

Bexley City School District

FACILITY ASSESSMENT REPORT

Building Assessment Summary

Cassingham Elementary School



Building Information - Bexley City (43620) - Cassingham Elem

Program Type	Classroom Facilities Assistance Program (CFAP) - Regular
Setting	Suburban
Assessment Name	Cassingham Elementary School
Assessment Date (on-site; non-EEA)	2017-10-19
Kitchen Type	No Kitchen
Cost Set:	2017
Building Name	Cassingham Elem
Building IRN	5082
Building Address	250 S Cassingham Rd
Building City	Bexley
Building Zipcode	43209
Building Phone	614.237.4309
Acreage	14.50
Current Grades:	K-6
Teaching Stations	30
Number of Floors	4
Student Capacity	500
Current Enrollment	432
Enrollment Date	2016-08-01
Enrollment Date is the date in which the current enrollment was taken.	
Number of Classrooms	27
Historical Register	NO
Building's Principal	Ms. Jeannie Hetzler
Building Type	Elementary

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North elevation photo:



East elevation photo:



South elevation photo:



West elevation photo:



GENERAL DESCRIPTION

84,961 Total Existing Square Footage
1927,1927,1993,2001 Building Dates
K-6 Grades
432 Current Enrollment
30 Teaching Stations
14.50 Site Acreage

Bexley Cassingham Elementary which is not on the National Register of Historic Buildings, and originally constructed in 1927, is a 3 story, 80,136 square foot brick school building located in a suburban, residential setting. The existing facility features a conventionally partitioned design, and does not utilize modular buildings. The structure of the overall facility contains brick type exterior wall construction, with cement block, glazed block and gypsum board type wall construction in the interior. The floor system consists of vinyl composite tile and terrazzo. The roof structure is cast in place concrete and metal deck on bar joists. The roofing system of the overall facility is built-up asphalt without gravel ballast installed over 20 years ago with additional layers being added between 2000 and 2017. The ventilation system of the building is adequate to meet the needs of the users. The Classrooms are adequately sized in terms of the current standards established by the State of Ohio. Physical Education and Student Dining spaces consist of one Gymnasium and separate Student Dining, 4,288 SF Primary Gymnasium Student Dining is in the Middle School/High School. The electrical system for the facility is inadequate. The facility is equipped with a non-compliant security system. The building has a compliant automatic fire alarm system. The facility is not equipped with an automated fire suppression system. The building does not contain asbestos or other hazardous materials. The overall building is not compliant with ADA accessibility requirements. The school is located on a 14.50 acre site shared with the MS and HS adjacent to residential properties. The property and playgrounds and athletic facilities are fenced for security. Access onto the site is restricted. Site circulation is poor. There is no dedicated space for school buses to load and unload on the site. Parking for staff, visitors and community events is inadequate.

The Cassingham Elementary is connected to the Middle School and High School. The Elementary School contains the original building

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Building Construction Information - Bexley City (43620) - Cassingham Elem (5082)

Name	Year	Handicapped Access	Floors	Square Feet	Non OSDM Addition	Built Under ELPP
Auditorium	1927	yes	2	6,503	yes	no
Cassingham Elementary	1927	yes	4	56,006	no	no
Gymnasium	1993	yes	2	6,538	no	no
Classroom Addition	2001	yes	2	15,914	no	no

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Building Component Information - Bexley City (43620) - Cassingham Elem (5082)

Addition	Auditorium Fixed Seating	Corridors	Agricultural Education Lab	Primary Gymnasium	Media Center	Vocational Space	Student Dining	Kitchen	Natatorium	Indoor Tracks	Adult Education	Board Offices	Outside Agencies	Auxiliary Gymnasium
Auditorium (1927)	6503													
Cassingham Elementary (1927)		10443												
Gymnasium (1993)		1522		5016										
Classroom Addition (2001)		3628												
Total	6,503	15,593	0	5,016	0	0	0	0	0	0	0	0	0	0
Master Planning Considerations														

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Existing CT Programs for Assessment

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Program Type	Program Name	Related Space	Square Feet
No Records Found			

Legend:

Not in current design manual
In current design manual but missing from assessment

Building Summary - Cassingham Elem (5082)

District: Bexley City				County: Franklin		Area: Central Ohio (0)	
Name: Cassingham Elem				Contact: Ms. Jeannie Hetzler			
Address: 250 S Cassingham Rd Bexley, OH 43209				Phone: 614.237.4309			
Bldg. IRN: 5082				Date Prepared: 2017-10-19		By: Tom Kurtz	
				Date Revised: 2017-12-14		By: Tom Kurtz	
Current Grades: K-6		Acreage: 14.50		Suitability Appraisal Summary			
Proposed Grades: N/A		Teaching Stations: 30					
Current Enrollment: 432		Classrooms: 27					
Projected Enrollment: N/A							
Addition		Date		HA		Number of Floors	
						Current Square Feet	
<u>Cassingham Elementary</u>		1927		yes		4	
						56,006	
<u>Auditorium</u>		1927		yes		2	
						6,503	
<u>Gymnasium</u>		1993		yes		2	
						6,538	
<u>Classroom Addition</u>		2001		yes		2	
						15,914	
Total						84,961	
		*HA =		Handicapped Access			
		*Rating =		1 Satisfactory			
				=2 Needs Repair			
				=3 Needs Replacement			
		*Const P/S =		Present/Scheduled Construction			
FACILITY ASSESSMENT				Rating		Dollar Assessment	
Cost Set: 2017							
						Renovation Cost Factor	
						Cost to Renovate (Cost Factor applied)	
						100.00%	
						\$8,697,370.95	
						The Replacement Cost Per SF and the Renovate/Replace ratio are only provided when this summary is requested from a Master Plan.	
A. Heating System				3		\$1,104,493.00	
B. Roofing				3		\$961,093.80	
C. Ventilation / Air Conditioning				1		\$0.00	
D. Electrical Systems				3		\$1,378,917.03	
E. Plumbing and Fixtures				3		\$33,100.00	
F. Windows				3		\$139,640.00	
G. Structure: Foundation				1		\$0.00	
H. Structure: Walls and Chimneys				3		\$91,150.00	
I. Structure: Floors and Roofs				1		\$0.00	
J. General Finishes				3		\$996,954.70	
K. Interior Lighting				3		\$424,805.00	
L. Security Systems				3		\$157,177.85	
M. Emergency/Egress Lighting				3		\$84,961.00	
N. Fire Alarm				1		\$0.00	
O. Handicapped Access				3		\$124,457.20	
P. Site Condition				3		\$188,385.50	
Q. Sewage System				1		\$0.00	
R. Water Supply				1		\$0.00	
S. Exterior Doors				3		\$24,000.00	
T. Hazardous Material				1		\$0.00	
U. Life Safety				3		\$271,875.20	
V. Loose Furnishings				3		\$143,840.00	
W. Technology				3		\$864,902.98	
X. Construction Contingency / Non-Construction Cost				-		\$1,707,617.69	
Total						\$8,697,370.95	

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Cassingham Elementary (1927) Summary

District: Bexley City				County: Franklin		Area: Central Ohio (0)				
Name: Cassingham Elem				Contact: Ms. Jeannie Hetzler						
Address: 250 S Cassingham Rd Bexley, OH 43209				Phone: 614.237.4309						
Bldg. IRN: 5082				Date Prepared: 2017-10-19		By: Tom Kurtz				
				Date Revised: 2017-12-14		By: Tom Kurtz				
Current Grades	K-6	Acreage:	14.50	Suitability Appraisal Summary						
Proposed Grades	N/A	Teaching Stations:	30							
Current Enrollment	432	Classrooms:	27							
Projected Enrollment	N/A									
Addition	Date	HA	Number of Floors	Current Square Feet	Section	Points Possible	Points Earned	Percentage	Rating	Category
<u>Cassingham Elementary</u>	1927	yes	4	56,006	<u>Cover Sheet</u>	—	—	—	—	—
<u>Auditorium</u>	1927	yes	2	6,503	<u>1.0 The School Site</u>	100	70	70%	Satisfactory	
<u>Gymnasium</u>	1993	yes	2	6,538	<u>2.0 Structural and Mechanical Features</u>	200	147	74%	Satisfactory	
<u>Classroom Addition</u>	2001	yes	2	15,914	<u>3.0 Plant Maintainability</u>	100	69	69%	Borderline	
Total				84,961	<u>4.0 Building Safety and Security</u>	200	156	78%	Satisfactory	
					<u>5.0 Educational Adequacy</u>	200	149	75%	Satisfactory	
					<u>6.0 Environment for Education</u>	200	150	75%	Satisfactory	
					<u>LEED Observations</u>	—	—	—	—	—
					<u>Commentary</u>	—	—	—	—	—
					Total	1000	741	74%	Satisfactory	
Enhanced Environmental Hazards Assessment Cost Estimates										
C=Under Contract										
Renovation Cost Factor										
Cost to Renovate (Cost Factor applied)										100.00%
The Replacement Cost Per SF and the Renovate/Replace ratio are only provided when this summary is requested from a Master Plan.										\$6,100,750.37
FACILITY ASSESSMENT			Rating	Dollar Assessment						
Cost Set: 2017										
A.	Heating System		3	\$728,078.00						
B.	Roofing		3	\$695,751.20						
C.	Ventilation / Air Conditioning		1	\$0.00						
D.	Electrical Systems		3	\$908,977.38						
E.	Plumbing and Fixtures		3	\$33,100.00						
F.	Windows		3	\$132,880.00						
G.	Structure: Foundation		1	\$0.00						
H.	Structure: Walls and Chimneys		3	\$60,450.00						
I.	Structure: Floors and Roofs		1	\$0.00						
J.	General Finishes		3	\$767,070.80						
K.	Interior Lighting		3	\$280,030.00						
L.	Security Systems		3	\$103,611.10						
M.	Emergency/Egress Lighting		3	\$56,006.00						
N.	Fire Alarm		1	\$0.00						
O.	Handicapped Access		3	\$118,666.20						
P.	Site Condition		3	\$144,953.00						
Q.	Sewage System		1	\$0.00						
R.	Water Supply		1	\$0.00						
S.	Exterior Doors		3	\$12,000.00						
T.	Hazardous Material		1	\$0.00						
U.	Life Safety		3	\$179,219.20						
V.	Loose Furnishings		3	\$112,012.00						
W.	Technology		3	\$570,141.08						
- X.	Construction Contingency / Non-Construction Cost		-	\$1,197,804.41						
Total				\$6,100,750.37						

Auditorium (1927) Summary

District: Bexley City				County: Franklin		Area: Central Ohio (0)	
Name: Cassingham Elem				Contact: Ms. Jeannie Hetzler			
Address: 250 S Cassingham Rd Bexley, OH 43209				Phone: 614.237.4309			
Bldg. IRN: 5082				Date Prepared: 2017-10-19		By: Tom Kurtz	
				Date Revised: 2017-12-14		By: Tom Kurtz	
Current Grades		K-6		Acreage:		14.50	
Proposed Grades		N/A		Teaching Stations:		30	
Current Enrollment		432		Classrooms:		27	
Projected Enrollment		N/A					
Addition		Date		HA		Number of Floors	
						Current Square Feet	
<u>Cassingham Elementary</u>		1927		yes		4	
Auditorium		1927		yes		2	
<u>Gymnasium</u>		1993		yes		2	
<u>Classroom Addition</u>		2001		yes		2	
Total						84,961	
		*HA =		Handicapped Access			
		*Rating =1		Satisfactory			
		=2		Needs Repair			
		=3		Needs Replacement			
		*Const P/S =		Present/Scheduled Construction			
FACILITY ASSESSMENT				Rating		Dollar Assessment	
Cost Set: 2017							
A. <u>Heating System</u>				3		\$84,539.00	
B. <u>Roofing</u>				3		\$19,509.00	
C. <u>Ventilation / Air Conditioning</u>				1		\$0.00	
D. <u>Electrical Systems</u>				3		\$105,543.69	
E. <u>Plumbing and Fixtures</u>				3		\$0.00	
F. <u>Windows</u>				3		\$0.00	
G. <u>Structure: Foundation</u>				1		\$0.00	
H. <u>Structure: Walls and Chimneys</u>				3		\$0.00	
I. <u>Structure: Floors and Roofs</u>				1		\$0.00	
J. <u>General Finishes</u>				3		\$22,760.50	
K. <u>Interior Lighting</u>				3		\$32,515.00	
L. <u>Security Systems</u>				3		\$12,030.55	
M. <u>Emergency/Egress Lighting</u>				3		\$6,503.00	
N. <u>Fire Alarm</u>				1		\$0.00	
O. <u>Handicapped Access</u>				3		\$1,300.60	
P. <u>Site Condition</u>				3		\$9,754.50	
Q. <u>Sewage System</u>				1		\$0.00	
R. <u>Water Supply</u>				1		\$0.00	
S. <u>Exterior Doors</u>				3		\$0.00	
T. <u>Hazardous Material</u>				1		\$0.00	
U. <u>Life Safety</u>				3		\$20,809.60	
V. <u>Loose Furnishings</u>				3		\$0.00	
W. <u>Technology</u>				3		\$66,200.54	
X. <u>Construction Contingency / Non-Construction Cost</u>				-		\$93,193.28	
Total						\$474,659.26	
Suitability Appraisal Summary							
				Section		Points Possible	
						Points Earned	
						Percentage	
						Rating	
						Category	
				<u>Cover Sheet</u>		—	
				<u>1.0 The School Site</u>		100	
				<u>2.0 Structural and Mechanical Features</u>		200	
				<u>3.0 Plant Maintainability</u>		100	
				<u>4.0 Building Safety and Security</u>		200	
				<u>5.0 Educational Adequacy</u>		200	
				<u>6.0 Environment for Education</u>		200	
				<u>LEED Observations</u>		—	
				<u>Commentary</u>		—	
				Total		1000	
						741	
						74%	
						Satisfactory	
<u>Enhanced Environmental Hazards Assessment Cost Estimates</u>							
<u>C=Under Contract</u>							
Renovation Cost Factor							
Cost to Renovate (Cost Factor applied)							
100.00%							
\$474,659.26							
<i>The Replacement Cost Per SF and the Renovate/Replace ratio are only provided when this summary is requested from a Master Plan.</i>							

