

**Building Information - Troy City (44925) - Concord Elementary**

Program Type	Classroom Facilities Assistance Program (CFAP) - Regular
Setting	Small City
Assessment Name	Concord Elementary School (7161) FINAL
Assessment Date (on-site; non-EEA)	2016-08-17
Kitchen Type	Warming Kitchen
Cost Set:	2016
Building Name	Concord Elementary
Building IRN	7161
Building Address	3145 W State Route 718
Building City	Troy
Building Zipcode	45373
Building Phone	(937) 332.6730
Acreage	9.38
Current Grades:	K-5
Teaching Stations	36
Number of Floors	3
Student Capacity	600
Current Enrollment	595
Enrollment Date	2016-08-08
Enrollment Date is the date in which the current enrollment was taken.	
Number of Classrooms	30
Historical Register	<b>NO</b>
Building's Principal	Mr. Dan Hake
Building Type	Elementary

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North elevation photo:



East elevation photo:



South elevation photo:



West elevation photo:



**GENERAL DESCRIPTION**

**71,894** Total Existing Square Footage  
**1919,1939,1952,1972,2006** Building Dates  
**K-5** Grades  
**595** Current Enrollment  
**36** Teaching Stations  
**9.38** Site Acreage

Concord Elementary, which is not on the National Register of Historic Buildings, and originally constructed in 1919, is a two story, 71,894 square foot brick and stone school building located in a rural, residential setting. The existing facility features a conventionally partitioned design, and does not utilize modular buildings. The structure of the overall facility contains brick veneer on load bearing masonry type exterior wall construction, with load bearing masonry type wall construction in the interior. The base floor system of the overall facility consists of concrete slab on grade. The intermediate floor system of the 1919 Original Construction and 1939 Addition consists of cast-in-place concrete type construction. There are no intermediate floors in the 1952, 1972, and 2006 Additions. The roof structure of the 1919 Original Construction is assumed to be cast-in-place concrete type construction. The roof structure of the 1939 Addition is wood deck on steel joist type construction. The roof structure of the 1952 Addition is gypsum deck on steel joist type construction. The roof structure of the 1972 and 2006 Additions is steel deck on steel joist type construction. The roofing system of the 1919 Original Construction is a modified bitumen system by Tremco, installed in 2001. The roofing system of the 1939 Addition is a modified bitumen system by Tremco, installed in 2006. The roofing system of the 1952 and 1972 Additions is an EPDM system, installed in 2012. The roofing system of the 2006 Addition is a TPO system, installed in 2006. The ventilation system of the building is inadequate to meet the needs of the users. Due to multiple additions, a variety of Classroom sizes are provided. Some Classrooms are adequately sized and some are slightly undersized in terms of the current standards established by the State of Ohio. Physical Education and Student Dining spaces consist of one Multipurpose space in the 2006 Addition and one Gymnasium in the 1939 Addition. The electrical system for the facility is inadequate. The facility is not equipped with a compliant security system. The building has a non-compliant automatic fire alarm system. The facility is not equipped with a compliant automated fire suppression system. The building contains asbestos. The overall building is not compliant with ADA accessibility requirements. The school is located on a 9.38 acre site adjacent to residential properties. The property and playgrounds are partially fenced for security. Access onto the site is unrestricted. Site circulation is good. There is dedicated space for school buses to load and unload on the site. Parking for staff, visitors and community events is adequate.

The school district owns property directly to the north of Concord Elementary, consisting of 4.89 acres with a single family home and barn.

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**Building Construction Information - Troy City (44925) - Concord Elementary (7161)**

<b>Name</b>	<b>Year</b>	<b>Handicapped Access</b>	<b>Floors</b>	<b>Square Feet</b>	<b>Non OSDM Addition</b>
Original Construction	1919	no	2	17,979	no
Gymnasium Addition	1939	no	1	13,495	no
Classroom Addition	1952	yes	1	20,556	no
Classroom Addition	1972	yes	1	6,653	no
Cafeteria and Media Center Addition	2006	yes	1	13,211	no

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Building Component Information - Troy City (44925) - Concord Elementary (7161)

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
Original Construction (1919)		3492												
Gymnasium Addition (1939)		433		4755										
Classroom Addition (1952)		4523												
Classroom Addition (1972)		795												
Cafeteria and Media Center Addition (2006)		1990			2305		3662	1492						
Total	0	11,233	0	4,755	2,305	0	3,662	1,492	0	0	0	0	0	0

**Master Planning Considerations**

There are no readily evident conditions that might significantly effect master planning with regard to the site. Due to the size of the site, building expansion is not recommended. The school district owns property directly to the north of Concord Elementary, consisting of 4.89 acres with a single family home and barn. Due to limited topography on the site, a significant number of man made drainage systems have been implemented, which should be taken into consideration for any future renovations to the site.

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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 - Concord Elementary (7161)

<b>District:</b> Troy City				<b>County:</b> Miami		<b>Area:</b> West Central Ohio (2)			
<b>Name:</b> Concord Elementary				<b>Contact:</b> Mr. Dan Hake					
<b>Address:</b> 3145 W State Route 718 Troy, OH 45373				<b>Phone:</b> (937) 332.6730					
<b>Bldg. IRN:</b> 7161				<b>Date Prepared:</b> 2016-08-17		<b>By:</b> Julie Apt			
				<b>Date Revised:</b> 2016-12-11		<b>By:</b> Bernie Merritt			
Current Grades	K-5	Acreage:	9.38	<b>CEFPI Appraisal Summary</b>					
Proposed Grades	N/A	Teaching Stations:	36						
Current Enrollment	595	Classrooms:	30						
Projected Enrollment	N/A								
				<b>Section</b>	<b>Points Possible</b>	<b>Points Earned</b>	<b>Percentage</b>	<b>Rating</b>	<b>Category</b>
				<u>Cover Sheet</u>	—	—	—	—	—
<b>Addition</b>				1.0 <u>The School Site</u>	100	76	76%	Satisfactory	
	Date	HA	Number of Floors	Current Square Feet	2.0 <u>Structural and Mechanical Features</u>	200	110	55%	Borderline
<u>Original Construction</u>	1919	no	2	17,979	3.0 <u>Plant Maintainability</u>	100	60	60%	Borderline
<u>Gymnasium Addition</u>	1939	no	1	13,495	4.0 <u>Building Safety and Security</u>	200	113	57%	Borderline
<u>Classroom Addition</u>	1952	yes	1	20,556	5.0 <u>Educational Adequacy</u>	200	130	65%	Borderline
<u>Classroom Addition</u>	1972	yes	1	6,653	6.0 <u>Environment for Education</u>	200	105	53%	Borderline
<u>Cafeteria and Media Center Addition</u>	2006	yes	1	13,211	<u>LEED Observations</u>	—	—	—	—
<b>Total</b>				<b>71,894</b>	<u>Commentary</u>	—	—	—	—
				<b>Total</b>	1000	594	59%	Borderline	
				<u>Enhanced Environmental Hazards Assessment Cost Estimates</u>					
				<b>C=Under Contract</b>					
				Renovation Cost Factor 97.49%					
				Cost to Renovate (Cost Factor applied) \$12,661,053.33					
				<i>The Replacement Cost Per SF and the Renovate/Replace ratio are only provided when this summary is requested from a Master Plan.</i>					
<b>FACILITY ASSESSMENT</b>				<b>Rating</b>	<b>Dollar Assessment</b>				
Cost Set: 2016									
A.	<u>Heating System</u>			3	\$2,453,023.28				
B.	<u>Roofing</u>			3	\$254,728.80				
C.	<u>Ventilation / Air Conditioning</u>			2	\$5,000.00				
D.	<u>Electrical Systems</u>			3	\$1,166,839.62				
E.	<u>Plumbing and Fixtures</u>			3	\$628,181.00				
F.	<u>Windows</u>			3	\$339,480.00				
G.	<u>Structure: Foundation</u>			2	\$27,098.00				
H.	<u>Structure: Walls and Chimneys</u>			2	\$100,057.00				
I.	<u>Structure: Floors and Roofs</u>			2	\$5,250.00				
J.	<u>General Finishes</u>			3	\$1,986,930.70				
K.	<u>Interior Lighting</u>			3	\$359,470.00				
L.	<u>Security Systems</u>			3	\$204,897.90				
M.	<u>Emergency/Egress Lighting</u>			3	\$71,894.00				
N.	<u>Fire Alarm</u>			3	\$107,841.00				
O.	<u>Handicapped Access</u>			3	\$284,228.80				
P.	<u>Site Condition</u>			2	\$370,658.60				
Q.	<u>Sewage System</u>			1	\$0.00				
R.	<u>Water Supply</u>			1	\$0.00				
S.	<u>Exterior Doors</u>			2	\$20,500.00				
T.	<u>Hazardous Material</u>			3	\$841,300.30				
U.	<u>Life Safety</u>			3	\$329,155.80				
V.	<u>Loose Furnishings</u>			2	\$148,775.00				
W.	<u>Technology</u>			3	\$731,880.92				
X.	<u>Construction Contingency / Non-Construction Cost</u>			-	\$2,549,837.00				
<b>Total</b>					\$12,987,027.72				

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Original Construction (1919) Summary

<b>District:</b> Troy City				<b>County:</b> Miami		<b>Area:</b> West Central Ohio (2)				
<b>Name:</b> Concord Elementary				<b>Contact:</b> Mr. Dan Hake						
<b>Address:</b> 3145 W State Route 718 Troy, OH 45373				<b>Phone:</b> (937) 332.6730						
<b>Bldg. IRN:</b> 7161				<b>Date Prepared:</b> 2016-08-17		<b>By:</b> Julie Apt				
				<b>Date Revised:</b> 2016-12-11		<b>By:</b> Bernie Merritt				
Current Grades	K-5	Acreage:	9.38	<b>CEFPI Appraisal Summary</b>						
Proposed Grades	N/A	Teaching Stations:	36							
Current Enrollment	595	Classrooms:	30							
Projected Enrollment	N/A									
<b>Addition</b>	<b>Date</b>	<b>HA</b>	<b>Number of Floors</b>	<b>Current Square Feet</b>	<b>Section</b>	<b>Points Possible</b>	<b>Points Earned</b>	<b>Percentage</b>	<b>Rating</b>	<b>Category</b>
<b>Original Construction</b>	<b>1919</b>	<b>no</b>	<b>2</b>	<b>17,979</b>	1.0 <b>The School Site</b>	100	76	76%	Satisfactory	
<b>Gymnasium Addition</b>	1939	no	1	13,495	2.0 <b>Structural and Mechanical Features</b>	200	110	55%	Borderline	
<b>Classroom Addition</b>	1952	yes	1	20,556	3.0 <b>Plant Maintainability</b>	100	60	60%	Borderline	
<b>Classroom Addition</b>	1972	yes	1	6,653	4.0 <b>Building Safety and Security</b>	200	113	57%	Borderline	
<b>Cafeteria and Media Center Addition</b>	2006	yes	1	13,211	5.0 <b>Educational Adequacy</b>	200	130	65%	Borderline	
<b>Total</b>				<b>71,894</b>	6.0 <b>Environment for Education</b>	200	105	53%	Borderline	
					<b>LEED Observations</b>	—	—	—	—	
					<b>Commentary</b>	—	—	—	—	
					<b>Total</b>	<b>1000</b>	<b>594</b>	<b>59%</b>	<b>Borderline</b>	
<b>*HA = Handicapped Access</b>				<b>Enhanced Environmental Hazards Assessment Cost Estimates</b>						
<b>*Rating = 1 Satisfactory</b>				<b>C=Under Contract</b>						
<b>= 2 Needs Repair</b>										
<b>= 3 Needs Replacement</b>										
<b>*Const P/S = Present/Scheduled Construction</b>				<b>Renovation Cost Factor</b> 97.49%						
<b>FACILITY ASSESSMENT</b>				<b>Cost to Renovate (Cost Factor applied)</b> \$4,115,334.42						
<b>Cost Set: 2016</b>				<i>The Replacement Cost Per SF and the Renovate/Replace ratio are only provided when this summary is requested from a Master Plan.</i>						
<b>A.</b>	<b>Heating System</b>			<b>3</b>	<b>\$613,443.48</b>					
<b>B.</b>	<b>Roofing</b>			<b>3</b>	<b>\$120,516.00</b>					
<b>C.</b>	<b>Ventilation / Air Conditioning</b>			<b>2</b>	<b>\$5,000.00</b>					
<b>D.</b>	<b>Electrical Systems</b>			<b>3</b>	<b>\$291,799.17</b>					
<b>E.</b>	<b>Plumbing and Fixtures</b>			<b>3</b>	<b>\$207,753.00</b>					
<b>F.</b>	<b>Windows</b>			<b>3</b>	<b>\$144,900.00</b>					
<b>G.</b>	<b>Structure: Foundation</b>			<b>2</b>	<b>\$896.00</b>					
<b>H.</b>	<b>Structure: Walls and Chimneys</b>			<b>2</b>	<b>\$21,843.00</b>					
<b>I.</b>	<b>Structure: Floors and Roofs</b>			<b>2</b>	<b>\$0.00</b>					
<b>J.</b>	<b>General Finishes</b>			<b>3</b>	<b>\$793,898.90</b>					
<b>K.</b>	<b>Interior Lighting</b>			<b>3</b>	<b>\$89,895.00</b>					
<b>L.</b>	<b>Security Systems</b>			<b>3</b>	<b>\$51,240.15</b>					
<b>M.</b>	<b>Emergency/Egress Lighting</b>			<b>3</b>	<b>\$17,979.00</b>					
<b>N.</b>	<b>Fire Alarm</b>			<b>3</b>	<b>\$26,968.50</b>					
<b>O.</b>	<b>Handicapped Access</b>			<b>3</b>	<b>\$101,495.80</b>					
<b>P.</b>	<b>Site Condition</b>			<b>2</b>	<b>\$133,515.22</b>					
<b>Q.</b>	<b>Sewage System</b>			<b>1</b>	<b>\$0.00</b>					
<b>R.</b>	<b>Water Supply</b>			<b>1</b>	<b>\$0.00</b>					
<b>S.</b>	<b>Exterior Doors</b>			<b>2</b>	<b>\$2,000.00</b>					
<b>T.</b>	<b>Hazardous Material</b>			<b>3</b>	<b>\$403,098.40</b>					
<b>U.</b>	<b>Life Safety</b>			<b>3</b>	<b>\$129,287.80</b>					
<b>V.</b>	<b>Loose Furnishings</b>			<b>2</b>	<b>\$53,937.00</b>					
<b>W.</b>	<b>Technology</b>			<b>3</b>	<b>\$183,026.22</b>					
<b>X.</b>	<b>Construction Contingency / Non-Construction Cost</b>			<b>-</b>	<b>\$828,796.13</b>					
<b>Total</b>					<b>\$4,221,288.77</b>					



Gymnasium Addition (1939) Summary

<b>District:</b> Troy City				<b>County:</b> Miami		<b>Area:</b> West Central Ohio (2)				
<b>Name:</b> Concord Elementary				<b>Contact:</b> Mr. Dan Hake						
<b>Address:</b> 3145 W State Route 718 Troy, OH 45373				<b>Phone:</b> (937) 332.6730						
<b>Bldg. IRN:</b> 7161				<b>Date Prepared:</b> 2016-08-17		<b>By:</b> Julie Apt				
				<b>Date Revised:</b> 2016-12-11		<b>By:</b> Bernie Merritt				
Current Grades	K-5	Acreeage:	9.38	<b>CEFPI Appraisal Summary</b>						
Proposed Grades	N/A	Teaching Stations:	36							
Current Enrollment	595	Classrooms:	30							
Projected Enrollment	N/A									
<b>Addition</b>	<b>Date</b>	<b>HA</b>	<b>Number of Floors</b>	<b>Current Square Feet</b>	<b>Section</b>	<b>Points Possible</b>	<b>Points Earned</b>	<b>Percentage</b>	<b>Rating</b>	<b>Category</b>
<u>Original Construction</u>	1919	no	2	17,979	1.0 <u>The School Site</u>	100	76	76%	Satisfactory	
<b>Gymnasium Addition</b>	<b>1939</b>	<b>no</b>	<b>1</b>	<b>13,495</b>	2.0 <u>Structural and Mechanical Features</u>	200	110	55%	Borderline	
<u>Classroom Addition</u>	1952	yes	1	20,556	3.0 <u>Plant Maintainability</u>	100	60	60%	Borderline	
<u>Classroom Addition</u>	1972	yes	1	6,653	4.0 <u>Building Safety and Security</u>	200	113	57%	Borderline	
<u>Cafeteria and Media Center Addition</u>	2006	yes	1	13,211	5.0 <u>Educational Adequacy</u>	200	130	65%	Borderline	
<b>Total</b>				<b>71,894</b>	6.0 <u>Environment for Education</u>	200	105	53%	Borderline	
					<u>LEED Observations</u>	—	—	—	—	
					<u>Commentary</u>	—	—	—	—	
					<b>Total</b>	<b>1000</b>	<b>594</b>	<b>59%</b>	<b>Borderline</b>	
				<b>Enhanced Environmental Hazards Assessment Cost Estimates</b>						
				<b>C=Under Contract</b>						
				Renovation Cost Factor						
				97.49%						
				Cost to Renovate (Cost Factor applied)						
				\$2,287,153.92						
<p><i>The Replacement Cost Per SF and the Renovate/Replace ratio are only provided when this summary is requested from a Master Plan.</i></p>										
<b>FACILITY ASSESSMENT</b>										
Cost Set: 2016										
				<b>Rating</b>	<b>Dollar Assessment</b>					
A.	<u>Heating System</u>			3	\$460,449.40 -					
B.	<u>Roofing</u>			3	\$118,792.80 -					
C.	<u>Ventilation / Air Conditioning</u>			2	<b>\$0.00</b> -					
D.	<u>Electrical Systems</u>			3	\$219,023.85 -					
E.	<u>Plumbing and Fixtures</u>			3	\$99,465.00 -					
F.	<u>Windows</u>			3	\$7,680.00 -					
G.	<u>Structure: Foundation</u>			2	\$24,326.00 -					
H.	<u>Structure: Walls and Chimneys</u>			2	\$24,667.50 -					
I.	<u>Structure: Floors and Roofs</u>			2	\$5,250.00 -					
J.	<u>General Finishes</u>			3	\$357,296.50 -					
K.	<u>Interior Lighting</u>			3	\$67,475.00 -					
L.	<u>Security Systems</u>			3	\$38,460.75 -					
M.	<u>Emergency/Egress Lighting</u>			3	\$13,495.00 -					
N.	<u>Fire Alarm</u>			3	\$20,242.50 -					
O.	<u>Handicapped Access</u>			3	\$72,649.00 -					
P.	<u>Site Condition</u>			2	\$51,843.62 -					
Q.	<u>Sewage System</u>			1	\$0.00 -					
R.	<u>Water Supply</u>			1	\$0.00 -					
S.	<u>Exterior Doors</u>			2	\$18,500.00 -					
T.	<u>Hazardous Material</u>			3	\$84,659.60 -					
U.	<u>Life Safety</u>			3	\$63,769.00 -					
V.	<u>Loose Furnishings</u>			2	<b>\$0.00</b> -					
W.	<u>Technology</u>			3	\$137,379.10 -					
X.	<u>Construction Contingency / Non-Construction Cost</u>			-	\$460,614.89 -					
<b>Total</b>					<b>\$2,346,039.51</b>					

