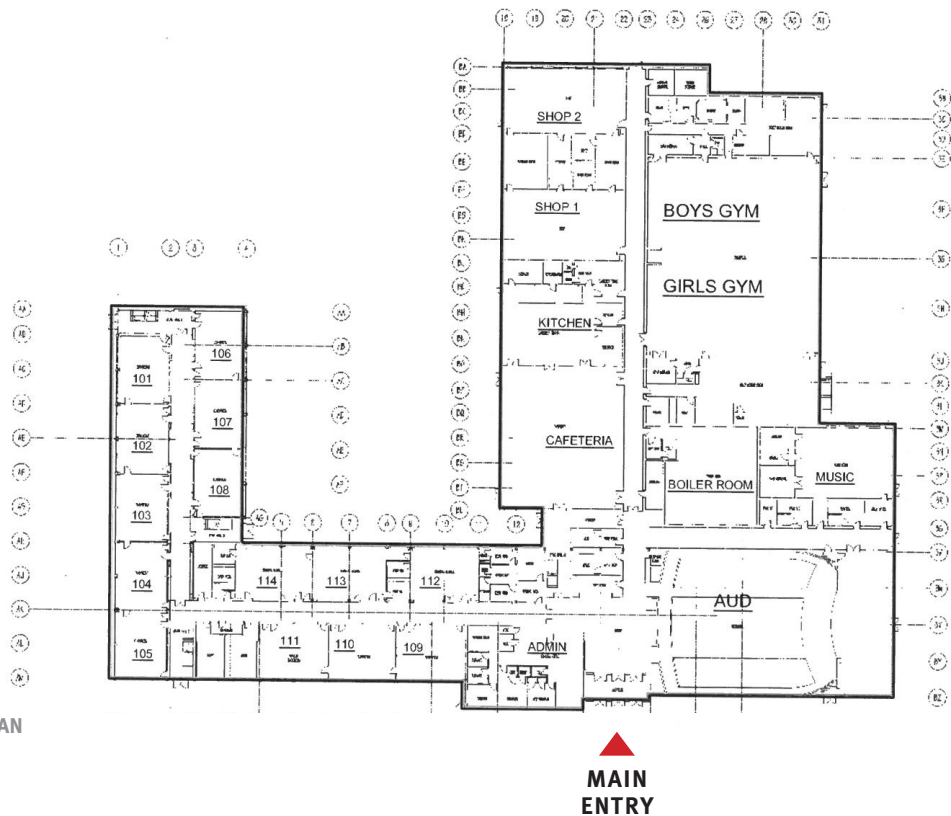
		PRIORITY	4	3	2	1	
		VISIT DATE: March 10, 2017	GOOD	ADEQUATE	MARGINAL	POOR	COMMENTS
SITE	PARKING	✓					Asphalt
	LANDSCAPING				✓		Trees. Have a garden club.
	SIDEWALKS				✓		Asphalt, cracking. Curb missing in some locations
	OTHER						
EXTERIOR	ROOF	✓		✓			New, no leaks, recently inspected. Consider replacing flashing over boiler room windows
	GUTTERS/DOWNSPOUT	✓					New
	WALLS	✓					Brick masonry
	WINDOWS		✓				Replaced 15 years ago. Hoppers in lower third of window bay with infill at top portion. Window roller shades missing or broken.
	DOORS	✓					Metal doors, front doors wood with glazing
	SECURITY		✓				Cameras
	FOUNDATIONS		✓				Concrete
	OTHER		✓				Skylights in wood shop, reported to create glare on the teaching wall
INTERIOR	FLOORS	✓			✓		Newer VCT and carpet 1st floor, older 9" x 9" tiles and carpet on 2nd floor, older stair treads and landings
	WALLS	✓	✓				Painted CMU, brick gym walls are brick with appearance of efflorescence
	CEILINGS	✓			✓		Newer ACT and LED lighting at front entry. Older throughout. Ceiling fans used in Café and Kitchen. Skylights have been covered.
	DOORS				✓		Wood. Classrooms have center plexi or glass lite approx. 1'x 2'. Non- ADA accessible door knobs/clearances
	OTHER	✓					New carpet in front office and Library
TOILET ROOMS	FLOORS				✓		Older mosaic tile
	WALLS				✓		Older ceramic tile, some cracked. Holes in walls from previous repairs/ capped off fixtures.
	CEILINGS				✓		Older painted, peeling. Vents do not appear to be working in Boys room
	FIXTURES				✓		Older porcelain wall mounted sinks, floor mounted toilets. Wall mounted urinals.
	TOILET PARTITIONS				✓		Older painted wood. Not enough toilets. Some toilet partitions are old/ rusty
KITCHEN	FLOORS				✓		Terra cotta tile, some missing. Some painted concrete flooring, peeling
	WALLS	✓					Glazed CMU
	CEILINGS	✓					ACT, fans, covered skylights
	GREASE TRAP	✓					Serviced
	KITCHEN EQUIPMENT	✓					In working order
	OTHER						Temperature of kitchen is reported to be too hot for Kitchen staff. Fans used in cafeteria and kitchen.
ELEC	SERVICE/DISTRIB.		✓				Old, possibly original switchgear
	LIGHTING/POWER				✓		Wall switches throughout, some bathrooms use occupancy sensors
HVAC	SUPPLY/DISTRIB.				✓		Steam/ hot water for heat, no A/C, gas boiler. (1 back up, 1 main). Recently serviced.
	UNIT SOURCES				✓		Unit vent system. Window A/C units in some offices, classrooms, Health suite, cafeteria.
FIRE	SPRINKLERS				✓		None, not sprinklered
	DETECTION	✓					New fire alarm panel installed 2017
			POSSIBLE	NO	MAYBE	UNKNOWN	
CODE	ASBESTOS	✓					Assumed in 9" x 9" floor tiles and pipes in cafeteria
	LEAD				✓		Unknown
	HANDICAP-ACCESSIBLE		✓				No elevator. Bathrooms appear accessible (turning radius, door clearances/ thresholds, fixture clearances/ hardware, accessories)
	OTHER						

North Middle School

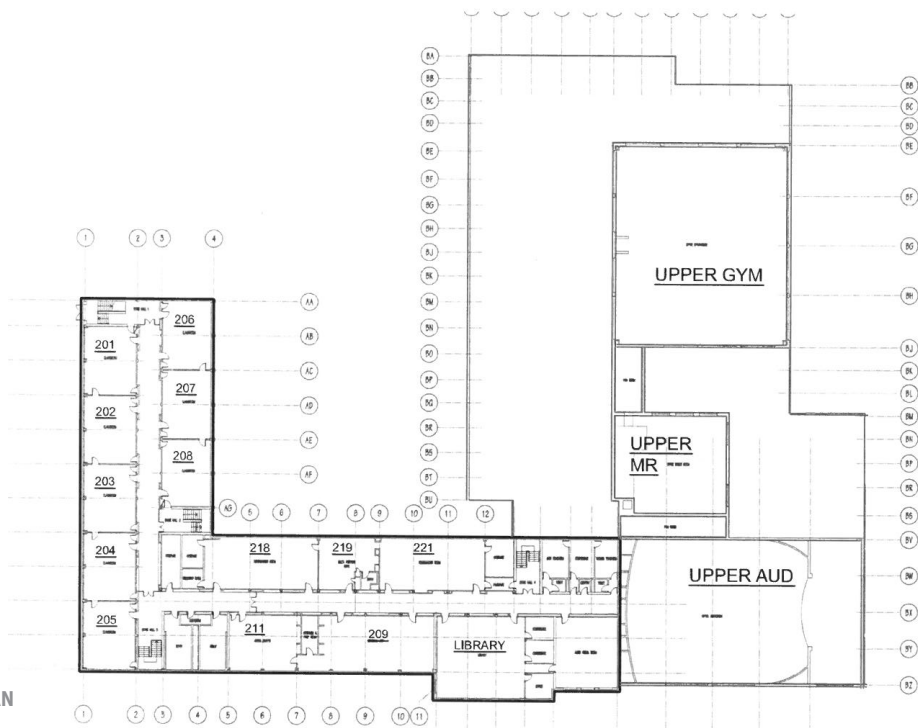
S-13



FIRST FLOOR PLAN

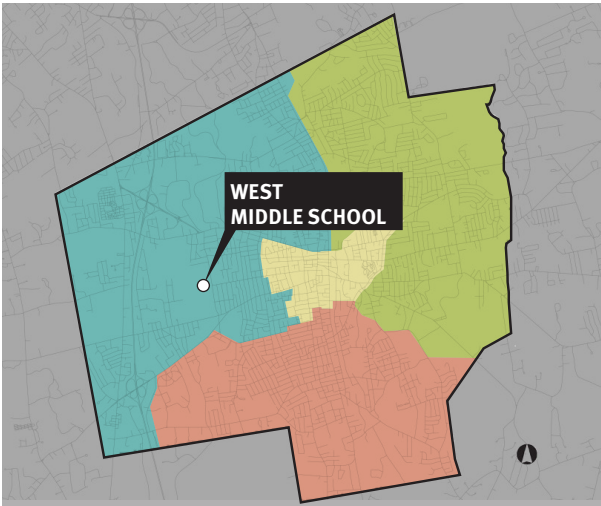


SECOND FLOOR PLAN



West Middle School

271 West Street
Brockton, MA 02301



LOCATION MAP



AERIAL PHOTO



EAST ELEVATION

FACILITIES INFORMATION

DEPARTMENT	School
BUILDING USE	Middle 6–8
SCHOOL ZONE	Northwest
YEAR(S) BUILT	1952, reno 2012
NUMBER OF CLASSROOMS	36

SITE & BUILDING AREA

SITE AREA	11.5 Acres
BUILDING AREA	110,318 GSF
MODULAR CLASSROOM AREA	N/A
TOTAL SCHOOL AREA	110,318 GSF

SCHOOL YEAR 2017/18

ENROLLMENT DATA	Students	Classes per grade
GRADE 6	245	8
GRADE 7	223	10
GRADE 8	200	8
TOTAL	668	26

KEY PROGRAMS

	Special Education Emotionally Impaired (EI) (three classrooms)
GRADES 6–8	Special Education Inclusion Strands (three classrooms)
	Voting precinct

West Middle School



BUILDING OVERVIEW

West Middle School is located in the Northwest Zone. It has a Grade 6–8 population.

In 2014 the Brockton School District submitted a Statement of Interest (SOI) to the MSBA to install a second boiler for back up, however it was not invited into the Accelerated Repair Program. This is still a concern and the custodial staff noted that the second back up boiler has not functioned in three years. In 2011 a new roof was installed through the MSBA Green Repair Program. Exterior doors are currently being replaced with new.

The Auditorium space is used by both the school and community and is seen as a important asset to the neighborhood. The room finishes and seating are original to the 1952 construction and would benefit from renovation to bring the room to today’s standards. Custodial staff commented that the balcony is no longer used.

The building is used by the community for voting, basketball, soccer, dance, karate, and performances.

North Middle School is in good to adequate condition with considerable wear and tear on the interior in some locations. The building is in need of updated interior finishes, ADA upgrades, a fire suppression system, and elevator access the second floor.

SITE INFORMATION

TOPOGRAPHY	Flat
LOCATED IN A FLOOD ZONE	No
WETLANDS ON SITE	No
HISTORIC DESIGNATION	No
ORIENTATION OF BUILDING	Main Entry faces North
NEIGHBORHOOD WALK SCORE	60 Somewhat Walkable
NEIGHBORHOOD TRANSIT SCORE	28 Some Transit
EST. COMMUTE TO DOWNTOWN BROCKTON	6 minutes by car 8 minutes by bicycle 29 minutes walking

West Middle School



SUMMARY OF FINDINGS

- The MSBA Space summary template guidelines indicate that **Middle school general classroom sizes** (Grades 6–8) should be in a range of 850 to 950 square feet with a maximum of 23 students per classroom. The West Middle School for School Year 2017/18 has an average enrollment of 30 students per classroom for 6th grade, 22 students for 7th grade, and 25 students for 8th grade. This demonstrates that a select number of classrooms exceed the recommended count and suggests that the school is partially operating above MSBA recommended capacity.
- Due to the condition and age of the **Auditorium interior finishes**, future upgrades to the original seating and finishes should be considered.
- Due to the condition and age of the **interior finishes and materials** throughout, future upgrades to the facility should consider an interior renovation.
- Interior 9" x 9" **floor tiles** located throughout the building are worn and chipped. The flooring should be tested for asbestos prior to any renovation or maintenance that would disturb or remove the material.
- **Older records and files** are insecurely and improperly stored in the basement of West Middle School. These files and records should be addressed and stored appropriately and securely off site as part of the Records management strategy.
- The **bathroom plumbing fixtures** are dated and possibly original. Future upgrades to the building should consider using low flow fixtures. The student toilet rooms do not offer accessible stalls or fixtures and the quantity of bathrooms for the population should be evaluated per current plumbing code.
- **Lighting** is currently operated by wall mounted switches. Occupancy sensors in classrooms, offices, bathrooms, and storage areas can help with energy efficiency and operation
- The building currently does not have a **sprinkler system** or heat detection devices. Future upgrades to this building should consider adding a fire suppression system and heat detection devices to meet current codes.
- There are noticeable settling **cracks** observed in the interior CMU partitions.

West Middle School

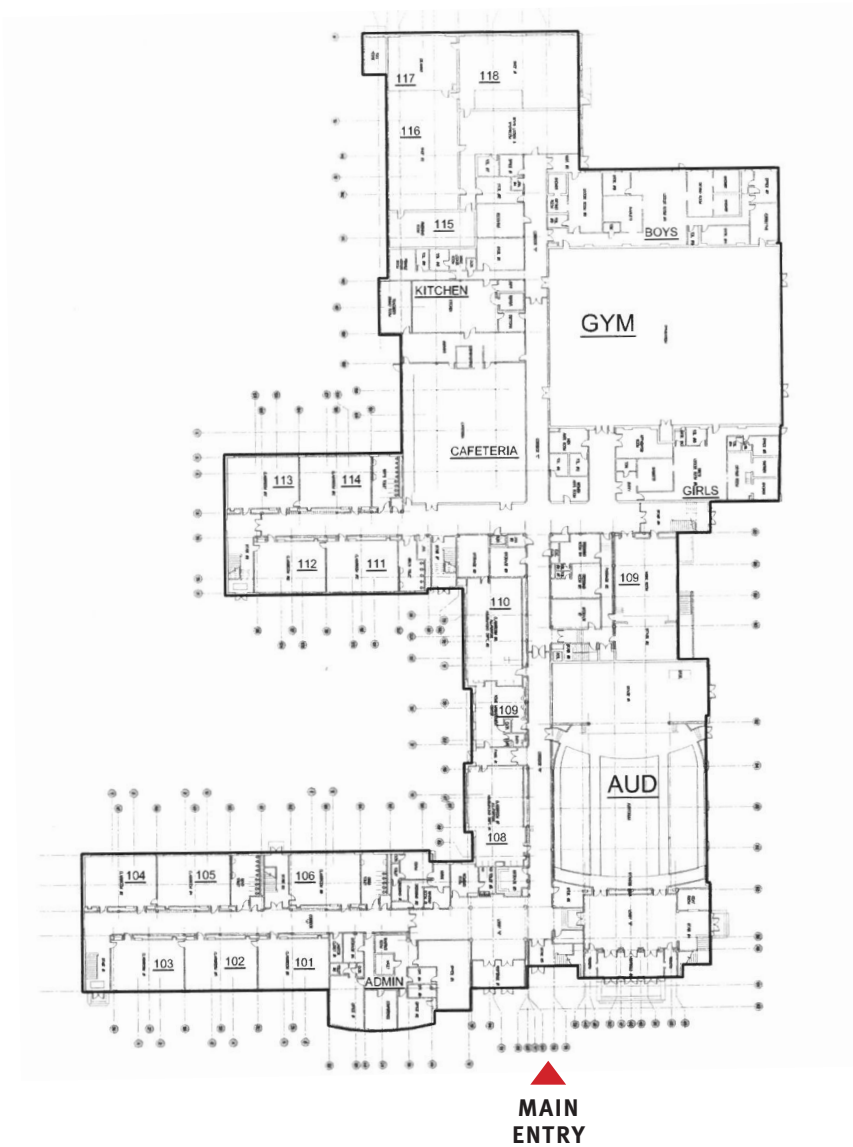
 Facility Priority 2.6

S-14

		PRIORITY	4	3	2	1	
		VISIT DATE: April 19, 2017	GOOD	ADEQUATE	MARGINAL	POOR	COMMENTS
SITE	PARKING		✓				Asphalt, some cracking and potholes. Curbing missing on islands.
	LANDSCAPING			✓			Grass and trees, parking lot islands are dirt
	SIDEWALKS		✓				Concrete
	OTHER						
EXTERIOR	ROOF		✓				Replaced in 2011-12. No reported leaks. (Ceiling stains are reported to be prior to roof replacement.)
	GUTTERS/DOWNSPOUT		✓				Internal storm drains, no issues reported
	WALLS		✓				Brick masonry
	WINDOWS		✓				Double pane, estimated 15 years old
	DOORS		✓			✓	Roughly 25% have been replaced with new doors. Phasing in new doors to the remaining locations
	SECURITY			✓			1 camera at rear parking lot, 1 other camera observed. It was not confirmed if they are working and connected to central.
	FOUNDATIONS		✓				
INTERIOR	OTHER						
	FLOORS		✓			✓	Terrazzo at entry, 12"x12" VCT in good condition. Older 9"x9" tiles and carpet throughout
	WALLS			✓			Glazed CMU and painted
	CEILINGS		✓			✓	Newer 2'x2' ACT in some areas in good condition. Older 2' x 4' ACT and classroom ceiling tiles
	DOORS						
TOILET ROOMS	OTHER						
	FLOORS					✓	Older mosaic tiles
	WALLS					✓	Older glazed CMU
	CEILINGS					✓	Older painted GWB
	FIXTURES					✓	Older original floor and wall mounted fixtures
KITCHEN	TOILET PARTITIONS					✓	Older original, painted
	FLOORS		✓				Terracotta tiles
	WALLS		✓				Glazed CMU
	CEILINGS		✓				Painted
	GREASE TRAP		✓				Serviced Feb. 2017
	KITCHEN EQUIPMENT		✓				Operable, in good condition
ELEC	OTHER						Custodian noted that the kitchen is scheduled to be renovated in the near future
	SERVICE/DISTRIB.		✓				Switchgear, circuit panels and boards
HVAC	LIGHTING/POWER		✓		✓		LED lamps installed in corridors in 2016
	SUPPLY/DISTRIB.		✓				Natural gas, hot water. One of the boilers reportedly has not worked for approximately three years
	UNIT SOURCES		✓				A/C window units and heat vents.
FIRE	OTHER						Sump pump. New water heater 12/30/2016.
	SPRINKLERS					✓	None, not sprinklered
CODE	DETECTION		✓				Fire alarm system at entry lobby. Smoke/ heat detectors only observed in some spaces.
	ASBESTOS		✓				Assumed in 9" x 9" floor tiles, possibly pipes
CODE	LEAD					✓	Unknown
	HANDICAP-ACCESSIBLE		✓	✓			Some access; building has elevator and ramps for ADA Access. Non-ADA accessible door clearances, toilet rooms, and door hardware
	OTHER						