Gymnasium (1993) Summary

District: Bexley City				County: Franklin		Area: Central Ohio (0)				
Name: Cassingham Elem				Contact: Ms. Jeannie Hetzler						
Address: 250 S Cassingham Rd Bexley, OH 43209				Phone: 614.237.4309						
Bldg. IRN: 5082				Date Prepared: 2017-10-19		By: Tom Kurtz				
				Date Revised: 2017-12-14		By: Tom Kurtz				
Current Grades		K-6	Acreeage:		14.50	Suitability Appraisal Summary				
Proposed Grades		N/A	Teaching Stations:		30					
Current Enrollment		432	Classrooms:		27					
Projected Enrollment		N/A								
Addition	Date	HA	Number of Floors	Current Square Feet	Section	Points Possible	Points Earned	Percentage	Rating	Category
<u>Cassingham Elementary</u>	1927	yes	4	56,006	<u>1.0 The School Site</u>	100	70	70%	Satisfactory	
<u>Auditorium</u>	1927	yes	2	6,503	<u>2.0 Structural and Mechanical Features</u>	200	147	74%	Satisfactory	
<u>Gymnasium</u>	1993	yes	2	6,538	<u>3.0 Plant Maintainability</u>	100	69	69%	Borderline	
<u>Classroom Addition</u>	2001	yes	2	15,914	<u>4.0 Building Safety and Security</u>	200	156	78%	Satisfactory	
Total				84,961	<u>5.0 Educational Adequacy</u>	200	149	75%	Satisfactory	
					<u>6.0 Environment for Education</u>	200	150	75%	Satisfactory	
					<u>LEED Observations</u>	—	—	—	—	
					<u>Commentary</u>	—	—	—	—	
					Total	1000	741	74%	Satisfactory	
Enhanced Environmental Hazards Assessment Cost Estimates										
C=Under Contract										
Renovation Cost Factor										
Cost to Renovate (Cost Factor applied)										
100.00%										
\$738,538.23										
<i>The Replacement Cost Per SF and the Renovate/Replace ratio are only provided when this summary is requested from a Master Plan.</i>										
FACILITY ASSESSMENT										
Cost Set: 2017										
			Rating	Dollar Assessment						
A.	<u>Heating System</u>		3	\$84,994.00	-					
B.	<u>Roofing</u>		3	\$107,829.20	-					
C.	<u>Ventilation / Air Conditioning</u>		1	\$0.00	-					
D.	<u>Electrical Systems</u>		3	\$106,111.74	-					
E.	<u>Plumbing and Fixtures</u>		3	\$0.00	-					
F.	<u>Windows</u>		3	\$6,760.00	-					
G.	<u>Structure: Foundation</u>		1	\$0.00	-					
H.	<u>Structure: Walls and Chimneys</u>		3	\$13,700.00	-					
I.	<u>Structure: Floors and Roofs</u>		1	\$0.00	-					
J.	<u>General Finishes</u>		3	\$120,224.40	-					
K.	<u>Interior Lighting</u>		3	\$32,690.00	-					
L.	<u>Security Systems</u>		3	\$12,095.30	-					
M.	<u>Emergency/Egress Lighting</u>		3	\$6,538.00	-					
N.	<u>Fire Alarm</u>		1	\$0.00	-					
O.	<u>Handicapped Access</u>		3	\$1,307.60	-					
P.	<u>Site Condition</u>		3	\$9,807.00	-					
Q.	<u>Sewage System</u>		1	\$0.00	-					
R.	<u>Water Supply</u>		1	\$0.00	-					
S.	<u>Exterior Doors</u>		3	\$4,000.00	-					
T.	<u>Hazardous Material</u>		1	\$0.00	-					
U.	<u>Life Safety</u>		3	\$20,921.60	-					
V.	<u>Loose Furnishings</u>		3	\$0.00	-					
W.	<u>Technology</u>		3	\$66,556.84	-					
X.	<u>Construction Contingency / Non-Construction Cost</u>		-	\$145,002.55	-					
Total				\$738,538.23						

Classroom Addition (2001) Summary

District: Bexley City				County: Franklin		Area: Central Ohio (0)																																																																			
Name: Cassingham Elem				Contact: Ms. Jeannie Hetzler																																																																					
Address: 250 S Cassingham Rd Bexley, OH 43209				Phone: 614.237.4309																																																																					
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A.	Heating System	3	\$206,882.00																																																																						
B.	Roofing	3	\$138,004.40																																																																						
C.	Ventilation / Air Conditioning	1	\$0.00																																																																						
D.	Electrical Systems	3	\$258,284.22																																																																						
E.	Plumbing and Fixtures	3	\$0.00																																																																						
F.	Windows	3	\$0.00																																																																						
G.	Structure: Foundation	1	\$0.00																																																																						
H.	Structure: Walls and Chimneys	3	\$17,000.00																																																																						
I.	Structure: Floors and Roofs	1	\$0.00																																																																						
J.	General Finishes	3	\$86,899.00																																																																						
K.	Interior Lighting	3	\$79,570.00																																																																						
L.	Security Systems	3	\$29,440.90																																																																						
M.	Emergency/Egress Lighting	3	\$15,914.00																																																																						
N.	Fire Alarm	1	\$0.00																																																																						
O.	Handicapped Access	3	\$3,182.80																																																																						
P.	Site Condition	3	\$23,871.00																																																																						
Q.	Sewage System	1	\$0.00																																																																						
R.	Water Supply	1	\$0.00																																																																						
S.	Exterior Doors	3	\$8,000.00																																																																						
T.	Hazardous Material	1	\$0.00																																																																						
U.	Life Safety	3	\$50,924.80																																																																						
V.	Loose Furnishings	3	\$31,828.00																																																																						
W.	Technology	3	\$162,004.52																																																																						
X.	Construction Contingency / Non-Construction Cost	-	\$271,617.45																																																																						
Total					\$1,383,423.09																																																																				
				Renovation Cost Factor		100.00%																																																																			
				Cost to Renovate (Cost Factor applied)		\$1,383,423.09																																																																			
The Replacement Cost Per SF and the Renovate/Replace ratio are only provided when this summary is requested from a Master Plan.																																																																									

A. Heating System

Description:

The existing system for the overall facility is a gas fired heating hot water system, installed in 2001, and is in good condition. The heating and chilled water system in the overall facility is a 4-pipe system, with a capacity for simultaneous heating and cooling operation, which is compliant with the OSDM requirements for basic system type. The 3 gas fired boilers, manufactured by Unilux, were installed in 2001 and are in fair condition. A gas fired boiler, manufactured by Thermal Solutions, was installed in 2008, and is in good condition. The boilers are shared with the middle/high school and are located in the middle/high school. Heating water is distributed to terminal units consisting of cabinet heaters, unit heaters, air handlers, and VAV boxes. The terminal equipment was installed in 2001 and is in good condition. The system does comply with the 15 CFM per person fresh air requirements of the Ohio Building Code mechanical code and Ohio School Design Manual. The DDC type system temperature controls were installed in 2001 and are in good condition. The system does feature individual temperature controls in all spaces required by the OSDM. The overall system does not feature any central energy recovery systems. The facility is not equipped with louvered interior doors to facilitate Corridor utilization as return air plenums. The existing system is ducted, though lack of need for HVAC system replacement at this time negates any need to evaluate the potential integration of existing ductwork into a new system. The overall heating system is evaluated as being in safe and efficient working order, and long-term life expectancy of the existing system is anticipated. The structure is equipped with central air conditioning. The site does not contain underground fuel tanks.

Rating:

3 Needs Replacement

Recommendations:

Replace the existing roof mounted air handlers due to age and condition.

Item	Cost	Unit	Whole Building	Auditorium (1927) 6,503 ft ²	Cassingham Elementary (1927) 56,006 ft ²	Gymnasium (1993) 6,538 ft ²	Classroom Addition (2001) 15,914 ft ²	Sum	Comments
HIGH BAY/INDUSTRIAL SPACE - LAB TYPES 5,6,7 - Roof Top Unit with air conditioning	\$13.00	sq. ft. (of entire building addition)		Required	Required	Required	Required	\$1,104,493.00	
Sum:			\$1,104,493.00	\$84,539.00	\$728,078.00	\$84,994.00	\$206,882.00		



Gas Fired Boilers



Heating Hot Water Pumps

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B. Roofing

Description:

The roof over the overall facility is a built-up asphalt system that was installed over 20 years ago with additional build-up layers added between 2000 and 2016, and is in fair condition. There are no District reports of current leaking. No signs of past leaking were observed during the physical assessment. Access to the roof was gained by access hatch that is in fair condition. Fall safety protection cages are not required, have been not provided to the slope roof area. There were no observations of standing water on the roof. Metal cap flashings and stone copings are in fair condition. Roof storm drainage is addressed through a system of gutters and downspouts as well as roof drains and thru-wall scuppers, which are properly located, and in fair condition. The roof is not equipped with overflow roof drains though they will be required in areas of roof replacement. No problems requiring attention were encountered with any roof penetrations. There are not any covered walkways attached to this structure.

Rating:

3 Needs Replacement

Recommendations:

The roof over the overall facility requires replacement to meet Ohio School Design Manual guidelines due to age of system and projected lifecycle. Replace the cap flashing and gravel stops on the overall facility due to condition. Add overflow drains in areas surrounded by parapets.

Item	Cost	Unit	Whole Building	Auditorium (1927) 6,503 ft ²	Cassingham Elementary (1927) 56,006 ft ²	Gymnasium (1993) 6,538 ft ²	Classroom Addition (2001) 15,914 ft ²	Sum	Comments
Asphalt Shingle:	\$3.00	sq.ft. (Qty)		6,503 Required	7,300 Required	6,538 Required	15,914 Required	\$108,765.00	
Built-up Asphalt:	\$13.20	sq.ft. (Qty)		0 Required	48,706 Required	6,538 Required	5,222 Required	\$798,151.20	
Repair/replace cap flashing and coping:	\$18.40	ln.ft.			730 Required	104 Required	480 Required	\$24,177.60	
Overflow Roof Drains and Piping:	\$2,500.00	each			7 Required		5 Required	\$30,000.00	
Sum:			\$961,093.80	\$19,509.00	\$695,751.20	\$107,829.20	\$138,004.40		



Built up roofing



Coping

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C. Ventilation / Air Conditioning

Description: The overall facility is equipped with a chilled water central air conditioning system, which is in fair condition. A cooling tower, manufactured by Harley, was installed in 2001, and is in poor condition. Cooling water is distributed to a chiller. The chiller, manufactured by McQuay, was installed in 2001, and is in poor condition. The chiller and cooling tower is shared with the middle/high school and are located in the middle/high school. Chilled water is distributed to terminal units consisting of air handlers. The terminal equipment was installed in 2001 and is in good condition. The ventilation system in the overall facility consists of air handlers, installed in 2001 and in poor condition, providing fresh air to Classrooms, and air handlers, installed in 2001 and in poor condition, providing fresh air to other miscellaneous spaces such as Gymnasiums, Student Dining, and Media Center. Relief air venting is provided by ceiling plenums. The ventilation system does meet the Ohio Building Code 15 CFM per occupant fresh air requirement. The overall system is compliant with Ohio Building Code and Ohio School Design Manual requirements. The Art program is equipped with a kiln, and existing kiln ventilation is adequate, and in fair condition. General building exhaust systems for Restrooms and Custodial Closets are adequately placed, and in fair condition.