Classroom Addition (1952) Summary

<b>District:</b> Troy City				<b>County:</b> Miami		<b>Area:</b> West Central Ohio (2)				
<b>Name:</b> Concord Elementary				<b>Contact:</b> Mr. Dan Hake						
<b>Address:</b> 3145 W State Route 718 Troy, OH 45373				<b>Phone:</b> (937) 332.6730						
<b>Bldg. IRN:</b> 7161				<b>Date Prepared:</b> 2016-08-17		<b>By:</b> Julie Apt				
				<b>Date Revised:</b> 2016-12-11		<b>By:</b> Bernie Merritt				
Current Grades	K-5	Acreage:	9.38	<b>CEFPI Appraisal Summary</b>						
Proposed Grades	N/A	Teaching Stations:	36							
Current Enrollment	595	Classrooms:	30							
Projected Enrollment	N/A									
<b>Addition</b>	<b>Date</b>	<b>HA</b>	<b>Number of Floors</b>	<b>Current Square Feet</b>	<b>Section</b>	<b>Points Possible</b>	<b>Points Earned</b>	<b>Percentage</b>	<b>Rating</b>	<b>Category</b>
<u>Original Construction</u>	1919	no	2	17,979	1.0 <u>The School Site</u>	100	76	76%	Satisfactory	
<u>Gymnasium Addition</u>	1939	no	1	13,495	2.0 <u>Structural and Mechanical Features</u>	200	110	55%	Borderline	
<b>Classroom Addition</b>	<b>1952</b>	<b>yes</b>	<b>1</b>	<b>20,556</b>	3.0 <u>Plant Maintainability</u>	100	60	60%	Borderline	
<u>Classroom Addition</u>	1972	yes	1	6,653	4.0 <u>Building Safety and Security</u>	200	113	57%	Borderline	
<u>Cafeteria and Media Center Addition</u>	2006	yes	1	13,211	5.0 <u>Educational Adequacy</u>	200	130	65%	Borderline	
<b>Total</b>				<b>71,894</b>	6.0 <u>Environment for Education</u>	200	105	53%	Borderline	
					<u>LEED Observations</u>	—	—	—	—	
					<u>Commentary</u>	—	—	—	—	
					<b>Total</b>	<b>1000</b>	<b>594</b>	<b>59%</b>	<b>Borderline</b>	
				<b>Enhanced Environmental Hazards Assessment Cost Estimates</b>						
				<b>C=Under Contract</b>						
				Renovation Cost Factor						
				97.49%						
				Cost to Renovate (Cost Factor applied)						
				\$3,858,503.96						
				<i>The Replacement Cost Per SF and the Renovate/Replace ratio are only provided when this summary is requested from a Master Plan.</i>						
<b>FACILITY ASSESSMENT</b>				<b>Rating</b>	<b>Dollar Assessment</b>					
Cost Set: 2016										
A.	<u>Heating System</u>			3	\$701,370.72					
B.	<u>Roofing</u>			3	\$10,280.00					
C.	<u>Ventilation / Air Conditioning</u>			2	\$0.00					
D.	<u>Electrical Systems</u>			3	\$333,623.88					
E.	<u>Plumbing and Fixtures</u>			3	\$247,692.00					
F.	<u>Windows</u>			3	\$177,300.00					
G.	<u>Structure: Foundation</u>			2	\$952.00					
H.	<u>Structure: Walls and Chimneys</u>			2	\$21,900.75					
I.	<u>Structure: Floors and Roofs</u>			2	\$0.00					
J.	<u>General Finishes</u>			3	\$632,455.60					
K.	<u>Interior Lighting</u>			3	\$102,780.00					
L.	<u>Security Systems</u>			3	\$58,584.60					
M.	<u>Emergency/Egress Lighting</u>			3	\$20,556.00					
N.	<u>Fire Alarm</u>			3	\$30,834.00					
O.	<u>Handicapped Access</u>			3	\$96,061.20					
P.	<u>Site Condition</u>			2	\$93,190.38					
Q.	<u>Sewage System</u>			1	\$0.00					
R.	<u>Water Supply</u>			1	\$0.00					
S.	<u>Exterior Doors</u>			2	\$0.00					
T.	<u>Hazardous Material</u>			3	\$310,315.00					
U.	<u>Life Safety</u>			3	\$71,949.20					
V.	<u>Loose Furnishings</u>			2	\$61,668.00					
W.	<u>Technology</u>			3	\$209,260.08					
X.	<u>Construction Contingency / Non-Construction Cost</u>			-	\$777,072.49					
<b>Total</b>					<b>\$3,957,845.90</b>					

Classroom Addition (1972) Summary

<b>District:</b> Troy City				<b>County:</b> Miami		<b>Area:</b> West Central Ohio (2)				
<b>Name:</b> Concord Elementary				<b>Contact:</b> Mr. Dan Hake						
<b>Address:</b> 3145 W State Route 718 Troy, OH 45373				<b>Phone:</b> (937) 332.6730						
<b>Bldg. IRN:</b> 7161				<b>Date Prepared:</b> 2016-08-17		<b>By:</b> Julie Apt				
				<b>Date Revised:</b> 2016-12-11		<b>By:</b> Bernie Merritt				
Current Grades	K-5	Acreeage:	9.38	<b>CEFPI Appraisal Summary</b>						
Proposed Grades	N/A	Teaching Stations:	36							
Current Enrollment	595	Classrooms:	30							
Projected Enrollment	N/A									
<b>Addition</b>	<b>Date</b>	<b>HA</b>	<b>Number of Floors</b>	<b>Current Square Feet</b>	<b>Section</b>	<b>Points Possible</b>	<b>Points Earned</b>	<b>Percentage</b>	<b>Rating</b>	<b>Category</b>
<u>Original Construction</u>	1919	no	2	17,979	1.0 <u>The School Site</u>	100	76	76%	Satisfactory	
<u>Gymnasium Addition</u>	1939	no	1	13,495	2.0 <u>Structural and Mechanical Features</u>	200	110	55%	Borderline	
<u>Classroom Addition</u>	1952	yes	1	20,556	3.0 <u>Plant Maintainability</u>	100	60	60%	Borderline	
<u>Classroom Addition</u>	1972	yes	1	6,653	4.0 <u>Building Safety and Security</u>	200	113	57%	Borderline	
<u>Cafeteria and Media Center Addition</u>	2006	yes	1	13,211	5.0 <u>Educational Adequacy</u>	200	130	65%	Borderline	
<b>Total</b>				<b>71,894</b>	6.0 <u>Environment for Education</u>	200	105	53%	Borderline	
					<u>LEED Observations</u>	—	—	—	—	
					<u>Commentary</u>	—	—	—	—	
					<b>Total</b>	<b>1000</b>	<b>594</b>	<b>59%</b>	<b>Borderline</b>	
				<b>Enhanced Environmental Hazards Assessment Cost Estimates</b>						
				<b>C=Under Contract</b>						
				Renovation Cost Factor						
				97.49%						
				Cost to Renovate (Cost Factor applied)						
				\$1,006,500.23						
				<i>The Replacement Cost Per SF and the Renovate/Replace ratio are only provided when this summary is requested from a Master Plan.</i>						
<b>FACILITY ASSESSMENT</b>				<b>Rating</b>	<b>Dollar Assessment</b>					
Cost Set: 2016										
A.	<u>Heating System</u>			3	\$227,000.36					
B.	<u>Roofing</u>			3	\$5,140.00					
C.	<u>Ventilation / Air Conditioning</u>			2	\$0.00					
D.	<u>Electrical Systems</u>			3	\$107,978.19					
E.	<u>Plumbing and Fixtures</u>			3	\$65,271.00					
F.	<u>Windows</u>			3	\$9,600.00					
G.	<u>Structure: Foundation</u>			2	\$924.00					
H.	<u>Structure: Walls and Chimneys</u>			2	\$10,220.75					
I.	<u>Structure: Floors and Roofs</u>			2	\$0.00					
J.	<u>General Finishes</u>			3	\$140,364.70					
K.	<u>Interior Lighting</u>			3	\$33,265.00					
L.	<u>Security Systems</u>			3	\$18,961.05					
M.	<u>Emergency/Egress Lighting</u>			3	\$6,653.00					
N.	<u>Fire Alarm</u>			3	\$9,979.50					
O.	<u>Handicapped Access</u>			3	\$11,380.60					
P.	<u>Site Condition</u>			2	\$30,770.96					
Q.	<u>Sewage System</u>			1	\$0.00					
R.	<u>Water Supply</u>			1	\$0.00					
S.	<u>Exterior Doors</u>			2	\$0.00					
T.	<u>Hazardous Material</u>			3	\$43,227.30					
U.	<u>Life Safety</u>			3	\$21,289.60					
V.	<u>Loose Furnishings</u>			2	\$19,959.00					
W.	<u>Technology</u>			3	\$67,727.54					
X.	<u>Construction Contingency / Non-Construction Cost</u>			-	\$202,701.27					
<b>Total</b>					<b>\$1,032,413.82</b>					

Cafeteria and Media Center Addition (2006) Summary

<b>District:</b> Troy City				<b>County:</b> Miami		<b>Area:</b> West Central Ohio (2)				
<b>Name:</b> Concord Elementary				<b>Contact:</b> Mr. Dan Hake						
<b>Address:</b> 3145 W State Route 718 Troy, OH 45373				<b>Phone:</b> (937) 332.6730						
<b>Bldg. IRN:</b> 7161				<b>Date Prepared:</b> 2016-08-17		<b>By:</b> Julie Apt				
				<b>Date Revised:</b> 2016-12-11		<b>By:</b> Bernie Merritt				
Current Grades	K-5	Acreage:	9.38	<b>CEFPI Appraisal Summary</b>						
Proposed Grades	N/A	Teaching Stations:	36							
Current Enrollment	595	Classrooms:	30							
Projected Enrollment	N/A									
<b>Addition</b>	<b>Date</b>	<b>HA</b>	<b>Number of Floors</b>	<b>Current Square Feet</b>	<b>Section</b>	<b>Points Possible</b>	<b>Points Earned</b>	<b>Percentage</b>	<b>Rating</b>	<b>Category</b>
<u>Original Construction</u>	1919	no	2	17,979	1.0 <u>The School Site</u>	100	76	76%	Satisfactory	
<u>Gymnasium Addition</u>	1939	no	1	13,495	2.0 <u>Structural and Mechanical Features</u>	200	110	55%	Borderline	
<u>Classroom Addition</u>	1952	yes	1	20,556	3.0 <u>Plant Maintainability</u>	100	60	60%	Borderline	
<u>Classroom Addition</u>	1972	yes	1	6,653	4.0 <u>Building Safety and Security</u>	200	113	57%	Borderline	
<b>Cafeteria and Media Center Addition</b>	<b>2006</b>	<b>yes</b>	<b>1</b>	<b>13,211</b>	5.0 <u>Educational Adequacy</u>	200	130	65%	Borderline	
<b>Total</b>				<b>71,894</b>	6.0 <u>Environment for Education</u>	200	105	53%	Borderline	
					<u>LEED Observations</u>	—	—	—	—	
					<u>Commentary</u>	—	—	—	—	
					<b>Total</b>	<b>1000</b>	<b>594</b>	<b>59%</b>	<b>Borderline</b>	
					<u>Enhanced Environmental Hazards Assessment Cost Estimates</u>					
					<b>C=Under Contract</b>					
					Renovation Cost Factor					
					97.49%					
					Cost to Renovate (Cost Factor applied)					
					\$1,393,560.80					
					<i>The Replacement Cost Per SF and the Renovate/Replace ratio are only provided when this summary is requested from a Master Plan.</i>					
<b>FACILITY ASSESSMENT</b>				<b>Rating</b>	<b>Dollar Assessment</b>					
Cost Set: 2016										
A.	<u>Heating System</u>			3	\$450,759.32					
B.	<u>Roofing</u>			3	\$0.00					
C.	<u>Ventilation / Air Conditioning</u>			2	\$0.00					
D.	<u>Electrical Systems</u>			3	\$214,414.53					
E.	<u>Plumbing and Fixtures</u>			3	\$8,000.00					
F.	<u>Windows</u>			3	\$0.00					
G.	<u>Structure: Foundation</u>			2	\$0.00					
H.	<u>Structure: Walls and Chimneys</u>			2	\$21,425.00					
I.	<u>Structure: Floors and Roofs</u>			2	\$0.00					
J.	<u>General Finishes</u>			3	\$62,915.00					
K.	<u>Interior Lighting</u>			3	\$66,055.00					
L.	<u>Security Systems</u>			3	\$37,651.35					
M.	<u>Emergency/Egress Lighting</u>			3	\$13,211.00					
N.	<u>Fire Alarm</u>			3	\$19,816.50					
O.	<u>Handicapped Access</u>			3	\$2,642.20					
P.	<u>Site Condition</u>			2	\$61,338.42					
Q.	<u>Sewage System</u>			1	\$0.00					
R.	<u>Water Supply</u>			1	\$0.00					
S.	<u>Exterior Doors</u>			2	\$0.00					
T.	<u>Hazardous Material</u>			3	\$0.00					
U.	<u>Life Safety</u>			3	\$42,860.20					
V.	<u>Loose Furnishings</u>			2	\$13,211.00					
W.	<u>Technology</u>			3	\$134,487.98					
X.	<u>Construction Contingency / Non-Construction Cost</u>			-	\$280,652.23					
<b>Total</b>					<b>\$1,429,439.73</b>					

A. Heating System

**Description:** The existing system for the 1919 Original Construction is a natural gas fired steam boiler type system, installed in 1919 with incremental upgrades, and is in fair condition. The systems in the 1939, 1952, and 1972 Additions are an extension of that found in the 1919 Original Construction. The existing system for the 2006 Addition is a natural gas fired heated water boiler type system, installed in 2006, and is in good to fair condition. 2-pipe vs. 4-pipe designations are not applicable in this facility, as no central air conditioning is provided. The 1919 Original Construction is equipped with (2) steam boilers, were manufactured by Superior, were installed in 1919, and are in fair condition. The 2006 Original Construction is equipped with (2) heated water boilers, were manufactured by RBI, were installed in 2006, and are in good to fair condition. Steam and heating water is distributed to terminal units consisting of fin tubes, unit ventilators, cabinet heaters, unit heaters, and air handlers. The terminal equipment is original to each addition and is in fair condition. The system does not appear to comply with the 15 CFM per person fresh air requirements of the Ohio Building Code mechanical code and Ohio School Design Manual. The pneumatic and electric type system temperature controls are original to each addition and are in fair to poor condition. The system does not feature individual temperature controls in all spaces required by the OSDM. The overall system does not feature any central energy recovery systems. The 1972 Addition is equipped with widespread louvered interior doors to facilitate Corridor utilization as return air plenums. The remainder of the overall facility is not equipped with louvered interior doors to facilitate Corridor utilization as return air plenums. The existing system is ducted in the 2006 Addition, but the ductwork cannot be integrated into a possible future system due to arrangement, air volume, and routing of existing ductwork. The existing system is not ducted in the remainder of the overall facility, and floor to structural deck heights will accommodate the installation of properly sized ductwork for a future Ohio School Design Manual approved system. The overall heating system for the most part is evaluated as being unsafe and in inefficient working order, and long term life expectancy of the existing system is not anticipated. The structure is not equipped with central air conditioning. The site does not contain underground fuel tanks.

**Rating:** 3 Needs Replacement

**Recommendations:** Provide new overall heating, ventilating, and air conditioning system to achieve compliance with Ohio Building Code and Ohio School Design Manual standards. Replace existing ductwork in the 2006 Addition to facilitate efficient exchange of conditioned air. Convert to ducted system the remainder of the overall facility to facilitate efficient exchange of conditioned air.

Item	Cost	Unit	Whole Building	Original Construction (1919)	Gymnasium Addition (1939)	Classroom Addition (1952)	Classroom Addition (1972)	Cafeteria and Media Center Addition (2006)	Sum	Comments
HVAC System Replacement:	\$26.12	sq.ft. (of entire building addition)		17,979 ft <sup>2</sup> Required	13,495 ft <sup>2</sup> Required	20,556 ft <sup>2</sup> Required	6,653 ft <sup>2</sup> Required	13,211 ft <sup>2</sup> Required	\$1,877,871.28	(includes demo of existing system and reconfiguration of piping layout and new controls, air conditioning)
Convert To Ducted System	\$8.00	sq.ft. (of entire building addition)		Required	Required	Required	Required	Required	\$575,152.00	(includes costs for vert. & horz. chases, cut openings, soffits, etc. Must be used in addition to HVAC System Replacement if the existing HVAC system is non-ducted)
<b>Sum:</b>			\$2,453,023.28	\$613,443.48	\$460,449.40	\$701,370.72	\$227,000.36	\$450,759.32		



Natural Gas Fired Heated Water Boiler



Unit Heater

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B. Roofing

Description:

The roof over the Original Construction is a ballasted modified bitumin system by Tremco that was installed in 2001, is out of warranty, and is in poor condition. There are District reports of current leaking. Blisters form in the roofing system and burst. Burst blisters adjacent to seams cause leaks. Signs of past leaking were observed during the physical assessment. Access to the roof was gained by access ladder and access door that are in good condition. Fall safety protection cages are not required, and are not provided. The roof over the 1939 Gymnasium Addition is a modified bitumin system by Tremco that was installed in 2006, is under a 15-year warranty, and is in poor condition. There are District reports of current leaking. Blisters form in the roofing system and burst. Burst blisters adjacent to seams cause leaks. Signs of past leaking were observed during the physical assessment. The scupper drains also leak, causing large areas of paint on the interior walls to peel off. Access to the roof was gained by the access door of the Original Construction that is in fair condition. The roof over the 1952 Classroom Addition and the 1972 Classroom Addition is an EPDM system that was installed in 2012, is under a 20-year warranty, and is in good 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 and access ladder in the 2006 Addition. The roof over the 2006 Cafeteria and Media Center Addition is a TPO system that was installed in 2006, and is in good 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 and access ladders that are in good condition. Fall safety protection cages are not required, and are not provided. There were no observations of standing water on the roof of the Original Construction. Metal cap flashings and copings are in poor condition. Roof storm drainage is addressed through a system of roof drains, which are properly located, and in good condition. The roof is not equipped with overflow roof drains though they will be required in areas of roof replacement. There were no observations of standing water on the roof of the 1939 Gymnasium Addition. Metal cap flashings and copings are in poor condition. Roof storm drainage is addressed through a system of gutters, downspouts, and through-wall scuppers, which are properly located, and in poor condition. The roof is not equipped with overflow roof drains and they are not required. There were observations of standing water on the roof of the 1952 Classroom Addition and 1972 Classroom Addition. Metal cap flashings and copings are in good condition. Roof storm drainage is addressed through a system of gutters, through-wall scuppers and downspouts, which are properly located, and in good condition. The roof is not equipped with overflow roof drains and they are not required as there are no parapets. There were no observations of standing water on the roof of the 2006 Cafeteria and Media Center Addition. Metal cap flashings and copings are in good condition. Roof storm drainage is addressed through a system of gutters and downspouts, which are properly located, and in good condition. The roof is not equipped with overflow roof drains and they are not required. 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 Original Construction and the 1939 Gymnasium Addition requires replacement to meet Ohio School Design Manual guidelines due to condition and age of system and projected lifecycle. The flashing and coping at the Original Construction and 1939 Gymnasium Addition require replacement due to condition and age of system and projected lifecycle. Due to existing conditions gutters and downspouts require replacement at the 1939 Gymnasium Addition. Install overflow drains for the Original Construction. Install tapered insulation to correct ponding at the 1952 Classroom Addition and the 1972 Classroom Addition. Install insulation in areas where the roof is being replaced throughout the overall facility.