West Middle School

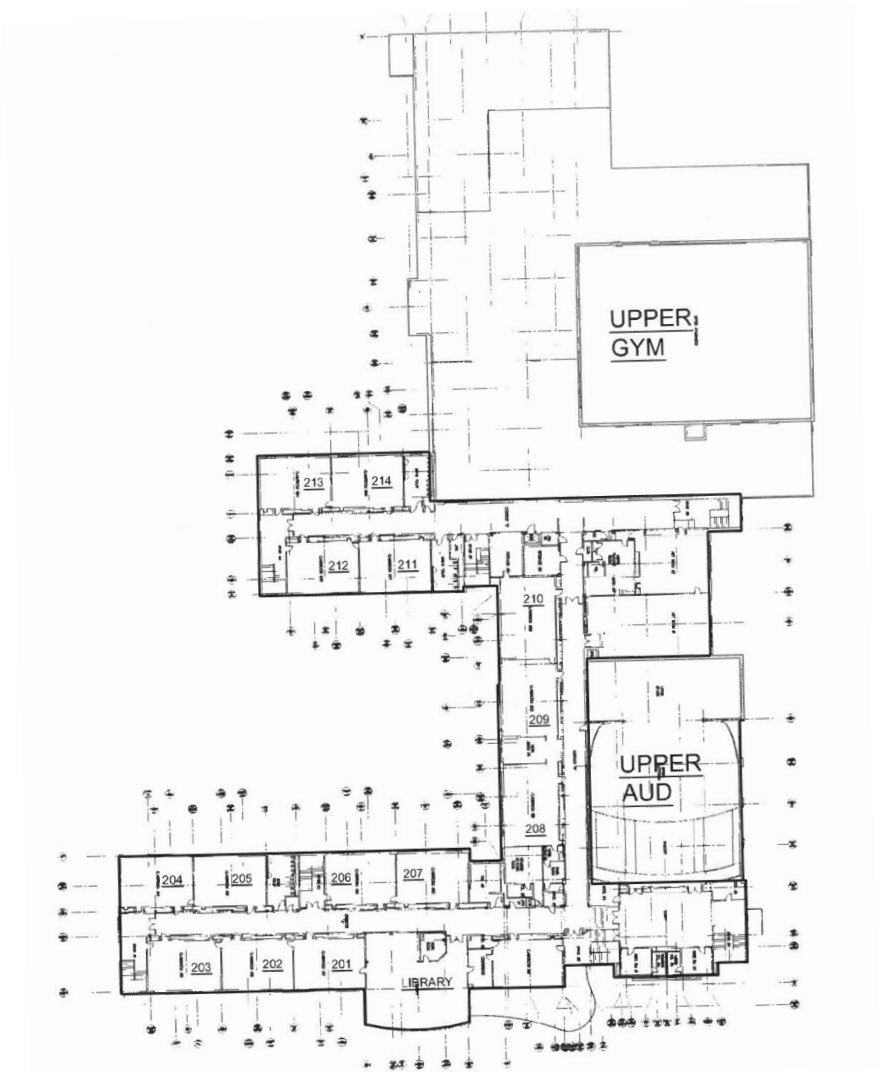
S-14




NORTH
FIRST FLOOR PLAN

West Middle School

S-14

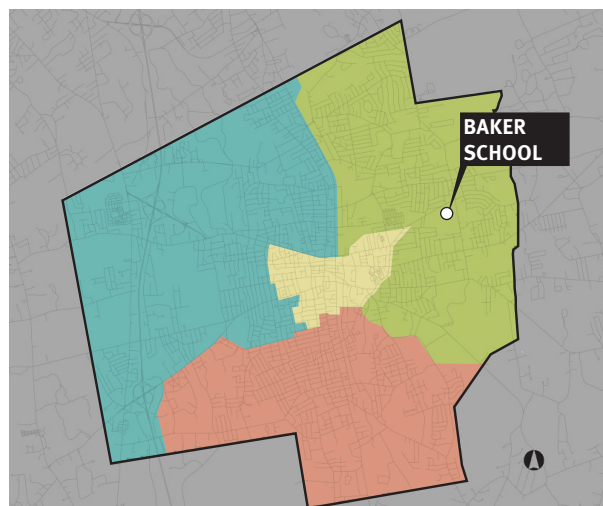


SECOND FLOOR PLAN

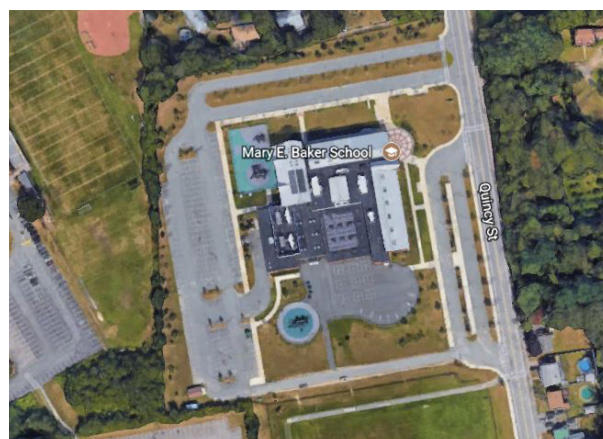
Mary E. Baker School

45 Quincy Street
Brockton, MA 02302

S-15



LOCATION MAP



AERIAL PHOTO



EAST ELEVATION

FACILITIES INFORMATION

DEPARTMENT	School
BUILDING USE	Elementary K-5
SCHOOL ZONE	Northeast
YEAR(S) BUILT	2008
NUMBER OF CLASSROOMS	50

SITE & BUILDING AREA

SITE AREA	13.48 Acres
BUILDING AREA	116,000 GSF
MODULAR CLASSROOM AREA	N/A
TOTAL SCHOOL AREA	116,000 GSF

SCHOOL YEAR 2017/18

ENROLLMENT DATA	Students	Classes per grade
KINDERGARTEN	137	6
GRADE 1	145	6
GRADE 2	133	6
GRADE 3	128	6
GRADE 4	117	6
GRADE 5	128	6
TOTAL	788	36

KEY PROGRAMS

GRADES K-5	Haitian Sheltered English Immersion (SEI)
GRADES 4-5	Special Education Emotionally Impaired (EI) (one classroom)
	Special Education City Resource Room (CRR) (one classroom)
GRADES K-2	Special Education Life Skills (one classroom)
	Special Education TOD (one classroom)
	Special Education ASD High Functioning (one classroom)
	Special Education SLD (one classroom)

Mary E. Baker School



BUILDING OVERVIEW

The Mary E. Baker School is located in the Northeast Zone neighborhood. It has a K–5 elementary school population. The building is one of two new schools in the district that was built in 2008, a year before George School. The architecture, area, floor plan configuration, building age, and complete design in its very similar to George School, located in the Northwest neighborhood.

The structure is three-stories, with the main entry located on the east elevation along Quincy Street. Day parking is located at the rear of the building. A vehicular loop and parallel parking is along Quincy Street is for convenient access to the front entry.

Unlike George School, there are two separate arrays of solar panels—an array on the roof of the library pitched roof and array on the gym flat roof.

The building structure and site are in excellent condition and well maintained.

SITE INFORMATION

TOPOGRAPHY	Flat
LOCATED IN A FLOOD ZONE	No
WETLANDS ON SITE	No
HISTORIC DESIGNATION	No
ORIENTATION OF BUILDING	Main Entry faces East
NEIGHBORHOOD WALK SCORE	28 Car-Dependent
NEIGHBORHOOD TRANSIT SCORE	28 Some Transit
EST. COMMUTE TO DOWNTOWN BROCKTON	7 minutes by car 11 minutes by bicycle 38 minutes walking

Mary E. Baker School


 S-15

SUMMARY OF FINDINGS

- The MSBA Space summary template guidelines indicate that **Elementary school general classroom sizes** (Grades 1–5) should be in a range of 900 to 1,000 square feet with a maximum of 23 students per classroom. The Mary E. Baker School for School Year 2017/18 has an enrollment between 24 to 27 students per classroom for grades 1-5. This demonstrates that the number of students per classroom exceeds the recommended count and suggests that the school is operating above MSBA recommended capacity.
- The building appears to be **ADA compliant**. The stage in the cafetorium is accessed via a handicap accessible lift and the building has a functioning elevator.
- **Heating and cooling** is reportedly consistent throughout the building.
- Staff noted that every classroom has a **smart board** and a **sink**.
- Custodial staff noted that the **lights at the stairs** are difficult to access and require a cherry picker. LED fixtures can improve the longevity of the lamp life for less maintenance.
- There are two separate arrays of **solar panels** on the roof.
- Custodial staff noted that as the occupancy sensors no longer functioned, they have been replaced with light switches. This accounts for approximately 30–40% of lights throughout the building.
- The **bathroom plumbing fixtures** are new to the 2008 construction and in excellent condition.

Mary E. Baker School

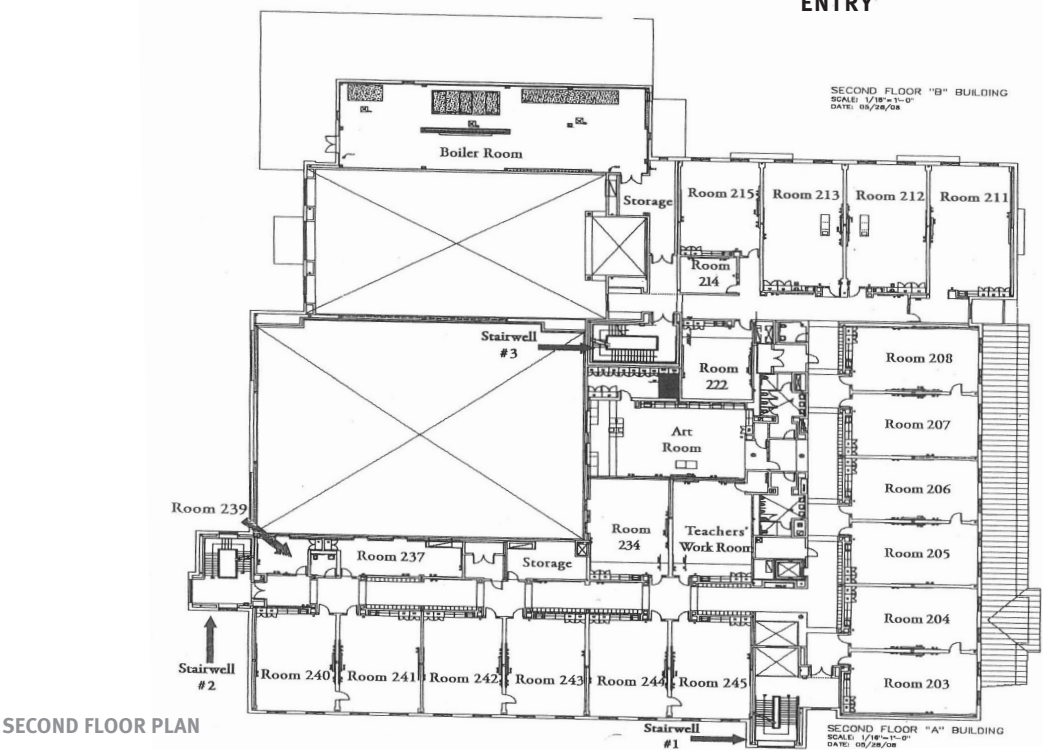
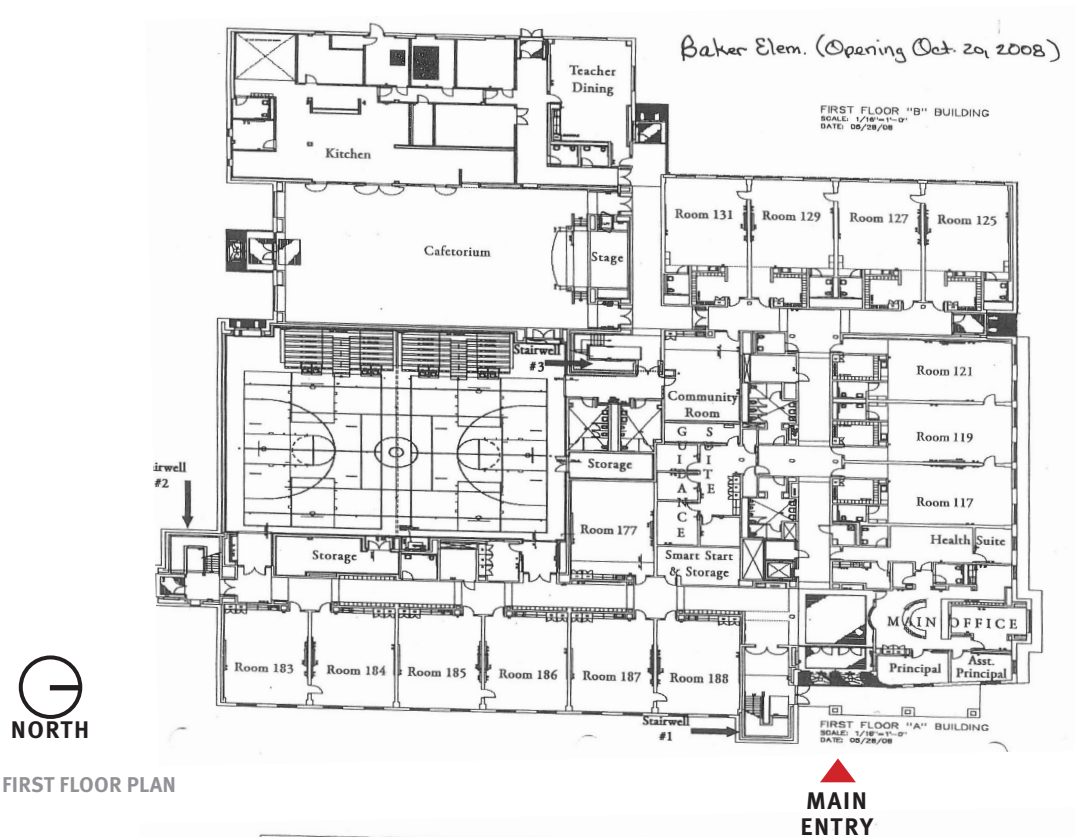
● Facility Priority 3.9

S-15

		PRIORITY	4	3	2	1	
		VISIT DATE: February 21, 2017	GOOD	ADEQUATE	MARGINAL	POOR	COMMENTS
SITE	PARKING	✓					New asphalt, painted parking lines
	LANDSCAPING	✓					New grass, trees, bushes
	SIDEWALKS	✓					New concrete
	PLAY GROUND	✓					Three new playground areas, age appropriate
EXTERIOR	ROOF	✓					New rubber membrane roof
	GUTTERS/DOWNSPOUT	✓					New external metal storm drains
	WALLS	✓					New brick masonry, standing metal seam
	WINDOWS	✓					New double pane double hung insulated windows
	DOORS	✓					New metal with ADA accessible hardware
	SECURITY	✓					Camera at every door
	FOUNDATIONS						None
	OTHER						
INTERIOR	FLOORS	✓					New 12" x 12" VCT throughout, carpet in the library
	WALLS	✓					New glazed tile wainscot, paint above
	CEILINGS	✓					New 2' x 2' ACT
	DOORS	✓					New metal doors throughout
	OTHER						
TOILET ROOMS	FLOORS	✓					New mosaic tile
	WALLS	✓					New glazed tile wainscot, paint above
	CEILINGS	✓					New 2' x 2' ACT
	FIXTURES	✓					New wall mounted
	PARTITIONS	✓					New HDPE (High Density Polyethylene)
KITCHEN	FLOORS	✓					New epoxy, some cracking that has been patched
	WALLS	✓					New painted CMU
	CEILINGS	✓					New washable ACT
	GREASE TRAP	✓					2 grease traps: 1 in dish room, 1 at sink
	KITCHEN EQUIPMENT	✓					Excellent, in working condition
	OTHER						
ELEC	SERVICE/DISTRIB.	✓					Switchgear and circuit breakers/ panel boards
	LIGHTING/POWER	✓					Classrooms have occupancy sensors. Energy efficient lamps. When occupancy sensor breaks, controls are being replaced with switches
	OTHER						Solar panels on roof; two arrays
HVAC	SUPPLY/DISTRIB.	✓					Natural gas, three boilers
	UNIT SOURCES	✓					Forced hot air through ceiling registers/ Air conditioning. Heating and cooling is controlled by central.
FIRE	SPRINKLERS	✓					Sprinkler system throughout
	DETECTION	✓					Fire panel serviced Feb., 2017. Checked 2 times/ year
			POSSIBLE	NO	MAYBE	UNKNOWN	
CODE	ASBESTOS	✓					
	LEAD	✓					
	HANDICAP-ACCESSIBLE	✓					ADA accessible throughout. Evacuation chair located at top of stairs.
	OTHER						

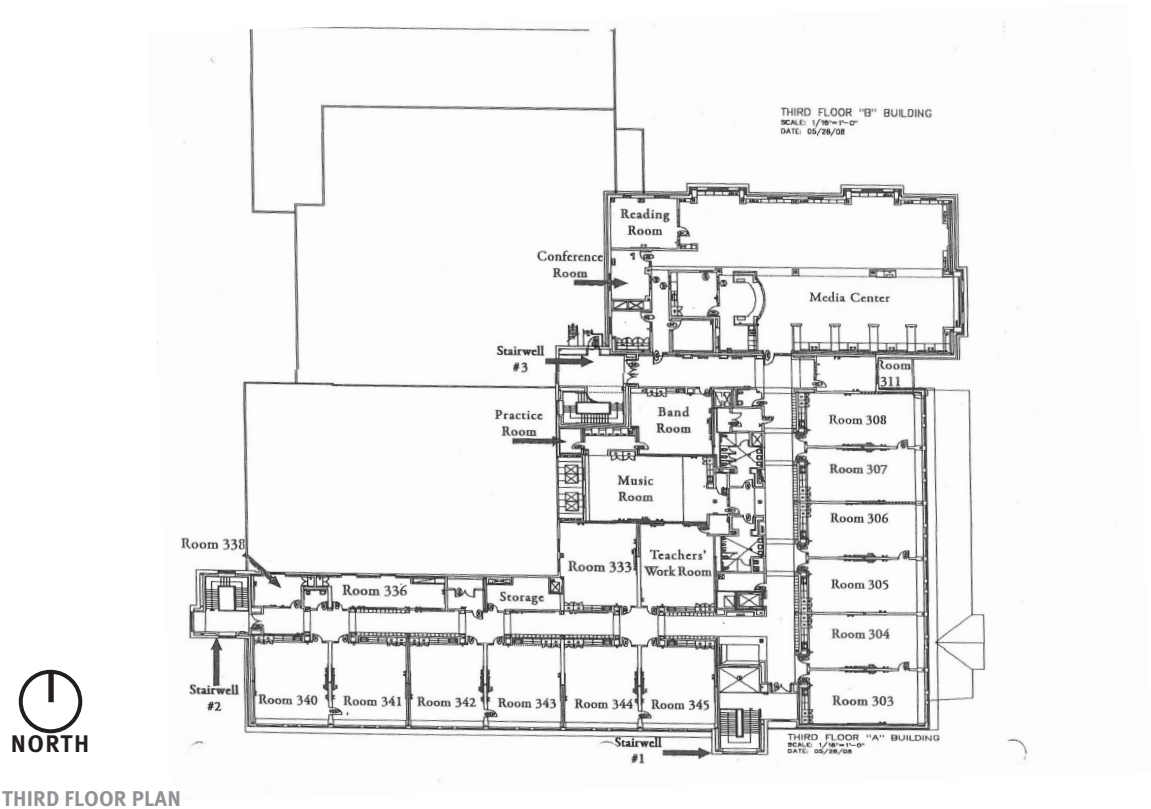
Mary E. Baker School

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Mary E. Baker School

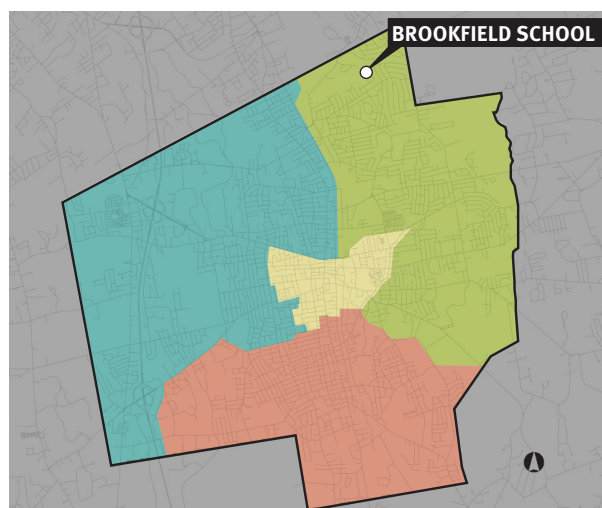
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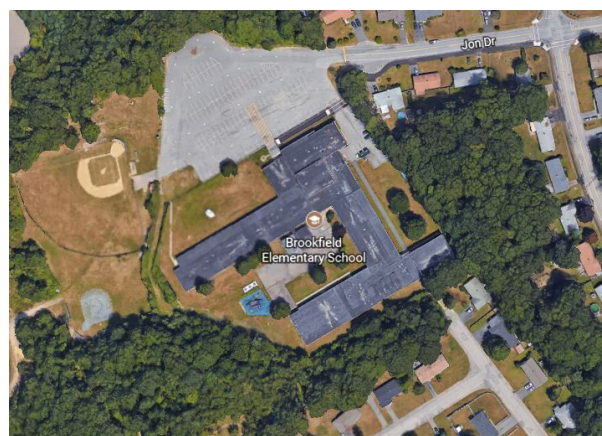
Brookfield School

135 Jon Drive
Brockton, MA 02302

S-16



LOCATION MAP



AERIAL PHOTO



SIGN ALONG NORTH ELEVATION

FACILITIES INFORMATION

DEPARTMENT	School
BUILDING USE	Elementary K-5
SCHOOL ZONE	Northeast
YEAR(S) BUILT	1963, 1970
NUMBER OF CLASSROOMS	29

SITE & BUILDING AREA

SITE AREA	28.85 Acres
BUILDING AREA	68,261 GSF
MODULAR CLASSROOM AREA	2,250 GSF
TOTAL SCHOOL AREA	70,511 GSF

SCHOOL YEAR 2017/18

ENROLLMENT DATA	Students	Classes per grade
KINDERGARTEN	66	5
GRADE 1	94	5
GRADE 2	111	5
GRADE 3	108	5
GRADE 4	127	6
GRADE 5	111	5
TOTAL	617	31*

*includes 2 modular classroom

KEY PROGRAMS

GRADES K-5	Cape Verdean Sheltered English Immersion (SEI)
GRADES K-5	Special Education City Resource Room (CRR) (three classrooms)
	"Walk to School Wednesday" Massachusetts Program

Brookfield School



BUILDING OVERVIEW

The Brookfield School is in the Northeast Zone neighborhood of Brockton. It has a K–5 elementary school age population. The building was constructed in 1963 and is very similar in square footage, floor plan configuration, building age, and design to the Hancock School (Northwest Zone) and the Ashfield School (Northeast Zone).