Rating: 1 Satisfactory

Recommendations: Replace the existing cooling tower due to age and condition. Cost included in the Bexley Middle/High school assessment. The cooling tower sets on the Middle/High school building and provides cooling to Cassingham as well as the MS/HS. It is not practical to split the cost between 2 assessments. Replace the existing roof mounted air handlers due to age and condition. Cost included in Item A.

Item	Cost	Unit	Whole Building	Auditorium (1927)	Cassingham Elementary (1927)	Gymnasium (1993)	Classroom Addition (2001)	Sum	Comments
				6,503 ft ²	56,006 ft ²	6,538 ft ²	15,914 ft ²		
Sum:			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		



Cooling Tower



Chillers

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D. Electrical Systems

Description: The electrical system provided to the overall facility is an 2000A, 208/120V, 3PH, 4W and a shared 1200A, 480/277V, 3PH, 4W system installed in 2002 and is in good condition. The panel system is in good condition, and can be expanded to add additional capacity. The Classrooms are equipped with adequate electrical outlets. The typical Classroom contains 7 general purpose outlets. There are not any spaces that have no electrical outlets. The Corridors are equipped with adequate electrical outlets for servicing. Adequate GFI protected exterior outlets are provided around the perimeter of the building. The facility is equipped with suitable emergency generators. Adequate lightning protection safeguards are not provided. Stage lighting power system including control panel, breakers, and dimmers is adequately provided, in fair condition and does meet OSDM requirements. The overall electrical system does not meet Ohio School Design Manual requirements in supporting the current needs of the school, and will not be adequate to meet the facility's future needs.

Rating: 3 Needs Replacement

Recommendations: The entire electrical system requires replacement to meet Ohio School Design Manual guidelines for overall capacity.

Item	Cost	Unit	Whole Building	Auditorium (1927) 6,503 ft ²	Cassingham Elementary (1927) 56,006 ft ²	Gymnasium (1993) 6,538 ft ²	Classroom Addition (2001) 15,914 ft ²	Sum	Comments
System Replacement:	\$16.23	sq.ft. (of entire building addition)		Required	Required	Required	Required	\$1,378,917.03	(Includes demo of existing system. Includes generator for life safety systems. Does not include telephone or data or equipment) (Use items below ONLY when the entire system is NOT being replaced)
Sum:			\$1,378,917.03	\$105,543.69	\$908,977.38	\$106,111.74	\$258,284.22		



Main Distribution Switchgear



Elementary School Subdistribution

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E. Plumbing and Fixtures

Description:

The service entrance is equipped with a reduced pressure backflow preventer in fair condition. A water treatment system is not provided. The domestic water supply piping in the overall facility is copper and PVC, and is in fair condition. The waste piping in the overall facility is cast iron and PVC, and is in fair condition. The facility is equipped with 4 gas water heaters in fair condition, with 6 separate 200-gallon storage tanks in good condition. The school contains 3 Large Group Restrooms for boys, 3 Large Group Restrooms for girls, and 3 Restrooms for staff. Boys' Large Group Restrooms contain 2 ADA and 4 non-ADA floor mounted flush valve toilets, 0 ADA and 13 non-ADA floor mounted flush valve urinals, as well as 2 ADA and 4 non-ADA wall mounted lavatories. Girls' Large Group Restrooms contain 0 ADA and 14 non-ADA floor mounted flush valve toilets, as well as 2 ADA and 4 non-ADA wall mounted lavatories. Staff Restrooms contain 1 ADA and 3 non-ADA floor mounted flush valve toilets, 0 ADA and 0 non-ADA urinals, as well as 1 ADA and 3 non-ADA wall mounted lavatories. Condition of fixtures is good. The facility is equipped with 4 ADA and 2 non-ADA electric water coolers, in good condition. The 22 Elementary Classrooms are equipped with 0 ADA and 22 non-ADA sink mounted type drinking fountains, in good condition. Kitchen and Health Clinic is in the Middle School. Kindergarten / Pre-K Classrooms are equipped with Restroom facilities, and fixtures are in good condition. The kitchen and cafeteria are in the middle school/high school. These facilities are shared by the elementary school and are address in the Bexley MS/HS assessment. The school does not meet the OBC requirements for fixtures. Relative to LEED requirements, the school is not equipped with low flow type fixtures. Per OBC and OSDM requirements this facility should be equipped with 38 toilets, 10 urinals, 38 lavatories, 22 Classroom sink mounted drinking fountains, and 6 electric water coolers. Observations revealed that the school is currently equipped with 31 toilets, 13 urinals, 24 lavatories, 22 Classroom sink mounted drinking fountains, and 6 electric water coolers. ADA requirements are not met for fixtures and drinking fountains (see Item O). Custodial Closets are not properly located and are not adequately provided with required service sinks or floor drain sinks, which are in fair condition. Science Classroom and Lab utility sinks, gas connections, compressed air connections, and safety shower and eyewash are not provided, but are not required due to existing grade configuration. Due to existing grade configuration, no Biology or Chemistry Classroom acid waste systems are required. Adequate exterior wall hydrants are not provided.

Rating:

3 Needs Replacement

Recommendations:

To facilitate the school's compliance with OBC and OSFC fixture requirements Due to age, condition, LEED, and OSFC requirements, provide 2 new toilets, 9 new lavatories, 0 new electric water coolers. See Item O for the replacement of fixtures related to ADA requirements that are not included in this fixture count. Replace faucets and flush valves on fixtures that don't already have them. Provide 2 exterior wall hydrants.

Item	Cost	Unit	Whole Building	Auditorium (1927) 6,503 ft ²	Cassingham Elementary (1927) 56,006 ft ²	Gymnasium (1993) 6,538 ft ²	Classroom Addition (2001) 15,914 ft ²	Sum	Comments
Toilet:	\$3,800.00	unit						2 Required	\$7,600.00 (new)
Sink:	\$2,500.00	unit						9 Required	\$22,500.00 (new)
Other: Exterior Wall Hydrants	\$1,500.00	each						2 Required	\$3,000.00 Exterior wall hydrants in existing walls.
Sum:			\$33,100.00	\$0.00	\$33,100.00	\$0.00	\$0.00		



Gas Fired Water Heater



Classroom sink with fountain

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F. Windows

Description:

The 1927 facility is equipped double glazed insulated glazing type window system, the installation date is not known, and is in poor condition. The 1993 addition is equipped double glazed insulated glazing type window system, the installation date is assumed to be 1993, and are in fair condition. The 2001 addition is equipped with double glazed insulated type window system, and is in good condition. The window system features operable windows throughout the building, and operable windows are not equipped with opening limiters or and insect screens. Window system seals in the 1927 facility and 1993 addition are in fair condition, with minimal air and water infiltration being experienced. Window system hardware is in fair condition. The window system features surface mounted blinds, which are in fair condition or no blinds. This facility is not equipped with any curtain wall systems. This facility does not feature any glass block windows. The exterior doors in the overall facility are equipped with aluminum frame sidelights and transoms with double glazing, in good condition. Exterior door vision panels are double glazed. The school does not contain skylights. The school does not contain clerestories. Interior glass is not OSDM-compliant in the 1927 building due to it not being tempered. Window security grilles are not provided for ground floor windows. There is not Greenhouse associated with this school.

Rating:

3 Needs Replacement

Recommendations:

Provide a new insulated window system with integral blinds to meet with Ohio School Design Manual requirements. Replace interior glazing. Replace exterior sidelights and transom glass panels.

Item	Cost	Unit	Whole Building	Auditorium (1927) 6,503 ft ²	Cassingham Elementary (1927) 56,006 ft ²	Gymnasium (1993) 6,538 ft ²	Classroom Addition (2001) 15,914 ft ²	Sum	Comments
Insulated Glass/Panels:	\$65.00	sq.ft. (Qty)			1,952 Required	104 Required		\$133,640.00	(includes blinds)
Door and Window Panel Replacement	\$200.00	each			30 Required			\$6,000.00	(Hazardous Material Replacement Cost - See T.)
Sum:			\$139,640.00	\$0.00	\$132,880.00	\$6,760.00	\$0.00		



Double hung windows



Window frame and glazing

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G. Structure: Foundation

Description: The overall facility is equipped with concrete foundation walls on concrete spread footings, which displayed no locations of significant differential settlement, cracking, or leaking, and are in good condition. No significant issues related to foundation cracking or spalling were encountered. The District reports that there has been no past leaking. No grading or site drainage deficiencies were noted around the perimeter of the structure that are contributing or could contribute to foundation wall structural deterioration.

Rating: 1 Satisfactory

Recommendations: Existing conditions require no renovation or replacement at the present time.

Item	Cost	Unit	Whole Building	Auditorium (1927)	Cassingham Elementary (1927)	Gymnasium (1993)	Classroom Addition (2001)	Sum	Comments
				6,503 ft ²	56,006 ft ²	6,538 ft ²	15,914 ft ²		
Sum:			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		



Foundation wall exposed



Foundation wall at downspout

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H. Structure: Walls and Chimneys

Description:

The 1927 facility has a brick veneer on load bearing masonry wall system, which displayed locations mortar of deterioration, and is in fair condition. Control joints are not provided at lintel locations, at doors and windows, building corners, and wall offsets though are not needed. The school does not contain expansion joints and none are needed, as there is no indication of exterior masonry cracking or separation. All of the 1927 brick work needs tuckpointing. The 1993 and 2001 additions have a brick veneer on load bearing masonry, which displayed no locations of deterioration, and is in good condition. The exterior masonry appears to have appropriately spaced and adequately caulked control joints in good condition. Control joints are provided in walls. The school does have sufficient expansion joints, and they are in good condition. Exterior walls in the 1927 facility are inadequately insulated. Brick veneer masonry walls are not cavity walls. Exterior walls in the 1993 and 2001 addition are adequately insulated. Brick veneer masonry walls are cavity walls. Weep holes and vents are not provided or required on the 1927 building. Weep holes are not provided in sufficient quantity at the base of masonry cavity walls in the 1993 and 2001 addition. The exterior masonry on the 1993 and 2001 have not yet been cleaned and sealed, showing no evidence of mortar deterioration. The 1927 building has not been cleaned and sealed in recent years, and shows evidence of mortar deterioration in the entire building, has no locations of efflorescence and mold. Architectural exterior accent materials consist of stone which is in good condition. Exterior building fenestration in the overall facility represents over 12.50% of the exterior surfaces. Interior Corridor and demising walls are concrete masonry units, glazed block metal stud framed partitions with gypsum board, project full height from floor to bottom of deck, and are in good condition. Interior masonry appears to have inadequately spaced control joints. Interior soffits are of metal stud with gypsum board type construction, and in good condition. The window sills are in good condition. The exterior lintels are steel, and are in good condition. Chimneys are in fair condition and need to be repointed. Canopies over entrances are framed with a flat roof and attached to the wall with metal bracket type construction, and are in fair condition. Exterior soffits are of metal stud and gypsum type construction, and in good condition. The school is not equipped with a loading dock.

Rating:

3 Needs Replacement

Recommendations:

Provide tuckpointing in all areas of mortar deterioration. Provide masonry cleaning and sealing. Provide weeps.

Item	Cost	Unit	Whole Building	Auditorium (1927) 6,503 ft ²	Cassingham Elementary (1927) 56,006 ft ²	Gymnasium (1993) 6,538 ft ²	Classroom Addition (2001) 15,914 ft ²	Sum	Comments
Tuckpointing:	\$5.25	sq.ft. (Qty)			7,800 Required			\$40,950.00	(wall surface)
Exterior Masonry Cleaning:	\$1.50	sq.ft. (Qty)			7,800 Required	5,000 Required	5,200 Required	\$27,000.00	(wall surface)
Exterior Masonry Sealing:	\$1.00	sq.ft. (Qty)			7,800 Required	5,000 Required	5,200 Required	\$18,000.00	(wall surface)
Other: Install Weeps	\$20.00	each				60 Required	200 Required	\$5,200.00	Provide weeps in existing wall
Sum:			\$91,150.00	\$0.00	\$60,450.00	\$13,700.00	\$17,000.00		



Brick building cleaned and sealed



Brick wall to be tuck pointed

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I. Structure: Floors and Roofs

Description: The floor construction of the base floor of the overall facility is concrete slab on grade type construction, and is in good condition. The floor construction of the intermediate floors of the 1927 facility is cast-in-place concrete type construction, and is in good condition. There are no intermediate floors in the 1993 gymnasium addition. Ceiling to structural deck spaces are sufficient to accommodate HVAC, electrical, and plumbing scopes of work in required renovations. The roof construction of the 1927 facility is cast-in-place concrete type construction, and is in good condition. The roof construction of the 1993 and 2001 additions are metal deck on steel joist type construction, and is in good condition.