Item	Cost	Unit	Whole Building	Original Construction (1919)	Gymnasium Addition (1939)	Classroom Addition (1952)	Classroom Addition (1972)	Cafeteria and Media Center Addition (2006)	Sum	Comments
Built-up Asphalt:	\$13.20	sq.ft. (Qty)		6,223 Required	6,555 Required	400 Required	200 Required		\$176,589.60	
Repair/replace cap flashing and coping:	\$18.40	ln.ft.		334 Required	326 Required				\$12,144.00	
Gutters/Downspouts	\$13.10	ln.ft.			169 Required				\$2,213.90	
Overflow Roof Drains and Piping:	\$2,500.00	each		2 Required					\$5,000.00	
Roof Insulation:	\$3.20	sq.ft. (Qty)		6,223 Required	6,555 Required				\$40,889.60	(non-tapered insulation for use in areas without drainage problems)
Roof Insulation:	\$4.70	sq.ft. (Qty)		1,556 Required	655 Required				\$10,391.70	(tapered insulation for limited area use to correct ponding)
Correct Ponding Water on Roof by Remove/Replace Existing Ponding Area:	\$12.50	sq.ft. (Qty)				400 Required	200 Required		\$7,500.00	(provide tapered insulation for limited area use to correct ponding)
Sum:			\$254,728.80	\$120,516.00	\$118,792.80	\$10,280.00	\$5,140.00	\$0.00		





EPDM and TPO Membrane Roofs



Tremco Roofing and Coping of the 1939 Gymnasium Addition

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C. Ventilation / Air Conditioning

**Description:** The overall facility is not equipped with a central air conditioning system. Window units are present in the overall facility. Isolated room systems consisting of thru-wall PTAC units are located in the Administrative Offices. Isolated room systems consisting of ducted split AC units (with condensing units pad-mounted on the roof of the overall facility) are located in the Computer Lab and various other locations throughout the overall facility. Isolated room system consisting of ducted packaged roof top HVAC unit is located in the 2006 Addition. The ventilation system in the overall facility consists of unit ventilators, original to each addition and in fair condition, providing fresh air to Classrooms and Media Center and air handlers, original to each addition and in fair condition, providing fresh air to other miscellaneous spaces such as the Gymnasium and Student Dining areas. Relief air venting is provided by louvered interior doors, unit ventilators, transfer grilles to corridors, central relief fans, and air handlers. The ventilation system does not appear to meet the Ohio Building Code 15 CFM per occupant fresh air requirement. The overall system is not compliant with Ohio Building Code and Ohio School Design Manual requirements. Dust collection systems are not required in this facility. The Art program is equipped with a kiln and the kiln ventilation system is inadequate. General building exhaust systems for Restrooms, Storage Rooms, Art Rooms, and Custodial Closets do not appear to be inadequately placed, and in fair condition.

**Rating:** 2 Needs Repair

**Recommendations:** Provide an air conditioning system to meet with Ohio Building Code and Ohio School Design Manual requirements. Replace general building exhaust systems located in Restrooms, Storage Rooms, Art Rooms, and Custodial Closets. Pricing included in Item A. Provide the Art program with a kiln ventilation system to meet Ohio Building Code and Ohio School Design Manual requirements.

Item	Cost	Unit	Whole Building	Original Construction (1919) 17,979 ft²	Gymnasium Addition (1939) 13,495 ft²	Classroom Addition (1952) 20,556 ft²	Classroom Addition (1972) 6,653 ft²	Cafeteria and Media Center Addition (2006) 13,211 ft²	Sum	Comments
Kiln Exhaust System:	\$5,000.00	each		1 Required					\$5,000.00	
<b>Sum:</b>			\$5,000.00	\$5,000.00	\$0.00	\$0.00	\$0.00	\$0.00		



Roof Top Mounted Condensing Unit



Roof Top HVAC Unit

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D. Electrical Systems

**Description:** The electrical system provided to the 1919 Original Construction is a 240 volts, 1,200 amp, 3 phase and 4 wire system installed in 1919 with upgrades in 1992 and 2006, and is in fair condition. The systems in the 1939, 1952, and 1972 Additions are an extension of that found in the 1919 Original Construction. The electrical system provided to the 2006 Addition is a 208Y/120V volts, 1,200 amp, 3 phase and 4 wire system installed in 2006, and is in good to fair condition. Power is provided to the school by multiple utility owned, pad-mounted transformers located outside the Mechanical Rooms of the 1919 Original Construction and the 2006 Addition, and appear to be in fair condition. The Square D and Eaton panel systems, original to each addition with upgrades in 2006, are in fair condition, and for the most part cannot be expanded to add additional capacity. The Classrooms are not equipped with adequate electrical outlets. The typical Classroom contains (5) general purpose outlets, (0) dedicated outlets for each Classroom computer, and (1) dedicated outlet for each Classroom television. Some Classrooms are equipped with as many as (6) general purpose outlets, while others are equipped with as few as (4) general purpose outlets. There are not any spaces that have no electrical outlets. The Corridors appear to be equipped with adequate electrical outlets for servicing. Adequate GFI protected exterior outlets are not provided around the perimeter of the building. The facility is not equipped with an emergency generator. Adequate lightning protection safeguards do not appear to be provided. Stage lighting power system including control panel, breakers, and dimmers is inadequately provided, in fair condition and does not meet OSDM requirements. The overall electrical system does not fully meet Ohio School Design Manual requirements in supporting the current needs of the school, and will be inadequate 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 and due to lack of OSDM-required features and to accommodate the addition of an air conditioning system. Provide an emergency generator, with funding included in the electrical system replacement. Provide adequate lightning protection safeguards in the overall facility, including associated grounding system, with funding included in the electrical system replacement. Provide control panel, dimmers, and breakers to support the Stage lighting system, with funding included in the electrical system replacement.

Item	Cost	Unit	Whole Building	Original Construction (1919)	Gymnasium Addition (1939)	Classroom Addition (1952)	Classroom Addition (1972)	Cafeteria and Media Center Addition (2006)	Sum	Comments
				17,979 ft <sup>2</sup>	13,495 ft <sup>2</sup>	20,556 ft <sup>2</sup>	6,653 ft <sup>2</sup>	13,211 ft <sup>2</sup>		
System Replacement:	\$16.23	sq.ft. (of entire building addition)		Required	Required	Required	Required	Required	\$1,166,839.62	(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:			\$1,166,839.62	\$291,799.17	\$219,023.85	\$333,623.88	\$107,978.19	\$214,414.53		



Main Electrical Distribution Panel



Pad Mounted Transformer

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## E. Plumbing and Fixtures

**Description:** The service entrance is equipped with a reduced pressure back flow preventer in good condition. A water treatment system is not provided, though none is needed. The domestic water supply piping in the 1919 Original Construction, the 1939 Addition, the 1952 Addition and the 1972 Addition, is reported to be mostly galvanized steel with limited copper. The galvanized steel is original to the 1919 Original Construction and each Addition. The galvanized steel is in fair condition and the copper is in good condition. The 2006 Addition is reported to be mostly copper with limited galvanized steel. Both the copper and the galvanized steel are in good condition. The facility is systematically replacing the galvanized steel with copper as needed. No replacement is needed in the 2006 Addition. The waste piping in the 1919 Original Construction, the 1939 Addition, the 1952 Addition and the 1972 Addition is reported to be mostly cast iron with limited PVC. The cast iron is original to the 1919 Original Construction and each Addition. The cast iron is in fair to poor condition and the PVC is in good condition. The 2006 Addition is reported to be mostly cast iron with limited PVC. Both the cast iron and the PVC are in good condition. The facility is systematically replacing the cast iron with PVC as needed. No replacement is needed in the 2006 Addition. The facility is equipped with (2) 76 gallon gas water heaters which are in good condition and (1) 100 gallon gas water heater which is in good condition. The school contains 4 Large Group Restrooms for boys, 4 Large Group Restrooms for girls, 1 Locker Room Restroom for boys, 1 Locker Room Restroom for girls, 3 Restrooms associated with specialty Classrooms, 1 Unisex Restroom and 4 Restrooms for staff. Boys' Large Group Restrooms contain 1 ADA and 1 non-ADA floor mounted flush valve toilets, 2 ADA and 4 non-ADA wall mounted flush valve toilets, 4 ADA and 8 non-ADA wall mounted flush valve urinals, as well as 2 ADA and 2 non-ADA wall mounted lavatories and 0 ADA and 2 non-ADA countertop lavatories. Girls' Large Group Restrooms contain 1 ADA and 4 non-ADA floor mounted flush valve toilets, 2 ADA and 11 non-ADA wall mounted flush valve toilets, as well as 4 ADA and 1 non-ADA wall mounted lavatories and 0 ADA and 2 non-ADA countertop lavatories. Boys' Locker Room Restroom contains 0 ADA and 2 non-ADA floor mounted flush valve toilets, 0 ADA and 2 non-ADA floor mounted flush valve urinals, 0 ADA and 1 non-ADA wall mounted lavatory, as well as 0 ADA and 3 non-ADA showers. Girls' Locker Room Restroom contains 0 ADA and 3 non-ADA floor mounted flush valve toilets, 0 ADA and 2 non-ADA wall mounted lavatories, as well as 0 ADA and 3 non-ADA showers. The Restrooms associated with Specialty Classrooms contain 0 ADA and 3 non-ADA floor mounted flush valve toilets, no urinals or lavatories are associated with these Restrooms. The Unisex Restroom contains 0 ADA and 1 non-ADA floor mounted flush valve toilet, no urinal or lavatory is associated with this Restroom. Staff Restrooms contain 0 ADA and 2 non-ADA floor mounted flush valve toilets, 3 ADA and 0 non-ADA wall mounted flush valve toilets, as well as 3 ADA and 2 non-ADA wall mounted lavatories. Condition of fixtures is good to fair. The facility is equipped with 0 ADA and 1 non-ADA drinking fountain, as well as 2 ADA and 7 non-ADA electric water coolers, in good to fair condition. The 34 Elementary Classrooms are mostly not equipped with ADA or non-ADA sink mounted type drinking fountains. The Classrooms which do have a sink mounted type drinking fountain are in fair condition. 1 Classroom is equipped with a sink only, which is in fair condition. No Special Education Classroom was observed at this facility. Kitchen is equipped with the required Restroom and the fixtures are in good condition. Heath Clinic is equipped with the required Restroom and the fixtures are in fair condition. Kindergarten Classrooms are equipped with Restroom facilities and the fixtures are in fair condition. Kitchen fixtures consist of 1 triple compartment sink, 1 double compartment sink, 1 rinse sink with disposal, 3 hand wash sinks, 1 rinse hose, 1 ice maker, 1 floor mounted utility sink, 1 clothes washer and 1 commercial dishwasher, which are in good condition. The Kitchen is not equipped with a satisfactory grease interceptor, though none is required. The Kitchen is provided the required 140 degree hot water supply via a heat booster which is in good condition. 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 25 toilets, 9 urinals, 25 lavatories, 34 Classroom sink mounted drinking fountains, and 9 electric water coolers. Observations revealed that the school is currently equipped with 40 toilets, 14 urinals, 21 lavatories, 7 Classroom sink mounted drinking fountains, 1 drinking fountain and 9 electric water coolers. ADA requirements are not met for fixtures and drinking fountains. Custodial Closets are properly located and are adequately provided with required service sinks or floor drain sinks which are in good condition. Science Classroom, Lab utility sinks, gas connections, compressed air connections, and safety shower / 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 mostly provided.

**Rating:** 3 Needs Replacement

**Recommendations:** In the overall facility, replace the remaining galvanized steel domestic water piping and the remaining cast iron waste piping in the 1919 Original Construction, the 1939 Addition, the 1952 Addition and the 1972 Addition, due to age and condition. Due to age and condition and to facilitate the school's compliance with OBC and OSFC fixture requirements, in the 1919 Original Construction, the 1939 Addition, the 1952 Addition and the 1972 Addition, replace 21 toilets, 2 lavatories (include ADA compliant faucets), 6 urinals and 4 electric water coolers. Provide 1 additional electric water cooler in the 1972 Addition. Due to age, condition, LEED, OBC and OSFC, replace 69 faucets and valves throughout the overall facility. Provide 32 in Classroom sinks with deck mounted drinking fountain. All fixtures, whether new or replaced, to be mounted at ADA compliant heights. Provide 2 additional exterior wall hydrants. See Item O for replacement of fixtures related to ADA requirements, as well as reconfiguration of toilet stalls in Boys and Girls Restrooms, Locker Room Restrooms and the reconfiguration of 2 Staff Restrooms and 3 Kindergarten Restrooms.

Item	Cost	Unit	Whole Building	Original Construction (1919) 17,979 ft <sup>2</sup>	Gymnasium Addition (1939) 13,495 ft <sup>2</sup>	Classroom Addition (1952) 20,556 ft <sup>2</sup>	Classroom Addition (1972) 6,653 ft <sup>2</sup>	Cafeteria and Media Center Addition (2006) 13,211 ft <sup>2</sup>	Sum	Comments
Domestic Supply Piping:	\$3.50	sq.ft. (of entire building addition)		Required	Required	Required	Required		\$205,390.50	(remove / replace)
Sanitary Waste Piping:	\$3.50	sq.ft. (of entire building addition)		Required	Required	Required	Required		\$205,390.50	(remove / replace)
Toilet:	\$1,500.00	unit		9 Required		12 Required			\$31,500.00	(remove / replace) See Item O
Urinal:	\$1,500.00	unit		5 Required		1 Required			\$9,000.00	(remove / replace)
Sink:	\$1,500.00	unit				2 Required			\$3,000.00	(remove / replace)
Electric water cooler:	\$3,000.00	unit		2 Required		2 Required	1 Required		\$15,000.00	(double ADA)
Replace faucets and flush valves	\$500.00	per unit		11 Required	10 Required	31 Required	1 Required	16 Required	\$34,500.00	(average cost to remove/replace)
<b>Other:</b> Classroom Sink with Deck Mounted Drinking Fountain	\$3,800.00	each		13 Required		15 Required	4 Required		\$121,600.00	Provide new Classroom sink with deck mounted drinking fountain. Includes fixture, demolition, supply piping, drains and floor repair.
<b>Other:</b> Exterior Wall Hydrant	\$1,400.00	each				2 Required			\$2,800.00	Provide additional exterior wall hydrants.
<b>Sum:</b>			\$628,181.00	\$207,753.00	\$99,465.00	\$247,692.00	\$65,271.00	\$8,000.00		



Large Group Restroom-Boys-1919 Original Construction



Classroom Sink With Deck Mounted Drinking Fountain

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F. Windows

**Description:** The Original Construction, 1939 Gymnasium Addition, 1952 Classroom Addition, and 1972 Classroom Addition are equipped with aluminum frame windows with insulated glazing type window system, which was installed at an unknown date, and is in fair to poor condition. Some windows in these portions of the building were replaced with the 2006 Addition or 2015, and are in good condition. The window system features operable windows throughout the building, and some operable windows are equipped with opening limiters in fair condition and insect screens in poor condition. Window system seals are in fair to poor condition, with minimal air and water infiltration being experienced. Window system hardware is in fair to poor condition. The window system features no blinds. This facility is not equipped with any curtain wall systems. There are glass block windows in the 1939 Gymnasium and 1952 Classroom Additions, in fair to poor condition. The 2006 Cafeteria and Media Center Addition, along with some windows in the other portions of the building, are equipped with thermally broken aluminum frame windows with insulated glazing type window system, which was installed in 2006 and 2015, and is in good condition. The window system features operable windows in most of the building, and operable windows are not equipped with opening limiters, but do contain insect screens in good to fair condition. Window system seals are in good condition, with no air and water infiltration being experienced. Window system hardware is in good to fair condition. The window system features integral blinds, which are in good condition. This facility is not equipped with any curtain wall systems. This Addition does not feature any glass block windows. The exterior doors in the overall facility are equipped with thermally broken aluminum frame sidelights and transoms with tempered insulated glazing, in good condition. Exterior door vision panels are tempered insulated glazing. The school does not contain any skylights. The school does not contain any clerestories. Interior glass is OSDM-compliant. Window security grilles are not provided for ground floor windows. There is not a Greenhouse associated with this school.

**Rating:** 3 Needs Replacement

**Recommendations:** Provide a new insulated window system with integral blinds in the Original Construction, 1952 Classroom Addition and 1972 Classroom Addition to meet with Ohio School Design Manual requirements. Replace the existing glass block in the 1939 Gymnasium Addition and the 1952 Classroom Addition with a new insulated window system to match existing insulated system and comply with Ohio School Design Manual requirements. Cost is included with the other window replacement costs.

Item	Cost	Unit	Whole Building	Original Construction (1919) 17,979 ft²	Gymnasium Addition (1939) 13,495 ft²	Classroom Addition (1952) 20,556 ft²	Classroom Addition (1972) 6,653 ft²	Cafeteria and Media Center Addition (2006) 13,211 ft²	Sum	Comments
Insulated Glass/Panels:	\$60.00	sq. ft. (Qty)		2,415 Required	128 Required	2,955 Required	160 Required		\$339,480.00	(includes blinds)
<b>Sum:</b>			\$339,480.00	\$144,900.00	\$7,680.00	\$177,300.00	\$9,600.00	\$0.00		



Typical Aluminum and Glass Block Windows of the 1952 Classroom Addition



Typical Aluminum Window

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G. Structure: Foundation

**Description:** The overall facility is equipped with concrete foundation walls on concrete footings, which displayed minor locations of significant differential settlement, cracking, or leaking, and are in good to fair condition. Areas of minor cracking and spalling were observed through the overall facility. The District reports that there has been past leaking in the basement locker rooms. 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:** 2 Needs Repair

**Recommendations:** Provide sprayed on waterproofing system for the 1939 Gymnasium Addition. Provide drainage tile system at the 1939 Gymnasium Addition due to basement leaking. Repair areas of cracking and spalling through the overall facility.