The structure is one story on a flat site with the main entry located on north elevation. The site is surrounded by trees at the end of a residential street.

The original north portion of the building was constructed in 1963 with a southern wing added in 1970. There have been recent updates to the building, including newer boilers, water heater, gym floor, and new library skylights.

The building currently has two modular classrooms that are reported to be at least 20 years old and are at the end of their useful life for both the interior and exterior.

The original building is observed to be in good to adequate condition for its age with the exception of some failing interior finishes and wear and tear on the interior. The building is in need of a considerable interior renovation, ADA upgrades, and a fire suppression system.

SITE INFORMATION

TOPOGRAPHY	Flat
LOCATED IN A FLOOD ZONE	No
WETLANDS ON SITE	Yes
HISTORIC DESIGNATION	No
ORIENTATION OF BUILDING	Main Entry faces North
NEIGHBORHOOD WALK SCORE	28 Car-Dependent
NEIGHBORHOOD TRANSIT SCORE	28 Some Transit
EST. COMMUTE TO DOWNTOWN BROCKTON	7 minutes by car 11 minutes by bicycle 38 minutes walking

Brookfield School



SUMMARY OF FINDINGS

- The MSBA Space summary template guidelines indicate that Elementary school general classroom sizes (Grades 1–5) should be in a range of 900 to 1,000 square feet with a maximum of 23 students per classroom. The Brookfield School for School Year 2017/18 has an enrollment between 23 to 28 students per classroom for grades 1–5. This demonstrates that the number of students per classroom exceeds the recommended count and suggests that the school is operating above MSBA recommended capacity.
- Due to the condition and age of the **interior finishes and materials** throughout, future upgrades to the facility should consider an interior renovation.
- Due to the condition and age of the **modulars**, a solution for a permanent structure should be reviewed.
- Interior 9" x 9" **floor tiles** located throughout the building are worn and chipped. The flooring should be tested for asbestos prior to any renovation or maintenance that would disturb or remove the material.
- The building currently does not have a **sprinkler system** or heat detection devices. Future upgrades to this building should consider adding a fire suppression system and heat detection devices to meet current codes.
- The **bathroom plumbing fixtures** are dated and are possibly original to the building. Future upgrades to the building should consider using low flow fixtures. The student toilet rooms do not offer accessible stalls or fixtures, and the quantity of bathrooms for the population should be evaluated per current plumbing code.
- **Lighting** is currently operated by wall mounted switches. Occupancy sensors in classrooms, offices, bathrooms, and storage areas can help with energy efficiency and operation.

Brookfield School

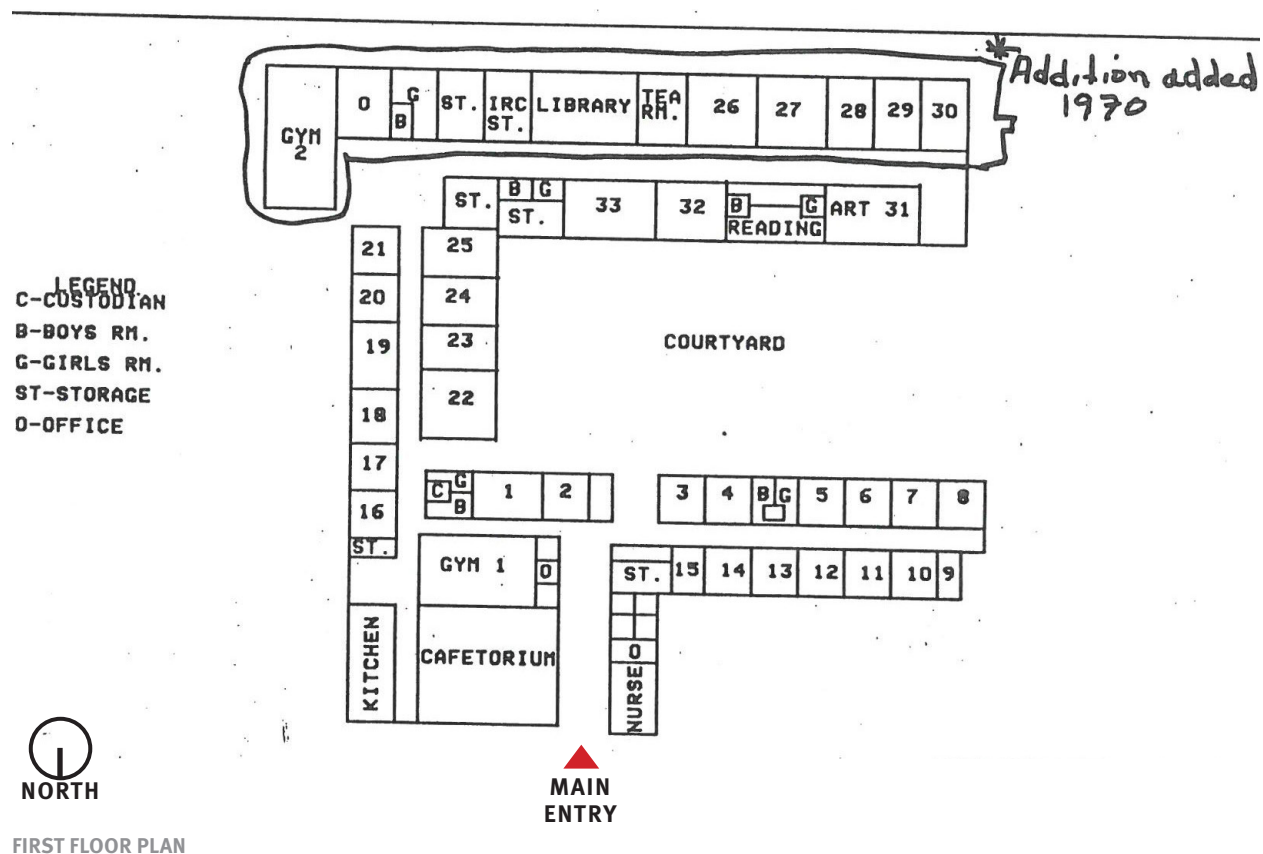
Facility Priority 3.2

S-16

		PRIORITY	4	3	2	1	
		VISIT DATE: February 21, 2017	GOOD	ADEQUATE	MARGINAL	POOR	COMMENTS
SITE	PARKING	✓					Asphalt, few pot holes, some filled
	LANDSCAPING	✓					Courtyard: grass is cut/ maintained. In the courtyard there is rubber and grass.
	SIDEWALKS						There are no sidewalks
	PLAY GROUND				✓		Asphalt in the courtyard- cracking, poor condition. Age appropriate playground.
EXTERIOR	ROOF	✓					New rubber membrane, replaced last year (2016)
	GUTTERS/DOWNSPOUT	✓					Newer
	WALLS	✓					Masonry brick
	WINDOWS	✓					Possibly replaced 7-8 years ago
	DOORS	✓					Newer double pane, insulated hopper windows
	SECURITY	✓					Exterior cameras
	FOUNDATIONS	✓					
	OTHER						
INTERIOR	FLOORS	✓			✓		9" x 9" tiles, cracking, missing, chipping, old carpet in library. Some areas have newer 12" x 12" VCT.
	WALLS		✓				Hallways newly painted, CMU painted
	CEILINGS	✓			✓		New 2' x 2' ACT in some corridors. Classrooms have older 9"x 9" tiles
	DOORS				✓		Older, original. Hardware and clearances non-ADA accessible
	OTHER						
TOILET ROOMS	FLOORS				✓		Original 9" x 9" tiles, cracking/ crumbling/ missing
	WALLS			✓			Glazed CMU
	CEILINGS				✓		Older 2' x 4' ACT, sagging
	FIXTURES	✓					Original porcelain floor mounted toilets, wall mounted sinks, floor urinals
	PARTITIONS	✓					Newer metal partitions in some areas
KITCHEN	FLOORS				✓		Terra cotta tile, worn
	WALLS	✓					Glazed CMU
	CEILINGS				✓		Older 9" x 9" tiles, cracking/ crumbling/ missing
	GREASE TRAP	✓					Serviced/ cleaned
	KITCHEN EQUIPMENT	✓					Newer, functional
	OTHER						Use Styrofoam for lunches; Dish room has not been used for years
ELEC	SERVICE/DISTRIB.	✓					Switch gear with circuit breakers/ panel boards
	LIGHTING/POWER			✓			Corridor lighting has been replaced with LEDs. Others are surface mounted or recessed fluorescent.
	OTHER	✓					Emergency generator
HVAC	SUPPLY/DISTRIB.	✓					Natural gas, hot water heat
	UNIT SOURCES	✓					Newer boilers, hot air radiators at perimeter
FIRE	SPRINKLERS				✓		None
	DETECTION	✓					Fire Alarm System located at front lobby
			POSSIBLE	NO	MAYBE	UNKNOWN	
CODE	ASBESTOS	✓					Assumed in 9" x 9" floor tiles, pipes in Boiler room
	LEAD				✓		Unknown
	HANDICAP-ACCESSIBLE	✓	✓				New ADA accessible toilet rooms Lobby. Ganged student bathrooms not accessible (turning radius, door and fixture clearances/ thresholds, hardware, accessories)
	OTHER						

Brookfield School

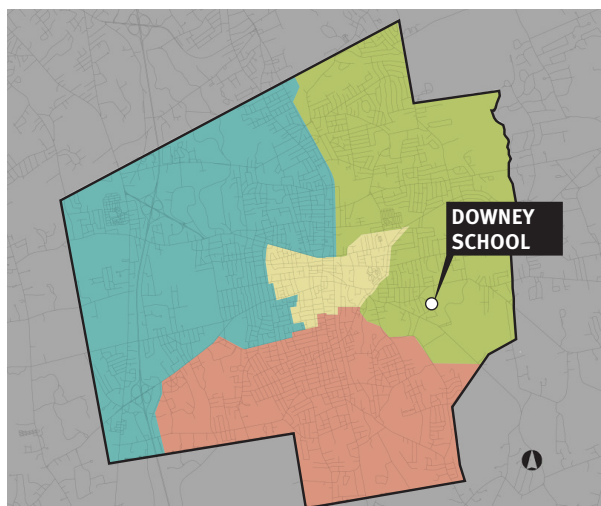
S-16



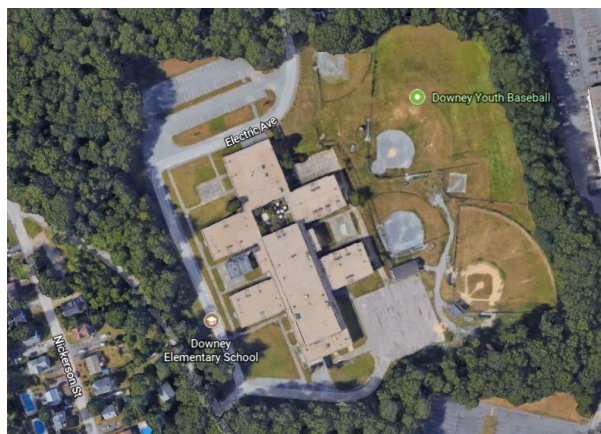
Downey School

55 Electric Avenue
Brockton, MA 02302

S-17



LOCATION MAP



AERIAL PHOTO



NORTH ELEVATION

FACILITIES INFORMATION

DEPARTMENT	School
BUILDING USE	Elementary K–5
SCHOOL ZONE	Northeast
YEAR(S) BUILT	1971, 2012
NUMBER OF CLASSROOMS	36*

SITE & BUILDING AREA

SITE AREA	16.33 Acres
BUILDING AREA	119,000 GSF
MODULAR CLASSROOM AREA	2,250 GSF
TOTAL SCHOOL AREA	121,250 GSF

SCHOOL YEAR 2017/18

ENROLLMENT DATA	Students	Classes per grade
KINDERGARTEN	70	6
GRADE 1	96	5
GRADE 2	118	5
GRADE 3	109	5
GRADE 4	116	5
GRADE 5	99	5
TOTAL	608	31*

*includes 2 modular classrooms

KEY PROGRAMS

GRADES 3–4	Special Education Emotionally Impaired (EI) (two classrooms)
GRADES 1–5	Special Education Life Skills Classroom (five classrooms)
GRADES K–5	Special Education Inclusion Classroom (seven classrooms)
	“Walk to School Wednesday” Massachusetts Program

Downey School



BUILDING OVERVIEW

The Downey Elementary School is located in the Northeast Zone neighborhood. It has a K–5 elementary school population. The building has four open classrooms on the first floor and two open classrooms in the lower level/semi-basement which is exposed at grade on the east side. Additionally, there are two modular classrooms that are more than 20 years old.

The building was constructed in 1971 and is heated by electricity. The configuration of the building has a central spine containing the Administration, an outdoor courtyard, library with mezzanine, smaller gym, larger gym, cafetorium, and kitchen. Off of the central core, there are two classroom pods to the east and two classrooms pods plus the modular structure to the west. The lower level is accessed by a small elevator or internal stairs within the pods, which stack with the pods above on the first level.

The building is well situated on a sloped site, allowing direct egress at grade from the lower level. The sidewalk surrounding the building are cracked and uneven, and in need of extensive repair or replacement.

The overall structure is in poor condition with moderate to significant wear and tear on the interior. The building is in need of a considerable renovation, site improvements, ADA upgrades, additional classrooms, and a fire suppression system.

SITE INFORMATION

TOPOGRAPHY	Sloped
LOCATED IN A FLOOD ZONE	No
WETLANDS ON SITE	No
HISTORIC DESIGNATION	No
ORIENTATION OF BUILDING	Main Entry faces North
NEIGHBORHOOD WALK SCORE	41 Car-Dependent
NEIGHBORHOOD TRANSIT SCORE	30 Some Transit
EST. COMMUTE TO DOWNTOWN BROCKTON	5 minutes by car 9 minutes by bicycle 30 minutes walking

Downey School


 S-17

SUMMARY OF FINDINGS

- The MSBA Space summary template guidelines indicate that **Elementary school general classroom sizes** (Grades 1–5) should be in a range of 900 to 1,000 square feet with a maximum of 23 students per classroom. The Downey Elementary School for School Year 2017/18 has an enrollment between 19 to 23 students per classroom for grades 1–5. This demonstrates that the number of students per classroom meets the MSBA recommended student count.
- The Downey School houses many special needs programs. The **space considerations** for these programs should be thoroughly evaluated.
- The **open classroom configuration** of the building has caused concern for staff in regards to egress safety due to limited lock down options as well as appropriate learning environment within the pod configuration. Classroom dividers are created with temporary partitions that do not go to the underside of the roof and therefore acoustics are difficult for teaching and learning.
- Due to the condition and age of the **interior finishes and materials** throughout, future upgrades to the facility should consider an interior renovation.
- The building currently is **not fully ADA compliant** as there is no accessible means to access the library mezzanine. Future upgrades should consider installing accessible access to all populated areas of the building.
- Interior 9" x 9" **floor tiles** located throughout the building are worn and chipped. The flooring should be tested for asbestos prior to any renovation or maintenance that would disturb or remove the material.
- The building currently does not have a **sprinkler system** or heat detection devices. Future upgrades to this building should consider adding a fire suppression system and heat detection devices to meet current codes.
- The **bathroom plumbing fixtures** are dated and are possibly original to the building. Future upgrades to the building should consider using low flow fixtures. The student toilet rooms do not offer accessible stalls or fixtures, and the quantity of bathrooms for the population should be evaluated per current plumbing code.
- **Lighting** is currently operated by wall mounted switches. Occupancy sensors in classrooms, offices, bathrooms, and storage areas can help with energy efficiency and operation.
- Stairways are currently being used for **storage** of classroom furniture under the landing. Storage in an exit enclosure, including stairwells, is not permitted per the current life safety code.
- There are unused and decommissioned **drinking fountains** throughout the school. The unused drinking fountains could be replaced with newer water stations or removed completely as long as the quantity within the building meets the current plumbing code requirements.

Downey School

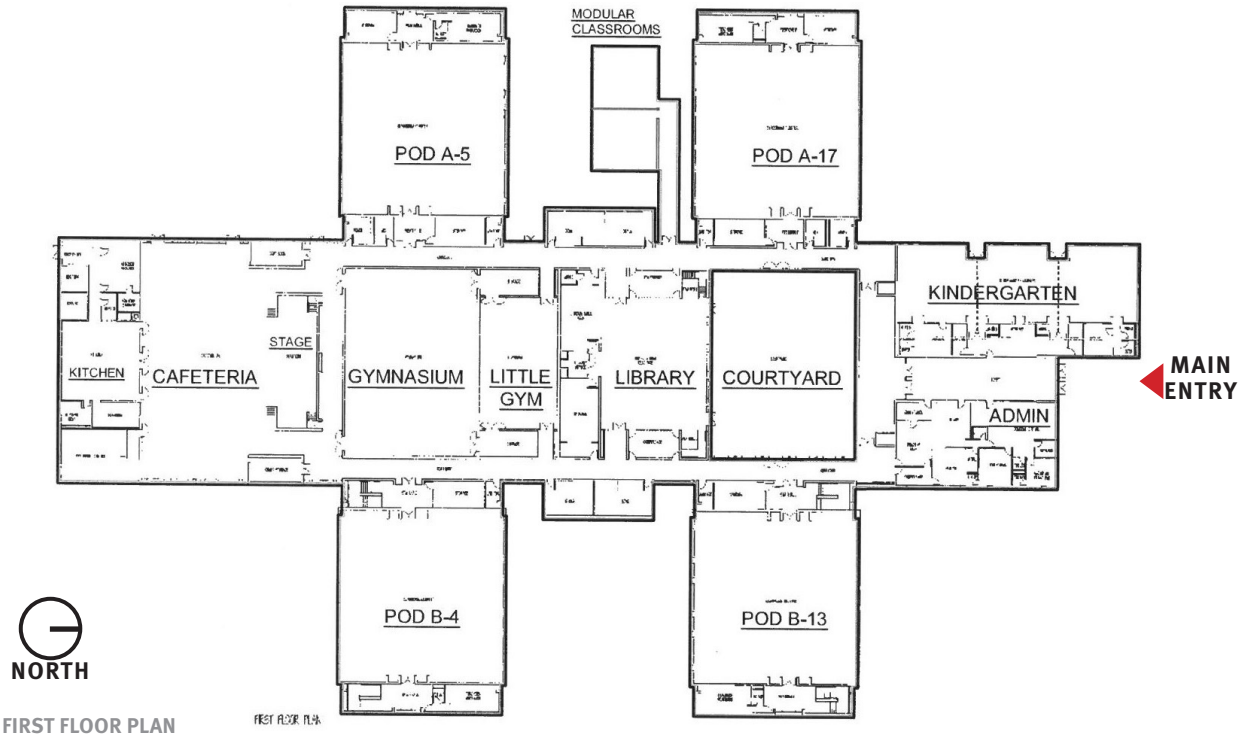
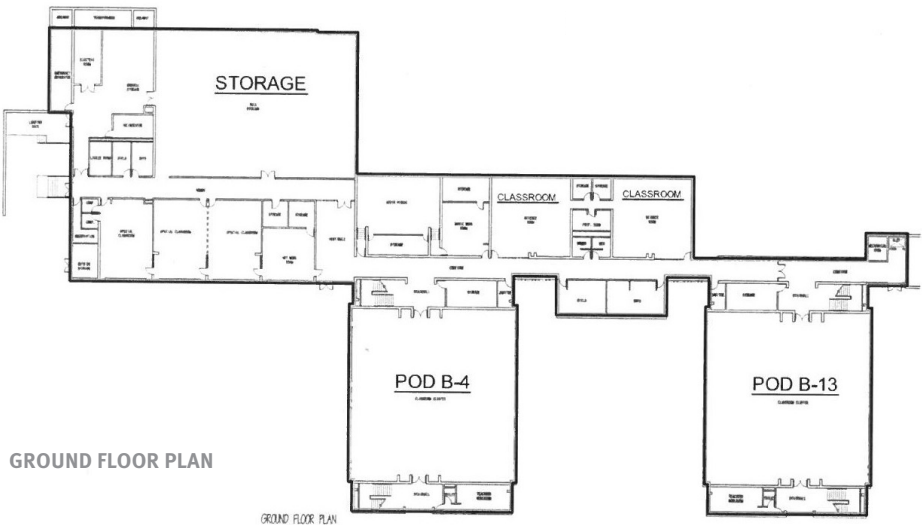
Facility Priority 2.0