Rating: 1 Satisfactory

Recommendations: Existing conditions require no renovation or replacement at the present time.

Item	Cost	Unit	Whole Building	Auditorium (1927)	Cassingham Elementary (1927)	Gymnasium (1993)	Classroom Addition (2001)	Sum	Comments
				6,503 ft ²	56,006 ft ²	6,538 ft ²	15,914 ft ²		
Sum:			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		



Precast concrete deck



Exposed metal deck

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J. General Finishes

Description:

The 1927 facility and 1993 addition features conventionally partitioned Classrooms with vinyl composite tile type flooring, acoustical ceiling tile type ceilings, as well as painted gypsum type wall finishes, and they are in fair to poor condition. The 1927 facility and 1993 addition has Corridors with vinyl composite tile mixed with terrazzo type flooring, acoustical ceiling tile type ceilings, as well as painted gypsum painted brick and block and glazed block type wall finishes. The flooring and ceiling tile are in fair to poor condition. The 2001 addition has, gypsum type ceilings, exposed deck, masonry and gypsum type wall finishes, and they are in good condition. Toilet partitions are plastic and are in good condition. Classroom casework in the is wood type construction with plastic laminate tops, is adequately provided, and in good condition. The typical Classroom contains 20 lineal feet of casework. Classrooms are provided adequate chalkboards and tack boards which are in good condition. There are lockers located in the corridors are adequately provided, and in good condition The Art program is not equipped with a kiln. The 1927 facility is equipped with wood non-louvered interior doors that are flush mounted with mostly proper ADA hardware and clearances and in fair condition. The 2001 addition is equipped with wood non-louvered interior doors that are recessed with proper ADA hardware and clearances, and in good condition. The Gymnasium space has wood type flooring, exposed metal deck type ceilings, as well as painted type wall finishes, and they are in good condition. Wood Gymnasium flooring has been well maintained, will accommodate multiple future sandings and refinishing, and is rated at a median stage of its product lifecycle. There is no evidence of Tartan flooring under the wood. Gymnasium does not have stands. Gymnasium basketball backboards are electrically operated type, and are in good condition. The Media Center and Student Dining is in the Middle School/High School building. Information on these spaces will be address in that buildings assessment. OSDM-required fixed equipment for Stage is adequately provided by the auditorium building, and is in good condition. Existing Gymnasium is provided with appropriate sound attenuation acoustical surface treatments. There is no kitchen in this facility. The kitchen that provides lunch for this schools is located in the attached Middle School building.

Rating:

3 Needs Replacement

Recommendations:

Insulate exterior walls. Replace finishes less casework. Classrooms require ADA sink mounted drinking fountains. Replace base cabinet. Refer to Item O for ADA sinks and drinking fountains. Replace doors, frames and hardware. Refer to Item O Replace acoustical ceilings due to Item K lighting replacement.

Item	Cost	Unit	Whole Building	Auditorium (1927) 6,503 ft²	Cassingham Elementary (1927) 56,006 ft²	Gymnasium (1993) 6,538 ft²	Classroom Addition (2001) 15,914 ft²	Sum	Comments
Paint:	\$2.00	sq.ft. (of entire building addition)				Required		\$13,076.00	(partial finish - floor area/prep and installation)
Acoustic Ceiling:	\$3.50	sq.ft. (Qty)		6,503 Required			15,914 Required	\$78,459.50	(partial finish - tear out and replace per area)
Complete Replacement of Finishes (excludes casework) (Elementary):	\$11.80	sq.ft. (of entire building addition)			Required	Required		\$738,019.20	(elementary, per building area, with removal of existing)
Partial Casework (base and wall):	\$450.00	ln.ft.			132 Required			\$59,400.00	(refer to OSFC, OSDM for requirements)
Additional Wall Insulation	\$6.00	sq.ft. (Qty)			7,800 Required	5,000 Required	5,200 Required	\$108,000.00	(includes the furring out of the existing walls, insulation and abuse resistant GWB)
Sum:			\$996,954.70	\$22,760.50	\$767,070.80	\$120,224.40	\$86,899.00		



Terrazzo and VCT flooring



Damaged ceiling tile

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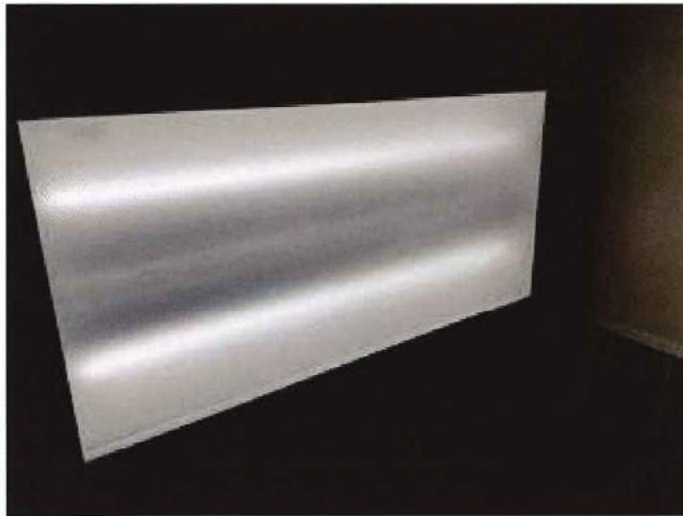
K. Interior Lighting

Description: The typical Classrooms in the overall facility are equipped with T-8 lay-in 2x4 fluorescent fixtures with dual level switching. Classroom fixtures are in good condition, providing an average illumination of 75 FC, thus complying with the 50 FC recommended by the OSDM. The typical Corridors in the overall facility are equipped with T-8 lay-in 2x4 fluorescent fixtures with single level switching. Corridor fixtures are in good condition, providing an average illumination of 28 FC, thus complying with the 20 FC recommended by the OSDM. The Gymnasium spaces are equipped with T-8 suspended fluorescent type lighting, in good condition, providing an average illumination of 50 FC, thus complying with the 50 ES / MS FC recommended by the OSDM. The Media Center is equipped with T-8 lay-in 2x4 fluorescent fixture type lighting in good condition, providing an average illumination of 60 FC, thus complying with the 50 FC recommended by the OSDM. The Service Areas in the overall facility are equipped with T-8 surface mount 2x4 fluorescent fixture type lighting in good condition. The typical Administrative spaces in the overall facility are equipped with T-8 lay-in 2x4 fluorescent fixture type lighting in good condition, providing adequate illumination based on OSDM requirements. The overall lighting systems of the facility are compliant with Ohio School Design Manual requirements.

Rating: 3 Needs Replacement

Recommendations: Provide complete replacement of lighting system due to installation of systems outlined in Item U.

Item	Cost	Unit	Whole Building	Auditorium (1927)	Cassingham Elementary (1927)	Gymnasium (1993)	Classroom Addition (2001)	Sum	Comments
Complete Building Lighting Replacement	\$5.00	sq.ft. (of entire building addition)		6,503 ft ² Required	56,006 ft ² Required	6,538 ft ² Required	15,914 ft ² Required	\$424,805.00	Includes demo of existing fixtures
Sum:			\$424,805.00	\$32,515.00	\$280,030.00	\$32,690.00	\$79,570.00		



Classroom Light Fixture



Gymnasium Lighting

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L. Security Systems

Description:

The overall facility contains a CCTV type security system in good condition. Motion detectors are not provided in main entries, central gathering areas, offices, main Corridors, and spaces where 6 or more computers are located. Exterior doors are not equipped with door contacts. An automatic visitor control system is provided. Compliant color CCTV cameras are provided at main entry areas, parking lots, central gathering areas, and main Corridors. CCTV is monitored in a designated security station with an LCD monitor and computer based hard disk recording device. A compliant computer controlled access control system integrating alarms and video signals, with appropriate UPS backup, is not provided. The system is not equipped with card / biometric readers. The security system is not adequately provided throughout, and the system is not compliant with Ohio School Design Manual guidelines. The exterior site lighting system is equipped with surface mounted HID entry lights in good condition. Pedestrian walkways are illuminated with pole fixtures in good condition. Parking and bus pick-up / drop off areas are illuminated by pole mounted HID fixtures in good condition. The exterior site lighting system provides adequate illumination.

Rating:

3 Needs Replacement

Recommendations:

Provide new security system to meet Ohio School Design Manual guidelines.

Item	Cost	Unit	Whole Building	Auditorium (1927)	Cassingham Elementary (1927)	Gymnasium (1993)	Classroom Addition (2001)	Sum	Comments
Security System:	\$1.85	sq.ft. (of entire building addition)		6,503 ft ²	56,006 ft ²	6,538 ft ²	15,914 ft ²	\$157,177.85	(complete, area of building)
Sum:			\$157,177.85	\$12,030.55	\$103,611.10	\$12,095.30	\$29,440.90		



Exterior CCTV Cameras



Interior CCTV Camera

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M. Emergency/Egress Lighting

Description: The overall facility is equipped with an emergency egress lighting system consisting of non compliant plastic construction exit signs and the system is in good condition. The facility is equipped with emergency egress floodlighting and is equipped with recessed fluorescent lighting used as emergency egress lighting and the system is in good condition. The system is provided with appropriate battery backup and / or emergency generator. The system is adequately provided throughout, and does not meet Ohio School Design Manual and Ohio Building Code requirements.

Rating: 3 Needs Replacement

Recommendations: Provide complete replacement of emergency / egress lighting system to meet Ohio School Design Manual and Ohio Building Code guidelines and to facilitate work in Item U.

Item	Cost	Unit	Whole Building	Auditorium (1927) 6,503 ft ²	Cassingham Elementary (1927) 56,006 ft ²	Gymnasium (1993) 6,538 ft ²	Classroom Addition (2001) 15,914 ft ²	Sum	Comments
Emergency/Egress Lighting:	\$1.00	sq.ft. (of entire building addition)		Required	Required	Required	Required	\$84,961.00	(complete, area of building)
Sum:			\$84,961.00	\$6,503.00	\$56,006.00	\$6,538.00	\$15,914.00		



Noncompliant Exit Sign



Typical Egress Light

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N. Fire Alarm

Description: The overall facility is equipped with a Notifier type fire alarm system, installed in 2001, and in good condition, consisting of manual pull stations / horn and strobe indicating devices. The system is automatic and is monitored by a third party. The system is equipped with sufficient audible horns / strobe indicating devices / smoke detectors / heat sensors. The system thus will support future fire suppression systems. The system is adequately provided throughout, and does have additional zone capabilities. The system is compliant with Ohio Building Code, NFPA, and Ohio School Design Manual requirements.

Rating: 1 Satisfactory

Recommendations: Existing conditions require no renovation or replacement at the present time.

Item	Cost	Unit	Whole Building	Auditorium (1927)	Cassingham Elementary (1927)	Gymnasium (1993)	Classroom Addition (2001)	Sum	Comments
				6,503 ft ²	56,006 ft ²	6,538 ft ²	15,914 ft ²		
Sum:			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		



Fire Alarm Control Panel



Typical Horn/Strobe

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O. Handicapped Access

Description: At the site, there is an accessible route provided from the public right-of-way, the accessible parking areas, and from the passenger unloading zone to the back entrance of the school. There is an accessible route connecting all or most areas of the site. The exterior entrances are not all ADA accessible due to steps at the front entrance. Access from the parking and drop-off area to the building entries is not compromised by steps or steep ramps. Adequate handicap parking is provided. Exterior doors are equipped with ADA hardware. Building entrances should be equipped with 1 ADA power assist doors and none are provided. Playground layout and equipping are compliant. On the interior of the building, space allowances and reach ranges are mostly compliant. There is an accessible route through the building which does not include protruding objects. Ground and floor surfaces are compliant. Ramps and stairs do not meet all ADA requirements, and are insufficient due to lack of railing extensions and hand rail on some stairs. Elevation changes within the overall facility are facilitated by 2 compliant and 2 non-compliant stairwells in good condition, 1 compliant ramp in good condition. This multistory building has does have a compliant elevator that accesses every floor and is in good condition. Access to the Stage is facilitated by a Corridor at Stage level. Interior doors are not all recessed, are not all provided adequate clearances, and are not all provided with ADA-compliant hardware in the 1927 facility. In the 1993 and 2001 additions, interior doors are recessed, are provided adequate clearances, and are provided with ADA-compliant hardware. 9 ADA-compliant toilets are required, and 3 are currently provided. 9 ADA-compliant restroom lavatories are required, and 6 are currently provided. 6 ADA-compliant urinals are required, and 6 are currently provided. 6 ADA-compliant electric water coolers are required, and 2 are currently provided. Toilet partitions are plastic, and do not provide appropriate ADA clearances in all locations. ADA-compliant accessories are not adequately provided and mounted. Mirrors do not meet ADA requirements for mounting heights. There are no restrooms in the 1993 or 2001 additions. Due to existing grade configuration, no Science Classroom considerations require evaluation. Health Clinic and Special Education Restrooms are in the Middle School/High. ADA signage is not provided on both the interior the exterior of the building.