Item	Cost	Unit	Whole Building	Original Construction (1919) 17,979 ft <sup>2</sup>	Gymnasium Addition (1939) 13,495 ft <sup>2</sup>	Classroom Addition (1952) 20,556 ft <sup>2</sup>	Classroom Addition (1972) 6,653 ft <sup>2</sup>	Cafeteria and Media Center Addition (2006) 13,211 ft <sup>2</sup>	Sum	Comments
Waterproofing Spray Applied:	\$6.00	sq.ft. (Qty)			2,530 Required				\$15,180.00	(include excavation and backfill)
Drainage Tile Systems / Foundation Drainage:	\$18.00	in.ft.			253 Required				\$4,554.00	(include excavation and backfill)
<b>Other:</b> Repair Foundation	\$28.00	sq.ft. (Qty)		32 Required	164 Required	34 Required	33 Required		\$7,364.00	Repair minor foundation cracking and spalling.
<b>Sum:</b>			\$27,098.00	\$896.00	\$24,326.00	\$952.00	\$924.00	\$0.00		



Typical Concrete Foundation



Foundation Repair at 1939 Gymnasium Addition

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H. Structure: Walls and Chimneys

**Description:** The Original Construction, 1939 Gymnasium Addition, 1952 Classroom Addition and 1972 Classroom Addition have a brick veneer on load bearing masonry wall system, which displayed minor locations of deterioration, and is in good to fair condition. The exterior masonry does not contain control joints. The school does have sufficient expansion joints, and they are in fair condition. The 2006 Cafeteria and Media Center Addition has a brick veneer on load bearing masonry wall system, 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 at lintel locations, at doors and windows, building corners, and wall offsets and are in good condition. The school does have sufficient expansion joints, and they are in good condition. Exterior walls in the Original Construction, 1939 Gymnasium Addition, 1952 Classroom Addition and 1972 Classroom Addition are inadequately insulated. Brick veneer masonry walls are not cavity walls. Exterior walls in the 2006 Cafeteria and Media Center Addition are adequately insulated. Brick veneer masonry walls are cavity walls. Weep holes and vents are not provided or required in the Original Construction, 1939 Gymnasium Addition, 1952 Classroom Addition and 1972 Classroom Addition. Weep holes are provided in sufficient quantity at lintels, below sills, and the base of masonry cavity walls, and are in good condition in the 2006 Cafeteria and Media Center Addition. Weep holes are not rope type weeps. Vents are provided in sufficient quantity. The exterior masonry of the Original Construction has not been cleaned and sealed in recent years, and shows minor evidence of mortar deterioration. Architectural exterior accent materials consist of stone and metal, which are in fair condition. Exterior building fenestration in the Original Construction represents 22.71% of the exterior surfaces. The exterior masonry of the 1939 Gymnasium Addition has not been cleaned and sealed in recent years, and shows minor evidence of mortar deterioration throughout the addition. Architectural exterior accent materials consist of stone, which is in fair condition. Exterior building fenestration in the 1939 Gymnasium Addition represents 8.15% of the exterior surfaces. The exterior masonry of the 1952 Classroom Addition has not been cleaned and sealed in recent years, and shows minor evidence of mortar deterioration. Architectural exterior accent materials consist of stone, which is in fair condition. Exterior building fenestration in the 1952 Classroom Addition represents 27.52% of the exterior surfaces. The exterior masonry of the 1972 Classroom Addition has not been cleaned and sealed in recent years, and shows minor evidence of mortar deterioration. Architectural exterior accent materials consist of stone, which is in fair condition. Exterior building fenestration in the 1972 Classroom Addition represents 21.79% of the exterior surfaces. The exterior masonry of the 2006 Cafeteria and Media Center Addition has not yet needed to be cleaned and sealed, showing no evidence of mortar deterioration. Architectural exterior accent materials consist of stone, which is in good condition. Exterior building fenestration in the 2006 Cafeteria and Media Center Addition represents 9.28% of the exterior surfaces. Most classrooms in the Original Construction, 1952 Classroom Addition, and 1972 Classroom Addition have unit ventilators which will be removed. Masonry infill will be required. Interior Corridor and demising walls are concrete masonry units, brick, glazed block and plaster partition walls, project full height from floor to bottom of deck, and are in good to fair condition. Interior masonry appears to have adequately spaced and caulked control joints in good to fair condition. Interior soffits are of plaster or gypsum board type construction, and in good condition. The window sills are stone, and are in good to fair condition. The exterior lintels are steel, and are in good to fair condition. Chimneys are in poor condition, requiring tuckpointing. Canopies over entrances of the 1939 Gymnasium Addition are concrete type construction, and are in poor condition. Canopies over entrances of the 1952 Classroom Addition are metal panel type construction, and are in good condition. Canopies over entrances of the 1972 Classroom Addition are plaster type construction, and are in good condition. Exterior soffits are of metal panel type construction, and in good condition. The school is not equipped with a loading dock.

**Rating:** 2 Needs Repair

**Recommendations:** Provide tuckpointing in all areas of mortar deterioration as required in the Original Construction, 1939 Gymnasium Addition, 1952 Classroom Addition and 1972 Classroom Addition. Provide masonry cleaning and sealing as required through the overall facility. Recaulk existing expansion joints in the 1939 Gymnasium Addition, 1952 Classroom Addition and 1972 Classroom Addition. Prep and paint exposed steel lintels in the 1952 Classroom Addition. Exterior wall insulation deficiencies are addressed in Item J. Infill masonry openings from removed unit ventilators. Patch the concrete canopies of the 1939 Gymnasium Addition.

Item	Cost	Unit	Whole Building	Original Construction (1919) 17,979 ft <sup>2</sup>	Gymnasium Addition (1939) 13,495 ft <sup>2</sup>	Classroom Addition (1952) 20,556 ft <sup>2</sup>	Classroom Addition (1972) 6,653 ft <sup>2</sup>	Cafeteria and Media Center Addition (2006) 13,211 ft <sup>2</sup>	Sum	Comments
Tuckpointing:	\$5.25	sq.ft. (Qty)		64 Required	164 Required	34 Required	33 Required		\$1,548.75	(wall surface)
Exterior Masonry Cleaning:	\$1.50	sq.ft. (Qty)		8,214 Required	5,577 Required	8,132 Required	3,597 Required	8,570 Required	\$51,135.00	(wall surface)
Exterior Masonry Sealing:	\$1.00	sq.ft. (Qty)		8,214 Required	5,577 Required	8,132 Required	3,597 Required	8,570 Required	\$34,090.00	(wall surface)
Exterior Caulking:	\$5.50	ln.ft.			48 Required	13 Required	74 Required		\$742.50	(removing and replacing)
<b>Other:</b> Concrete Repairs	\$50.00	sq.ft. (Qty)			192 Required				\$9,600.00	Repair concrete canopies.
<b>Other:</b> Masonry Infill	\$27.00	sq.ft. (Qty)		36 Required		48 Required	24 Required		\$2,916.00	Provide masonry infill for removed unit ventilators.
<b>Other:</b> Paint lintels	\$2.75	sq.ft. (Qty)				9 Required			\$24.75	Prep and paint lintels.
<b>Sum:</b>			\$100,057.00	\$21,843.00	\$24,667.50	\$21,900.75	\$10,220.75	\$21,425.00		



Masonry of the Original Construction



Concrete Repair of the 1939 Gymnasium Addition

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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 to fair condition. There is no crawl space. The floor construction of the intermediate floors of the Original Construction and the 1939 Gymnasium Addition is cast-in-place concrete type construction, and is in fair condition. There are no intermediate floors in the 1952 Classroom Addition, 1972 Classroom Addition, and 2006 Cafeteria and Media Center 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 Original Construction is assumed to be cast-in-place concrete type construction, and is in good condition. All areas have plaster ceilings with no access. The roof construction of the 1939 Gymnasium Addition is wood deck on steel joist type construction, and is in good condition. The roof construction of the 1952 Classroom Addition is gypsum deck on steel joist type construction, and is in good condition. The roof construction of the 1972 Classroom Addition is steel deck on steel joist type construction, and is in good condition. The roof construction of the 2006 Cafeteria and Media Center Addition is steel deck on steel joist type construction, and is in good condition.

**Rating:** 2 Needs Repair

**Recommendations:** Provide fire separation assembly for wood roof structure in the 1939 Gymnasium Addition at the Stage only. Refer to Item U for pricing of fire suppression system for wood structures.

Item	Cost	Unit	Whole Building	Original Construction (1919)	Gymnasium Addition (1939)	Classroom Addition (1952)	Classroom Addition (1972)	Cafeteria and Media Center Addition (2006)	Sum	Comments
Fire Rated Drywall over Existing Wood Ceiling Joists	\$3.50	sq.ft. (Qty)		17,979 ft <sup>2</sup>	1,500 Required				\$5,250.00	(per square feet of required drywall)
<b>Sum:</b>			\$5,250.00	\$0.00	\$5,250.00	\$0.00	\$0.00	\$0.00		



Typical Concrete Floor Structure of the 1939 Gymnasium Addition



Wood Roof Deck of the 1939 Gymnasium Addition

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## J. General Finishes

**Description:** The 1919 Original Construction features conventionally partitioned Classrooms with VAT, wood, marmoleum, or sealed concrete type flooring, acoustical tile type ceilings, as well as painted plaster type wall finishes, and they are in fair condition. The 1919 Original Construction has Corridors with terrazzo type flooring, acoustical tile or painted plaster type ceilings, as well as painted plaster type wall finishes, and they are in fair condition. The 1919 Original Construction has Restrooms with ceramic tile type flooring, acoustical tile type ceilings, as well as ceramic tile type wall finishes, and they are in fair condition. Toilet partitions are metal, and are in good to fair condition. The 1939 Addition features a Gymnasium, Locker Rooms, and Storage and Receiving areas. The 1939 Addition has Locker Room Restrooms with concrete type flooring, painted plaster type ceilings, as well as glazed block and concrete type wall finishes, and they are in poor condition. Toilet partitions are metal, and are in poor condition. The 1952 Addition features conventionally partitioned Classrooms with VAT, VCT, or marmoleum type flooring, acoustical tile type ceilings, as well as glazed block, painted block, or painted gypsum type wall finishes, and they are in fair condition. The 1952 Addition has Corridors with VAT, VCT, or marmoleum type flooring, acoustical tile type ceilings, as well as brick painted brick, painted block, glazed block, and wood paneling type wall finishes, and they are in fair condition. The 1952 Addition has Restrooms with terrazzo or ceramic tile type flooring, acoustical tile type ceilings, as well as glazed block and painted block type wall finishes, and they are in fair condition. Toilet partitions are metal, and are in fair condition. The 1972 Addition features conventionally partitioned Classrooms with VAT, VCT, or marmoleum type flooring, acoustical tile type ceilings, as well as painted brick and painted block type wall finishes, and they are in fair condition. The 1972 Addition has Corridors with VCT and marmoleum type flooring, acoustical tile type ceilings, as well as painted block type wall finishes, and they are in fair condition. The 1972 Addition does not contain Restrooms. The 2006 Addition features a Multipurpose Space, Warming Kitchen, Media Center, Staff Lounge, as well as a Computer Classroom. The Computer Classroom has marmoleum type flooring, acoustical tile type ceilings, as well as painted block type wall finishes, and they are in good condition. The 2006 Addition has Corridors with marmoleum or walk-off caret type flooring, acoustical tile type ceilings, as well as painted block and brick type wall finishes, and they are in good condition. The 2006 Addition has Restrooms with ceramic tile type flooring, acoustical tile type ceilings, as well as painted block type wall finishes, and they are in good condition. Toilet partitions are plastic, and are in good condition. Classroom casework in the overall facility is wood type construction with plastic laminate tops. About half of Classrooms in the overall facility are provided with adequate casework while the other half are provided with lockers instead of casework. Classroom casework in the 1919 Original Construction, 1952, and 1972 Addition is in fair to poor condition. There are no Classrooms in the 1939 Addition. Classroom casework in the 2006 Addition is in good condition. The typical Classroom contains 25 lineal feet of casework, and Classroom casework provided ranges from 0 to 25 feet. Classrooms in the 1919 Original Construction, 1952, and 1972 Addition are provided adequate chalkboards, markerboards, and tackboards which are in fair condition. Classrooms 2006 Addition are provided adequate chalkboards, markerboards, and tackboards which are in good condition. The lockers, located in half of the Classrooms, are adequately provided, and in fair condition. The classroom coat hooks and storage cubbies, located in the other half of the Classrooms, are adequately provided, and in fair condition. The Art program is equipped with a kiln in good condition, and existing kiln ventilation is inadequate. The 1919 Original Construction and 1939 Addition is equipped with wood non-louvered interior doors that are flush mounted with and without proper ADA hardware and clearances, and in poor condition. The 1952 Addition is equipped with wood non-louvered interior doors that are flush mounted without proper ADA hardware and clearances, and in poor condition. The 1972 Addition is equipped with wood louvered and non-louvered interior doors that are flush mounted with and without proper ADA hardware and clearances, and in fair to poor condition. The 2006 Addition is equipped with wood non-louvered interior doors that are flush mounted with proper ADA hardware and clearances, and in good condition. The 1939 Addition's Gymnasium space has wood type flooring, painted plaster type ceilings, as well as glazed block and painted plaster type wall finishes, and they are in poor condition. Wood Gymnasium flooring has been well maintained, but will accommodate no future sandings and refinishing, and is rated at an advanced stage of its product lifecycle. Gymnasium concrete fixed stands with metal seats are in good to fair condition. Two Gymnasium basketball backboards are a fixed type, and are in good to fair condition. The 2006 Addition's Gymnasium space shares Student Dining, and has rubber mat type flooring, acoustical tile type ceilings, as well as painted block type wall finishes, and they are in good condition. Gymnasium stands are not provided. Two Gymnasium basketball backboards are a fixed type, and are in good condition. The Media Center, located in the 2006 Addition, has marmoleum type flooring, acoustical tile and painted gypsum type ceilings, as well as painted block type wall finishes, and they are in good condition. Student Dining shares the 2006 Addition's Gymnasium space. OSDM-required fixed equipment for the 1939 Addition Stage is adequately provided, and in poor condition. The existing 2006 Addition's Gymnasium space is adequately provided with appropriate sound attenuation acoustical surface treatments. Existing 1939 Addition's Gymnasium, Music Room, and the 2006 Addition's Media Center spaces are inadequately provided with appropriate sound attenuation acoustical surface treatments. The existing Kitchen is a Warming Kitchen only, is correctly sized based on current enrollment, and the existing Kitchen equipment, installed in 2006, is in good condition. The Kitchen hood is in good condition, and is not equipped with the required UL 300 compliant wet chemical fire suppression system. The required 6" overhang on all three exposed sides of the cooking equipment is provided by the hood. Kitchen hood exhaust ductwork is of proper construction, material, insulation, and installed as required by the OSDM and OBCMC. Reach-in coolers and freezers are located within the Kitchen spaces, and are in good condition.

**Rating:** 3 Needs Replacement

**Recommendations:** Provide complete replacement of finishes and casework except in the 2006 Addition, due to condition and installation of systems outlined in Items A, C, D, E, I, K, L, M, N, T, U, and W. Provide for replacement of toilet partitions due to age and condition. Provide for the replacement of toilet accessories. Provide for the replacement of interior doors due to age and condition. Funding for replacement of two interior doors with inadequate clearances is provided in Item O. Provide for the repair of terrazzo flooring due to condition. Provide for replacement of the 1939 Addition's Gymnasium flooring due to age and condition. Provide for additional wall insulation. Provide for the replacement of the Warming Kitchen exhaust hood to meet OSDM standards. Provision of a heat removal hood for the Art program kilns is provided in Item C. Remove Corridor transfer grilles, fill voids, and coordinate with adjacent finishes. Provide for appropriate sound attenuation acoustical surface treatments in the 1939 Gymnasium, Music room, and Media Center. Provide for the replacement of Stage Equipment due to age and condition.

Item	Cost	Unit	Whole Building	Original Construction (1919) 17,979 ft²	Gymnasium Addition (1939) 13,495 ft²	Classroom Addition (1952) 20,556 ft²	Classroom Addition (1972) 6,653 ft²	Cafeteria and Media Center Addition (2006) 13,211 ft²	Sum	Comments
Complete Replacement of Finishes and Casework (Elementary):	\$15.90	sq.ft. (of entire building addition)		Required	Required	Required	Required		\$933,059.70	(elementary, per building area, with removal of existing)
Toilet Partitions:	\$1,000.00	per stall			3 Required	12 Required			\$15,000.00	(removing and replacing)
Toilet Accessory Replacement	\$0.20	sq.ft. (of entire building addition)		Required	Required	Required			\$10,406.00	(per building area)
Door, Frame, and Hardware:	\$1,300.00	each		30 Required	6 Required	38 Required	10 Required		\$109,200.00	(non-ADA)
Terrazzo Floor Repair	\$25.00	sq.ft. (Qty)		150 Required		150 Required			\$7,500.00	(floor area affected; max. area to be 300 sf)
Additional Wall Insulation	\$6.00	sq.ft. (Qty)		8,214 Required	5,577 Required	8,132 Required	3,597 Required		\$153,120.00	(includes the furring out of the existing walls, insulation and abuse resistant GWB)
Hard Plaster Replacement	\$9.00	sq.ft. (Qty)		45,500 Required	7,500 Required	16,180 Required			\$622,620.00	(Hazardous Material Replacement Cost - See T.)
Gypsum Board Replacement	\$4.00	sq.ft. (Qty)		200 Required		4,100 Required			\$17,200.00	(Hazardous Material Replacement Cost - See T.)
Acoustical Panel / Tile Ceiling Replacement	\$1.50	sq.ft. (Qty)				16,260 Required			\$24,390.00	(Hazardous Material Replacement Cost - See T.)
Kitchen Exhaust Hood:	\$56,000.00	per unit						1 Required	\$56,000.00	(includes fans, exhaust & ductwork)
<b>Other:</b> Sound Control	\$3.00	sq.ft. (Qty)		701 Required	4,755 Required			2,305 Required	\$23,283.00	Provide for appropriate sound attenuation acoustical surface treatments in the 1939 Gymnasium, Music room, and Media Center.
<b>Other:</b> Stage Equipment	\$14,000.00	allowance			Required				\$14,000.00	Provide for the replacement of Stage Equipment due to age and condition.
<b>Other:</b> Transfer Grilles	\$48.00	sq.ft. (Qty)				24 Required			\$1,152.00	Remove Corridor transfer grilles, fill voids, and coordinate with adjacent finishes.
<b>Sum:</b>			\$1,986,930.70	\$793,898.90	\$357,296.50	\$632,455.60	\$140,364.70	\$62,915.00		



Classroom Storage



Multipurpose Space

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K. Interior Lighting

**Description:** The typical Classrooms in the overall facility are equipped with T-8 2x4 lay-in direct fluorescent fixture type lighting, with dual level switching. Classroom fixtures are in fair condition, providing an average illumination of 90 FC, thus complying with the 40 FC recommended by the OSDM. The typical Corridors in the overall facility are equipped with T-8 2x4 lay-in direct fluorescent fixture type lighting, with single level switching. Corridor fixtures are in fair condition, providing an average illumination of 14 FC, which is less than the 15 FC recommended by the OSDM. The Multi-Purpose Room (Auxiliary Gymnasium/Student Dining) spaces are equipped with T-8 2x4 lay-in direct fluorescent fixture type lighting, in fair condition, providing an average illumination of 37 FC, which is less than the 40 FC recommended by the OSDM. The Primary Gymnasium is equipped with T-8 2x4 suspended direct fluorescent fixture type lighting, in fair condition, providing an average illumination of 28 FC, which is less than the 30 FC recommended by the OSDM. The Media Center is equipped with T-8 2x4 lay-in direct fluorescent fixture type lighting, in fair condition, providing an average illumination of 50 FC, thus complying with the 40 FC recommended by the OSDM. The Kitchen spaces are equipped with T-8 2x4 lay-in direct fluorescent fixture type lighting, with single level switching. Kitchen fixtures are in fair condition, providing an average illumination of 43 FC, which is less than the 50 FC recommended by the OSDM. The Service Areas in the overall facility are equipped with T-8 1x4 suspended and surface mount fluorescent fixture type lighting, in fair condition, providing inadequate illumination based on OSDM requirements. The typical Administrative spaces in the overall facility are equipped with T-8 2x4 lay-in direct fluorescent fixture type lighting, in fair condition, providing inadequate illumination based on OSDM requirements. The overall lighting systems of the facility are not fully compliant with Ohio School Design Manual requirements due to age and condition, inadequate lighting levels, and lack of multi-level switching.