S-17

		PRIORITY	4	3	2	1	
		VISIT DATE: February 23, 2017	GOOD	ADEQUATE	MARGINAL	POOR	COMMENTS
SITE	PARKING					✓	Asphalt; potholes, poor drainage, no curbing
	LANDSCAPING					✓	Grass, mud, minimal trees and landscaping, site lighting. Inner courtyard
	SIDEWALKS					✓	Asphalt; crumbling, non-ADA accessible slopes, tripping hazards, no curbing
	OTHER						
EXTERIOR	ROOF	✓					Newly replaced in 2012, no issues reported
	GUTTERS/DOWNSPOUT	✓					Inside building, no issues reported
	WALLS	✓					Masonry brick
	WINDOWS	✓					Recently replaced; double pane insulated, aluminum frame. Windows in the big gym show evidence of prior leaks.
	DOORS	✓					Recently replaced; metal doors with sidelights
	SECURITY					✓	No lockdown options with interior open classroom configuration and no classroom doors.
	FOUNDATIONS	✓					Concrete
INTERIOR	OTHER						
	FLOORS					✓	Older 9" x 9" tiles, cracking, missing, chipping. Carpet in classroom pods, old, ripping, torn. Newer 12" x 12" VCT in some areas. Library carpet recently replaced.
	WALLS	✓					Painted CMU, painted brick
	CEILINGS	✓					Original exposed concrete waffle slab with acoustical filler in some areas
	DOORS						
TOILET ROOMS	OTHER						
	FLOORS					✓	Older ceramic mosaic, cracked
	WALLS					✓	Older glazed tile/ CMU, cracked
	CEILINGS					✓	Older 2' x 4' ACT, staining, sagging
	FIXTURES					✓	Wall mounted fixtures, possibly original
KITCHEN	TOILET PARTITIONS					✓	Floor mounted metal partitions in disrepair; rusting, dented, broken
	FLOORS					✓	Older tiles; worn
	WALLS	✓					Glazed tile/ CMU
	CEILINGS	✓					2' x 2' ACT
	GREASE TRAP	✓					Recently serviced
	KITCHEN EQUIPMENT	✓					
ELEC	OTHER						
	SERVICE/DISTRIB.					✓	Electric distribution, expensive, replacement parts for system reportedly no longer available
HVAC	LIGHTING/POWER					✓	Interior has fluorescent lamps. Exterior has LED lighting.
	SUPPLY/DISTRIB.					✓	Electric heat. No gas utility to the building. Oil used for Emergency Generator.
FIRE	UNIT SOURCES					✓	Unable to replace
	SPRINKLERS					✓	None, no sprinkler system
	DETECTION					✓	Old panel, heat/ smoke sensors in some areas.
CODE			POSSIBLE	NO	MAYBE	UNKNOWN	
	ASBESTOS	✓					Assumed in 9" x 9" asbestos tiles, pipes
	LEAD					✓	Unknown
	HANDICAP-ACCESSIBLE		✓				Stage not ADA accessible, Door hardware not ADA accessible. Toilet rooms not accessible (turning radius, door and fixture clearances/ thresholds, hardware, fixtures, accessories). Mezzanine of Library not HC accessible. Elevator not large enough for a stretcher.
	OTHER						

Downey School

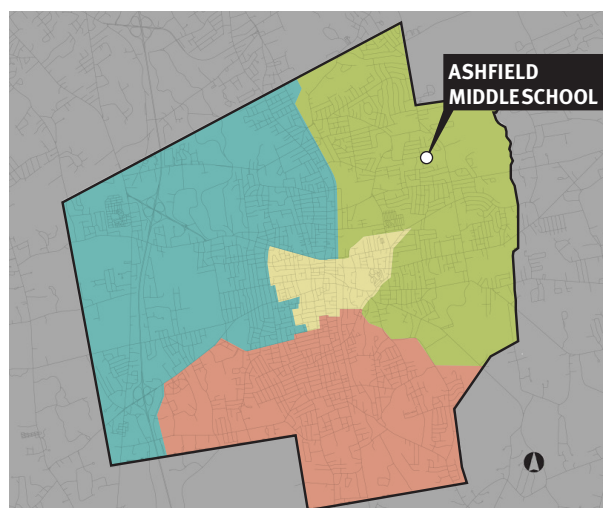
S-17



Ashfield Middle School

225 Coe Road
Brockton, MA 02302

S-18



LOCATION MAP



AERIAL PHOTO



WEST ELEVATION

FACILITIES INFORMATION

DEPARTMENT	School
BUILDING USE	Middle 6–8
SCHOOL ZONE	Northeast
YEAR(S) BUILT	1965, 2009
NUMBER OF CLASSROOMS	30*

SITE & BUILDING AREA

SITE AREA	14.25 Acres
BUILDING AREA	63,100 GSF
MODULAR CLASSROOM AREA	3,875 GSF
TOTAL SCHOOL AREA	66,975 GSF

SCHOOL YEAR 2017/18

ENROLLMENT DATA	Students	Classes per grade
GRADE 6	167	7
GRADE 7	163	7
GRADE 8	174	7
CITY RESOURCE ROOM (CRR)		2
TOTAL	504	23*

*includes 4 modular classrooms

KEY PROGRAMS

	Haitian Sheltered English Immersion (SEI/TBE)
	Low-Incidence Sheltered English Immersion (SEI)
	Special Education City Resource Rooms (CRR)(two classrooms)
GRADE 6–8	Special Education Emotional Inclusion (EI) (one classroom)

Ashfield Middle School



BUILDING OVERVIEW

The Ashfield Middle School is in the Northeast Zone neighborhood. It has a Grade 6–8 middle school population. The building was constructed in 1965 and is similar in floor plan configuration, building age, and design to the Brookfield School (Northeast Zone) and the Hancock School (Northwest Zone). The differences include that Ashfield School is a middle School, whereas Hancock School and Brookfield School are both elementary schools.

The structure is primarily a one-story building on a flat site surrounded by trees with the main entry located on the west elevation. There is a second floor that is located above the east wing that is only accessible by stairs at either end of the classroom bar.

In Fiscal Year 2014, the Brockton School District submitted a Statement of Interest (SOI) to the MSBA for Ashfield School facility improvements. It was successfully invited to the Accelerated Repair Program to provide updates to the building, including a new roof and boiler in 2016.

The building currently has a modular structure that is located in the middle of the U-shaped building. It is estimated to be more than 20 years old and contains four classrooms and two bathrooms that have reached the end of their useful life. The interior has evidence of ongoing leaking from the roof and the exterior siding is deteriorating and rotting, with reports of animals occupying the space below the modular.

The overall structure is in poor condition with moderate to significant wear and tear on the interior. The building is in need of a considerable renovation, site improvements, ADA upgrades, a permanent classroom addition(s) solution, and a fire suppression system.

SITE INFORMATION

TOPOGRAPHY	Flat
LOCATED IN A FLOOD ZONE	No
WETLANDS ON SITE	Yes
HISTORIC DESIGNATION	No
ORIENTATION OF BUILDING	Main Entry faces West
NEIGHBORHOOD WALK SCORE	27 Car-Dependent
NEIGHBORHOOD TRANSIT SCORE	25 Some Transit
EST. COMMUTE TO DOWNTOWN BROCKTON	8 minutes by car 13 minutes by bicycle 45 minutes walking

Ashfield Middle School



SUMMARY OF FINDINGS

- The MSBA Space summary template guidelines indicate that **Middle school general classroom sizes** (Grades 6–8) should be in a range of 850 to 950 square feet with a maximum of 23 students per classroom. The Ashfield Middle School for School Year 2017/18 has an average enrollment of 23 students per classroom for 6th grade, 23 students for 7th grade, and 24 students for 8th grade. This demonstrates that a select number of classrooms exceeds the recommended count and suggests that the school is partially operating above full capacity per MSBA commendations.
- Due to the condition and age of the **modular**, a solution for a permanent structure should be reviewed.
- Due to the condition and age of the **interior finishes and materials** throughout, future upgrades to the facility should consider an interior renovation
- The building currently is not fully **ADA compliant** as there is no accessible means to access the second floor. The addition of an elevator would be required to meet ADA and MAAB compliance in this area.
- Interior 9" x 9" **floor tiles** located throughout the building are worn and chipped. The flooring should be tested for asbestos prior to any renovation or maintenance that would disturb or remove the material.
- The building currently does not have a **sprinkler system**, nor heat detection throughout. Consideration should be given to adding a fire suppression system. At a minimum, smoke/heat detectors should be installed in all areas.
- The **handrails at the stairs** do not comply with current code due to large gaps at the spindles.
- The **bathroom plumbing fixtures** are dated and are possibly original to the building. Future upgrades to the building should consider using low flow fixtures. The student toilet rooms do not offer accessible stalls or fixtures, and the quantity of bathrooms for the population should be evaluated per current plumbing code.
- **Lighting** is currently operated by wall mounted switches. Occupancy sensors in classrooms, offices, bathrooms, and storage areas can help with energy efficiency and operation.

Ashfield Middle School

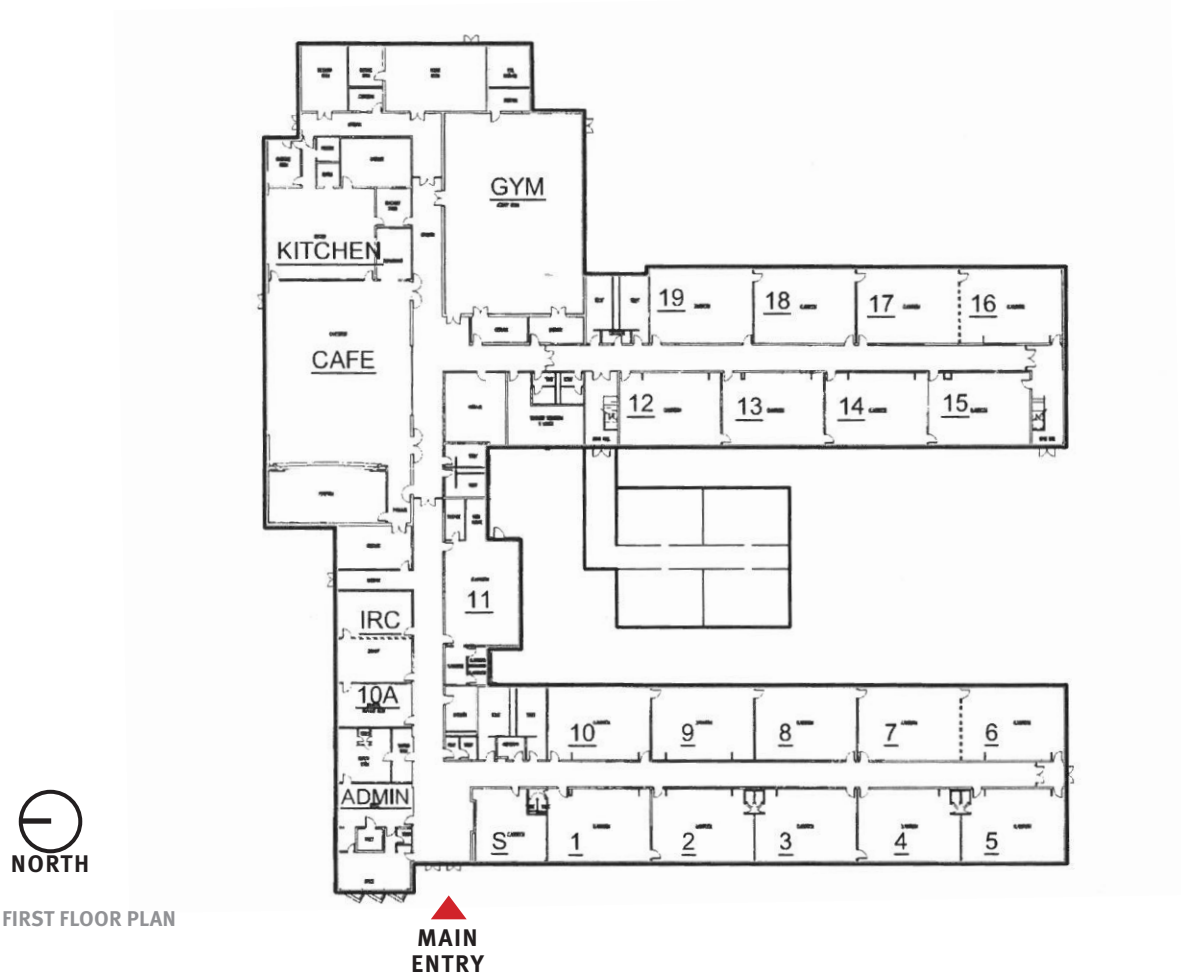
● Facility Priority 2.8

S-18

		PRIORITY	4	3	2	1	
		VISIT DATE: February 21, 2017	GOOD	ADEQUATE	MARGINAL	POOR	COMMENTS
SITE	PARKING		✓				Asphalt, some potholes/ cracking
	LANDSCAPING				✓		Mud, no grass, poor drainage. There is a community playground on site, not used by the school
	SIDEWALKS				✓		Asphalt sidewalks, crumbling, no curbing
	OTHER						
EXTERIOR	ROOF		✓			✓	New 2016 rubber membrane for original building. Leaks observed in the modular
	GUTTERS/DOWNSPOUT		✓				New, replaced last year (2016)
	WALLS		✓			✓	Original brick masonry at original building. Siding at modular in disrepair, old, damaged
	WINDOWS		✓			✓	Original double pane, newer insulated hopper windows at original building. Older windows at modular classrooms
	DOORS		✓			✓	Newer metal doors at original building, older in modular
	SECURITY		✓				Exterior cameras, lighting
	FOUNDATIONS						
	OTHER						
INTERIOR	FLOORS					✓	9" x 9" tiles, cracking, chipping, missing. Base is peeling.
	WALLS		✓				Painted CMU
	CEILINGS					✓	Older 2' x 4' ACT, sagging, stained . Some newer 2' x 2' ACT.
	DOORS		✓				Older, original. Hardware and clearances not accessible with ADA.
	OTHER						Gym in good condition
TOILET ROOMS	FLOORS					✓	Mosaics, cracked, missing
	WALLS					✓	Tiles and painted CMU. Holes from previous plumbing repairs. Metal floor mounted partitions, rusted.
	CEILINGS					✓	Missing ACT tiles
	FIXTURES		✓			✓	Some possibly original. Non-ADA accessible surface mounted sinks
	TOILET PARTITIONS		✓			✓	Newer metal partitions in some areas. Some older/original metal, rusting
KITCHEN	FLOORS		✓				Terra cotta tile
	WALLS		✓				Glazed CMU
	CEILINGS					✓	Older tiles, cracking/ crumbling/ missing
	GREASE TRAP		✓				Serviced/ cleaned
	KITCHEN EQUIPMENT		✓				New, fully functional
	OTHER						Use Styrofoam for lunches; Dish room not used
ELEC	SERVICE/DISTRIB.		✓				Switch gear with circuit breakers/ panel boards. Emergency generator.
	LIGHTING/POWER				✓		Some LEDs in hallway
HVAC	SUPPLY/DISTRIB.		✓				Natural gas heating, 3 boilers, new in 2016
	UNIT SOURCES		✓				Window radiator unit heaters, hot water heat
FIRE	SPRINKLERS					✓	None, no sprinklers
	DETECTION		✓				Heat/ smoke detectors inconsistently located throughout. Fire Alarm panel located at front lobby.
			POSSIBLE	NO	MAYBE	UNKNOWN	
CODE	ASBESTOS		✓				Assumed in 9" x 9" floor tiles and pipes
	LEAD					✓	Unknown
	HANDICAP-ACCESSIBLE		✓				Bathrooms non- ADA accessible (turning radius, door and fixture clearances/ thresholds, hardware, fixtures, accessories). No ADA access to second floor
	OTHER						

Ashfield Middle School

S-18



FIRST FLOOR PLAN

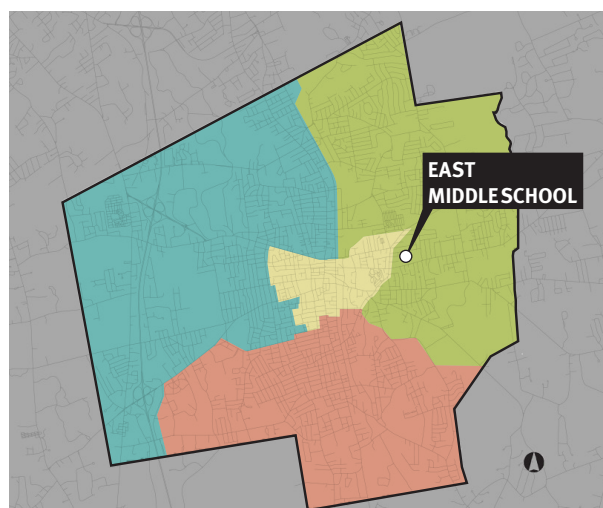


SECOND FLOOR PLAN

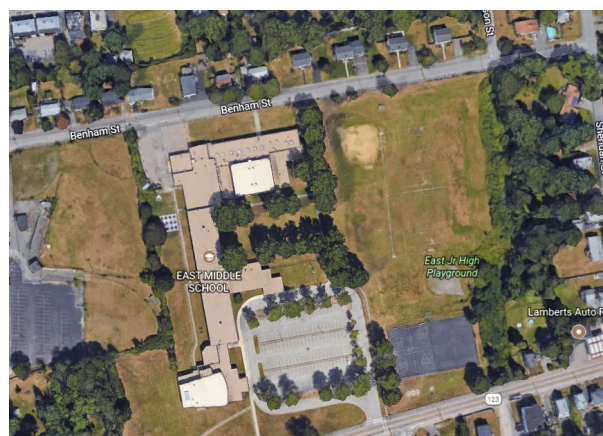
East Middle School

464 Centre Street
Brockton, MA 02302

S-19



LOCATION MAP



AERIAL PHOTO



WEST ELEVATION

FACILITIES INFORMATION

DEPARTMENT	School
BUILDING USE	Middle 6–8
SCHOOL ZONE	Northeast
YEAR(S) BUILT	1958, 2012
NUMBER OF CLASSROOMS	37

SITE & BUILDING AREA

SITE AREA	6 Acres
BUILDING AREA	96,516 GSF
MODULAR CLASSROOM AREA	N/A
TOTAL SCHOOL AREA	96,516 GSF

SCHOOL YEAR 2017/18

ENROLLMENT DATA	Students	Classes per grade
GRADE 6	146	6
GRADE 7	161	7
GRADE 8	179	7
CITY RESOURCE ROOMS (CRR)		2
AUTISM SPECTRUM DISORDER (ASD)		1
TOTAL	486	23

KEY PROGRAMS

	Cape Verdean Sheltered English Immersion (SEI/TBE)
	Special Education City Resource Rooms (CRR)(two classrooms)
	Special Education Autism Spectrum Disorder (ASD) (one classroom)
GRADES 6–8	Special Education Inclusion Strands (three classrooms)

East Middle School



BUILDING OVERVIEW

East Middle School is located in the Northeast Zone neighborhood. It has grade 6–8 middle school population.

The Auditorium space is utilized by the school and also the community, and is an important program element to the building and neighborhood. The room finishes and seating are original and would benefit from a full renovation to bring the room to today’s standards.

The building was constructed in 1958 and is primarily a one-story building on a flat site, with the main entry located on the east elevation. There is a second floor that is located above the north-south classroom portion of the building that is only accessible by stairs at either end of the classroom bar.

East Middle School is in poor condition with moderate to significant wear and tear on the interior and exterior. The building is in need of a considerable renovation, accessibility upgrades, a renovated auditorium, and a working fire suppression system.