Rating: 3 Needs Replacement

Recommendations: Provide ADA-compliant electric water coolers, toilets, sinks, toilet partitions and toilet accessories. Provide new doors frames and hardware in the 1927 facility as needed. Provide ADA signage. Add ADA door operator. Replace railings. Refer to Item J. Provide toilet partitions and accessories as needed, Adjust mirror height. Replace sink mounted drinking fountains and sinks in the classrooms. Refer to Item J for base cabinets.

Item	Cost	Unit	Whole Building	Auditorium (1927) 6,503 ft²	Cassingham Elementary (1927) 56,006 ft²	Gymnasium (1993) 6,538 ft²	Classroom Addition (2001) 15,914 ft²	Sum	Comments
Signage:	\$0.20	sq.ft. (of entire building addition)		Required	Required	Required	Required	\$16,992.20	(per building area)
Electric Water Coolers:	\$3,000.00	unit			2 Required			\$6,000.00	(new double ADA)
Toilet/Urinals/Sinks:	\$3,800.00	unit			9 Required			\$34,200.00	(new ADA)
Toilet Partitions:	\$1,000.00	stall			6 Required			\$6,000.00	(ADA - grab bars, accessories included)
ADA Assist Door & Frame:	\$7,500.00	unit			1 Required			\$7,500.00	(openers, electrical, patching, etc)
Replace Doors:	\$1,300.00	leaf			12 Required			\$15,600.00	(standard 3070 wood door, HM frame, door/light, includes hardware)
Remount Restroom Mirrors to Handicapped Height:	\$285.00	per restroom			9 Required			\$2,565.00	
Provide Toilet Accessories:	\$1,000.00	per restroom			6 Required			\$6,000.00	
Other: Drinking Fountains	\$800.00	each			22 Required			\$17,600.00	Replace sinks and drinking fountains in classrooms. Does not include cabinets.
Other: Replace Handrails	\$100.00	ln.ft.			120 Required			\$12,000.00	Replacement handrails to match existing
Sum:			\$124,457.20	\$1,300.60	\$118,666.20	\$1,307.60	\$3,182.80		



Non-compliant fixtures and mirrors



Non-compliant toilet accessories

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P. Site Condition

Description:

The 14.50-acre flat site is located in an urban, residential setting with moderate tree and shrub type landscaping. The site is shared with Bexley Middle and High Schools, and 2 outbuildings include a maintenance equipment building and a restroom building. There are apparent problems with erosion or ponding. The site is bordered by lightly traveled city streets. There are no entrances onto the site for buses. There is a curbside bus loading and unloading zone in front of the school, on the street, which is not separated from other vehicular traffic. Staff and visitor parking is facilitated by an asphalt parking lot in good condition, containing 31 parking places, which does not provide adequate parking for staff members, visitors, and the disabled. The site and parking lot drainage design, consisting of catch basins and storm sewers adequate evacuation of storm water, and no problems with parking lot ponding were observed. Concrete curbs in good condition are appropriately placed. Concrete sidewalks are properly sloped, are located to provide a logical flow of pedestrian traffic, and are in good condition. Trash pick-up and service drive pavement is part of the Middle/High School assessment. Concrete steps at the front entrances to the school with non-ADA compliant metal handrails are in poor condition. The ADA ramp to the back entrance is in good condition. A 6' tall fence encloses the playground and the sports fields. The playground equipment is primarily constructed of coated steel and high-density plastic, and is in good condition. Playground equipment is placed to provide compliant fall zones, and on ADA compliant rubber tile. Hard surfaces, with 3 basketball half courts and 1 funnel ball being provided on an asphalt surface in good condition. The playground area is not equipped with any tables, benches are in fair condition. The athletic facilities are shared with the middle school and high school. They consist of a baseball field, football field and 5 tennis courts, and are in good condition. Site features are suitable for outdoor instruction, though no related equipment has been provided to facilitate doing so. The entire school complex site including Cassingham Elementary and Bexley Middle and High School is taken up by the school building and sports fields. The school property takes up approximately 80% of the city block that it sets on. Nine residential properties take up the remaining 20%. Parking, is very inadequate for teachers and staff

Rating:

3 Needs Replacement

Recommendations:

Replace ADA handrails at the front entrance. Replace concrete steps and landing at the front entrance.

Item	Cost	Unit	Whole Building	Auditorium (1927) 6,503 ft ²	Cassingham Elementary (1927) 56,006 ft ²	Gymnasium (1993) 6,538 ft ²	Classroom Addition (2001) 15,914 ft ²	Sum	Comments
Replace Concrete Steps:	\$32.00	sq.ft. (Qty)				192 Required		\$6,144.00	
Base Sitework Allowance for Unforeseen Circumstances	\$50,000.00	allowance				Required		\$50,000.00	Include this and one of the next two. (Applies for whole building, so only one addition should have this item)
Sitework Allowance for Unforeseen Circumstances for buildings between 0 SF and 100,000 SF	\$1.50	sq.ft. (of entire building addition)		Required	Required	Required	Required	\$127,441.50	Include this one or the next. (Each addition should have this item)
Other: Provide metal stair.	\$100.00	n.ft.			48 Required			\$4,800.00	Provide iron railing to match existing
Sum:			\$188,385.50	\$9,754.50	\$144,953.00	\$9,807.00	\$23,871.00		



Broken concrete steps



Handrails

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Facility Assessment

Q. Sewage System

Description: The sanitary sewer system is tied in to the city system, and is in good condition. No significant system deficiencies were reported by the school district or noted during the physical assessment.

Rating: 1 Satisfactory

Recommendations: Existing conditions require no renovation or replacement at the present time.

Item	Cost	Unit	Whole Building	Auditorium (1927)	Cassingham Elementary (1927)	Gymnasium (1993)	Classroom Addition (2001)	Sum	Comments
				6,503 ft ²	56,006 ft ²	6,538 ft ²	15,914 ft ²		
Sum:			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		



Exposed Waste



Kitchen Sink Waste

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R. Water Supply

Description: The domestic water supply system is tied in to the city system, features 4" service and 4" water meter, and is in good condition. The District was not able to provide water supply flow test data. The existing domestic water service appears to meet the facility's current needs. The facility is not equipped with an automated fire suppression system, and the existing water supply will not provide adequate support for a future system. The domestic water service is not equipped with a water booster pump. The system provides adequate pressure for the future needs of the school.

Rating: 1 Satisfactory

Recommendations: Provide a new city water supply line of adequate capacity to support the existing needs of the facility, as well as a future automated fire suppression system. Funding provided in Item U.

Item	Cost	Unit	Whole Building	Auditorium (1927)	Cassingham Elementary (1927)	Gymnasium (1993)	Classroom Addition (2001)	Sum	Comments
				6,503 ft²	56,006 ft²	6,538 ft²	15,914 ft²		
Sum:			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		



Backflow Preventer



Water Meter

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S. Exterior Doors

Description: Typical exterior doors in the overall facility are steel type construction, installed on steel frames, and in fair condition. Typical exterior doors feature single glazed vision panels, and appropriate hardware. Entrance doors in the overall facility are aluminum type construction, installed on aluminum frames, and in fair condition. Entrance doors feature single glazed vision panels, transoms, sidelights, and appropriate hardware. The facility is equipped with roof access doors. There are no overhead doors in the facility.

Rating: 3 Needs Replacement

Recommendations: Replace all exterior and entrance doors to comply with Ohio Building Code, ADA, and Ohio School Design Manual guidelines.

Item	Cost	Unit	Whole Building	Auditorium (1927) 6,503 ft ²	Cassingham Elementary (1927) 56,006 ft ²	Gymnasium (1993) 6,538 ft ²	Classroom Addition (2001) 15,914 ft ²	Sum	Comments
Door Leaf/Frame and Hardware:	\$2,000.00	per leaf			6 Required	2 Required	4 Required	\$24,000.00	(includes removal of existing)
Sum:			\$24,000.00	\$0.00	\$12,000.00	\$4,000.00	\$8,000.00		



Single pane exterior doors



Exterior steel door and frame

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T. Hazardous Material

Description: The School District provided the AHERA three-year reinspection reports, prepared by Dupler Environmental Consultants, and dated June 28, 2016, documenting known and assumed locations of asbestos and other hazardous materials in all Bexley City Schools. Per the report no asbestos containing material have been located in Cassingham Elementary School. Due to the construction date, there is a potential for lead based paint.

Rating: 1 Satisfactory

Recommendations: Provide for the testing of paint that has the potential of being lead-based.

Item	Cost	Unit	Whole Building	Auditorium (1927)	Cassingham Elementary (1927)	Gymnasium (1993)	Classroom Addition (2001)	Sum	Comments
				6,503 ft ²	56,006 ft ²	6,538 ft ²	15,914 ft ²		
Sum:			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		



asbestos free flooring



Asbestos free fire doors

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U. Life Safety

Description:

The overall facility is not equipped with an automated fire suppression system. The Kitchen hood is in fair condition, and is equipped with the required UL 300 compliant wet chemical fire suppression system. The cooking equipment is interlocked to shut down in the event of discharge of the fire suppression system. The facility is equipped with 2 emergency generators located in the middle/high school and shared with the middle/high school. The emergency generators are natural gas fired type units, are located outside the building, which currently support the illuminated exit signs, emergency egress floodlighting, recessed fluorescent emergency lighting, and fire alarm system. The emergency generators are in poor condition, and appear to provide adequate capacity for the future needs of the school. The existing water supply is provided by a tie-in to the city system, and is insufficient to meet the future fire suppression needs of the school.

Rating:

3 Needs Replacement

Recommendations:

Provide new automated fire suppression system to meet Ohio School Design Manual guidelines. Provide increased water service of a capacity sufficient to support the fire suppression system, funding included in fire suppression funding. Replace the existing emergency generators due to condition. Cost included in the Bexley Middle/High School assessment.

Item	Cost	Unit	Whole Building	Auditorium (1927)	Cassingham Elementary (1927)	Gymnasium (1993)	Classroom Addition (2001)	Sum	Comments
Sprinkler / Fire Suppression System:	\$3.20	sq.ft. (Qty)		6,503 Required	56,006 Required	6,538 Required	15,914 Required	\$271,875.20	(includes increase of service piping, if required)
Sum:			\$271,875.20	\$20,809.60	\$179,219.20	\$20,921.60	\$50,924.80		



Kitchen Hood



Generators

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V. Loose Furnishings

Description: The typical Classroom furniture is mismatched, and in generally fair condition, consisting of student desks & chairs, teacher desks & chairs, desk height file cabinets, reading tables, computer workstations, bookcases, wastebaskets. The facility's furniture and loose equipment were evaluated in item 6.17 in the CEFPI section of this report, and on a scale of 1 to 10 the overall facility received a rating of 7 due to observed conditions, and due to the fact that it lacks some of the Design Manual required elements.

Rating: 3 Needs Replacement

Recommendations: Provide for replacement of outdated or inadequate furnishings.

Item	Cost	Unit	Whole Building	Auditorium (1927)	Cassingham Elementary (1927)	Gymnasium (1993)	Classroom Addition (2001)	Sum	Comments
CEFPI Rating	\$2.00	sq.ft. (of entire building addition)		6,503 ft ²	56,006 ft ²	6,538 ft ²	15,914 ft ²	\$143,840.00	
7					Required		Required		
Sum:			\$143,840.00	\$0.00	\$112,012.00	\$0.00	\$31,828.00		



Mismatched loose furnishings



Mismatched loose furnishings

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W. Technology

Description: The typical Classroom is equipped with four technology data ports for student use / one data port for teacher use / one voice port with a digitally based phone system / one cable port and monitor / and a 2-way PA system that can be initiated by either party to meet Ohio School Design Manual requirements. The facility is equipped with a centralized clock system. Specialized electrical / sound system requirements of Gymnasium, Stage, Student Dining, and Music spaces are adequately provided, and in good condition. OSDM-compliant computer network infrastructure is not provided. The facility shares a media distribution center with Bexley Middle School, and provides Computer Labs for use by students. Elevators are equipped with telephones.