**Rating:** 3 Needs Replacement

**Recommendations:** Provide complete replacement of lighting system due to age, condition, lighting levels, lack of multilevel switching, and installation of systems outlined in Items A, C, J, and U.

Item	Cost	Unit	Whole Building	Original Construction (1919)	Gymnasium Addition (1939)	Classroom Addition (1952)	Classroom Addition (1972)	Cafeteria and Media Center Addition (2006)	Sum	Comments
Complete Building Lighting Replacement	\$5.00	sq.ft. (of entire building addition)		17,979 ft <sup>2</sup>	13,495 ft <sup>2</sup>	20,556 ft <sup>2</sup>	6,653 ft <sup>2</sup>	13,211 ft <sup>2</sup>	\$359,470.00	Includes demo of existing fixtures
<b>Sum:</b>			\$359,470.00	\$89,895.00	\$67,475.00	\$102,780.00	\$33,265.00	\$66,055.00		



Classroom Fluorescent Light Fixtures



Media Center Fluorescent Light Fixtures

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L. Security Systems

**Description:** The overall facility contains a Sonitrol motion detector, door contact, and CCTV type security system in fair condition. Motion detectors are inadequately provided in main entries, central gathering areas, offices, main Corridors, and spaces where 6 or more computers are located. Exterior doors are inadequately equipped with door contacts. An automatic visitor control system is provided. Compliant color CCTV cameras are inadequately provided at main entry areas, parking lots, central gathering areas, and main Corridors. CCTV is monitored in Administrative Area with the use of a LCD monitor. A compliant computer controlled access control system integrating alarms and video signals, with appropriate UPS backup, is not provided. The system is equipped with card readers. The security system is not adequately provided throughout, and the system is not fully compliant with Ohio School Design Manual guidelines. There are no playground fencing issues requiring attention. The exterior site lighting system is equipped with surface mounted HID high pressure sodium and LED entry lights in fair condition. Pedestrian walkways are illuminated with surface mounted HID high pressure sodium and LED entry lights in fair condition. Parking and bus pick-up / drop off areas are illuminated by pole mounted LED fixtures in fair condition. The exterior site lighting system provides inadequate illumination due to insufficient fixture capacity and sparse placement of fixtures.

**Rating:** 3 Needs Replacement

**Recommendations:** Provide complete replacement of security system to meet Ohio School Design Manual guidelines. Provide complete replacement of exterior site lighting system to meet Ohio School Design Manual guidelines.

Item	Cost	Unit	Whole Building	Original Construction (1919)	Gymnasium Addition (1939)	Classroom Addition (1952)	Classroom Addition (1972)	Cafeteria and Media Center Addition (2006)	Sum	Comments
Security System:	\$1.85	sq.ft. (of entire building addition)		17,979 ft <sup>2</sup> Required	13,495 ft <sup>2</sup> Required	20,556 ft <sup>2</sup> Required	6,653 ft <sup>2</sup> Required	13,211 ft <sup>2</sup> Required	\$133,003.90	(complete, area of building)
Exterior Site Lighting:	\$1.00	sq.ft. (of entire building addition)		Required	Required	Required	Required	Required	\$71,894.00	(complete, area of building)
<b>Sum:</b>			\$204,897.90	\$51,240.15	\$38,460.75	\$58,584.60	\$18,961.05	\$37,651.35		



Security System Door Contacts



Security System CCTV Camera

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M. Emergency/Egress Lighting

**Description:** The overall facility is inadequately equipped with an emergency egress lighting system consisting of non-compliant plastic construction exit signs, as well as OSDM compliant red lettered and LED illuminated exit signs, and the system is in fair condition. The facility is inadequately equipped with emergency egress floodlighting (which consists mainly of emergency egress lighting attached to exit signs), but is also equipped with some recessed fluorescent lighting used as emergency egress lighting, and the system is in fair condition. The system is not provided with appropriate battery backup or emergency generator on separate circuits. The system is not 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.

Item	Cost	Unit	Whole Building	Original Construction (1919)	Gymnasium Addition (1939)	Classroom Addition (1952)	Classroom Addition (1972)	Cafeteria and Media Center Addition (2006)	Sum	Comments
Emergency/Egress Lighting:	\$1.00	sq.ft. (of entire building addition)		17,979 ft <sup>2</sup>	13,495 ft <sup>2</sup>	20,556 ft <sup>2</sup>	6,653 ft <sup>2</sup>	13,211 ft <sup>2</sup>	\$71,894.00	(complete, area of building)
<b>Sum:</b>			\$71,894.00	\$17,979.00	\$13,495.00	\$20,556.00	\$6,653.00	\$13,211.00		



Exit Signs



Emergency Egress Light Fixtures

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N. Fire Alarm

**Description:** The overall facility is equipped with a Notifier Fire-Warden 100 addressable type fire alarm system, installed in 1919 with upgrades in 2006, and in fair condition, consisting of manual pull stations and horn and strobe indicating devices. The system is automatic and is monitored by a third party. The system appears to be equipped with sufficient audible horns and strobe indicating devices. The system is not equipped with sufficient smoke detectors. The system is not equipped with any flow switches, tamper switches, and heat sensors. The systems thus will not support future fire suppression systems. The systems are not adequately provided throughout, and does not have additional zone capabilities. The systems are not fully compliant with Ohio Building Code, NFPA, and Ohio School Design Manual requirements.

**Rating:** 3 Needs Replacement

**Recommendations:** Provide complete replacement of fire alarm systems to meet OBC, NFPA, and Ohio School Design Manual guidelines.

Item	Cost	Unit	Whole Building	Original Construction (1919)	Gymnasium Addition (1939)	Classroom Addition (1952)	Classroom Addition (1972)	Cafeteria and Media Center Addition (2006)	Sum	Comments
Fire Alarm System:	\$1.50	sq.ft. (of entire building addition)		17,979 ft <sup>2</sup> Required	13,495 ft <sup>2</sup> Required	20,556 ft <sup>2</sup> Required	6,653 ft <sup>2</sup> Required	13,211 ft <sup>2</sup> Required	\$107,841.00	(complete new system, including removal of existing)
Sum:			\$107,841.00	\$26,968.50	\$20,242.50	\$30,834.00	\$9,979.50	\$19,816.50		



Fire Alarm System Control Panel



Fire Alarm System Manual Pull Station

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## O. Handicapped Access

**Description:** At the site, there are accessible routes provided from the public right-of-way, the accessible parking areas, and from the passenger unloading zone to the main entrance located in the 1952 Addition of the school. There is an accessible route connecting most areas of the site. The exterior entrances are not ADA accessible at the 1919 Original Construction, due to steps at the entrances. The exterior entrances in the 1939 Addition, the 1952 Addition, the 1972 Addition and the 2006 Addition are ADA accessible. Access from the parking / 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 4 ADA power assist doors and 2 are provided. Playground layout and equipping are compliant. On the interior of the building, space allowances and reach ranges are mostly compliant. There is not an accessible route through to or through the 1919 Original Construction and the 1939 Addition which does include protruding objects. There is an accessible route through the 1952 Addition, the 1972 Addition and the 2006 Addition as they are all one story which does include protruding objects. Electric water coolers are not recessed, but due to wide hallways, do not impede the traffic flow. Ground and floor surfaces are compliant. Stairs in the 1919 Original Construction and the 1939 Addition do not meet all ADA requirements, due to slip surfaces on treads and handrails. Elevation changes within the overall facility are facilitated by 5 non-compliant stairwells in good condition. The 1919 Original Construction does not have a compliant elevator that accesses every floor. Access to the Stage located in the 1939 Addition is not facilitated by a Corridor at Stage level, chair lift, ramp or other. Interior doors are not recessed. Doors that are not recessed, open all the way and do not impede the traffic flow. Doors are provided adequate clearances, with the exception of 2 doors in the 1952 Addition, and are mostly not provided with ADA-compliant hardware, with the exception of the 2006 Addition which is provided with ADA-compliant hardware. 14 ADA-compliant toilets are required, and 9 are currently provided. 14 ADA-compliant Restroom lavatories are required, and 9 are currently provided. 6 ADA-compliant urinals are required, and 4 are currently provided. 5 ADA-compliant electric water coolers are required, and 2 are currently provided. Toilet partitions are metal and plastic and do provide appropriate ADA clearances where present. ADA-compliant accessories are adequately provided and mounted, with the exception of 1 mirror in the 1952 Addition Boy's Restroom. Mirrors do meet ADA requirements for mounting heights. Due to existing grade configuration, no Science Classroom considerations require evaluation. Health Clinic Restroom is not compliant with ADA requirements due to non compliant fixtures and insufficient square footage. No Special Education Classrooms were observed at this facility. Adequate ADA signage is not provided in both the interior and exterior.

**Rating:** 3 Needs Replacement

**Recommendations:** To facilitate the school's meeting of ADA requirements, throughout the overall facility: Provide ADA-compliant signage. Provide an accessible elevator in the 1919 Original Construction. Provide 2 power assisted doors with one being at the main entrance. Provide 1 stairway chair lift at the connector stairs between the 1919 Original Construction and the 1952 Addition stairway and 1 lift for Stage access. Replace 4 countertop lavatories with ADA compliant wall mounted lavatories and faucets. Remount 1 urinal in the 1919 Original Construction Boy's Restroom. Replace 4 lavatory faucets with ADA compliant faucets; 1 per Boy's and Girl's Restrooms in the 1952 Addition. Reconfigure a total of 2 toilet compartments; 1 per Boys and Girl's Restrooms in the 1919 Original Construction, to provide a fully ADA compliant toilet compartment. Includes 2 toilets, 2 full sets of accessories, grab bars and partitions. Reconfigure and enlarge 2 existing Staff Restrooms (including the Health Clinic), 2 Restrooms per Boy's and Girl's Locker Rooms (fixtures to include 2 ADA compliant urinals in the Boy's Locker Room), 3 Kindergarten Restrooms and 1 Unisex Restroom in the 1972 Addition, to include 10 toilets, 10 lavatories, 2 urinals and 10 full sets of accessories including grab bars. Replace 6 showers (3 per Locker Room) with 2 ADA compliant shower towers, 1 per Locker Room. All fixtures, whether new or replaced, to be mounted at correct ADA compliant heights. Provide 1 mirror in the 1952 Addition Boy's Restroom. Provide 11 ADA compliant pipe wrap throughout the overall facility. Provide non-slip strips on 5 non-compliant stairways. Rework a total of 2 doors in the 1952 Addition to meet ADA clearance requirements. Funding for replacement of door hardware in the overall facility not included in Item O, is provided for in Item J with the complete replacement of doors. Funding provided in Item E for electric water coolers, classroom sink with drinking fountains and fixtures not included in Item O. Funding for replacement of handrails is provided for in Item U. Funding provided in Item J for all toilet partitions not included in Item O. Funding for replacement of toilets and lavatories to be mounted at ADA compliant heights is provided for in Item E.

Item	Cost	Unit	Whole Building	Original Construction (1919) 17,979 ft²	Gymnasium Addition (1939) 13,495 ft²	Classroom Addition (1952) 20,556 ft²	Classroom Addition (1972) 6,653 ft²	Cafeteria and Media Center Addition (2006) 13,211 ft²	Sum	Comments
Signage:	\$0.20	sq.ft. (of entire building addition)		Required	Required	Required	Required	Required	\$14,378.80	(per building area)
Lifts:	\$15,000.00	unit			1 Required				\$15,000.00	(complete)
Elevators:	\$42,000.00	each		2 Required					\$84,000.00	(per stop, \$84,000 minimum)
Toilet/Urinals/Sinks:	\$1,500.00	unit		4 Required					\$6,000.00	(replacement ADA)
ADA Assist Door & Frame:	\$7,500.00	unit				2 Required			\$15,000.00	(openers, electrical, patching, etc)
Replace Doors:	\$5,000.00	leaf				2 Required			\$10,000.00	(rework opening and corridor wall to accommodate ADA standards when door opening is set back from edge of corridor and cannot accommodate a wheelchair.)
Other: ADA compliant Mirrors	\$300.00	each				1 Required			\$300.00	Provide full length restroom mirror. Includes mounting.
Other: ADA Pipe Wrap	\$50.00	each		2 Required	3 Required	5 Required	1 Required		\$550.00	Provide ADA compliant pipe wrap for all wall mounted lavatories.
Other: Group Shower Tower with ADA compliant heads	\$7,000.00	each			2 Required				\$14,000.00	Provide shower tower with ADA compliant shower head in Locker Rooms.
Other: Lavatory Faucet	\$250.00	each				4 Required			\$1,000.00	Provide new ADA compliant lavatory faucet. Includes removal and re-installation.
Other: Non-Slip Tread Strips	\$400.00	per unit		2 Required	2 Required	1 Required			\$2,000.00	Provide non slip tread strips on all non-compliant stairways. Funding provided is per stairway.
Other: Reconfigure Toilet Room for ADA Compliance	\$10,000.00	per restroom			4 Required	5 Required	1 Required		\$100,000.00	Enlarge and reconfigure existing Toilet Room to meet ADA requirements. Includes all fixtures, demolition, walls, door and hardware, supply lines, drains and full set of accessories and grab bars. Fixtures to include 2 urinals in Boy's Locker Room.
Other: Reconfigure Toilet Stall to meet ADA Compliance	\$2,500.00	per restroom		2 Required					\$5,000.00	Reconfigure existing toilet compartment to create ADA compliant stall. Includes fixtures, accessories, grab bars, demolition, floor/wall repair and partitions.
Other: Remount existing urinal	\$1,000.00	each		2 Required					\$2,000.00	Remount existing urinal to ADA compliant height. Includes demolition, rough in and wall repair.
Other: Wheelchair Stair Lift	\$15,000.00	per level				1 Required			\$15,000.00	Provide stairway chair lift. Includes lift, demolition, installation and wall/floor repair.
Sum:			\$284,228.80	\$101,495.80	\$72,649.00	\$96,061.20	\$11,380.60	\$2,642.20		



ADA Compliant Unisex Restroom



ADA Compliant Power Assisted Door



P. Site Condition

Description:

The 9.38 acre flat site is located in a rural residential setting with generous tree, shrub, and floral type landscaping. Outbuildings include two small sheds. There are no apparent problems with erosion or ponding, but the district has reports of minimal ponding during rainy seasons due to the limited topography on the site. Minimal areas of soil erosion were observed at pavement edges. The site is bordered by moderately traveled state routes. Multiple entrances onto the site facilitate proper separation of bus and other vehicular traffic, and one way bus traffic is provided. A bus loop is provided for student loading and unloading. Staff and visitor parking is facilitated by multiple asphalt parking lots in fair condition, containing 131 parking places, which provides adequate parking for staff members, visitors, and the disabled. The site and parking lot drainage design, consisting of sheet drainage, catch basins, storm sewers, trench drains, and a detention basin, provides adequate evacuation of storm water, and no problems with parking lot ponding were observed. Concrete curbs in fair condition are appropriately placed. Concrete and asphalt sidewalks are properly sloped, are located to provide a logical flow of pedestrian traffic, and are in fair condition. Trash pick-up and service drive pavement appears heavy duty, is in fair condition, and is equipped with a concrete pad area for dumpsters, which is in good condition. Exterior concrete steps in fair condition are appropriately located at the front and side building entrances to the main floor of the 1919 Original Construction only. Two exterior concrete service ramps in fair condition are provided for entry into the lower level of the 1939 Addition. Steel guardrails in fair to poor condition are provided at each service ramp and as the front building entrance to the 1919 Original Construction, but no handrails are provided on the site. Site fencing is partially provided around the play areas for security and separation from bus traffic. The fence is a steel wire mesh type, and in good to fair condition. Fencing is provided around the dumpster pad area. The playground equipment is primarily constructed of coated steel and high density plastic, and is in good to fair condition. Playground equipment is placed to provide compliant fall zones, and on a compliant wood fiber mulch of sufficient depth. Painted hard surface play areas, a basketball court, funnel ball, and tether ball are provided on an asphalt surface in fair condition. The site and playground area is equipped with sufficient tables and benches in good to fair condition. The athletic facilities are comprised of a baseball diamond and general practice field, and are in fair condition. Site features are suitable for outdoor instruction, which is enhanced through the District's provision of outdoor spaces and furniture. There are no readily evident conditions that might significantly effect master planning with regard to the site. Due to the size of the site, building expansion is not recommended. The school district owns property directly to the north of Concord Elementary, consisting of 4.89 acres with a single family home and barn. Due to limited topography on the site, a significant number of man made drainage systems have been implemented, which should be taken into consideration for any future renovations to the site.

Rating:

2 Needs Repair

Recommendations:

Provide for a new asphalt wearing course due to condition. Provide for the replacement of concrete curbs due to condition. Provide for the replacement of concrete sidewalks due to condition. Provide for soil erosion stabilization. Provide for exterior steel handrails and guardrails due to condition and where required by the OBC and OSDM standards. Provide for replacement or repair of concrete steps due to condition. Provide for additional parking lot catch basins to mitigate storm water during the rainy season. Provide allowances for unforeseen site circumstances.