SITE INFORMATION

TOPOGRAPHY	Flat
LOCATED IN A FLOOD ZONE	No
WETLANDS ON SITE	Yes
HISTORIC DESIGNATION	No
ORIENTATION OF BUILDING	North-South orientation with an East Main Entry
NEIGHBORHOOD WALK SCORE	62 Somewhat Walkable
NEIGHBORHOOD TRANSIT SCORE	39 Some Transit
EST. COMMUTE TO DOWNTOWN BROCKTON	3 minutes by car 6 minutes by bicycle 19 minutes walking

East Middle School



SUMMARY OF FINDINGS

- The MSBA Space summary template guidelines indicate that Middle school general classroom sizes (Grades 6–8) should be in a range of 850 to 950 square feet with a maximum of 23 students per classroom. The East Middle School for School Year 2017/18 has an average enrollment of 24 students per classroom for 6th grade, 23 students for 7th grade, and 25 students for 8th grade. This demonstrates that the number of students per classroom exceeds the recommended count and suggests that the school is operating above MSBA recommended capacity.
- Due to the condition and age of the **Auditorium interior finishes**, future upgrades to the original seating and finishes should be considered.
- Due to the condition and age of the **interior finishes and materials** throughout, future upgrades to the facility should consider an interior renovation.
- The building currently is not fully **ADA compliant** as there is no accessible means to access the second floor. The addition of an elevator would be required to meet ADA and MAAB compliance in this area.
- Interior 9" x 9" **floor tiles** located throughout the building are worn and chipped. The flooring should be tested for asbestos prior to any renovation or maintenance that would disturb or remove the material.
- The building currently does not have a **sprinkler system**, or heat detection devices. Currently the building has the outdated 1957 fire alarm pull stations. Future upgrades to the building should consider adding a fire suppression system and heat detection devices to meet current codes.
- The **bathroom plumbing fixtures** are dated and are possibly original to the building. Future upgrades to the building should consider using low flow fixtures. The student toilet rooms do not offer accessible stalls or fixtures, and the quantity of bathrooms for the population should be evaluated per current plumbing code..
- **Lighting** is currently operated by wall mounted switches. Occupancy sensors in classrooms, offices, bathrooms, and storage areas can help with energy efficiency and operation.
- The **handrails at the stairs** do not comply with current code due to large gaps at the spindles.
- There was comment from the staff that there is a **lack of air circulation** throughout the building. It was noted that the building overheats, and that rooms are uncomfortably hot.
- There is a classroom that was formerly used for **Home Economics** programming. This classroom has several kitchen layouts which are no longer used. Removal of these stations and capping services can create more usable classroom space in the building.

East Middle School

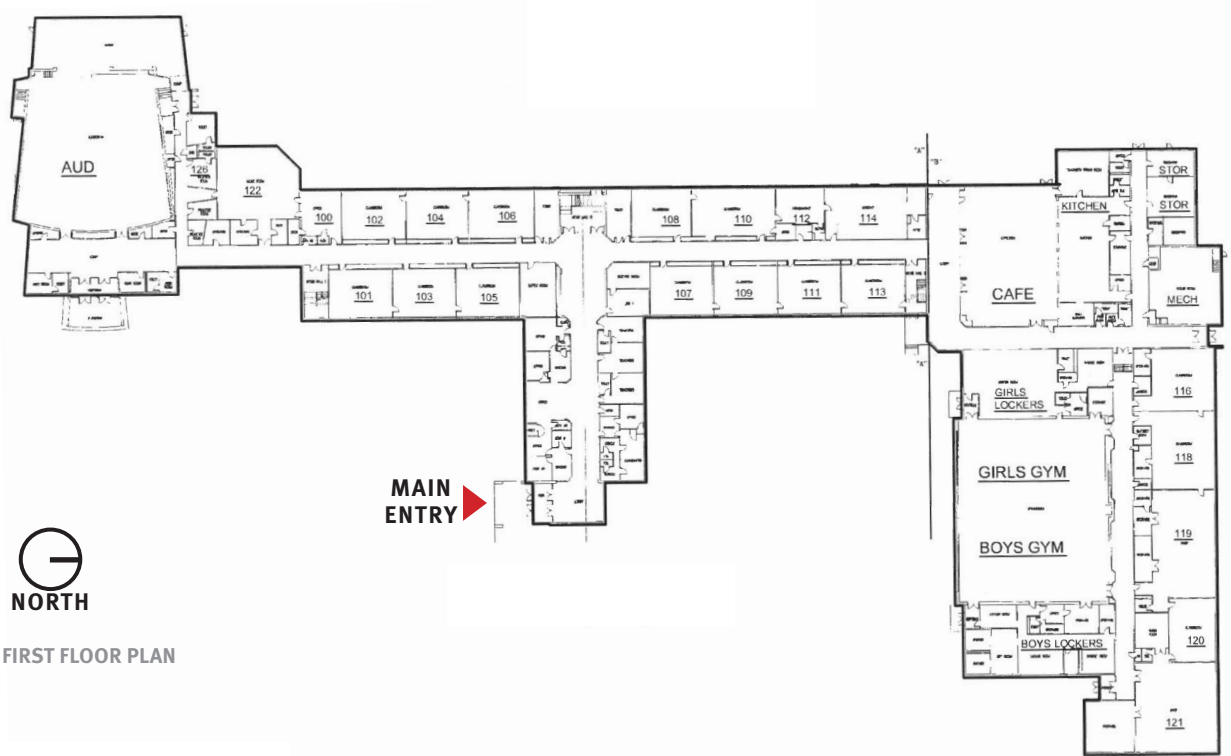
● Facility Priority 3.0

S-19

		PRIORITY	4	3	2	1	
			GOOD	ADEQUATE	MARGINAL	POOR	
VISIT DATE: February 23, 2017							COMMENTS
SITE	PARKING	✓		✓			Asphalt, main parking lot in good condition, service parking lot cracked, potholes
	LANDSCAPING	✓					Grass, no curbing
	SIDEWALKS				✓		Asphalt, some crumbling, cracking
	PLAY GROUND						Fields currently flood
EXTERIOR	ROOF	✓					Replaced in 2012, funded by a "green grant"
	GUTTERS/DOWNSPOUT	✓					Newer
	WALLS				✓		Brick masonry, missing in sections from removed air in-take grills
	WINDOWS				✓		Older. Functional, not well insulated. Exterior flashing shows signs of deterioration.
	DOORS	✓		✓			Some have been replaced within 5 years
	SECURITY	✓					Cameras and alarms. Reported concern due to plexiglass openings at interior doors.
	FOUNDATIONS	✓			✓		Concrete crumbling at bulkhead
	OTHER						
INTERIOR	FLOORS	✓			✓		9" x 9" floor tile through majority of building; cracking, missing. 2nd floor recently replaced with 12" x 12" Tile. Carpet buckling and ripping. Terrazo at entry in good condition. Gym floor replaced in 2012.
	WALLS				✓		Painted. Plaster needs to be patched in areas.
	CEILINGS	✓			✓		Newer 2' x 2' ACT in some areas. Older 2' x 4' and 9" x 9" in some classrooms and other areas
	DOORS				✓		Wood with plexiglas openings. Door hardware non-ADA accessible
	OTHER						
TOILET ROOMS	FLOORS				✓		Mosaic tiles, missing and cracked
	WALLS	✓					Glazed CMU
	CEILINGS				✓		Painted
	FIXTURES				✓		Original floor mount toilets and urinals, non-ADA accessible counter mounted sinks
	PARTITIONS		✓				New painted CMU walls with metal doors
KITCHEN	FLOORS				✓		9" x 9" tiles, worn, cracked
	WALLS	✓					Glazed CMU
	CEILINGS		✓				Painted, skylights have been covered
	GREASE TRAP	✓					Serviced
	KITCHEN EQUIPMENT	✓					Reported that the appliances are scheduled to be replaced
	OTHER						
ELEC	SERVICE/DISTRIB.				✓		Reportedly suggested that more amps are needed and that there is not enough outlet coverage in the classrooms and building
	LIGHTING/POWER						Fluorescent
	OTHER				✓		No existing generator. Currently use battery backup power.
HVAC	SUPPLY/DISTRIB.				✓		Natural Gas, forced hot water. No A/C. Boilers replaced in 2012
	UNIT SOURCES			✓			Several window units
FIRE	SPRINKLERS				✓		None, no sprinkler system
	DETECTION				✓		No observed detectors. Older, original 1957 fire alarm pull station system in place
			POSSIBLE	NO	MAYBE	UNKNOWN	
CODE	ASBESTOS	✓					Assumed in 9" x 9" floor tile throughout
	LEAD					✓	Unknown
	HANDICAP-ACCESSIBLE		✓				Ganged student bathrooms not accessible (turning radius, door and fixture clearances/ thresholds, hardware, accessories). No elevator or access to 2nd floor. Classrooms do not meet door clearances. Door hardware not ADA accessible.
	OTHER						

East Middle School

S-19



FIRST FLOOR PLAN

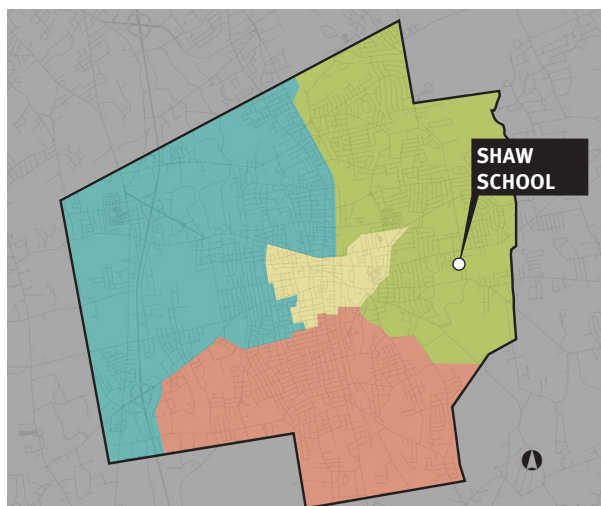


SECOND FLOOR PLAN

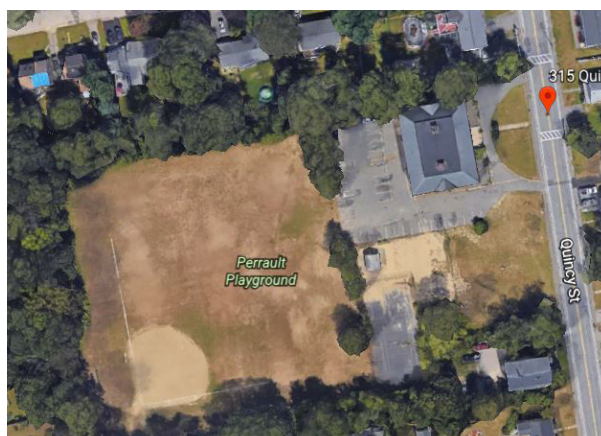
Shaw School (closed)

311/315 Quincy Street
Brockton, MA 02302

S-20



LOCATION MAP



AERIAL PHOTO



EAST ENTRY

FACILITIES INFORMATION

DEPARTMENT	School
BUILDING USE	Closed
SCHOOL ZONE	Northeast
YEAR(S) BUILT	1889 1930 Addition
NUMBER OF CLASSROOMS	N/A

SITE & BUILDING AREA

ASSESSOR PARCEL ID	143-099 143-100
SITE AREA	1 Acre
BUILDING AREA	18,900 SF *
MODULAR CLASSROOM AREA	N/A
TOTAL SCHOOL AREA	Unknown

* estimated from Assessor's database

SCHOOL YEAR 2017/18

ENROLLMENT DATA	Students	Classes per grade
TOTAL	N/A	N/A

KEY PROGRAMS

N/A

Shaw School (closed)



BUILDING OVERVIEW

The Shaw School is located in the Northeast Zone. It has been closed and vacant for some time. The original building was constructed in 1889 as noted on a date stone above the north entry while 1930 date stone is located above the south.

The building is a two-story structure on a sloped site with a floor plan that is symmetrical around the center circulation axis. Water and heat services inside the building have been shut off. The primary use for the building currently is for furniture storage for the schools department throughout the district. Toys and decorations remain in the attic from when the building was used for the Smart Start program. A calendar from the year 2007 was discovered in a closet that may identify the last time the building was occupied.

The overall condition of the building is unsatisfactory and unsafe. The building is in need of a considerable renovation, major repair to the exterior, site improvements, ADA upgrades, plumbing/bathroom reconstruction, MEP systems improvements, and a fire suppression system. There is no floor plan on file.

SITE INFORMATION

TOPOGRAPHY	Sloped
LOCATED IN A FLOOD ZONE	No
WETLANDS ON SITE	No
HISTORIC DESIGNATION	Form B eligibility filed in September 2013
ORIENTATION OF BUILDING	Entry on East
NEIGHBORHOOD WALK SCORE	61 Somewhat Walkable
NEIGHBORHOOD TRANSIT SCORE	30 Some Transit
EST. COMMUTE TO DOWNTOWN BROCKTON	6 minutes by car 10 minutes by bicycle 36 minutes walking

Shaw School (closed)



SUMMARY OF FINDINGS

- The condition and age of the **interior finishes** are in disrepair. Existing plaster walls are crumbling, paint is peeling throughout, and flooring is damaged.
- The building currently is not **ADA compliant** as there is no elevator or ramp access to the building.
- A **historic Form B** was filed on September 2013 with the Massachusetts Historical Commission. The building is not on the National Register of Historic Places.
- The building currently does not have a **sprinkler system** or heat detection devices. Future upgrades to this building should consider adding a fire suppression system and heat detection devices to meet current codes.
- The **bathroom plumbing fixtures** are dated and are possibly original to the building. Future upgrades to the building should consider using low flow fixtures. The toilet rooms do not offer accessible stalls or fixtures. Once programming for the building is determined, the quantity of bathrooms for the population should be evaluated per current plumbing code.
- **Lighting** is currently operated by wall mounted switches. Occupancy sensors in classrooms, offices, bathrooms, and storage areas can help with energy efficiency and operation.
- The **handrails at the stairs** do not comply with current code due to large gaps at the spindles.
- An evaluation of the **storage inventory** on site should take place.

Shaw School (closed)

● Facility Priority 1.2

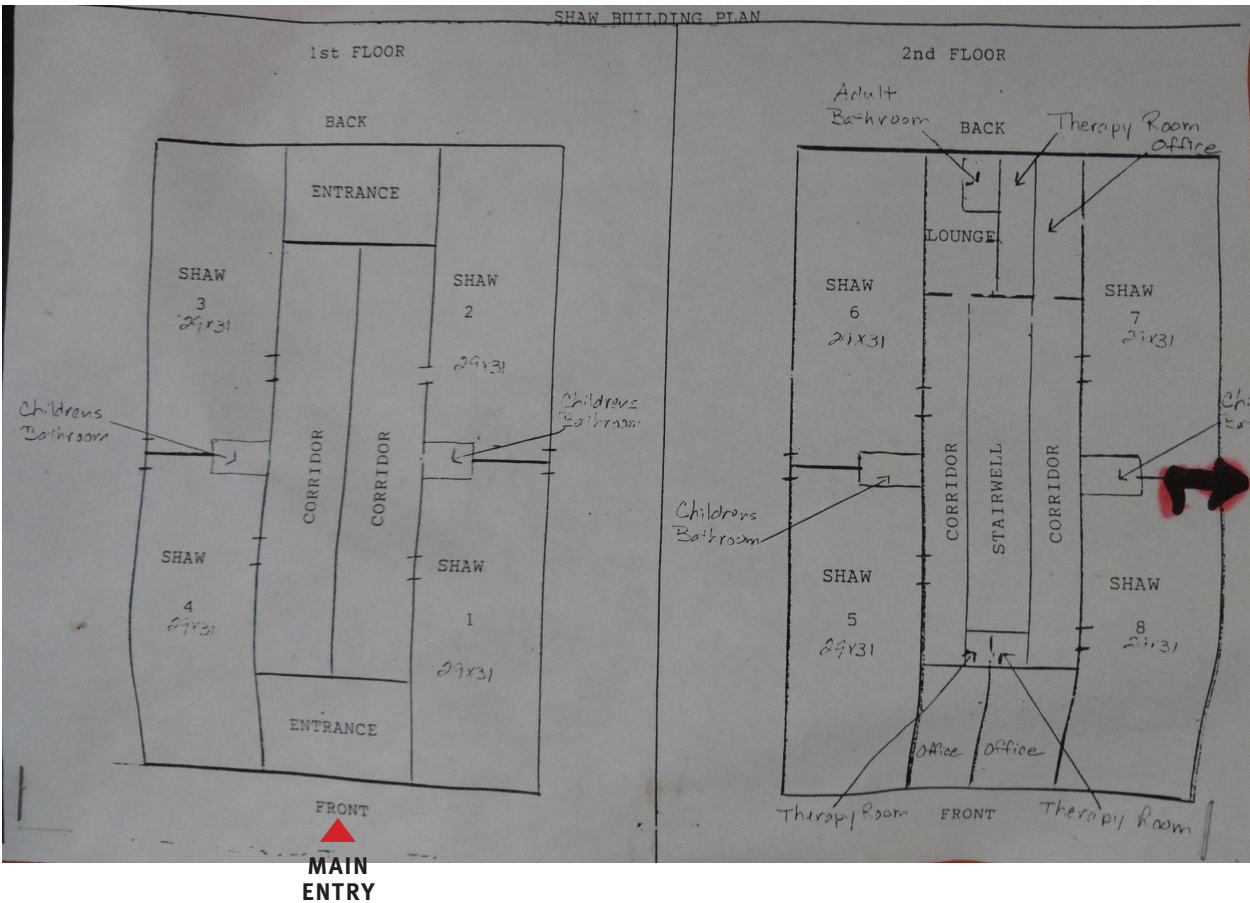
S-20

		PRIORITY	4	3	2	1	
		VISIT DATE: April 18, 2017	GOOD	ADEQUATE	MARGINAL	POOR	COMMENTS
SITE	PARKING					✓	Asphalt; sink holes, pot holes, in disrepair
	LANDSCAPING					✓	Overgrown, not maintained
	SIDEWALKS					✓	Concrete; cracking, non-ADA accessible slopes and surfaces
	OTHER						
EXTERIOR	ROOF	✓					No noticeable leaks observed in attic
	GUTTERS/DOWNSPOUT					✓	Copper; pieces disconnected, lower portions missing in some areas
	WALLS					✓	Brick masonry; spalling, crumbling, mortar lacking in some areas
	WINDOWS					✓	Old, inefficient, missing seals, some unable to close/ inoperable, broken glass.
	DOORS					✓	Old, inefficient
	SECURITY			✓			Building is alarmed. There are no cameras.
	FOUNDATIONS			✓			Granite foundation; some chipping and cracking
	OTHER						
INTERIOR	FLOORS					✓	Wood and Carpet. Wood floors could be restored.
	WALLS					✓	Painted lath and plaster; peeling, crumbling
	CEILINGS					✓	Original tin ceiling; painted; peeling. Could be restored.
	DOORS						
	OTHER						
TOILET ROOMS	FLOORS						Toilet rooms decommissioned, water shut off.
	WALLS						
	CEILINGS						
	FIXTURES						
	PARTITIONS						
KITCHEN	FLOORS						No kitchen or cafeteria
	WALLS						
	CEILINGS						
	GREASE TRAP						
	KITCHEN EQUIPMENT						
	OTHER						
ELEC	SERVICE/DISTRIB.		✓				Circuit breakers
	LIGHTING/POWER					✓	Fluorescent lamps, not working. Some original fixtures.
HVAC	SUPPLY/DISTRIB.					✓	Two empty oil tanks and one boiler in basement.
	UNIT SOURCES					✓	Hot water radiators throughout.
FIRE	SPRINKLERS					✓	None, no sprinklers
	DETECTION		✓				Smoke detectors observed in the basement.
			POSSIBLE	NO	MAYBE	UNKNOWN	
CODE	ASBESTOS	✓					Assumed at pipes, flooring
	LEAD					✓	Unknown
	HANDICAP-ACCESSIBLE		✓				Stairs at front entry, no ramp, front of site is steep, no interior elevator, bathrooms and clearances non- ADA accessible throughout
	OTHER						

Shaw School (closed)

311/315 Quincy Street
Brockton, MA 02302

S-20



NORTH

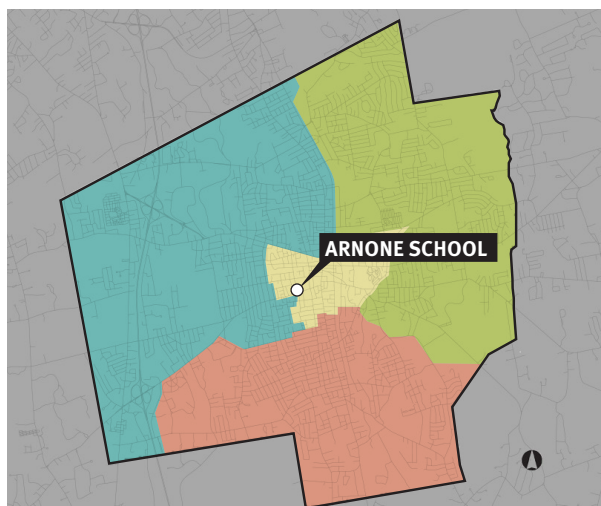
FIRST FLOOR PLAN

SECOND FLOOR PLAN

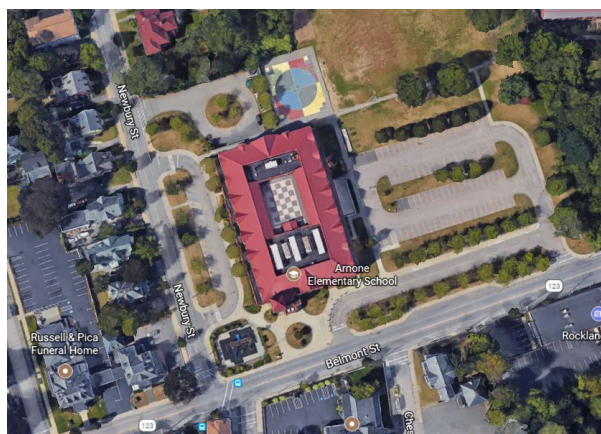
Arnone School

135 Belmont Street
Brockton, MA 02301

S-21



LOCATION MAP



AERIAL PHOTO



SOUTHWEST CORNER

FACILITIES INFORMATION

DEPARTMENT	School
BUILDING USE	Elementary K-5
SCHOOL ZONE	Citywide
YEAR(S) BUILT	2001
NUMBER OF CLASSROOMS	48

SITE & BUILDING AREA

SITE AREA	6.73 Acres
BUILDING AREA	95,500 GSF
MODULAR CLASSROOM AREA	N/A
TOTAL SCHOOL AREA	95,500 GSF

SCHOOL YEAR 2017/18

ENROLLMENT DATA	Students	Classes per grade
KINDERGARTEN	104	6
GRADE 1	122	6
GRADE 2	132	6
GRADE 3	143	6
GRADE 4	119	5
GRADE 5	130	5
TOTAL	750	34

KEY PROGRAMS

GRADES K-2	Special Education Emotionally Impaired (EI)(three classrooms)
GRADES K-5	Special Education Inclusion Classrooms (seven classrooms)
	After-school program until 6pm

Arnone School



BUILDING OVERVIEW

The Arnone School is a K–5 elementary school in the Brockton Citywide Zone neighborhood. Built in 2001, the building is one of the more recent ones built. The architecture, square footage, floor plan configuration, and design are very similar to the Plouffe Academy (completed in 1998), also in the Citywide Zone neighborhood, and the Angelo School (completed in 1999) in the Northwest Zone neighborhood.