Rating: 3 Needs Replacement

Recommendations: Provide complete replacement of technology systems to meet Ohio School Design Manual requirements, and to sustain the capacity to keep pace with technological development.

Item	Cost	Unit	Whole Building	Auditorium (1927)	Cassingham Elementary (1927)	Gymnasium (1993)	Classroom Addition (2001)	Sum	Comments
				6,503 ft ²	56,006 ft ²	6,538 ft ²	15,914 ft ²		
ES portion of building with total SF 89,361 to 100,000	\$10.18	sq.ft. (Qty)		6,503 Required	56,006 Required	6,538 Required	15,914 Required	\$864,902.98	
Sum:			\$864,902.98	\$66,200.54	\$570,141.08	\$66,556.84	\$162,004.52		



Typical Classroom Data Jacks



Classroom Smart Board Projector

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X. Construction Contingency / Non-Construction Cost

Renovation Costs (A-W)		\$6,989,753.26
7.00%	Construction Contingency	\$489,282.73
Subtotal		\$7,479,035.99
16.29%	Non-Construction Costs	\$1,218,334.96
Total Project		\$8,697,370.95

Construction Contingency	\$489,282.73
Non-Construction Costs	\$1,218,334.96
Total for X.	\$1,707,617.69

Non-Construction Costs Breakdown		
Land Survey	0.03%	\$2,243.71
Soil Borings / Phase I Envir. Report	0.10%	\$7,479.04
Agency Approval Fees (Bldg. Code)	0.25%	\$18,697.59
Construction Testing	0.40%	\$29,916.14
Printing - Bid Documents	0.15%	\$11,218.55
Advertising for Bids	0.02%	\$1,495.81
Builder's Risk Insurance	0.12%	\$8,974.84
Design Professional's Compensation	7.50%	\$560,927.70
CM Compensation	6.00%	\$448,742.16
Commissioning	0.60%	\$44,874.22
Non-Construction Contingency (includes partnering and mediation services)	1.12%	\$83,765.20
Total Non-Construction Costs	16.29%	\$1,218,334.96

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School Facility Appraisal

Name of Appraiser Tom Kurtz **Date of Appraisal** 2017-10-19
Building Name Cassingham Elem
Street Address 250 S Cassingham Rd
City/Town, State, Zip Code Bexley, OH 43209
Telephone Number(s) 614.237.4309
School District Bexley City

Setting: Suburban
 Site-Acreage 14.50 Building Square Footage 84,961
 Grades Housed K-6 Student Capacity 500
 Number of Teaching Stations 30 Number of Floors 4
 Student Enrollment 432
 Dates of Construction 1927,1927,1993,2001

Energy Sources: Fuel Oil Gas Electric Solar
Air Conditioning: Roof Top Windows Units Central Room Units
Heating: Central Roof Top Individual Unit Forced Air
 Hot Water Steam

Type of Construction
 Load bearing masonry
 Steel frame
 Concrete frame
 Wood
 Steel Joists

Exterior Surfacing
 Brick
 Stucco
 Metal
 Wood
 Stone

Floor Construction
 Wood Joists
 Steel Joists
 Slab on grade
 Structural slab

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1.0 The School Site	Points Allocated	Points
1.1 Site is large enough to meet educational needs as defined by state and local requirements <i>The site is much smaller than the Elementary School (10 ac. + 1 ac. Per 100 students).</i>	25	5
1.2 Site is easily accessible and conveniently located for the present and future population <i>Yes, the site is easily accessible and conveniently located for the present and future population</i>	20	20
1.3 Location is removed from undesirable business, industry, traffic, and natural hazards <i>The site is adjacent to residential uses, which are suitable for educational instruction.</i>	10	10
1.4 Site is well landscaped and developed to meet educational needs <i>The site is moderately landscaped with mature shade trees, ornamental trees, and shrubs which define the property and emphasize the building entrance. Lawn areas where mowing is required do not exceed 3:1 slope.</i>	10	8
1.5 ES Well equipped playgrounds are separated from streets and parking areas MS Well equipped athletic and intermural areas are separated from streets and parking HS Well equipped athletic areas are adequate with sufficient solid-surface parking <i>Yes, ES - Well equipped playgrounds are separated from streets and parking areas</i>	10	10
1.6 Topography is varied enough to provide desirable appearance and without steep inclines <i>The site is gently sloped to provide positive drainage across the site. A flat area is provided to accommodate buildings, perimeter walks, vehicular circulation, parking areas, outdoor play areas, and physical education spaces, and is desirable.</i>	5	4
1.7 Site has stable, well drained soil free of erosion <i>Soils appear to be stable and well drained, and no erosion was observed.</i>	5	4
1.8 Site is suitable for special instructional needs , e.g., outdoor learning <i>The site has not been developed to accommodate outdoor learning.</i>	5	3
1.9 Pedestrian services include adequate sidewalk with designated crosswalks, curb cuts, and correct slopes <i>Sidewalks are adequately provided to accommodate safe pedestrian circulation including designated crosswalks, curb cuts, and correct slopes.</i>	5	4
1.10 ES/MS Sufficient on-site, solid surface parking for faculty and staff is provided HS Sufficient on-site, solid surface parking is provided for faculty, students, staff and community <i>Parking for faculty and staff is not adequately provided on the site.</i>	5	2
TOTAL - 1.0 The School Site	100	70

2.0 Structural and Mechanical Features	Points Allocated	Points
Structural		
2.1 Structure meets all barrier-free requirements both externally and internally <i>Entire building is not ADA-compliant.</i>	15	10
2.2 Roofs appear sound, have positive drainage, and are weather tight <i>The roofs over the entire building are in good condition but require replacement due to age of systems.</i>	15	10
2.3 Foundations are strong and stable with no observable cracks <i>Foundations are in good condition with no observable cracks.</i>	10	9
2.4 Exterior and interior walls have sufficient expansion joints and are free of deterioration <i>Exterior and interior walls are in good condition, have sufficient control joints, and are free from deterioration. No expansion joints are provided.</i>	10	8
2.5 Entrances and exits are located so as to permit efficient student traffic flow <i>Exits are properly located to allow safe egress from the building.</i>	10	8
2.6 Building "envelope" generally provides for energy conservation (see criteria) <i>Building envelope does not meet minimum energy conservation requirements.</i>	10	4
2.7 Structure is free of friable asbestos and toxic materials <i>Reports show no friable asbestos.</i>	10	10
2.8 Interior walls permit sufficient flexibility for a variety of class sizes <i>Interior walls throughout the facility are fixed walls and are not flexible.</i>	10	6
Mechanical/Electrical		
2.9 Adequate light sources are well maintained, and properly placed and are not subject to overheating <i>The lighting system provides the minimum lighting intensity in all areas of the building as required by the OSDM. Classrooms have dual-level lighting systems. Lighting systems are well maintained.</i>	15	14
2.10 Internal water supply is adequate with sufficient pressure to meet health and safety requirements <i>The water pressure is adequate for the future needs of the school.</i>	15	14
2.11 Each teaching/learning area has adequate convenient wall outlets , phone and computer cabling for technology applications <i>Classrooms typical have 7 wall outlets. Each classroom has at least 1 digital phone jack, 1 network jack, and 1 cable jack.</i>	15	13
2.12 Electrical controls are safely protected with disconnect switches easily accessible <i>Electrical panels in the corridors are locked. Panels are easy to find.</i>	10	8
2.13 Drinking fountains are adequate in number and placement, and are properly maintained including provisions for the disabled <i>Drinking fountains are adequate in number and placement, but do not all meet ADA requirements. Drinking fountains are properly maintained.</i>	10	6
2.14 Number and size of restrooms meet requirements <i>The number and size of Restrooms do not meet requirements.</i>	10	4
2.15 Drainage systems are properly maintained and meet requirements <i>The roof drains are adequate in number and placement. There are floor drains in the mechanical rooms.</i>	10	8
2.16 Fire alarms, smoke detectors, and sprinkler systems are properly maintained and meet requirements	10	5

Horn and strobe fire alarms are provided in all locations as required by the OBC and the ADAG. The building is equipped with smoke detectors and horn/strobes. The building is not sprinkled.

2.17 **Intercommunication system** consists of a central unit that allows dependable **two-way communication** between the office and instructional areas 10 8

There is a two-way intercom system in each classroom with a central unit in the administration area.

2.18 **Exterior water supply** is sufficient and available for normal usage 5 2

Hose bibbs are not provided on all sides of the building.

TOTAL - 2.0 Structural and Mechanical Features 200 147

3.0 Plant Maintainability	Points Allocated	Points
<p>3.1 Windows, doors, and walls are of material and finish requiring minimum maintenance</p> <p><i>Exterior materials and finishes for doors, windows and walls are durable and require minimal maintenance.</i></p>	15	12
<p>3.2 Floor surfaces throughout the building require minimum care</p> <p><i>Flooring throughout the facility consists of VCT, VAT, wood, terrazzo, sealed concrete, ceramic tile, which is well maintained throughout the facility' but much of it is due for replacement.</i></p>	15	9
<p>3.3 Ceilings and walls throughout the building, including service areas, are easily cleaned and resistant to stain</p> <p><i>Lay-in type ceilings are not easily cleaned or resistant to stain.</i></p>	10	8
<p>3.4 Built-in equipment is designed and constructed for ease of maintenance</p> <p><i>Casework is wood type construction with plastic laminate tops, is well constructed and in fair condition.</i></p>	10	6
<p>3.5 Finishes and hardware, with compatible keying system, are of durable quality</p> <p><i>Most door hardware is consistent throughout the facility, and meets ADA requirements.</i></p>	10	6
<p>3.6 Restroom fixtures are wall mounted and of quality finish</p> <p><i>Fixtures are floor and wall mounted and are of good quality.</i></p>	10	7
<p>3.7 Adequate custodial storage space with water and drain is accessible throughout the building</p> <p><i>Custodial space is not adequately located throughout the facility.</i></p>	10	6
<p>3.8 Adequate electrical outlets and power, to permit routine cleaning, are available in every area</p> <p><i>Corridors and classrooms have an adequate number of outlets.</i></p>	10	9
<p>3.9 Outdoor light fixtures, electrical outlets, equipment, and other fixtures are accessible for repair and replacement</p> <p><i>Light fixtures are on all sides of the building and are accessible. Outlet coverage is sparse.</i></p>	10	6
<hr/>		
TOTAL - 3.0 Plant Maintainability	100	69

4.0 Building Safety and Security

Points Allocated Points

Site Safety

4.1 Student loading areas are segregated from other vehicular traffic and pedestrian walkways <i>Student loading occurs in the street, and is not separated from other vehicular traffic.</i>	15	6
4.2 Walkways , both on and offsite, are available for safety of pedestrians <i>Walkways are adequately provided both on and off-site for pedestrian safety.</i>	10	8
4.3 Access streets have sufficient signals and signs to permit safe entrance to and exit from school area <i>School signs and signals are not located as required on adjacent access streets.</i>	5	3
4.4 Vehicular entrances and exits permit safe traffic flow <i>Vehicular traffic use the same entrance and exit points to the site, which does provide safe vehicular traffic flow.</i>	5	4
4.5 ES Playground equipment is free from hazard MS Location and types of intramural equipment are free from hazard HS Athletic field equipment is properly located and is free from hazard <i>The playgrounds are less than 3 years old and meet ADA requirement and are hazard free.</i>	5	5

Building Safety

Points Allocated Points

4.6 The heating unit(s) is located away from student occupied areas <i>The building utilizes air handling units that are located away from the classrooms.</i>	20	18
4.7 Multi-story buildings have at least two stairways for student egress <i>The building does not have 2 stairways, which are not enclosed, and are not ADA and OBC compliant.</i>	15	12
4.8 Exterior doors open outward and are equipped with panic hardware <i>Exterior doors open in the direction of travel and are equipped with panic hardware.</i>	10	8
4.9 Emergency lighting is provided throughout the entire building with exit signs on separate electrical circuits <i>Emergency lighting is provided. Lights are battery or generator powered. There are an appropriate amount of exit signs.</i>	10	9
4.10 Classroom doors are recessed and open outward <i>Classroom doors are not all recessed from the Corridor and open outward, which impede traffic flow in the Corridors.</i>	10	6
4.11 Building security systems are provided to assure uninterrupted operation of the educational program <i>The building security system is a CCTV system. No motion detectors or door contacts are installed. There is a visitor control system provided.</i>	10	5
4.12 Flooring (including ramps and stairways) is maintained in a non-slip condition <i>Terrazzo and VCT flooring are due for replacement</i>	5	3
4.13 Stair risers (interior and exterior) do not exceed 6 1/2 inches and range in number from 3 - 16 <i>Stair risers do not exceed 7 inches permitted by the OBC.</i>	5	3
4.14 Glass is properly located and protected with wire or safety material to prevent accidental student injury <i>Glass at door transoms and sidelights is not tempered or provided with a wire mesh for safety.</i>	5	2
4.15 Fixed Projections in the traffic areas do not extend more than eight inches from the corridor wall <i>Fixed projections in the Corridor exceed 8 inches.</i>	5	2
4.16 Traffic areas terminate at an exit or a stairway leading to an egress <i>Exits are properly located to allow safe egress from the building. Stairways empty to the exterior, or adjacent to a Corridor leading to the exterior.</i>	5	12