Item	Cost	Unit	Whole Building	Original Construction (1919)	Gymnasium Addition (1939)	Classroom Addition (1952)	Classroom Addition (1972)	Cafeteria and Media Center Addition (2006)	Sum	Comments
Asphalt Paving / New Wearing Course:	\$19.00	sq. yard		2,647 Required	1,425 Required	3,054 Required	1,018 Required	2,036 Required	\$193,420.00	(includes minor crack repair in less than 5% of paved area)
Concrete Curb:	\$18.00	ln.ft.		67 Required	36 Required	77 Required	26 Required	51 Required	\$4,626.00	(new)
Concrete Sidewalk:	\$4.69	sq.ft. (Qty)		88 Required	48 Required	102 Required	34 Required	68 Required	\$1,594.60	(5 inch exterior slab)
Stabilize soil erosion:	\$2.50	sq.ft. (Qty)		52 Required	28 Required	60 Required	20 Required	40 Required	\$500.00	(includes stripping and re-grading)
Exterior Hand / Guard Rails:	\$43.00	ln.ft.		31 Required	17 Required	36 Required	12 Required	23 Required	\$5,117.00	
Replace Concrete Steps:	\$32.00	sq.ft. (Qty)		21 Required	11 Required	24 Required	8 Required	16 Required	\$2,560.00	
Provide Exterior Parking Lot Catch Basin:	\$2,500.00	each		1 Required	1 Required				\$5,000.00	
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	Required	\$107,841.00	Include this one or the next. (Each addition should have this item)
<b>Sum:</b>			\$370,658.60	\$133,515.22	\$51,843.62	\$93,190.38	\$30,770.96	\$61,338.42		



Detention Basin



Concrete Dumpster Pad

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Q. Sewage System

Description: The sanitary sewer system is tied in to the city system, and is in fair 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	Original Construction (1919)	Gymnasium Addition (1939)	Classroom Addition (1952)	Classroom Addition (1972)	Cafeteria and Media Center Addition (2006)	Sum	Comments
				17,979 ft <sup>2</sup>	13,495 ft <sup>2</sup>	20,556 ft <sup>2</sup>	6,653 ft <sup>2</sup>	13,211 ft <sup>2</sup>		
Sum:	\$0.00		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		



Sanitary Waste Piping



Sanitary Waste Piping

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R. Water Supply

**Description:** The domestic water supply system is tied in to the municipal system, features 3" service and water meter (with the meter located in a pit at the front of the 1919 Original Construction), and is in fair 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 equipped with two (2) parallel water booster pumps (with frequency drives), providing over 70 psi (from less than 65 psi), which appears adequate, and the units are in good to fair condition. The system does not provide adequate pressure and capacity 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	Original Construction (1919)	Gymnasium Addition (1939)	Classroom Addition (1952)	Classroom Addition (1972)	Cafeteria and Media Center Addition (2006)	Sum	Comments
				17,979 ft²	13,495 ft²	20,556 ft²	6,653 ft²	13,211 ft²		
Sum:			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		



Incoming Domestic Water Service Line



Incoming Domestic Water Service Booster Pumps

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S. Exterior Doors

**Description:** Typical exterior doors in the Original Construction, 1952 Classroom Addition and 1972 Classroom Addition are fiber-reinforced plastic type construction, installed on aluminum frames, and in good condition. Typical exterior doors in the 1939 Gymnasium Addition are fiber-reinforced plastic type construction, installed on aluminum frames, and in poor condition. Typical exterior doors feature no vision panels, and appropriate hardware. Typical exterior doors in the 2006 Cafeteria and Media Center Addition are aluminum type construction, installed on aluminum frames, and in good condition. Typical exterior doors feature no vision panels, and appropriate hardware. Entrance doors in the overall facility are aluminum type construction, installed on aluminum frames, and in good condition. Entrance doors feature insulated tempered glass vision panels, transoms, sidelights, and appropriate hardware. The facility is equipped with one roof access door in the Original Construction, which is in fair condition. Overhead doors are wood type in poor condition.

**Rating:** 2 Needs Repair

**Recommendations:** Replace the fiber-reinforced plastic exterior doors in the 1939 Gymnasium Addition, due to poor condition. Replace existing roof access doors. Replace the overhead door due to poor condition.

Item	Cost	Unit	Whole Building	Original Construction (1919) 17,979 ft²	Gymnasium Addition (1939) 13,495 ft²	Classroom Addition (1952) 20,556 ft²	Classroom Addition (1972) 6,653 ft²	Cafeteria and Media Center Addition (2006) 13,211 ft²	Sum	Comments
Door Leaf/Frame and Hardware:	\$2,000.00	per leaf		1 Required	8 Required				\$18,000.00	(includes removal of existing)
Overhead doors and hardware:	\$2,500.00	per leaf			1 Required				\$2,500.00	(8 x 10 sectional, manual operation)
<b>Sum:</b>			\$20,500.00	\$2,000.00	\$18,500.00	\$0.00	\$0.00	\$0.00		



Fiber-Reinforced Plastic Doors of the 1939 Gymnasium Addition



Wood Overhead Door of the 1939 Gymnasium Addition

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T. Hazardous Material

**Description:** The School District provided the AHERA three year reinspection reports, prepared by Westech Environmental Solutions, and dated 2013, documenting known and assumed locations of asbestos and other hazardous materials. Hard Plaster, Gypsum Joint Compound, Carpet mastic, Marmoleum Mastic, Chalk Board Mastic, Wall Paneling Mastic, Cove Base Mastic, Vinyl asbestos floor tile and mastic, 12x12 Ceiling Tile and Mastic, Window and Door Caulking, Fire Doors, Pipe insulation, Boiler Components, Sink Undercoating, and a Stage Curtain containing hazardous materials are located in the overall facility except the 2006 Addition in fair to poor condition. These materials were described in the report and open to observation and found to be in both friable and non-friable condition moderate to light damage. There are no underground storage tanks on the site. Due to the construction date, there is a potential for lead based paint. Fluorescent lighting will require special disposal.

**Rating:** 3 Needs Replacement

**Recommendations:** Remove all hazardous materials, inclusive of asbestos-containing materials in the overall facility except the 2006 Addition, as noted in the attached Environmental Hazards Assessment. Provide for the testing of paint that has the potential of being lead-based. Provide for disposal of fluorescent lighting.

Item	Cost	Unit	Whole Building	Original Construction (1919) 17,979 ft²	Gymnasium Addition (1939) 13,495 ft²	Classroom Addition (1952) 20,556 ft²	Classroom Addition (1972) 6,653 ft²	Cafeteria and Media Center Addition (2006) 13,211 ft²	Sum	Comments
<i>Environmental Hazards Form</i>				<a href="#">EHA Form</a>	<a href="#">EHA Form</a>	<a href="#">EHA Form</a>	<a href="#">EHA Form</a>		—	
Estimated Cost For Abatement Contractor to Perform Lead Mock-Ups	\$1.00	per unit		5,000 Required	0 Required	0 Required	0 Required		\$5,000.00	
Special Engineering Fees for LBP Mock-Ups	\$1.00	per unit		5,000 Required	0 Required	0 Required	0 Required		\$5,000.00	
Fluorescent Lamps & Ballasts Recycling/Incineration	\$0.10	sq.ft. (Qty)		14,384 Required	7,796 Required	0 Required	5,323 Required		\$2,750.30	
Pipe Insulation Removal	\$10.00	ln.ft.		1,600 Required	900 Required	1,850 Required	650 Required		\$50,000.00	
Dismantling of Boiler/Furnace/Incinerator	\$2,000.00	each		2 Required	0 Required	0 Required	0 Required		\$4,000.00	
Hard Plaster Removal	\$7.00	sq.ft. (Qty)		45,500 Required	7,500 Required	16,180 Required	0 Required		\$484,260.00	See J
Gypsum Board Removal	\$6.00	sq.ft. (Qty)		200 Required	0 Required	4,100 Required	0 Required		\$25,800.00	See J
Acoustical Panel/Tile Ceiling Removal	\$3.00	sq.ft. (Qty)		0 Required	0 Required	16,260 Required	0 Required		\$48,780.00	See J
Fire Door Removal	\$100.00	each		24 Required	14 Required	28 Required	9 Required		\$7,500.00	See S
Window Component (Compound, Tape, or Caulk) - Reno & Demo	\$300.00	each		117 Required	63 Required	135 Required	45 Required		\$108,000.00	
Resilient Flooring Removal, Including Mastic	\$3.00	sq.ft. (Qty)		3,360 Required	0 Required	15,555 Required	3,925 Required		\$68,520.00	See J
Carpet Mastic Removal	\$2.00	sq.ft. (Qty)		0 Required	0 Required	0 Required	420 Required		\$840.00	
Sink Undercoating Removal	\$100.00	each		0 Required	0 Required	5 Required	0 Required		\$500.00	
<b>Other:</b> Chalk Board Mastic Removal	\$1.00	sq.ft. (Qty)		1,920 Required	1,080 Required	2,220 Required	780 Required		\$6,000.00	Provide for removal of Chalk Board mastic
<b>Other:</b> Wood Wall Panel Mastic Removal	\$2.00	sq.ft. (Qty)				450 Required			\$900.00	Wood Wall Panel Mastic Removal
<b>Other:</b> Cove Base Mastic Removal	\$2.00	ln.ft.		210 Required		1,220 Required	660 Required		\$4,180.00	Provide for removal of Cove Base Mastic
<b>Other:</b> Marmoleum and Mastic Removal	\$3.00	sq.ft. (Qty)		680 Required		3,050 Required	2,360 Required		\$18,270.00	Provide for removal of Marmoleum and Mastic
<b>Other:</b> Stage Curtain Removal	\$1.00	sq.ft. (Qty)			1,000 Required				\$1,000.00	Provide for the removal of the Stage Curtain
<b>Sum:</b>			\$841,300.30	\$403,098.40	\$84,659.60	\$310,315.00	\$43,227.30	\$0.00		





VAT Flooring



Pipe Insulation

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U. Life Safety

**Description:** The overall facility is not equipped with a compliant automated fire suppression system. Exit Corridors are situated such that dead-end Corridors are not present. The facility features 2 interior stair towers, which are not protected by a compliant two hour fire enclosure. The facility does not have any exterior stairways from intermediate floors. Guard rails on all stairways are attached to wall structures and do not extend past the top and bottom stair risers as required by the Ohio Building Code. The Kitchen hood is in good condition and does not include equipment that requires fire suppression. Fire extinguishers are not provided in sufficient quantity. Existing fire extinguishers are inadequately spaced. The facility is not equipped with an emergency generator. The existing water supply is provided by a tie-in to the municipal system and is insufficient to meet the future fire suppression needs of the school. Rooms with a capacity greater than 50 occupants are equipped with adequate egress.

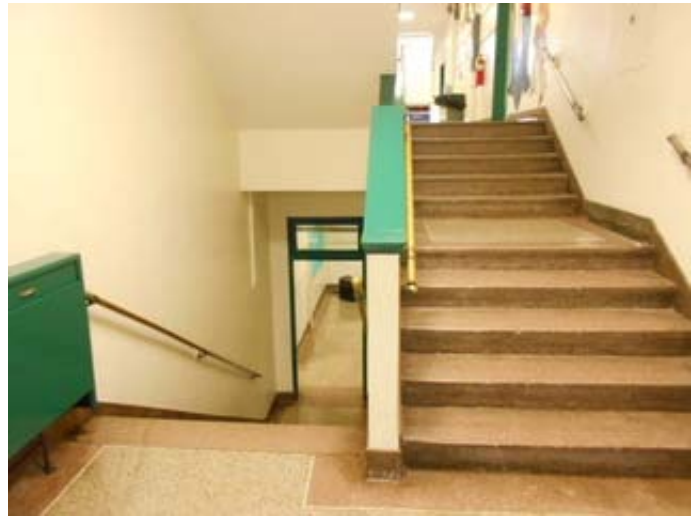
**Rating:** 3 Needs Replacement

**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. Provide new emergency generator, with funding provided via complete replacement of electrical system in Item D. Provide new handrails at all interior stairways in the overall facility. Provide fire-rated enclosure around 2 existing stair towers in the 1919 Original Construction. Provide 7 additional fire extinguishers.

Item	Cost	Unit	Whole Building	Original Construction (1919)	Gymnasium Addition (1939)	Classroom Addition (1952)	Classroom Addition (1972)	Cafeteria and Media Center Addition (2006)	Sum	Comments
Sprinkler / Fire Suppression System:	\$3.20	sq.ft. (Qty)		17,979 Required	13,495 Required	20,556 Required	6,653 Required	13,211 Required	\$230,060.80	(includes increase of service piping, if required)
Interior Stairwell Closure:	\$5,000.00	per level		6 Required					\$30,000.00	(includes associated doors, door frames and hardware)
Handrails:	\$5,000.00	per level		8 Required	4 Required	1 Required			\$65,000.00	
Provide Fire Extinguisher and Wall Cabinet:	\$585.00	each		3 Required	1 Required	2 Required		1 Required	\$4,095.00	(includes preparation of wall to receive recessed cabinet)
<b>Sum:</b>			\$329,155.80	\$129,287.80	\$63,769.00	\$71,949.20	\$21,289.60	\$42,860.20		



Compliant Fire Extinguisher



Non-Compliant Stair Tower

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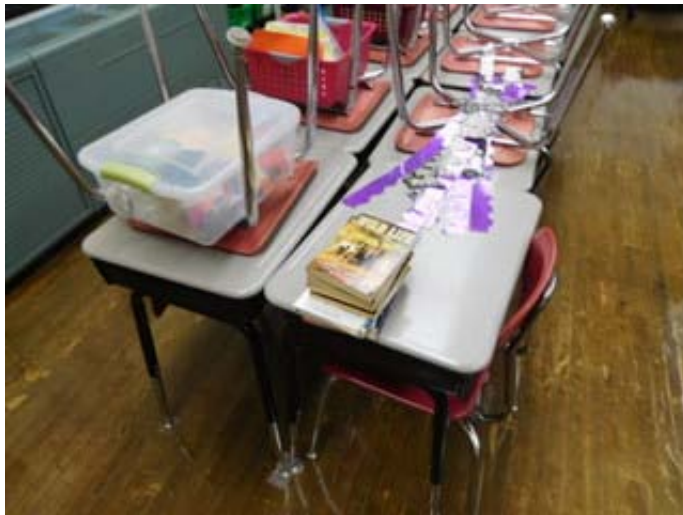
V. Loose Furnishings

**Description:** The typical Classroom furniture in the 1919 Original Construction, 1952 and 1972 Additions is mismatched, and in generally fair condition, consisting of student desks & chairs, teacher desks & chairs, desk height file cabinets, reading tables, computer workstations, bookcases, and 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 1920 Original Construction, 195 and 1972 Additions received a rating of 6 due to observed conditions, and due to the fact that it lacks some of the Design Manual required elements. The 1939 Addition does not contain Classrooms. The typical Classroom furniture in the 2006 Addition is of consistent design, and in generally good condition, consisting of student chairs, teacher desks & chairs, computer workstations, and wastebaskets. On a scale of 1 to 10 the 2006 Addition would receive a rating of 8 due to observed conditions.

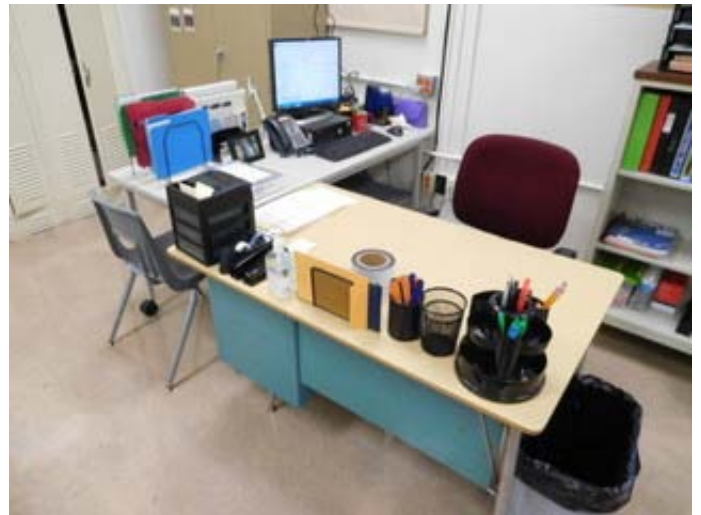
**Rating:** 2 Needs Repair

**Recommendations:** Provide for replacement of outdated or inadequate furnishings.

Item	Cost	Unit	Whole Building	Original Construction (1919)	Gymnasium Addition (1939)	Classroom Addition (1952)	Classroom Addition (1972)	Cafeteria and Media Center Addition (2006)	Sum	Comments
CEFPI Rating 8	\$1.00	sq.ft. (of entire building addition)		17,979 ft <sup>2</sup>	13,495 ft <sup>2</sup>	20,556 ft <sup>2</sup>	6,653 ft <sup>2</sup>	13,211 ft <sup>2</sup>	\$13,211.00	Required
CEFPI Rating 6	\$3.00	sq.ft. (of entire building addition)		Required		Required	Required		\$135,564.00	
<b>Sum:</b>			\$148,775.00	\$53,937.00	\$0.00	\$61,668.00	\$19,959.00	\$13,211.00		



Typical Student Desk and Chairs



Typical Teacher Desk and Chair

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## W. Technology

**Description:** The typical Classroom is equipped with the required 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 typical Classroom is not fully equipped with the required four technology data ports for student use 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 appear to be inadequately provided, and in fair condition. OSDM-compliant computer network infrastructure does not appear to be provided. The facility does contain a media distribution center, and provides Computer Labs for use by students. Elevators are not present in this overall facility.