The structure is three-stories with the main entry located on the first floor of the south elevation, along Belmont Street. On the first and second floor, the floor plan is configured with a double-loaded corridor loop, with support spaces, a bathroom core, and the gym located in the middle. The third floor plan has a double loaded corridor configuration with a central courtyard/ patio. The Cafetorium is located on the first floor and opens outside to the east.

Unlike Plouffe and Angelo, Arnone School has a 150-seat theater that is used by the community for night meetings while the remainder of the building is locked and inaccessible to the public.

The building is in excellent condition, well maintained, with only normal scheduled maintenance required.

SITE INFORMATION

TOPOGRAPHY	Flat
LOCATED IN A FLOOD ZONE	Yes
WETLANDS ON SITE	No
HISTORIC DESIGNATION	No
ORIENTATION OF BUILDING	North-South orientation with main Entry facing South
NEIGHBORHOOD WALK SCORE	81 Very Walkable
NEIGHBORHOOD TRANSIT SCORE	46 Some Transit
EST. COMMUTE TO DOWNTOWN BROCKTON	1 minutes by car 2 minutes by bicycle 10 minutes walking

Arnone School



SUMMARY OF FINDINGS

- The MSBA Space summary template guidelines indicate that **Elementary school general classroom sizes** (Grades 1–5) should be in a range of 900 to 1,000 square feet with a maximum of 23 students per classroom. The Arnone School for School Year 2017/18 has an enrollment between 20 to 28 students per classroom for grades 1–5. This demonstrates that the number of students per classroom exceeds the recommended count and suggests that the school is operating above MSBA recommended capacity.
- There are original **drinking fountains** throughout the school. With the addition of newer Elkay filtered water stations, the original drinking fountains could be removed as long as the quantity meets current plumbing code requirements.
- The broad loom **carpet** in the Administration area is assumed to be original and showing signs of wear and tear. Consider replacing the carpet in these areas.
- The existing **toilet partitions** are currently metal which is observed to be rusting, or new CMU with temporary wood doors. Future upgrades should consider using vandal-resistant HDPE (high-Density Polyethylene) partitions.
- There are reported **occasional leaks** in the roof on the flat portion of the roof in the cafeteria. Consider investigating the location of the water penetration.
- The **bathroom plumbing fixtures** are newer and in excellent condition. Future upgrades should consider using water conservation fixture fittings.

Arnone School

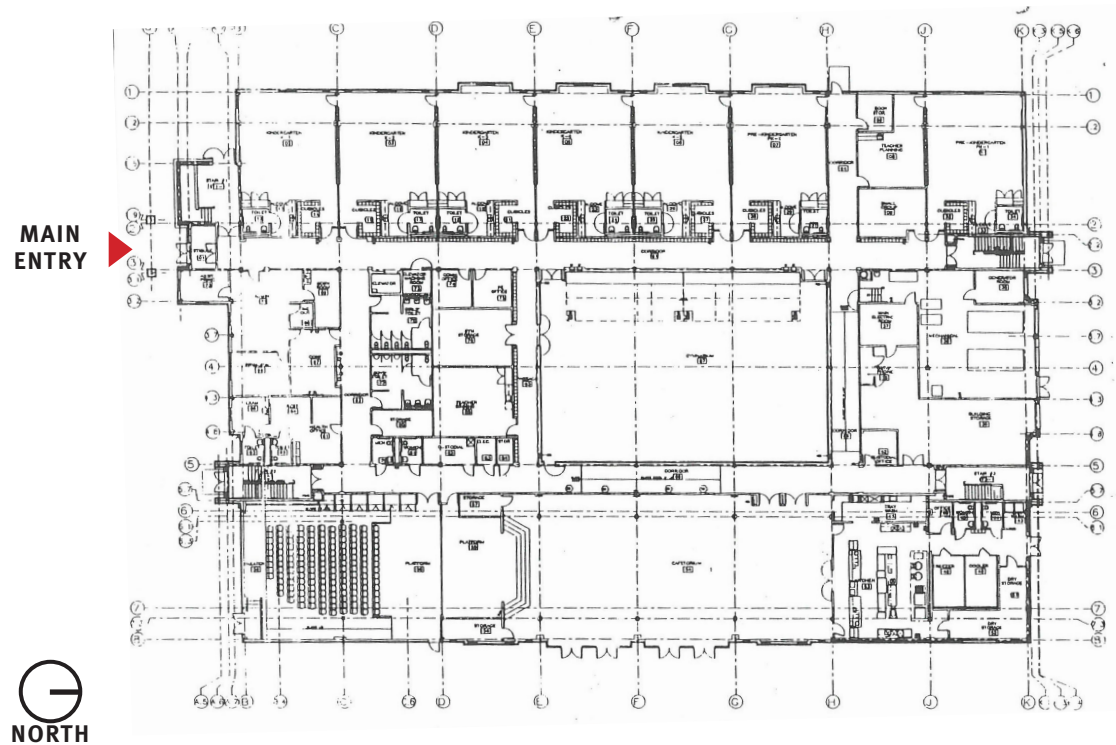
● Facility Priority 3.6

S-21

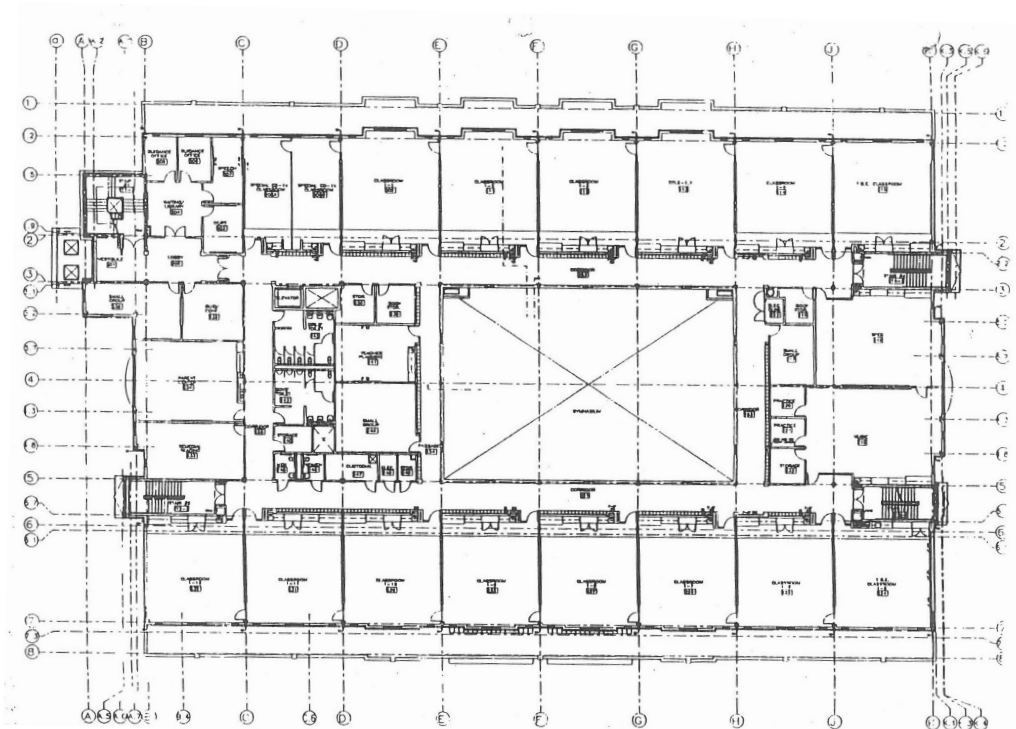
		PRIORITY	4	3	2	1	
		VISIT DATE: April 13, 2017	GOOD	ADEQUATE	MARGINAL	POOR	COMMENTS
SITE	PARKING		✓				Newer asphalt, some potholes and cracking
	LANDSCAPING		✓		✓		Grass, trees, flowers, planter boxes. Currently irrigate in the summer with sprinklers. Mortar failing at some brick site walls.
	SIDEWALKS			✓			Newer concrete, some cracking
	PLAY GROUND		✓				One newer age appropriate playground
EXTERIOR	ROOF			✓	✓		Newer metal standing seam roof. Leaks observed along the flat portion in cafeteria ceiling
	GUTTERS/DOWNSPOUT		✓				Newer metal
	WALLS			✓			Newer brick with mortar missing at some locations
	WINDOWS		✓				Newer double pane, insulated, operable
	DOORS		✓				Newer metal doors
	SECURITY		✓				Newer exterior cameras
	FOUNDATIONS		✓				Newer concrete and masonry
	OTHER						
INTERIOR	FLOORS		✓			✓	12"x 12" VCT throughout, rubber stair treads. Carpet in library and some classrooms; buckling, taped, and ripping
	WALLS		✓				Newer painted CMU
	CEILINGS		✓				Newer 2' x 4' ACT
	DOORS		✓				Newer wood with metal frames and sidelights
	OTHER						
TOILET ROOMS	FLOORS		✓				Newer mosaic tile
	WALLS		✓				Newer painted CMU
	CEILINGS		✓				Newer 2' x 4' ACT
	FIXTURES		✓				Newer wall mounted sinks, toilets, and urinals. Some toilet rooms have counter mounted sinks.
	PARTITIONS				✓		Unpainted wood doors, CMU partitions. Some have metal partitions and doors that are scheduled to be replaced with CMU and wood
KITCHEN	FLOORS		✓				Newer epoxy
	WALLS		✓				Newer painted
	CEILINGS		✓				Newer washable 2' x 4' ACT
	GREASE TRAP		✓				Serviced
	KITCHEN EQUIPMENT		✓				Newer appliances all in working order
	OTHER						Dishwasher was recently removed/ dish room abandoned. Use Styrofoam trays.
ELEC	SERVICE/DISTRIB.		✓				Switchgear and circuit breaker panels. Emergency generator.
	LIGHTING/POWER		✓				Majority of switches are on occupancy sensors.
HVAC	SUPPLY/DISTRIB.		✓				Two newer boilers. Natural gas fuel
	UNIT SOURCES		✓				Forced hot air, A/C
FIRE	SPRINKLERS		✓				Located throughout
	DETECTION		✓				Fire panel. Heat/ smoke detectors located throughout.
			POSSIBLE	NO	MAYBE	UNKNOWN	
CODE	ASBESTOS		✓				None assumed
	LEAD			✓			None assumed
	HANDICAP-ACCESSIBLE		✓				Elevator and bathrooms appear ADA accessible
	OTHER						

Arnone School

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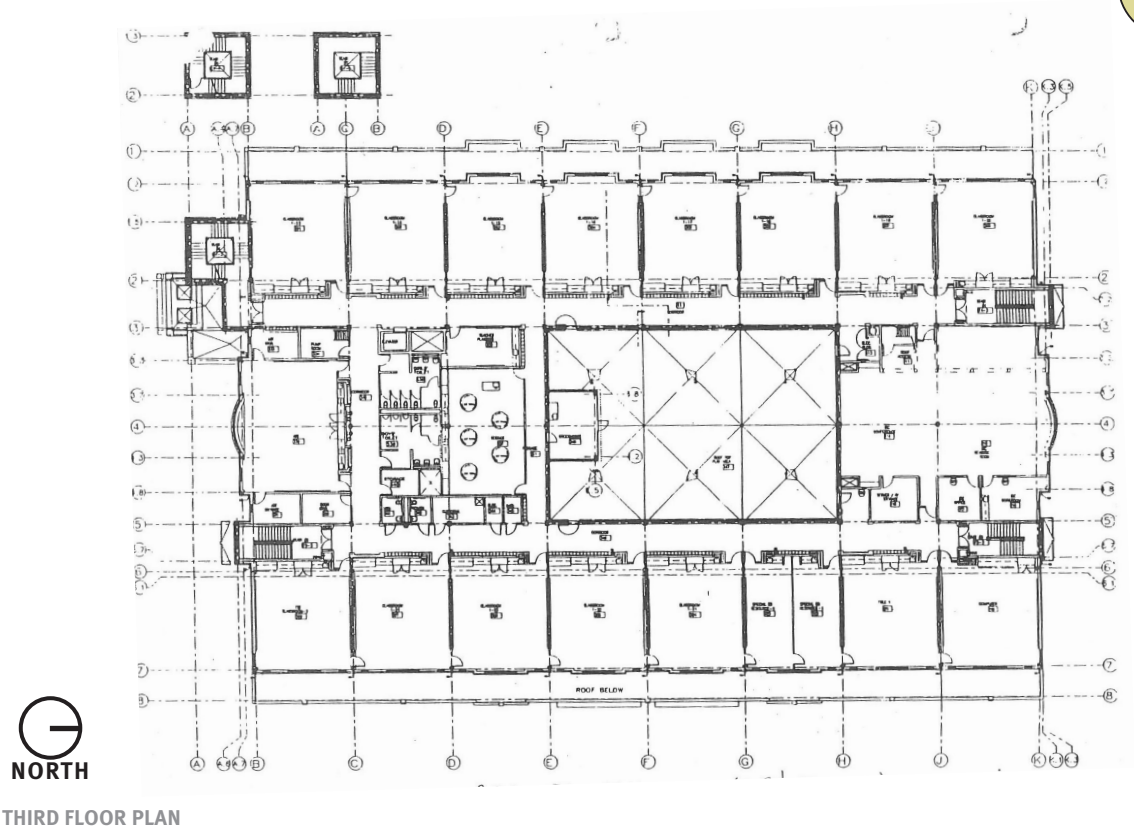
FIRST FLOOR PLAN



SECOND FLOOR PLAN

Arnone School

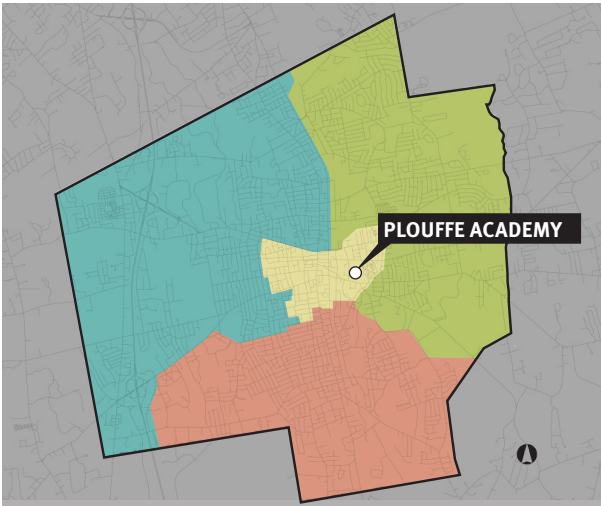
S-21



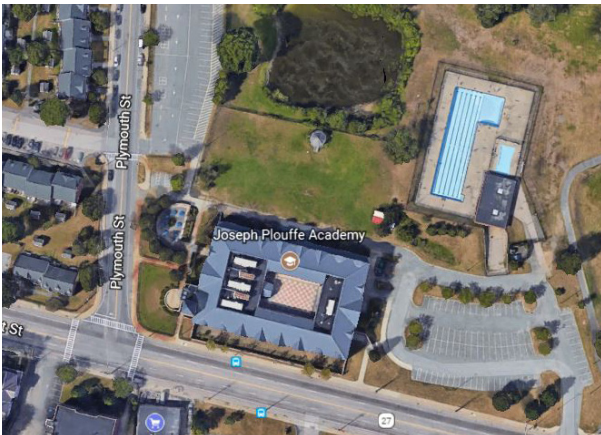
Plouffe Academy

250 Crescent Street
Brockton, MA 02302

S-22



LOCATION MAP



AERIAL PHOTO



WEST ENTRY

FACILITIES INFORMATION

DEPARTMENT	School
BUILDING USE	Middle 6–8
SCHOOL ZONE	Citywide
YEAR(S) BUILT	1998
NUMBER OF CLASSROOMS	50

SITE & BUILDING AREA

SITE AREA	6.6 Acres
BUILDING AREA	95,500 GSF
MODULAR CLASSROOM AREA	N/A
TOTAL SCHOOL AREA	95,500 GSF

SCHOOL YEAR 2017/18

ENROLLMENT DATA	Students	Classes per grade
GRADE 6	236	9
GRADE 7	247	10
GRADE 8	229	9
TOTAL	712	28

KEY PROGRAMS

Spanish Sheltered English Immersion (SEI/TBE)
Two-way
Talented and Gifted
Special Education Autism Spectrum Disorder (ASD)(one classroom)
Special Education Life Skills (one classroom)
Special Education SLD (three classrooms)

Plouffe Academy



BUILDING OVERVIEW

The Plouffe Academy is in the Citywide Zone neighborhood. It has a grade 6–8 middle School population. The building is one of the newer schools in the district and was built in 1998. The architecture, square footage, floor plan configuration, building age, and design is very similar to the Arnone School, also in the Citywide Zone neighborhood, and the Angelo School in the Northwest Zone neighborhood.

The structure is three-stories, with the main entry located on the second floor of the west elevation. On levels one and two, the floor plan is configured with a double-loaded corridor loop, with support spaces, the bathroom core, and the gym located in the middle. The third floor plan has a double loaded corridor configuration with a central courtyard/patio. The Cafetorium is located on the first floor and opens outside towards the North.

Unlike Arnone School and Angelo School, Plouffe Academy is Middle School for grades 6-8, as opposed to an elementary School. Due to this older population, the toilet rooms located within 8 of the classrooms, which were intended for Kindergarten, are not used.

The building is in excellent condition, well maintained, with only normal scheduled maintenance required.