Emergency Safety	Points Allocated	Points
4.17 Adequate fire safety equipment is properly located <i>Fire extinguishers are adequately provided.</i>	15	13
4.18 There are at least two independent exits from any point in the building <i>Multiple exits are provided from Corridors throughout the facility.</i>	15	12
4.19 Fire-resistant materials are used throughout the structure <i>The structure is a masonry load bearing system with steel joist and concrete deck. Interior walls are masonry, plaster, drywall.</i>	15	12
4.20 Automatic and manual emergency alarm system with a distinctive sound and flashing light is provided <i>There is an automatic and manual emergency alarm system manufactured by Honeywell Notifier provided. The system has an audible alarm and strobes.</i>	15	13
TOTAL - 4.0 Building Safety and Security	200	156

5.0 Educational Adequacy

Points Allocated Points

Academic Learning Space

5.1 Size of academic learning areas meets desirable standards	25	20
<i>The average Classroom is 825 SF compared to 900 SF required by the OSDM.</i>		
5.2 Classroom space permits arrangements for small group activity	15	10
<i>Undersized Classrooms do not allow sufficient space for effective small group activities.</i>		
5.3 Location of academic learning areas is near related educational activities and away from disruptive noise	10	8
<i>The Gymnasium and Music program are properly isolated from the academic learning areas to reduce distractions.</i>		
5.4 Personal space in the classroom away from group instruction allows privacy time for individual students	10	7
<i>Undersized Classrooms do not permit privacy time for individual students.</i>		
5.5 Storage for student materials is adequate	10	8
<i>Lockers, located in the Corridor, are adequately provided for student storage.</i>		
5.6 Storage for teacher materials is adequate	10	8
<i>Casework is adequately provided for storage of teacher materials.</i>		

Special Learning Space

Points Allocated Points

5.7 Size of special learning area(s) meets standards	15	9
<i>Special Education Classrooms are undersized compared to standards.</i>		
5.8 Design of specialized learning area(s) is compatible with instructional need	10	8
<i>Special Education spaces are properly designed to meet instructional needs.</i>		
5.9 Library/Resource/Media Center provides appropriate and attractive space	10	6
<i>The Media Center is an attractive space, including natural light and sufficient book storage space.</i>		
5.10 Gymnasium (or covered P.E. area) adequately serves physical education instruction	5	5
<i>The Gymnasium is 4557 SF compared to 4000 SF recommended in the OSDM. (HS/MS/ES)</i>		
5.11 ES Pre-kindergarten and kindergarten space is appropriate for age of students and nature of instruction MS/HS Science program is provided sufficient space and equipment	10	7
<i>Pre-K and Kindergarten spaces are undersized, and do not provide adequate instruction space.</i>		
5.12 Music Program is provided adequate sound treated space	5	3
<i>The Music Room is 1,450 SF compared to 1,800-3,000 recommended in the OSDM.</i>		
5.13 Space for art is appropriate for special instruction, supplies, and equipment	5	3
<i>The Art Room is undersized and does not provide sufficient space for storage of supplies and equipment.</i>		

School Facility Appraisal

Points Allocated Points

5.14 Space for technology education permits use of state-of-the-art equipment	5	4
<i>The facility is provided with Computer Labs for student use.</i>		
5.15 Space for small groups and remedial instruction is provided adjacent to classrooms	5	3
<i>No spaces have been provided adjacent to Classrooms for small groups or remedial instruction.</i>		
5.16 Storage for student and teacher material is adequate	5	4

Lockers have been adequately provided for storage of student materials. Casework has been adequately provided for storage of teacher materials.

Support Space	Points Allocated	Points
5.17 Teacher's lounge and work areas reflect teachers as professionals <i>Limited work space is provided for preparation of teacher materials.</i>	10	6
5.18 Cafeteria/Kitchen is attractive with sufficient space for seating/dining, delivery, storage, and food preparation <i>The Student Dining space is visual appeal with adequate seating capacity.</i>	10	10
5.19 Administrative offices provided are consistent in appearance and function with the maturity of the students served <i>Administrative Offices are adequately provided for Elementary School students.</i>	5	4
5.20 Counselor's office insures privacy and sufficient storage <i>The Counselor's Office is 200 SF compared to 120 SF, plus 50 SF for Storage</i>	5	4
5.21 Clinic is near administrative offices and is equipped to meet requirements <i>The Clinic is located near the Administrative Offices and is provided with required equipment.</i>	5	4
5.22 Suitable reception space is available for students, teachers, and visitors <i>There is a adequate area for reception in the front office.</i>	5	4
5.23 Administrative personnel are provided sufficient work space and privacy <i>Administrative personnel are provided sufficient work space and open environment</i>	5	4
TOTAL - 5.0 Educational Adequacy	200	149

6.0 Environment for Education	Points Allocated	Points
Exterior Environment		
6.1 Overall design is aesthetically pleasing to age of students	15	9
<i>The building consists of several uncoordinated colors and textures of brick due to multiple additions, and is not aesthetically pleasing.</i>		
6.2 Site and building are well landscaped	10	8
<i>The site is moderately landscaped with mature shade trees, ornamental trees, and shrubs which define the property and emphasize the building entrance. Lawn areas where mowing is required do not exceed 3:1 slope.</i>		
6.3 Exterior noise and poor environment do not disrupt learning	10	10
<i>The site is adjacent to residential uses, and there are no undesirable features adjacent to the school site.</i>		
6.4 Entrances and walkways are sheltered from sun and inclement weather	10	6
<i>Exits are not sheltered from sun and inclement weather.</i>		
6.5 Building materials provide attractive color and texture	5	5
<i>Exterior building materials consist of brick, stone, and concrete block, which do / do not provide an attractive color and texture.</i>		
Interior Environment		
6.6 Color schemes, building materials, and decor provide an impetus to learning	20	12
<i>Due to multiple additions and multiple building materials, the overall design is inconsistent, which does not enhance learning.</i>		
6.7 Year around comfortable temperature and humidity are provided throughout the building	15	14
<i>The building has a central air conditioning system.</i>		
6.8 Ventilating system provides adequate quiet circulation of clean air and meets 15cfm VBC requirement	15	13
<i>It does provide the minimum required ventilation as required by the OBCMC.</i>		
6.9 Lighting system provides proper intensity, diffusion, and distribution of illumination	15	14
<i>Lighting is adequate in all educational spaces.</i>		
6.10 Drinking fountains and restroom facilities are conveniently located	15	6
<i>Drinking fountains and Restroom facilities are not conveniently located.</i>		
6.11 Communication among students is enhanced by commons area(s) for socialization	10	8
<i>There are areas for students to gather in the Student Dining area, Auditorium, and Gymnasium, as well as a small gathering area at the entrance to the school.</i>		
6.12 Traffic flow is aided by appropriate foyers and corridors	10	6
<i>Classroom doorways are not recessed and impede traffic flow.</i>		
6.13 Areas for students to interact are suitable to the age group	10	8
<i>There are areas for students to gather in the Student Dining area, Auditorium, and Gymnasium, as well as a small gathering area at the entrance to the school.</i>		
6.14 Large group areas are designed for effective management of students	10	10
<i>The Auditorium is adequately designed to manage large groups of students.</i>		
6.15 Acoustical treatment of ceilings, walls, and floors provides effective sound control	10	6
<i>Limited consideration has been given to acoustical treatment of Classrooms and Corridors.</i>		
6.16 Window design contributes to a pleasant environment	10	8
<i>The windows are fairly well designed to contribute to a pleasant environment.</i>		
6.17 Furniture and equipment provide a pleasing atmosphere	10	7

Classroom furniture is mismatched and in fair condition.

TOTAL - 6.0 Environment for Education

200

150

LEED Observation Notes

School District: Bexley City
County: Franklin
School District IRN: 43620
Building: Cassingham Elem
Building IRN: 5082

Sustainable Sites

Construction process can have a harmful effect on local ecology, especially when buildings are build on productive agricultural, wildlife or open areas. Several measures can be take however to prevent the impact on undeveloped lands or to improve previously contaminated sites. Appropriate location reduces the need for private transportation and helps to prevent an increase in air pollution. Developing buildings in urban areas and on brownfield sites instead of greenfield locations has economical and environmental benefits. Controlling stormwater runoff and erosion can prevent the worsening of water quality in receiving bodies of water and the impact on aquatic life. Once the building is constructed, it's important to decrease heat island effects and reduce the light pollution on the site.

(source: LEED Reference Guide, 2001:9)

The roof surfaces are white to reflect heat.

Water Efficiency

In the US ca. 340 billion gallons of fresh water are withdrawn daily from surface sources, 65% of which is discharged later after use. Water is also withdrawn from underground aquifers. The excessive usage of water results in the current water deficit, estimated at 3,700 billion gallons. Water efficiency measures in commercial buildings can reduce water usage by at least 30%. Low-flow fixtures, sensors or using non potable water for landscape irrigation, toilet flushing and building systems are just some of available strategies. Not only do they result in environmental savings, but also bring about financial benefits, related to lower water use fees, lower sewage volumes to treat and energy use reductions.

(source: LEED Reference Guide, 2001:65)

Low flow faucets and flush valves could be used.

Energy & Atmosphere

Buildings in the US account for more than 30% of the total energy use and for approximately 60% of electricity. 75% of energy is derived from the burning of fossil fuels, which releases CO2 into the Atmosphere and contributes to global warming. Moreover, coal fired electric utilities release nitrogen oxides and sulfur dioxide, where the former contribute to smog and the latter to acid rain. Other types of energy production are not less harmful. Burning of natural gas produces nitrogen oxides and greenhouse gases as well, nuclear power creates nuclear wastes, while hydroelectric generating plants disrupt natural water flows. Luckily there are several practices that can reduce energy consumption and are environmentally and economically beneficial. Not only will they reduce the air pollution and mitigate global warming thanks to being less dependent on power plants, but also they will reduce operational costs and will quickly pay back. In order to make the most of those practices, it's important to adopt a holistic approach to the building's energy load and integrate different energy saving strategies.

(source: LEED Reference Guide, 2001:93)

Insulation can be added at the interior walls as part of the next renovation.

Material & Resources

The steps related to process building materials, such as extraction, processing and transportation are not environmentally natural, as they pollute the air, water and use natural resources. Construction and demolition wastes account for 40% of the solid waste stream in the US. Reusing existing documents is one of the best strategies to reduce solid wastes volumes and prevents them from ending up at landfills. It also reduces habitat disturbance and minimizes the need for the surrounding infrastructure. While using new materials one should take into account different material sources. Salvaged materials provide savings on material costs, recycled content material minimizes waste products and local materials reduce the environmental impact of transportation. Finally, using rapidly renewable materials and certified wood decreases the consumption of natural resources. Recycling and reusing construction waste is another strategy to be taken into consideration in sustainable design.

(source: LEED Reference Guide, 2001:167)

Send dumpsters to sorting facility or separate on site for recycling.

Indoor Environmental Quality

As we spend a big majority of our time indoors, the emphasis should be put on optimal indoor environmental quality strategies while (re)designing a building . Otherwise, a poor IEQ will have adverse effects on occupants' health, productivity and quality of life. IEQ strategies such as ventilation effectiveness and control of contaminants or a building flush-out prior to occupancy can reduce potential liability, increase the market value of the building but can also result in a significantly higher productivity (16%). Other strategies involve automatic sensors and controls, introducing fresh air to the building or providing lots of daylighting views.

(source: LEED Reference Guide, 2001:215)

Increase outdoor air usage in the next generation of air handling equipment.

Innovation & Design Process

This category is aimed at recognizing projects that implemented innovative building features and sustainable building knowledge, and whose strategy or measure results exceeded those which are required by the LEED Rating System. Expertise in sustainable design is the key element of the innovative design and construction process.

(source: LEED Reference Guide, 2001:271)

Introduce a green cleaning program.