**Rating:** 3 Needs Replacement

**Recommendations:** Provide complete replacement of technology systems to meet Ohio School Design Manual requirements.

Item	Cost	Unit	Whole Building	Original Construction (1919)	Gymnasium Addition (1939)	Classroom Addition (1952)	Classroom Addition (1972)	Cafeteria and Media Center Addition (2006)	Sum	Comments
				17,979 ft <sup>2</sup>	13,495 ft <sup>2</sup>	20,556 ft <sup>2</sup>	6,653 ft <sup>2</sup>	13,211 ft <sup>2</sup>		
ES portion of building with total SF 69,361 to 100,000	\$10.18	sq.ft. (Qty)		17,979 Required	13,495 Required	20,556 Required	6,653 Required	13,211 Required	\$731,880.92	
<b>Sum:</b>			\$731,880.92	\$183,026.22	\$137,379.10	\$209,260.08	\$67,727.54	\$134,487.98		



IT Data Rack



Classroom Overhead Projector

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X. Construction Contingency / Non-Construction Cost

<b>Renovation Costs (A-W)</b>		<b>\$10,437,190.72</b>
7.00%	Construction Contingency	\$730,603.35
<b>Subtotal</b>		<b>\$11,167,794.07</b>
16.29%	Non-Construction Costs	\$1,819,233.65
<b>Total Project</b>		<b>\$12,987,027.72</b>

Construction Contingency	\$730,603.35
Non-Construction Costs	\$1,819,233.65
<b>Total for X.</b>	<b>\$2,549,837.00</b>

<b>Non-Construction Costs Breakdown</b>		
Land Survey	0.03%	\$3,350.34
Soil Borings / Phase I Envir. Report	0.10%	\$11,167.79
Agency Approval Fees (Bldg. Code)	0.25%	\$27,919.49
Construction Testing	0.40%	\$44,671.18
Printing - Bid Documents	0.15%	\$16,751.69
Advertising for Bids	0.02%	\$2,233.56
Builder's Risk Insurance	0.12%	\$13,401.35
Design Professional's Compensation	7.50%	\$837,584.56
CM Compensation	6.00%	\$670,067.64
Commissioning	0.60%	\$67,006.76
Non-Construction Contingency (includes partnering and mediation services)	1.12%	\$125,079.29
<b>Total Non-Construction Costs</b>	<b>16.29%</b>	<b>\$1,819,233.65</b>

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School Facility Appraisal

**Name of Appraiser** Bernie Merritt **Date of Appraisal** 2016-08-17  
**Building Name** Concord Elementary  
**Street Address** 3145 W State Route 718  
**City/Town, State, Zip Code** Troy, OH 45373  
**Telephone Number(s)** (937) 332.6730  
**School District** Troy City

**Setting:** Small City

Site-Acreage	9.38	Building Square Footage	71,894
Grades Housed	K-5	Student Capacity	600
Number of Teaching Stations	36	Number of Floors	3
Student Enrollment	595		
Dates of Construction	1919,1939,1952,1972,2006		

**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

## School Facility Appraisal

		Points Allocated	Points
1.1	<b>Site is large enough</b> to meet educational needs as defined by state and local requirements <i>The site is 9.38 acres compared to 16 acres required by the OSDM. There is an additional district owned property adjacent to and north of the site consisting of a single family home and a barn on 4.89 acres.</i>	25	18
1.2	<b>Site is easily accessible</b> and conveniently located for the present and future population <i>The School is not centrally located within the district, but is still easily accessible. The site is accessible from rural, county roads that are suitable for buses, cars, and service vehicles. Two entry points are provided into the site, with appropriate separation of car and bus traffic.</i>	20	14
1.3	<b>Location</b> is removed from undesirable business, industry, traffic, and natural hazards <i>The site is adjacent to residential uses, and there are no undesirable features adjacent to the School site.</i>	10	8
1.4	Site is <b>well landscaped and developed</b> to meet educational needs <i>The site is generously 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. The site has been developed with outdoor learning spaces and athletic fields to enhance the learning environment.</i>	10	8
1.5	ES Well equipped <b>playgrounds are separated</b> from streets and parking areas MS Well equipped <b>athletic and intermural areas are separated</b> from streets and parking HS Well equipped <b>athletic areas</b> are adequate with sufficient solid-surface parking <i>Playground areas consist of coated steel and high density plastic type play equipment, which is in good to fair condition, and is located on wood fiber mulch which is an approved soft surface material. Play equipment is ADA accessible, and includes an accessible route to equipment. Fencing is partially provided to separate vehicular traffic from pedestrians.</i>	10	8
1.6	<b>Topography</b> is varied enough to provide desirable appearance and without steep inclines <i>The site is gently sloped to provided 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. Numerous catch basins are utilized to aid in storm water drainage.</i>	5	4
1.7	Site has stable, well drained <b>soil free of erosion</b> <i>Soils appear to be stable and well drained, and minimal areas of erosion were observed at pavement edges.</i>	5	4
1.8	Site is suitable for <b>special instructional needs</b> , e.g., outdoor learning <i>The site has been developed to accommodate outdoor learning, including benches and picnic tables to facilitate instruction.</i>	5	4
1.9	<b>Pedestrian services</b> 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 <b>on-site, solid surface parking</b> for faculty and staff is provided HS Sufficient <b>on-site, solid surface parking</b> is provided for faculty, students, staff and community <i>Adequate parking is provided for faculty, staff, and community parking, and is located on asphalt pavement in fair condition.</i>	5	4
<b>TOTAL - The School Site</b>		<b>100</b>	<b>76</b>



## 2.0 Structural and Mechanical Features

### School Facility Appraisal

Structural		Points Allocated	Points
2.1	Structure meets all <b>barrier-free</b> requirements both externally and internally  <i>The 1919 Original Construction and 1939 Addition do not meet ADA requirements. The 1952 Addition, 1972 Addition and 2006 Addition meets all ADA requirements.</i>	15	7
2.2	<b>Roofs</b> appear sound, have positive drainage, and are weather tight  <i>The roofs over portions of the building are in good to fair condition. The roofs over other portions are in poor condition, and require replacement.</i>	15	8
2.3	<b>Foundations</b> are strong and stable with no observable cracks  <i>Foundations are in fair condition with observable cracks.</i>	10	6
2.4	<b>Exterior and interior walls</b> have sufficient expansion joints and are free of deterioration  <i>Exterior and interior walls are in good condition, have sufficient control and expansion joints, and are free from deterioration.</i>	10	6
2.5	<b>Entrances and exits</b> are located so as to permit efficient student traffic flow  <i>Corridor/building layout does not provide an efficient means of circulation throughout the building.</i>	10	4
2.6	<b>Building "envelope"</b> generally provides for energy conservation (see criteria)  <i>Building envelope does not meet minimum energy conservation requirements.</i>	10	4
2.7	Structure is <b>free of friable asbestos</b> and <b>toxic materials</b>  <i>The building is reported to contain asbestos and other hazardous materials.</i>	10	5
2.8	Interior walls permit sufficient <b>flexibility</b> for a variety of class sizes  <i>Due to multiple additions, a variety of Classroom sizes have been provided throughout the facility.</i>	10	8
Mechanical/Electrical		Points Allocated	Points
2.9	<b>Adequate light sources</b> are well maintained, and properly placed and are not subject to overheating  <i>Light sources are improperly placed and provide inadequate lighting in some areas. Fixtures are well maintained in most areas. Light fixtures do not appear to be subject to overheating.</i>	15	6
2.10	<b>Internal water supply</b> is adequate with sufficient pressure to meet health and safety requirements  <i>Internal water supply will not support a future fire suppression system, but is adequate for current requirements.</i>	15	6
2.11	Each teaching/learning area has adequate convenient <b>wall outlets</b> , phone and computer cabling for technology applications  <i>Classrooms have an inadequate number of outlets and data jacks for technology applications.</i>	15	2

2.12	<b>Electrical controls</b> are safely protected with <b>disconnect switches</b> easily accessible <i>Disconnect switches are provided in required easily accessible locations to allow for safe servicing of equipment.</i>	10	8
2.13	<b>Drinking fountains</b> are adequate in number and placement, and are properly maintained including provisions for the disabled <i>Drinking fountains are adequate in number, but not adequate in placement, and do not meet ADA requirements. Drinking fountains are properly maintained.</i>	10	6
2.14	Number and size of <b>restrooms meet requirements</b> <i>The number and size of Restrooms meet requirements.</i>	10	9
2.15	<b>Drainage systems</b> are properly maintained and meet requirements <i>Drainage systems exhibit some signs of past leakage and repairs.</i>	10	7
2.16	<b>Fire alarms, smoke detectors, and sprinkler systems</b> are properly maintained and meet requirements <i>The facility is not sprinkled. Fire alarm systems are not provided with all required devices. Smoke detectors are not adequately provided.</i>	10	6
2.17	<b>Intercommunication system</b> consists of a central unit that allows dependable <b>two-way communication</b> between the office and instructional areas <i>The central intercommunication system provides reliable communication between the Administration area and all teaching/learning areas.</i>	10	8
2.18	<b>Exterior water supply</b> is sufficient and available for normal usage <i>Exterior wall hydrants are mostly adequately provided around the exterior of the facility.</i>	5	4
<b>TOTAL - Structural and Mechanical Features</b>		<b>200</b>	<b>110</b>

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### 3.0 Plant Maintainability

School Facility Appraisal

		Points Allocated	Points
3.1	<b>Windows, doors, and walls</b> are of material and finish requiring minimum maintenance <i>Exterior materials and finishes for doors, windows and walls are durable and require minimal maintenance.</i>	15	9
3.2	<b>Floor surfaces</b> throughout the building require minimum care <i>Flooring throughout the facility consists of VCT, VAT, wood, terrazzo, sealed concrete, carpet, marmoleum, and ceramic tile, which is somewhat well maintained throughout the facility.</i>	15	10
3.3	<b>Ceilings and walls</b> throughout the building, including service areas, are easily cleaned and resistant to stain <i>Acoustical tile and painted plaster ceilings are not easily cleaned or resistant to stain. Painted block, brick, ceramic tile, and glazed block is easily cleaned and resistant to stain. Drywall and plaster type wall finishes are not easily cleaned and resistant to stain.</i>	10	6
3.4	<b>Built-in equipment</b> is designed and constructed for ease of maintenance <i>Casework in the 1919 Original Construction, 1952 and 1972 Addition is wood type construction with plastic laminate tops, is well constructed and in fair to poor condition. Casework in the 2006 Addition is wood type construction with plastic laminate tops, is well constructed and in good condition.</i>	10	5
3.5	<b>Finishes and hardware</b> , with compatible keying system, are of durable quality <i>Door hardware varies throughout the facility, and does not meet ADA requirements.</i>	10	4
3.6	<b>Restroom fixtures</b> are wall mounted and of quality finish <i>Fixtures are wall and floor mounted and are of good to fair quality.</i>	10	6
3.7	Adequate <b>custodial storage space</b> with water and drain is accessible throughout the building <i>Custodial storage space is adequately located throughout the facility, including provisions for water and drains.</i>	10	10
3.8	Adequate <b>electrical outlets and power</b> , to permit routine cleaning, are available in every area <i>Electrical outlets are adequately provided in Corridors and allow for convenient routine cleaning.</i>	10	8
3.9	<b>Outdoor light fixtures, electrical outlets</b> , equipment, and other fixtures are accessible for repair and replacement <i>Outdoor light fixtures are provided inadequately, but are accessible for repair and replacement. Electrical outlets are inadequately provided around the exterior of the facility.</i>	10	2
<b>TOTAL - Plant Maintainability</b>		<b>100</b>	<b>60</b>

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## 4.0 Building Safety and Security

### School Facility Appraisal

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Site Safety	Points Allocated	Points
<p>4.1            <b>Student loading areas</b> are segregated from other vehicular traffic and pedestrian walkways</p> <p><i>Student loading is separated from vehicular traffic and pedestrian walkways.</i></p>	15	12
<p>4.2            <b>Walkways</b>, both on and offsite, are available for safety of pedestrians</p> <p><i>Walkways are adequately provided on-site for pedestrian safety. No off-site sidewalks are required for this rural school site.</i></p>	10	8
<p>4.3            <b>Access streets</b> have sufficient signals and signs to permit safe entrance to and exit from school area</p> <p><i>School signs are located as required on adjacent access streets.</i></p>	5	4
<p>4.4            <b>Vehicular entrances and exits</b> permit safe traffic flow</p> <p><i>Buses and other vehicular traffic use separate entrance and exit points to the site, allowing for safe vehicular traffic flow.</i></p>	5	4
<p>4.5    ES        <b>Playground equipment</b> is free from hazard</p> <p>         MS        Location and types of <b>intramural equipment</b> are free from hazard</p> <p>         HS        <b>Athletic field equipment</b> is properly located and is free from hazard</p> <p><i>Playground equipment consists of coated steel and high density plastic type equipment in good to fair condition, appears to be free from hazard, and is located on an approved soft surface material to a sufficient depth.</i></p>	5	4

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Building Safety	Points Allocated	Points
<p>4.6            <b>The heating unit(s)</b> is located away from student occupied areas</p> <p><i>Heating boilers are located in rooms that are not accessible by students. Unit ventilators are located in the Classrooms and other learning areas.</i></p>	20	10
<p>4.7            Multi-story buildings have at least <b>two stairways</b> for student egress</p> <p><i>The building does have 2 stairways, which are not enclosed and are not fully ADA and OBC compliant.</i></p>	15	8
<p>4.8            <b>Exterior doors</b> open outward and are equipped with panic hardware</p> <p><i>Exterior doors open in the direction of travel and are equipped with panic hardware.</i></p>	10	8
<p>4.9            <b>Emergency lighting</b> is provided throughout the entire building with exit signs on separate electrical circuits</p> <p><i>Emergency light fixtures and exit signs are not on separate circuits and are inadequately provided.</i></p>	10	4
<p>4.10          <b>Classroom doors</b> are recessed and open outward</p> <p><i>Classroom doors are not recessed from the Corridor. Doors open outward, but do not impede traffic flow in the Corridors.</i></p>	10	7
<p>4.11          <b>Building security systems</b> are provided to assure uninterrupted operation of the educational program</p>	10	2

Security systems are inadequately provided and are in fair condition.

4.12	<b>Flooring</b> (including ramps and stairways) is maintained in a non-slip condition  <i>Terrazzo and VCT flooring has been well maintained throughout the facility. Main stairways are not maintained in a non-slip condition.</i>	5	3
4.13	<b>Stair risers</b> (interior and exterior) do not exceed 6 1/2 inches and range in number from 3 - 16  <i>Stair treads and risers are properly designed and meet requirements. Stair risers do not exceed 7 inches permitted by the OBC. The 1952 Addition, 1972 Addition and 2006 Addition are one story without stairways.</i>	5	4
4.14	<b>Glass</b> is properly located and protected with wire or safety material to prevent accidental student injury  <i>Glass at door transoms and sidelights is tempered for safety.</i>	5	4
4.15	<b>Fixed Projections</b> in the traffic areas do not extend more than eight inches from the corridor wall  <i>Drinking fountains and electric water coolers are not recessed in the Corridor wall. Corridors are wide enough so that non-recessed fixture does not impede traffic flow in Corridors.</i>	5	4
4.16	<b>Traffic areas</b> terminate at an exit or a stairway leading to an egress  <i>Exits are properly located to allow safe egress from the building. Entry and exit points to the building have been adequately provided. Corridor and building layout does provide an efficient means of circulation throughout the building. There are no dead-end Corridors in the building. Stairways are not enclosed.</i>	5	4

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**Emergency Safety**

Points Allocated      Points

4.17	Adequate <b>fire safety equipment</b> is properly located  <i>The facility is not sprinkled. Fire alarm devices are not provided adequately. Fire extinguishers do not appear to be adequately provided.</i>	15	2
4.18	There are at least <b>two independent exits</b> from any point in the building  <i>Multiple exits are provided from Corridors throughout the facility. There are no dead-end Corridors in the building.</i>	15	13
4.19	<b>Fire-resistant materials</b> are used throughout the structure  <i>The structure is a masonry load bearing system with wood or steel joist and wood or concrete deck. Interior walls are masonry or wood framed partition. Finishes do not comply with OBBC requirements.</i>	15	4
4.20	Automatic and manual <b>emergency alarm system</b> with a distinctive sound and flashing light is provided  <i>The fire alarm is provided with manual and automatic actuation, but is not provided with all required devices.</i>	15	4

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<b>TOTAL - Building Safety and Security</b>	<b>200</b>	<b>113</b>
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## 5.0 Educational Adequacy

### School Facility Appraisal

<b>Academic Learning Space</b>	Points Allocated	Points
<p>5.1                    <b>Size of academic learning areas</b> meets desirable standards</p> <p><i>The average Classroom is 830 SF compared to 900 SF required by the OSDM. Due to multiple additions, a variety of Classroom sizes have been provided throughout the facility ranging from 700-1,100 SF.</i></p>	25	16
<p>5.2                    <b>Classroom space</b> permits arrangements for small group activity</p> <p><i>Some undersized Classrooms do not allow sufficient space for effective small group activities. Some Classrooms are large enough to allow effective small group activity spaces.</i></p>	15	10
<p>5.3                    <b>Location of academic learning areas</b> is near related educational activities and away from disruptive noise</p> <p><i>The Gymnasium and Music program are properly isolated from the academic learning areas to reduce distractions.</i></p>	10	8
<p>5.4                    <b>Personal space</b> in the classroom away from group instruction allows privacy time for individual students</p> <p><i>Some undersized Classrooms do not permit privacy time for individual students. Some Classrooms are large enough to allow privacy time for individual students.</i></p>	10	7
<p>5.5                    <b>Storage for student materials</b> is adequate</p> <p><i>Storage cubbies, coat hooks, and lockers, located in the Classrooms, are adequately provided for student storage. Classrooms either contain lockers or storage cubbies and coat hooks.</i></p>	10	7
<p>5.6                    <b>Storage for teacher materials</b> is adequate</p> <p><i>Casework is not adequately provided for storage of teacher materials in some Classrooms. Casework is adequately provided for storage of teacher materials in some Classrooms.</i></p>	10	6

<b>Special Learning Space</b>	Points Allocated	Points
<p>5.7                    <b>Size of special learning area(s)</b> meets standards</p> <p><i>Two Special Education Classrooms consisting of 468 SF and 811 SF total 1,279 SF compared to 900 SF recommended in the OSDM. Special Education Classrooms are undersized compared to standards.</i></p>	15	8
<p>5.8                    <b>Design of specialized learning area(s)</b> is compatible with instructional need</p> <p><i>Special Education spaces are not adequately provided to meet instructional needs.</i></p>	10	4
<p>5.9                    <b>Library/Resource/Media Center</b> provides appropriate and attractive space</p> <p><i>The Media Center is 2,305 SF compared to 1,785 SF recommended in the OSDM. The Media Center is an attractive space, including natural light and sufficient book storage space.</i></p>	10	8
<p>5.10                  <b>Gymnasium (or covered P.E. area)</b> adequately serves physical education instruction</p> <p><i>The 1939 Addition's Gymnasium is 4,755 SF. The 2006 Addition's Gymnasium is 3,622 SF. Total Gymnasium space provided is 8,377 SF compared to 3,500-10,000 SF recommended in the OSDM. The Gymnasium space is adequately sized and equipped for physical education instruction.</i></p>	5	4



5.11	ES	<b>Pre-kindergarten and kindergarten space</b> is appropriate for age of students and nature of instruction	10	8
	MS/HS	<b>Science</b> program is provided sufficient space and equipment		
		<i>Pre-K and Kindergarten spaces are adequate for age of students served.</i>		
5.12		<b>Music Program</b> is provided adequate sound treated space	5	2
		<i>The Music Room is 701 SF compared to 1,800-3,000 recommended in the OSDM. Music instruction is provided in a standard Classroom in the basement of the 1919 Original Construction without any sound treatment.</i>		
5.13		<b>Space for art</b> is appropriate for special instruction, supplies, and equipment	5	3
		<i>The Art Room is 830 SF plus and additional 300 SF of storage compared to 1,200 SF recommended in the OSDM.</i>		

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**School Facility Appraisal**

Points Allocated      Points

5.14		<b>Space for technology education</b> 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 <b>small groups and remedial instruction</b> is provided adjacent to classrooms	5	2
		<i>No spaces have been provided adjacent to Classrooms for small groups or remedial instruction.</i>		
5.16		<b>Storage for student and teacher material</b> is adequate	5	3
		<i>Lockers, coat hooks, and storage cubbies have been adequately provided for storage of student materials. Casework is not adequately provided for storage of teacher materials.</i>		

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**Support Space**

Points Allocated      Points

5.17		<b>Teacher's lounge and work areas</b> reflect teachers as professionals	10	8
		<i>The Teacher's Lounge is 464 SF compared to 450-900 SF, for 8-24 staff, recommended in the OSDM. The Teacher's Lounge does reflect a professional environment and includes adequate work space for preparation of teacher materials.</i>		
5.18		<b>Cafeteria/Kitchen</b> is attractive with sufficient space for seating/dining, delivery, storage, and food preparation	10	8
		<i>The Student Dining space is 3,662 SF compared to 3,000 SF recommended in the OSDM. The Kitchen space is 1,492 SF compared to 1,190 SF recommended in the OSDM. Student Dining shares the Auxiliary Gymnasium space.</i>		
5.19		<b>Administrative offices</b> provided are consistent in appearance and function with the maturity of the students served	5	3
		<i>Administrative Offices are not adequately provided for Elementary School students. Offices are located throughout the facility.</i>		
5.20		<b>Counselor's office</b> insures privacy and sufficient storage	5	3
		<i>Three Counselor Offices total 389 SF compared to 120 SF, plus 100 SF for Storage and 200 SF for Conference, recommended in the OSDM. The space provided for the Counselors do insure privacy, but lack sufficient storage spaces.</i>		
5.21		<b>Clinic</b> is near administrative offices and is equipped to meet requirements	5	2
		<i>The Clinic is 263 SF compared to 370 SF recommended in the OSDM. The Clinic is located within the Administrative Offices and is provided with required equipment.</i>		
5.22		<b>Suitable reception space</b> is available for students, teachers, and visitors	5	4

Reception space consists of approximately 244 SF compared to 200-400 SF recommended by the OSDM.