SITE INFORMATION

TOPOGRAPHY	Sloped
LOCATED IN A FLOOD ZONE	No
WETLANDS ON SITE	No
HISTORIC DESIGNATION	No
ORIENTATION OF BUILDING	East- West orientation with Main Entry facing West
NEIGHBORHOOD WALK SCORE	76 Very Walkable
NEIGHBORHOOD TRANSIT SCORE	46 Some Transit
EST. COMMUTE TO DOWNTOWN BROCKTON	1 minutes by car 2 minutes by bicycle 8 minutes walking

Plouffe Academy



SUMMARY OF FINDINGS

- The MSBA Space summary template guidelines indicate that **Middle school general classroom sizes** (Grades 6–8) should be in a range of 850 to 950 square feet with a maximum of 23 students per classroom. The Plouffe Academy for School Year 2017/18 has an average enrollment of 28 students per classroom for 6th grade, 24 students for 7th grade, and 25 students for 8th grade. This demonstrates that the number of students per classroom exceeds the recommended count and suggests that the school is operating above MSBA recommended capacity.
- There are original **drinking fountains** throughout the school. With the addition of newer Elkay filtered water stations, the original drinking fountains could be removed as long as the quantity meets current plumbing code requirements.
- The broad loom **carpet** in the Administration area is assumed to be original and showing signs of wear and tear. Consider replacing the carpet in these areas with carpet tile.
- The existing **toilet partitions** are currently metal which is observed to be rusting, or new CMU with temporary wood doors. Future upgrades should consider using vandal-resistant HDPE (high-Density Polyethylene) partitions.
- The mortar appears to be failing at a selection of the **masonry brick site walls**.
- At one stairway, there is an **evacuation chair** available in the area of refuge. A two-way communication system and additional door latches on the stairway doors would enhance the safety features of this system.
- There is **evidence of a leak** at the stair tower. Consider investigating the location of the water penetration.
- The **bathroom plumbing fixtures** are newer and in excellent condition.

Plouffe Academy

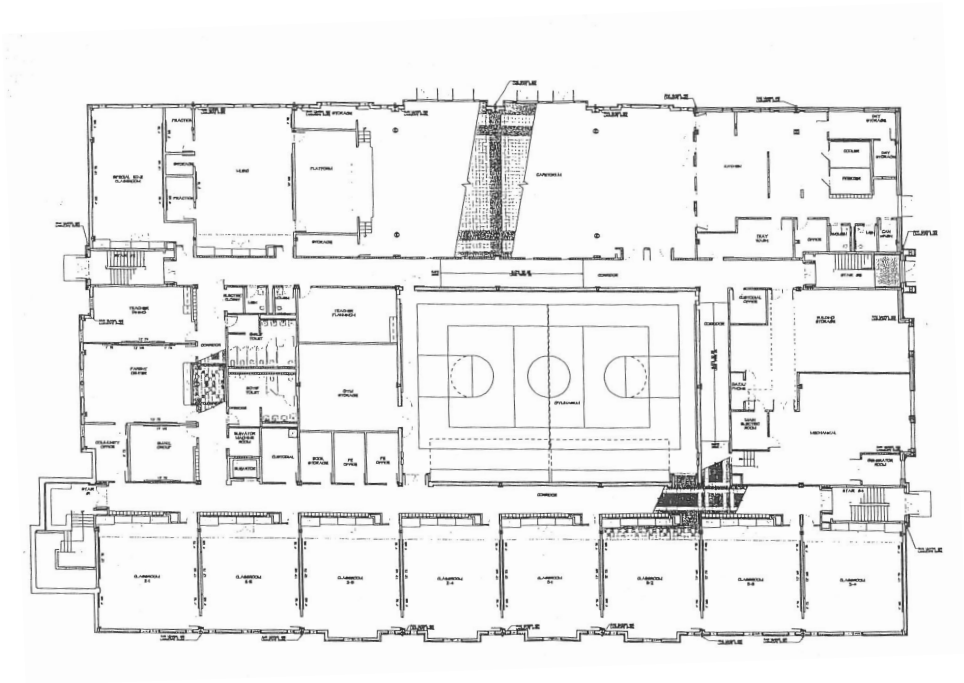
● Facility Priority 3-5

S-22

		PRIORITY	4	3	2	1	
		VISIT DATE: February 23, 2017	GOOD	ADEQUATE	MARGINAL	POOR	COMMENTS
SITE	PARKING		✓				Newer asphalt, some potholes and cracking
	LANDSCAPING	✓		✓			Currently irrigate in the summer with sprinklers. Mortar failing at brick site walls.
	SIDEWALKS	✓					Concrete
	OTHER						
EXTERIOR	ROOF		✓				Newer metal standing seam roof. Leaks observed along the flat portion in cafeteria ceiling
	GUTTERS/DOWNSPOUT	✓					Newer metal
	WALLS		✓				Newer masonry brick
	WINDOWS	✓					Newer double pane, insulated, operable
	DOORS	✓					Newer metal doors
	SECURITY	✓					Newer exterior cameras
	FOUNDATIONS	✓					Newer concrete and masonry
	OTHER						
INTERIOR	FLOORS	✓					Newer 12"x 12" VCT, rubber stair treads in good condition. Roll carpet in admin area is worn, recommend to replace.
	WALLS	✓					Newer painted CMU
	CEILINGS	✓					Newer 2' x 4' ACT
	DOORS	✓					Newer wood with metal frames and sidelights
	OTHER						
TOILET ROOMS	FLOORS		✓				Newer mosaic tile
	WALLS		✓				Newer painted CMU
	CEILINGS		✓				Newer 2' x 4' ACT
	FIXTURES		✓				Newer wall mounted sinks, toilets, and urinals. Some toilet rooms have counter mounted sinks.
	PARTITIONS			✓			Metal partitions and doors. Urinals have painted CMU partitions.
KITCHEN	FLOORS	✓					Newer epoxy
	WALLS	✓					Newer painted
	CEILINGS	✓					Newer washable 2' x 4' ACT
	GREASE TRAP	✓					Serviced
	KITCHEN EQUIPMENT	✓					Newer appliances all in working order
	OTHER						
ELEC	SERVICE/DISTRIB.	✓					Switchgear and circuit breaker panels. Emergency generator
	LIGHTING/POWER	✓					Majority of switches are on occupancy sensors.
HVAC	SUPPLY/DISTRIB.	✓					Two newer boilers. Natural gas fuel
	UNIT SOURCES	✓					Forced hot air, A/C
FIRE	SPRINKLERS	✓					Located throughout.
	DETECTION	✓					Fire panel. Heat/ smoke detectors located throughout.
			POSSIBLE	NO	MAYBE	UNKNOWN	
CODE	ASBESTOS	✓					None assumed
	LEAD	✓					None assumed
	HANDICAP-ACCESSIBLE	✓					Elevator and bathrooms meet ADA standards
	OTHER						

Plouffe Academy

S-22

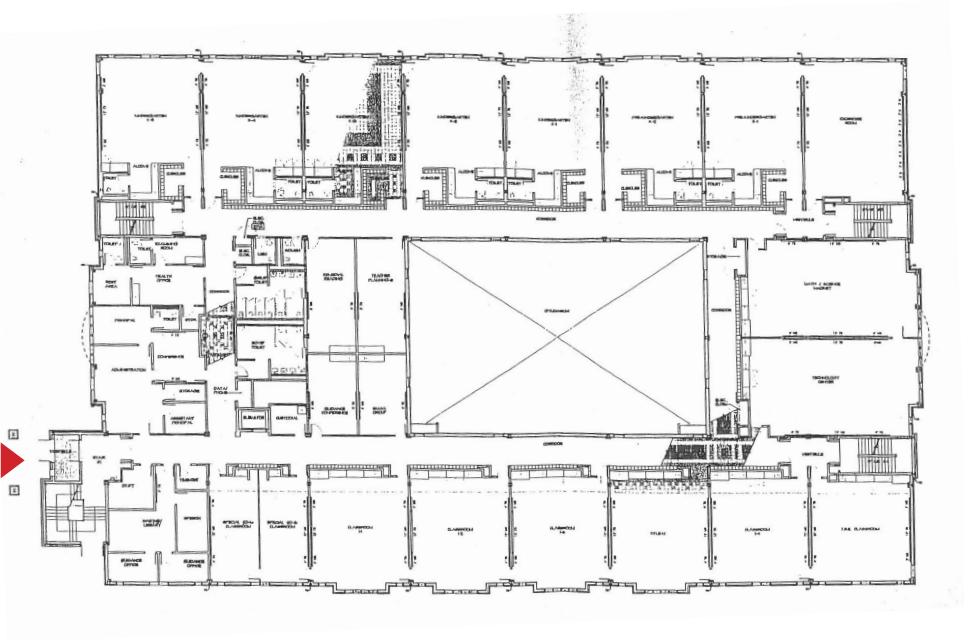


FIRST FLOOR PLAN

MAIN
ENTRY

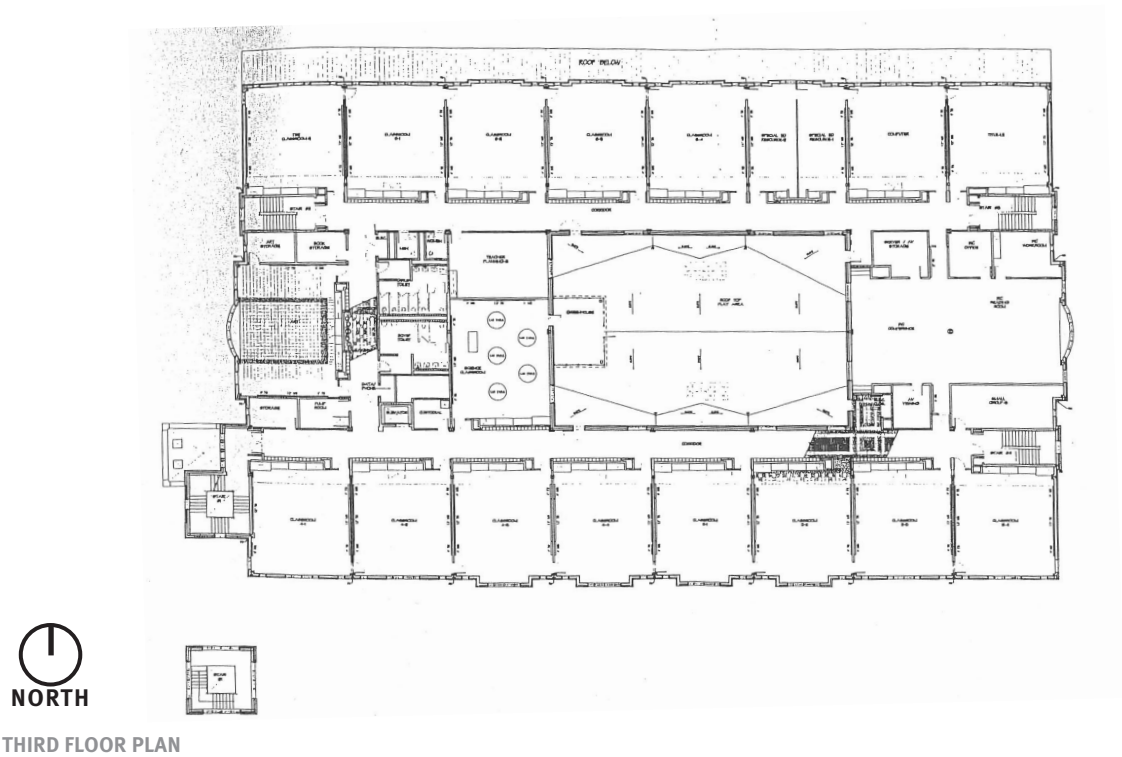


SECOND FLOOR PLAN



Plouffe Academy

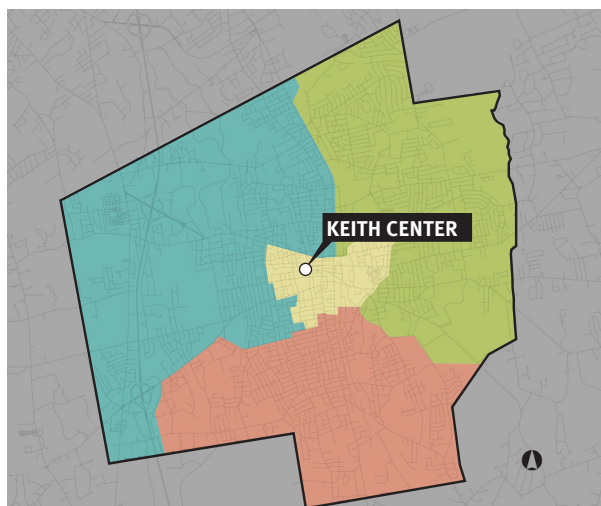
S-22



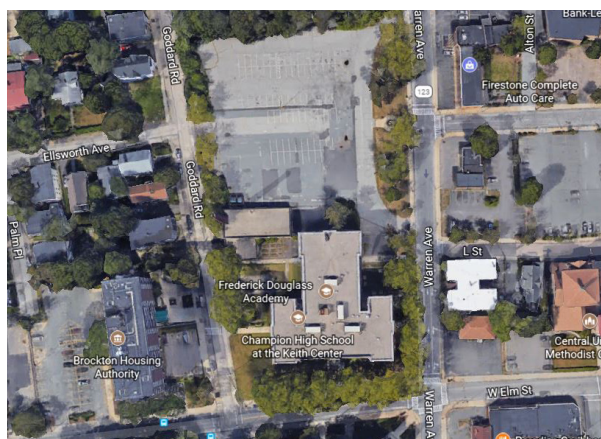
Keith Center—Frederick Douglass Academy and Champion High School

175 Warren Avenue
Brockton, MA 02301

S-23



LOCATION MAP



AERIAL PHOTO



EAST ELEVATION

FACILITIES INFORMATION

DEPARTMENT	School
BUILDING USE	Alternative High School 6–12
SCHOOL ZONE	Citywide
YEAR(S) BUILT	1916, reno 1974
NUMBER OF CLASSROOMS	30

SITE & BUILDING AREA

SITE AREA	3.75 Acres
BUILDING AREA	88,864 GSF
MODULAR CLASSROOM AREA	N/A
TOTAL SCHOOL AREA	88,864 GSF

SCHOOL YEAR 2017/18

ENROLLMENT DATA	Students	Classes per grade
CHAMPION	98	N/A
FREDERICK DOUGLASS	54	N/A
GATEWAY	3	N/A
TOTAL	155	

Keith Center—Frederick Douglass Academy and Champion High School



BUILDING OVERVIEW

Keith Center is located in the Citywide neighborhood and is an alternative high school servicing grades 6-12. The building was constructed in 1916 and was previously the Brockton High School. At the time of transfer, a portion of the building was demolished where the current parking lot is located. The demolished building outline remains in the parking lot and there is evidence of a connection with the prior building where a wall is filled with CMU.

9th–12th grade students that are enrolled at the Keith Center self select to attend as part of the Champion High School Program. The Frederick Douglass Academy is also located at the Keith Center for students in grades 6–12.

Staff notes that classroom enrollment numbers are small by design for a smaller teacher to student ratio.

There is no bus transportation to the site, unless there is an Individualized Education Plan for the student. Most of the student population either walks, arrives by car, or takes public bus/BAT.

In FY 2014, the Brockton School District submitted a Statement of Interest (SOI) for facility improvement of a new back-up boiler. It was not confirmed if the school was invited into the Accelerated Repair Program.

The overall structure is in poor condition with moderate to significant wear and tear on the interior. The building is in need of a considerable renovation, ADA upgrades, plumbing fixture quantity evaluation, and a fire suppression system.

SITE INFORMATION

TOPOGRAPHY	Sloped
LOCATED IN A FLOOD ZONE	No
WETLANDS ON SITE	No
HISTORIC DESIGNATION	No; possibly eligible
ORIENTATION OF BUILDING	Main Entry faces East
NEIGHBORHOOD WALK SCORE	88 Very Walkable
NEIGHBORHOOD TRANSIT SCORE	48 Some Transit
EST. COMMUTE TO DOWNTOWN BROCKTON	1 minutes by car 2 minutes by bicycle 7 minutes walking

Keith Center—Frederick Douglass Academy and Champion High School



SUMMARY OF FINDINGS

- Due to the condition and age of the **interior finishes and materials** throughout, future upgrades to the facility should consider an interior renovation.
- The building currently does not have a **sprinkler system** or heat detection devices. Future upgrades to this building should consider adding a fire suppression system and heat detection devices to meet current codes.
- There are unused and decommissioned **drinking fountains** throughout the school. The unused drinking fountains could be replaced with newer water stations or removed completely as long as the quantity within the building meets the current plumbing code requirements.
- Some of the **bathroom plumbing fixtures** are newer and in good condition. Future upgrades to the building should consider using low flow fixtures. Some of the student toilet rooms do not offer accessible stalls or fixtures. The quantity of bathrooms for the population should be evaluated per current plumbing code.
- **Lighting** is currently operated by wall mounted switches. Occupancy sensors in classrooms, offices, bathrooms, and storage areas can help with energy efficiency and operation.
- The lower sub-basement level where the gym is located is **not accessible by the elevator**. The installation of a lift would provide handicap access to all levels of the building.
- There is an elevated **banked track** that encircles the gym at one level above the gym floor. It was noted that the adjacent railing was not an adequate and safe height for the track to be used, therefore it is no longer utilized.

Keith Center—Frederick Douglass Academy and Champion High School

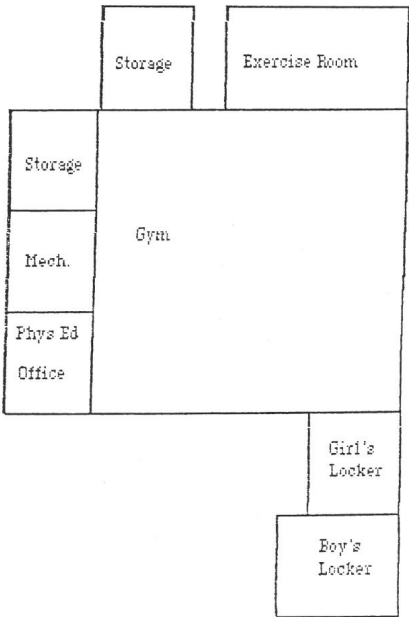
● Facility Priority 3.0

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		PRIORITY	4	3	2	1	
		VISIT DATE: April 7, 2017	GOOD	ADEQUATE	MARGINAL	POOR	COMMENTS
SITE	PARKING				✓		Asphalt; uneven paving at parking lot
	LANDSCAPING				✓		Minimal; Fence around grass picnic area
	SIDEWALKS				✓		Concrete; cracking in some areas
	OTHER						
EXTERIOR	ROOF		✓				Few leaks in the roof. According to 2014 SOI, a portion of the roof was replaced in 2003
	GUTTERS/DOWNSPOUT	✓					Internal, no reported issues
	WALLS	✓					Masonry brick
	WINDOWS	✓					Double pane, insulated, double hung operable
	DOORS	✓					Doors in good condition. Thresholds appear damaged and not flush with adjacent materials
	SECURITY	✓					Cameras and site lighting
	FOUNDATIONS	✓					
	OTHER						
INTERIOR	FLOORS				✓		Older carpet throughout; torn in some areas, worn
	WALLS		✓				Older plaster, painted
	CEILINGS	✓			✓		Older 2' x 4' ACT in some areas; sagging, staining
	DOORS				✓		Older, painted, solid wood with non-ADA accessible hardware or clearances
	OTHER						
TOILET ROOMS	FLOORS		✓				Newer mosaic tile
	WALLS		✓				Painted plaster
	CEILINGS				✓		2' x 4' ACT; sagging, missing, stained
	FIXTURES		✓				Wall mounted sinks, toilets and urinals
	PARTITIONS				✓		Metal floor mounted; rusting.
KITCHEN	FLOORS		✓				Older painted concrete, 12" x 12" VCT
	WALLS		✓				Painted
	CEILINGS		✓				Older 2' x 2' ACT tile; sagging
	GREASE TRAP						Unknown
	KITCHEN EQUIPMENT		✓				No issues reported
	OTHER						
ELEC	SERVICE/DISTRIB.	✓					Older switch gear panel, circuit breakers and panels
	LIGHTING/POWER	✓					
HVAC	SUPPLY/DISTRIB.	✓					Gas heat, forced hot water at window units. Controlled by central.
	UNIT SOURCES	✓					Portable A/C units
FIRE	SPRINKLERS	✓			✓		Sprinklers only at lower level kitchen and gym. No sprinklers at first, second or third floor. Hoses observed in corridor.
	DETECTION				✓		No heat or smoke detectors observed
			POSSIBLE	NO	MAYBE	UNKNOWN	
CODE	ASBESTOS	✓					Assumed at radiator pipes, in 9" x 9" floor tiles
	LEAD	✓					Possibly in older paint, however not confirmed
	HANDICAP-ACCESSIBLE	✓	✓				Building has elevator, although it does not service the lower level gym floor. Some ADA accessible door hardware.
	OTHER						