Justification for Allocation of Points

Building Name and Level: **Cassingham Elem**
K-6

Building features that clearly exceed criteria:

1. This building features an auditorium and stage that would be typical in a middle school or high school
2. There is a large kitchen and dining area that is shared with the middle and high school. The gym isn't needed for multiple use.
3. The playgrounds have rubber tile fall zones and new equipment and is ADA compliant.
- 4.
- 5.
- 6.

Building features that are non-existent or very inadequate:

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

[Back to Assessment Summary](#)

Environmental Hazards Assessment Cost Estimates

Owner:	Bexley City
Facility:	Cassingham Elem
Date of Initial Assessment:	Oct 19, 2017
Date of Assessment Update:	Dec 14, 2017
Cost Set:	2017

District IRN:	43620
Building IRN:	5082
Firm:	Van Auken Akins Architects

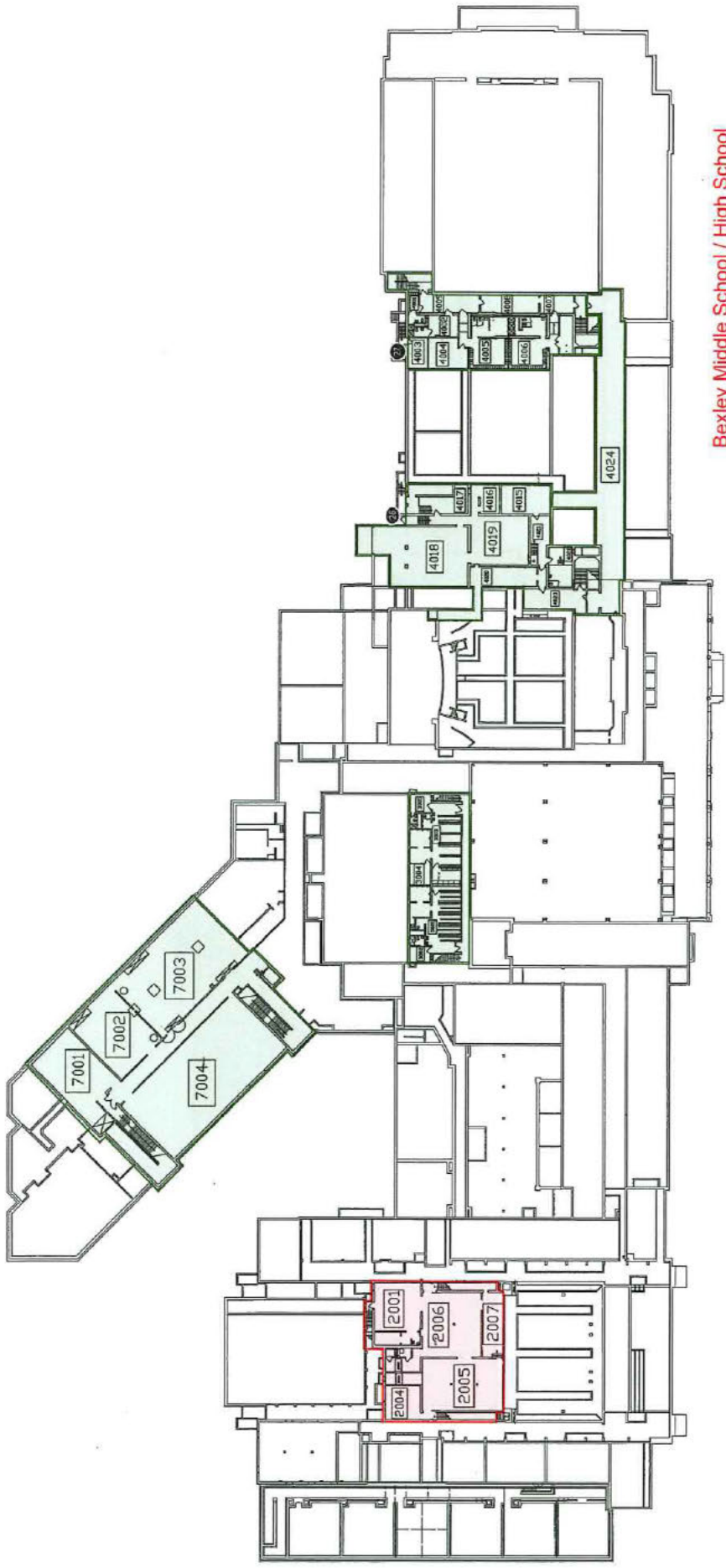
Scope remains unchanged after cost updates.

Building Addition	Addition Area (sf)	Total of Environmental Hazards Assessment Cost Estimates	
		Renovation	Demolition
1927 Auditorium	6,503	\$0.00	\$0.00
1927 Cassingham Elementary	56,006	\$0.00	\$0.00
1993 Gymnasium	6,538	\$0.00	\$0.00
2001 Classroom Addition	15,914	\$0.00	\$0.00
Total	84,961	\$0.00	\$0.00
Total with Regional Cost Factor (100.00%)	—	\$0.00	\$0.00
Regional Total with Soft Costs & Contingency	—	\$0.00	\$0.00

ADA Entrance Playground Asphalt Play Area Gymnasium



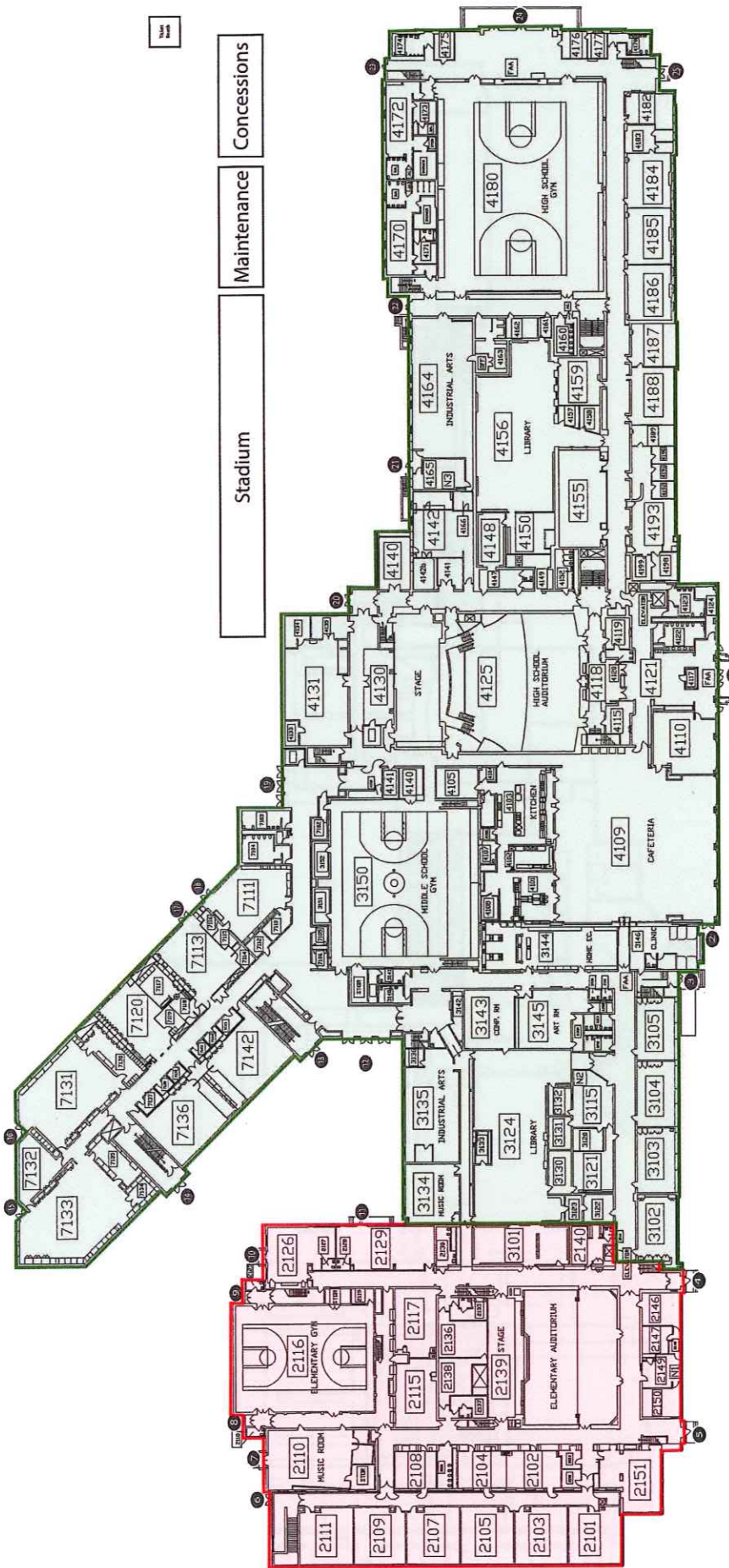
Parking Lot Main Entrance Bus Drop Off



Bexley Middle School / High School

Cassingham Elementary School

BASEMENT

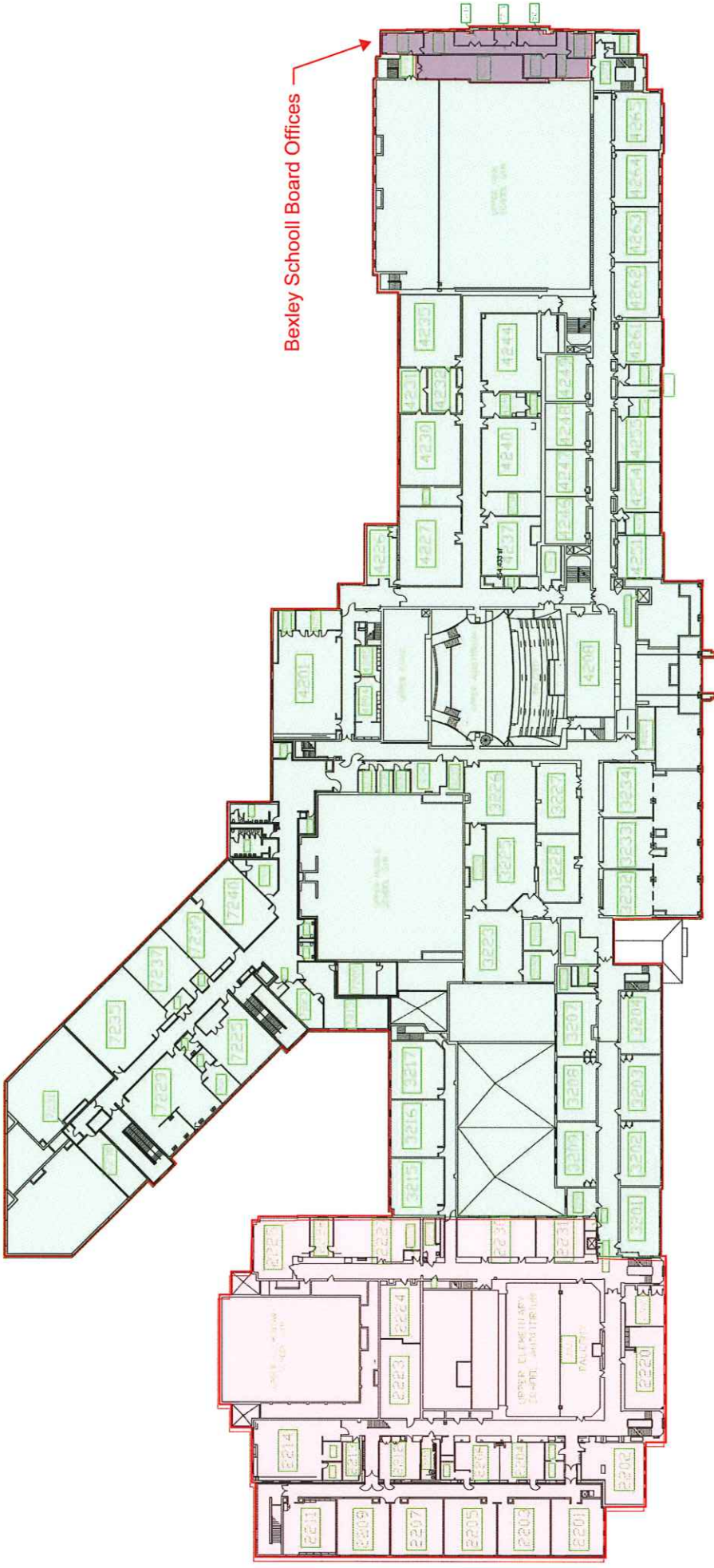


N1 - FIRE ALARM NODE PANEL
 FM - FIRE ALARM ANNUNCIATOR

FIRST FLOOR

Cassingham Elementary School

Bexley Middle School / High School



Bexley School Board Offices

Bexley Middle School / High School

Cassingham Elementary School

SECOND FLOOR