Keith Center—Frederick Douglass Academy and Champion High School

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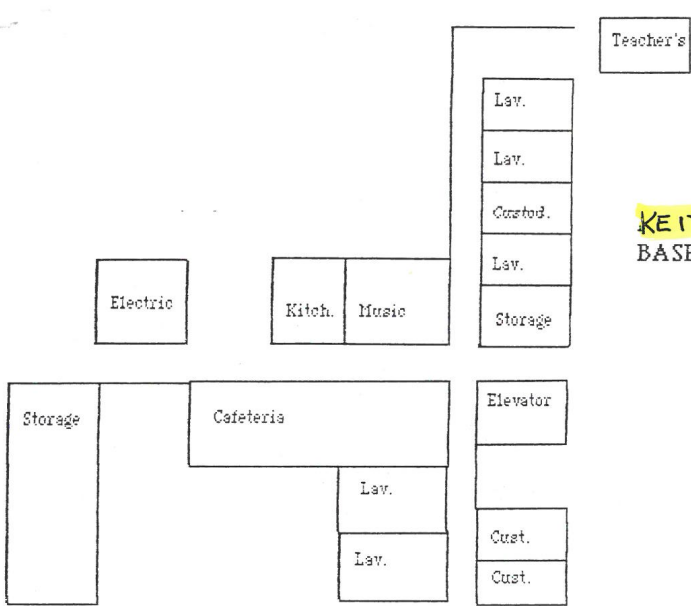


KEITH ELEMENTARY SCHOOL
SUB-BASEMENT FLOOR



NORTH

SUB-BASEMENT FLOOR PLAN



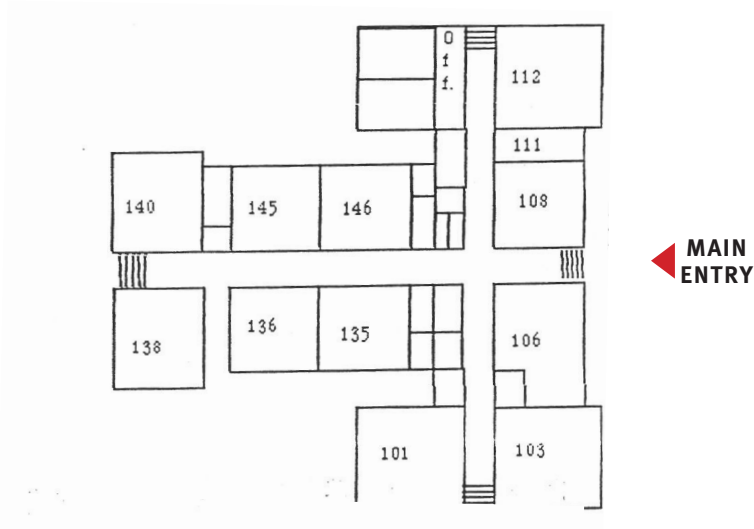
KEITH ELEMENTARY SCHOOL
BASEMENT FLOOR

BASEMENT PLAN

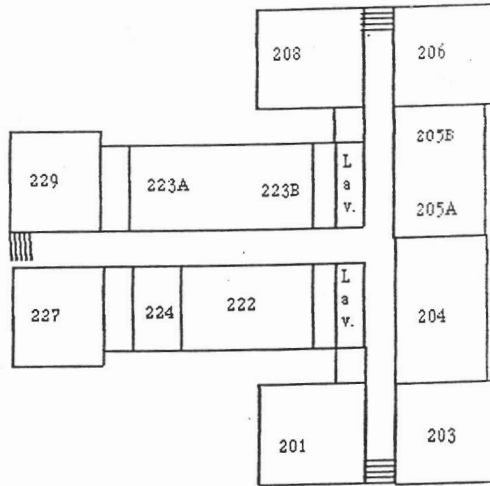
Keith Center—Frederick Douglass Academy and Champion High School

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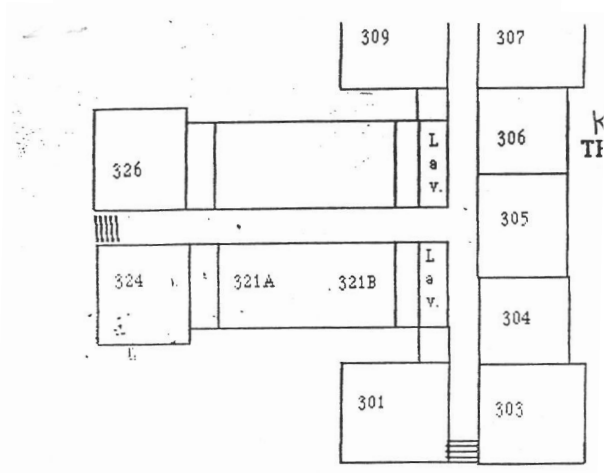

NORTH
FIRST FLOOR PLAN



SECOND FLOOR PLAN



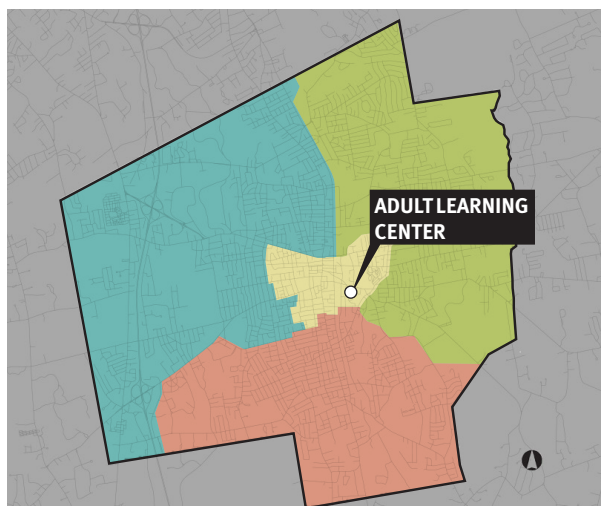
THIRD FLOOR PLAN



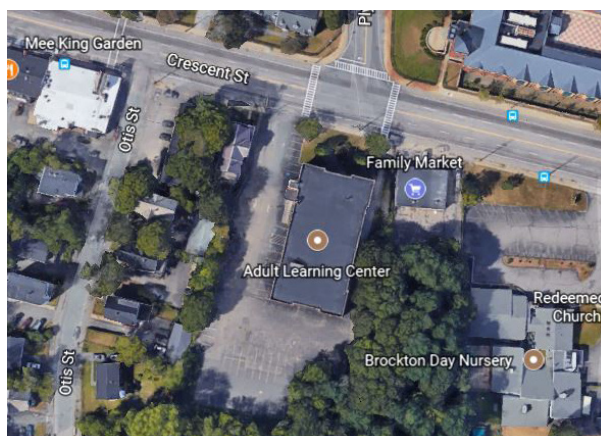
Adult Learning Center

211 Crescent Street
Brockton, MA 02302

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LOCATION MAP



AERIAL PHOTO



EAST ELEVATION

FACILITIES INFORMATION

DEPARTMENT	School
BUILDING USE	Adult Learning and Pre-School
SCHOOL ZONE	Citywide
YEAR(S) BUILT	1916, reno 2009
NUMBER OF CLASSROOMS	15

SITE & BUILDING AREA

SITE AREA	2 Acres
BUILDING AREA	39,012 GSF
MODULAR CLASSROOM AREA	N/A
TOTAL SCHOOL AREA	39,012 GSF

SCHOOL YEAR 2017/18

ENROLLMENT DATA	Students	Classes per grade
PRE-SCHOOL	15	1
TOTAL	15	1

KEY PROGRAMS

-

Adult Learning Center



BUILDING OVERVIEW

Adult Learning Center is located in the Citywide Zone neighborhood of Brockton and is a federally funded advocacy program for the public schools. The building services the adult population and also has one preschool classroom which is open to parents taking classes at the Adult Learning Center. The preschool program is year-round for children ages 2.9 to 5 years old. It is reported to be a successful program, and also ideally located in the center of Brockton along the bus line.

There have been several building improvements in the recent years, including adding an elevator and ADA accessible entry vestibule in 2009. Some interior finishes have been updated, while keeping the details of the original building.

The 1916 structure is three stories high with the first floor partially below grade. The building is rectilinear in shape with a central corridor. There is an auditorium space that is utilized by the community for gathering at tables and community activities.

The building is in moderate condition, well maintained, with the need to renovate the remaining original interior finishes. Consideration should be given to installing a fire suppression system.

SITE INFORMATION

TOPOGRAPHY	Flat
LOCATED IN A FLOOD ZONE	No
WETLANDS ON SITE	No
HISTORIC DESIGNATION	No; possibly eligible
ORIENTATION OF BUILDING	North-South Orientation with Main Entry on West
NEIGHBORHOOD WALK SCORE	78 Very Walkable
NEIGHBORHOOD TRANSIT SCORE	47 Some Transit
EST. COMMUTE TO DOWNTOWN BROCKTON	1 minutes by car 2 minutes by bicycle 7 minutes walking

Adult Learning Center



SUMMARY OF FINDINGS

- While some areas have been renovated, the condition and age of the remaining **interior finishes** are older and worn. Future upgrades should consider removing older, worn, and original finishes and replace with new.
- The building currently does not have a **sprinkler system** or heat detection devices. Future upgrades to this building should consider adding a fire suppression system and heat detection devices to meet current codes.
- **Lighting** is currently operated by wall mounted switches. Occupancy sensors in classrooms, offices, bathrooms, and storage areas can help with energy efficiency and operation
- Some of the **bathroom plumbing fixtures** and bathrooms are newer and in good condition. Future upgrades to the building should consider using low flow fixtures.
- There are unused and decommissioned **drinking fountains** throughout the school. The unused drinking fountains could be replaced with newer water stations or removed completely as long as the quantity within the building meets the current plumbing code requirements.
- An evaluation of the **storage inventory** located on the lower level should take place.
- At one of the stairways, there is an **evacuation chair** available in the area of refuge. A two-way communication system and additional door latches on the stairway doors would enhance the safety features of this system.
- Due to the compact site, the **site lacks storage** for landscaping equipment.
- The **building temperature** is not consistent throughout and experiences solar heat gain on hot sunny days. Consideration should be given to installing window A/C units in the remainder of the classrooms and offices.

Adult Learning Center

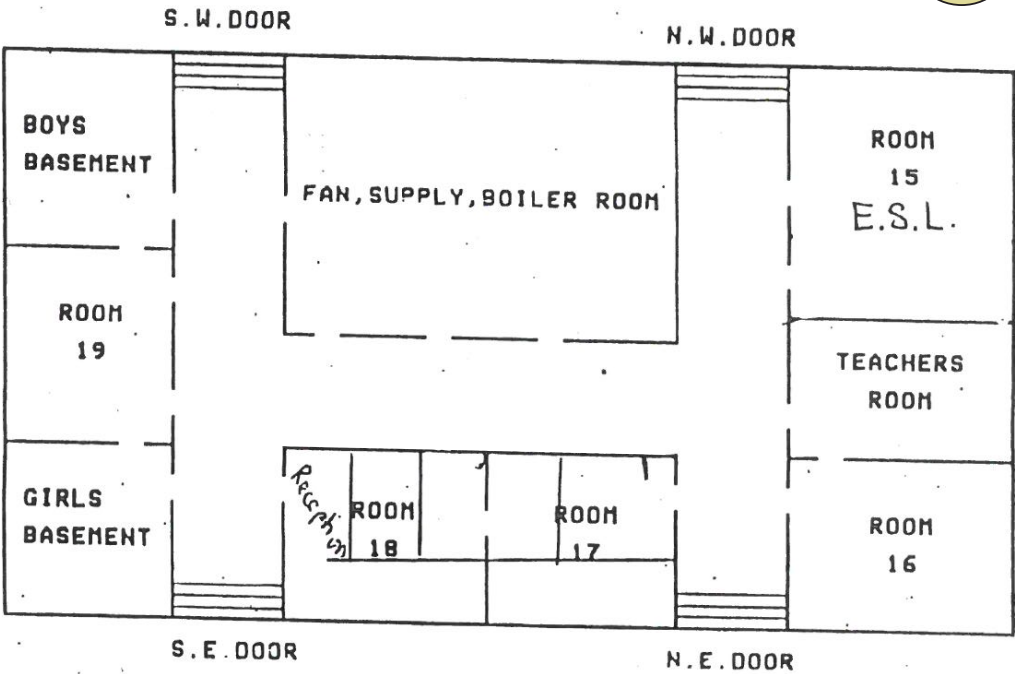
● Facility Priority 2.7

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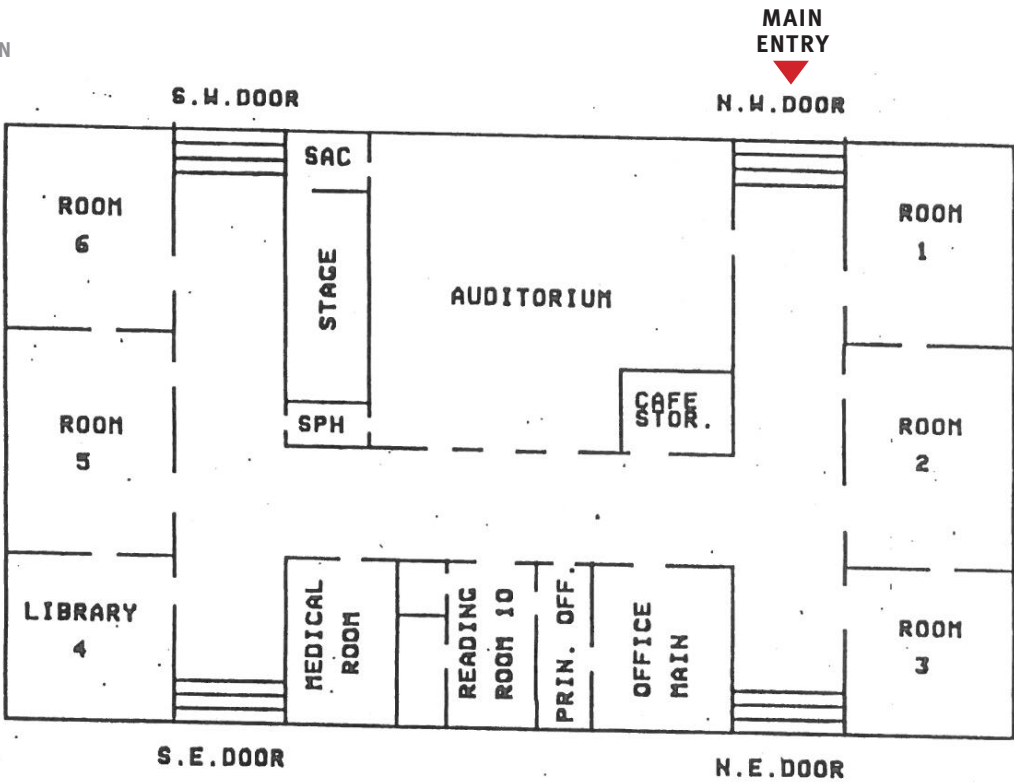
PRIORITY		4	3	2	1	
VISIT DATE: February 23, 2017		GOOD	ADEQUATE	MARGINAL	POOR	COMMENTS
SITE	PARKING			✓		Asphalt; some cracking, potholes
	LANDSCAPING		✓			Grass; minimal
	SIDEWALKS				✓	Concrete; holes, cracking, uneven
	OTHER					
EXTERIOR	ROOF	✓				Rubber membrane, new in 2009
	GUTTERS/DOWNSPOUT	✓				Internal, no reported issues
	WALLS			✓		Masonry brick.; mortar missing and efflorescence observed in some locations
	WINDOWS	✓				Newer double pane
	DOORS	✓				Newer metal doors
	SECURITY	✓				Exterior cameras
	FOUNDATIONS					
	OTHER					
INTERIOR	FLOORS	✓			✓	Roller carpet; buckled, ripping. 9" x 9" tiles; cracking, chipping. Newer carpet in some areas
	WALLS		✓			Painted plaster, painted brick masonry in basement. Hallways with well maintained original wood wainscoting.
	CEILINGS		✓			Painted tin
	DOORS		✓			Original wood
	OTHER					
TOILET ROOMS	FLOORS	✓				Painted CMU
	WALLS	✓				Newer tile
	CEILINGS	✓				Newer 2' x 4' ACT
	FIXTURES	✓				Newer floor mounted fixtures
	PARTITIONS	✓				Newer toilet partitions in ganged toilet rooms
KITCHEN	FLOORS					There is no Kitchen
	WALLS					
	CEILINGS					
	GREASE TRAP					
	KITCHEN EQUIPMENT					
	OTHER					
ELEC	SERVICE/DISTRIB.	✓				Circuit breakers and panels
	LIGHTING/POWER	✓				LED lighting at exterior. Pendant, surface mounted, and recessed fluorescent in interior.
HVAC	SUPPLY/DISTRIB.	✓				How water steam, newer hot water tank
	UNIT SOURCES	✓				Hot water radiators at windows and A/C window units. Floor grills are decommissioned
FIRE	SPRINKLERS				✓	None, no fire suppression system.
	DETECTION	✓				Newer fire panel system and pulls
		POSSIBLE	NO	MAYBE	UNKNOWN	
CODE	ASBESTOS	✓				Assumed in 9" x 9" tile flooring, pipes
	LEAD				✓	Unknown
	HANDICAP-ACCESSIBLE	✓				Newer hydraulic elevator for 2nd floor access. Bathrooms assumed ADA accessible with accessories and clearances.
	OTHER					

Adult Learning Center

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BASEMENT FLOOR PLAN

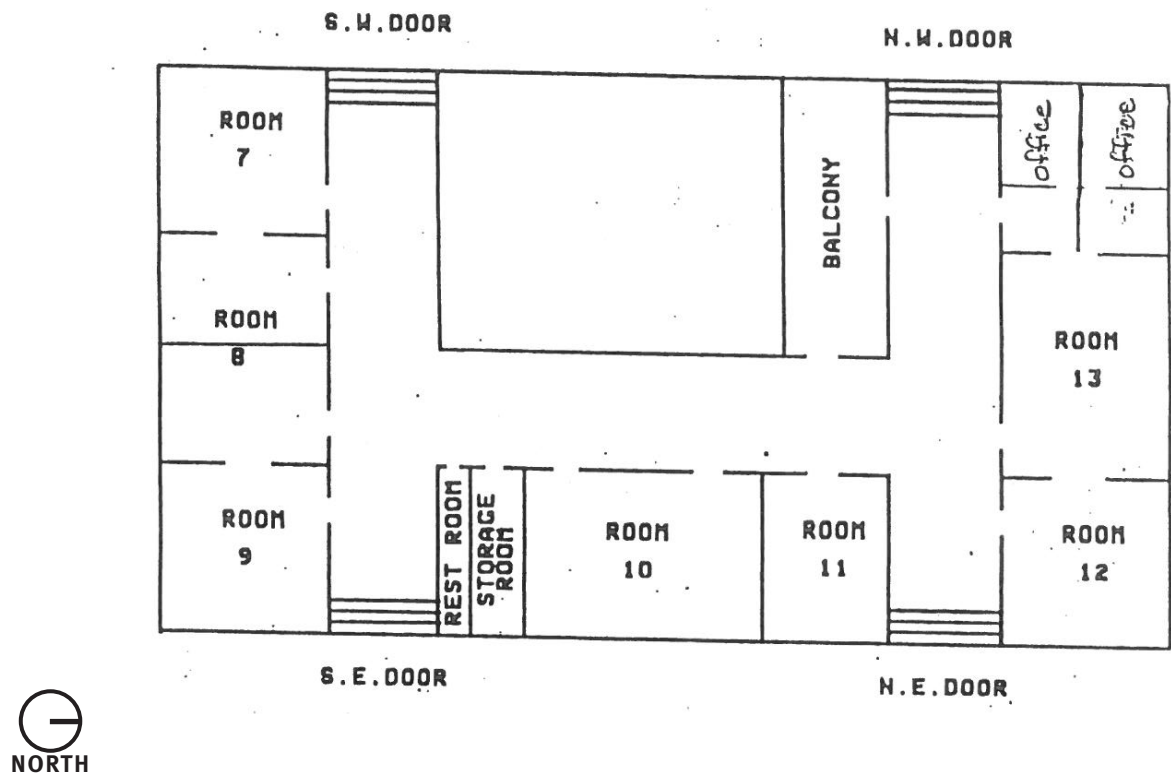


FIRST FLOOR PLAN

Note: Entry vestibule and elevator lobby not shown on floor plan

Adult Learning Center

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SECOND FLOOR PLAN

Section 5 **NEXT STEPS**

5.1 Conclusion

The first phase of this study was to gather data and methodically quantify the needs of the Brockton Public School district facilities. The information found in this Volume 1 —Schools Facilities Assessment was designed to inform the recommendations going forward with sound information and a substantial database to make comprehensive decisions for the future of the City of Brockton.

The purpose of this Volume 1 was to determine common themes and patterns throughout the different school buildings, and determine if and how the existing facilities are meeting the current district needs. With this information collected and analyzed, the team is now able to anticipate future objectives, determine quantitative recommendations based on existing conditions, identify areas for change, and calculate a road map for the future. This report is Volume 2 — School Master Plan Recommendations.