5.23 **Administrative personnel** are provided **sufficient work space and privacy** 5 2

*The Administrative area consists of approximately 879 SF for the principal, secretary, Copy room, and Restroom, compared to 2,600 SF for the principal, assistant principal, secretary, Conference Room, Storage, Copy Room, and Restroom recommended by the OSDM.*

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**TOTAL - Educational Adequacy**

**200**

**130**

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## 6.0 Environment for Education

### School Facility Appraisal

Exterior Environment	Points Allocated	Points
6.1 Overall <b>design is aesthetically pleasing</b> to age of students <i>The building consists of several uncoordinated colors and textures of brick due to multiple additions, and is not aesthetically pleasing.</i>	15	6
6.2 Site and building are <b>well landscaped</b> <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. The site has been developed with outdoor learning spaces and athletic fields to enhance the learning environment.</i>	10	8
6.3 <b>Exterior noise and poor environment</b> do not disrupt learning <i>The site is adjacent to residential uses, and there are no undesirable features adjacent to the school site.</i>	10	8
6.4 <b>Entrances and walkways</b> are <b>sheltered</b> from sun and inclement weather <i>Exits are partially sheltered from sun and inclement weather.</i>	10	4
6.5 <b>Building materials</b> provide attractive color and texture <i>The mixture of materials is / is not attractive or sensitive to an overall design aesthetic.</i>	5	2

Interior Environment	Points Allocated	Points
6.6 <b>Color schemes, building materials, and decor</b> provide an impetus to learning <i>Due to multiple additions and multiple building materials, the overall design is inconsistent, which does not enhance learning.</i>	20	8
6.7 <b>Year around comfortable temperature and humidity</b> are provided throughout the building <i>The facility is not air conditioned to provide year-round temperature and humidity control.</i>	15	2
6.8 <b>Ventilating system</b> provides adequate quiet circulation of clean air and meets 15cfm VBC requirement <i>The ventilating systems do not provide an adequate quantity of ventilation air to the spaces. Ventilation systems introduce minimal noise into the teaching and learning areas.</i>	15	4
6.9 <b>Lighting system</b> provides proper intensity, diffusion, and distribution of illumination <i>The lighting system does not provide proper intensity in some areas. Location of lighting fixtures provides uneven distribution of illumination. Diffusion of illumination is adequately provided by the light fixture lenses.</i>	15	8
6.10 <b>Drinking fountains and restroom facilities</b> are conveniently located <i>Drinking fountains are not conveniently located and Restroom facilities are conveniently located.</i>	15	9
6.11 <b>Communication among students</b> is enhanced by commons area(s) for socialization	10	8

There are areas for students to gather in the Student Dining area and Gymnasium, as well as a small gathering areas at multiple entrances to the school. Outdoor areas are provided to encourage socialization and communication spaces as well.

6.12	<b>Traffic flow</b> is aided by appropriate foyers and corridors	10	8
	<i>Corridors and Foyers are adequately designed for efficient traffic flow. Classroom doorways are not recessed, but do not impede traffic flow. Entry and exit points to the building have been adequately provided. Corridor and building layout does provide an efficient means of circulation throughout the building.</i>		
6.13	<b>Areas for students to interact</b> are suitable to the age group	10	8
	<i>There are areas for students to gather in the Student Dining area and Gymnasium, as well as small gathering areas at multiple entrances to the school. Outdoor areas are provided to encourage socialization and communication spaces as well.</i>		
6.14	<b>Large group areas are designed</b> for effective management of students	10	8
	<i>The Gymnasiums are adequately designed to manage large groups of students.</i>		
6.15	<b>Acoustical treatment</b> of ceilings, walls, and floors provides effective sound control	10	4
	<i>The 1939 Addition's Gymnasium, the Music Room, and the 2006 Addition's Media Center spaces are inadequately provided with appropriate sound attenuation acoustical surface treatments.</i>		
6.16	<b>Window design</b> contributes to a pleasant environment	10	4
	<i>The windows are not designed well, and do not contribute to a pleasant environment.</i>		
6.17	<b>Furniture and equipment</b> provide a pleasing atmosphere	10	6
	<i>Classroom furniture in the 1919 Original Construction, 1952 and 1973 Additions are mismatched and in fair condition. Classroom furniture in the 2006 Addition is of consistant design, and in generally good condition.</i>		
<b>TOTAL - Environment for Education</b>		<b>200</b>	<b>105</b>

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# LEED Observation Notes

<b>School District:</b>	Troy City
<b>County:</b>	Miami
<b>School District IRN:</b>	44925
<b>Building:</b>	Concord Elementary
<b>Building IRN:</b>	7161

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## 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 amount of asphalt contributes to the heat island effect for non-roofs (see SS Credit 7.1). Open space is effectively maximized at this urban site (see SS Credit 5.2). The size of the parking area exceeds the amount required with 131 spaces provided and 66 spaces required (see SS Credit 4.4). Reducing the amount of redundant asphalt and providing softer landscape elements including grasses, shrubs and flora, would contribute to a reduction in the heat island effect. Some of the roof surfaces have high reflectance and low thermal emittance, which helps mitigate the heat island effect.

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## 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)

Currently there are no overall facility measures to reduce wastewater or water usage. The site is in an urban area with limited areas of grass, deciduous trees, conifers, shrubs and area of flora. The overall facility does not contain water-efficient fixtures or appliances to meet LEED requirements. Battery operated or electrical flush sensors on the fixtures could provide reduced water use. Use of non-potable water on landscape is another area where reduced water usage could be utilized

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## 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)

The overall facility is equipped with HVAC equipment that, due to age, condition, and inefficiency, does not provide appropriate energy controls or recovery to meet LEED requirements. Most equipment in the overall facility is natural gas fired, but could be updated to electric fired. The District does not produce their own energy or buy energy credits to meet LEED requirements. The site is such that some measure of solar panel installation could be accomplished. By replacing all light switches in the facility with sensor switches, the school would see a reduction in the energy usage and, subsequently, a cost savings as well.

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## 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)

The facility provides storage and collection of recyclables (see MR Prerequisite 1). By providing containers designated for the collection of paper, plastic and glass bottles and cans reduces the solid waste impact on the environment and is a simple way to achieve LEED credits.

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## 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)

Corridors and Classrooms feature hard, easy to clean surfaces, but do not provide acoustical measure other than ceiling tile (see EQ Credit 9). The overall facility is equipped with HVAC equipment that, due to age, condition, and inefficiency, does not provide appropriate indoor air quality or controls to meet LEED requirements. Existing site and building layout, along with existing window opening sizes, may make achieving LEED credits for this section difficult and costly.

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## 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)

This facility does not implement innovative building features or sustainable building knowledge which is needed to exceed results that are required by the LEED Rating System.

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**Justification for Allocation of Points**

Building Name and Level: **Concord Elementary**

**K-5**

**Building features that clearly exceed criteria:**

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

**Building features that are non-existent or very inadequate:**

1. The facility is reported to contain asbestos.
2. The facility is not fully ADA compliant.
3. The facility is not equipped with an automated fire suppression system.
4. The facility is not equipped with a compliant security system.
- 5.
- 6.

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# Environmental Hazards Assessment Cost Estimates

<b>Owner:</b>	Troy City
<b>Facility:</b>	Concord Elementary
<b>Date of Initial Assessment:</b>	Aug 17, 2016
<b>Date of Assessment Update:</b>	Dec 11, 2016
<b>Cost Set:</b>	2016

<b>District IRN:</b>	44925
<b>Building IRN:</b>	7161
<b>Firm:</b>	SBDP

**Scope remains unchanged after cost updates.**

Building Addition	Addition Area (sf)	Total of Environmental Hazards Assessment Cost Estimates	
		Renovation	Demolition
1919 Original Construction	17,979	\$429,068.40	\$388,718.40
1939 Gymnasium Addition	13,495	\$82,579.60	\$82,579.60
1952 Classroom Addition	20,556	\$295,605.00	\$295,605.00
1972 Classroom Addition	6,653	\$34,047.30	\$34,047.30
2006 Cafeteria and Media Center Addition	13,211	\$0.00	\$0.00
<b>Total</b>	<b>71,894</b>	<b>\$841,300.30</b>	<b>\$800,950.30</b>
Total with Regional Cost Factor (97.49%)	—	\$820,183.66	\$780,846.45
Regional Total with Soft Costs & Contingency	—	\$1,020,556.99	\$971,609.58

**Environmental Hazards - Troy City (44925) - Concord Elementary (7161) - Original Construction**

**Owner:** Troy City **Bldg. IRN:** 7161  
**Facility:** Concord Elementary **BuildingAdd:** Original Construction  
**Date On-Site:** **Consultant Name:**

A. Asbestos Containing Material (ACM)		AFM=Asbestos Free Material		
ACM Found	Status	Quantity	Unit Cost	Estimated Cost
1. Boiler/Furnace Insulation Removal	Not Present	0	\$10.00	\$0.00
2. Breeching Insulation Removal	Not Present	0	\$10.00	\$0.00
3. Tank Insulation Removal	Not Present	0	\$8.00	\$0.00
4. Duct Insulation Removal	Not Present	0	\$8.00	\$0.00
5. Pipe Insulation Removal	Reported Asbestos-Containing Material	1600	\$10.00	\$16,000.00
6. Pipe Fitting Insulation Removal	Not Present	0	\$20.00	\$0.00
7. Pipe Insulation Removal (Crawlspace/Tunnel)	Not Present	0	\$12.00	\$0.00
8. Pipe Fitting Insulation Removal (Crawlspace/Tunnel)	Not Present	0	\$30.00	\$0.00
9. Pipe Insulation Removal (Hidden in Walls/Ceilings)	Not Present	0	\$15.00	\$0.00
10. Dismantling of Boiler/Furnace/Incinerator	Reported Asbestos-Containing Material	2	\$2,000.00	\$4,000.00
11. Flexible Duct Connection Removal	Not Present	0	\$100.00	\$0.00
12. Acoustical Plaster Removal	Not Present	0	\$7.00	\$0.00
13. Fireproofing Removal	Not Present	0	\$25.00	\$0.00
14. Hard Plaster Removal	Reported Asbestos-Containing Material	45500	\$7.00	\$318,500.00
15. Gypsum Board Removal	Reported Asbestos-Containing Material	200	\$6.00	\$1,200.00
16. Acoustical Panel/Tile Ceiling Removal	Not Present	0	\$3.00	\$0.00
17. Laboratory Table/Counter Top Removal	Not Present	0	\$100.00	\$0.00
18. Cement Board Removal	Not Present	0	\$5.00	\$0.00
19. Electric Cord Insulation Removal	Not Present	0	\$1.00	\$0.00
20. Light (Reflector) Fixture Removal	Not Present	0	\$50.00	\$0.00
21. Sheet Flooring with Friable Backer Removal	Not Present	0	\$4.00	\$0.00
22. Fire Door Removal	Reported Asbestos-Containing Material	24	\$100.00	\$2,400.00
23. Door and Window Panel Removal	Not Present	0	\$100.00	\$0.00
24. Decontamination of Crawlspace/Chase/Tunnel	Not Present	0	\$3.00	\$0.00
25. Soil Removal	Not Present	0	\$150.00	\$0.00
26. Non-ACM Ceiling/Wall Removal (for access)	Not Present	0	\$2.00	\$0.00
27. Window Component (Compound, Tape, or Caulk) - Reno & Demo	Reported Asbestos-Containing Material	117	\$300.00	\$35,100.00
28. Window Component (Compound, Tape, or Caulk) - Reno Only	Not Present	0	\$300.00	\$0.00
29. Resilient Flooring Removal, Including Mastic	Reported Asbestos-Containing Material	3360	\$3.00	\$10,080.00
30. Carpet Mastic Removal	Not Present	0	\$2.00	\$0.00
31. Carpet Removal (over RFC)	Not Present	0	\$1.00	\$0.00
32. Acoustical Tile Mastic Removal	Not Present	0	\$3.00	\$0.00
33. Sink Undercoating Removal	Not Present	0	\$100.00	\$0.00
34. Roofing Removal	Not Present	0	\$2.00	\$0.00
35. (Sum of Lines 1-34)	<b>Total Asb. Hazard Abatement Cost for Renovation Work</b>			\$387,280.00
36. (Sum of Lines 1-34)	<b>Total Asb. Hazard Abatement Cost for Demolition Work</b>			\$387,280.00

B. Removal Of Underground Storage Tanks <input checked="" type="checkbox"/> None Reported					
Tank No.	Location	Age	Product Stored	Size	Est.Rem.Cost
1. (Sum of Lines 1-0)	<b>Total Cost For Removal Of Underground Storage Tanks</b>				\$0.00

C. Lead-Based Paint (LBP) - Renovation Only <input type="checkbox"/> Addition Constructed after 1980		
1. Estimated Cost For Abatement Contractor to Perform Lead Mock-Ups		\$5,000.00
2. Special Engineering Fees for LBP Mock-Ups		\$5,000.00
3. (Sum of Lines 1-2)	<b>Total Cost for Lead-Based Paint Mock-Ups</b>	\$10,000.00

D. Fluorescent Lamps & Ballasts Recycling/Incineration <input type="checkbox"/> Not Applicable			
Area Of Building Addition	Square Feet w/Fluorescent Lamps & Ballasts	Unit Cost	Total Cost
1. 17979	14384	\$0.10	\$1,438.40

E. Other Environmental Hazards/Remarks <input checked="" type="checkbox"/> None Reported		
Description		Cost Estimate
1. (Sum of Lines 1-0)	<b>Total Cost for Other Environmental Hazards - Renovation</b>	\$0.00
2. (Sum of Lines 1-0)	<b>Total Cost for Other Environmental Hazards - Demolition</b>	\$0.00

F. Environmental Hazards Assessment Cost Estimate Summaries		
1. A35, B1, C3, D1, and E1	<b>Total Cost for Env. Hazards Work - Renovation</b>	\$398,718.40
2. A36, B1, D1, and E2	<b>Total Cost for Env. Hazards Work - Demolition</b>	\$388,718.40

\* INSPECTION ASSUMPTIONS for Reported/Assumed Asbestos-Free Materials (Rep/Asm AFM):

- a. Unless reported otherwise by the District, materials installed after 1980 are assumed to be asbestos-free.
- b. Unless reported otherwise by the District, small quantities (less than 1,000 square feet) of the following materials are assumed to be asbestos free: hard plaster, acoustical plaster and gypsum board systems; acoustical panels and tiles; fireproofing; 12"x12" floor tile and mastic.
- c. Unless reported otherwise by the District, all roofing materials are assumed to be asbestos-free.

THESE MATERIALS SHOULD BE PROPERLY SAMPLED AND ANALYZED FOR ASBESTOS PRIOR TO DISTURBING THEM.



**Environmental Hazards - Troy City (44925) - Concord Elementary (7161) - Classroom Addition**

**Owner:** Troy City **Bldg. IRN:** 7161  
**Facility:** Concord Elementary **BuildingAdd:** Classroom Addition  
**Date On-Site:** **Consultant Name:**

A. Asbestos Containing Material (ACM)		AFM=Asbestos Free Material			
ACM Found		Status	Quantity	Unit Cost	Estimated Cost
1.	Boiler/Furnace Insulation Removal	Not Present	0	\$10.00	\$0.00
2.	Breeching Insulation Removal	Not Present	0	\$10.00	\$0.00
3.	Tank Insulation Removal	Not Present	0	\$8.00	\$0.00
4.	Duct Insulation Removal	Not Present	0	\$8.00	\$0.00
5.	Pipe Insulation Removal	Reported Asbestos-Containing Material	1850	\$10.00	\$18,500.00
6.	Pipe Fitting Insulation Removal	Not Present	0	\$20.00	\$0.00
7.	Pipe Insulation Removal (Crawlspace/Tunnel)	Not Present	0	\$12.00	\$0.00
8.	Pipe Fitting Insulation Removal (Crawlspace/Tunnel)	Not Present	0	\$30.00	\$0.00
9.	Pipe Insulation Removal (Hidden in Walls/Ceilings)	Not Present	0	\$15.00	\$0.00
10.	Dismantling of Boiler/Furnace/Incinerator	Not Present	0	\$2,000.00	\$0.00
11.	Flexible Duct Connection Removal	Not Present	0	\$100.00	\$0.00
12.	Acoustical Plaster Removal	Not Present	0	\$7.00	\$0.00
13.	Fireproofing Removal	Not Present	0	\$25.00	\$0.00
14.	Hard Plaster Removal	Reported Asbestos-Containing Material	16180	\$7.00	\$113,260.00
15.	Gypsum Board Removal	Reported Asbestos-Containing Material	4100	\$6.00	\$24,600.00
16.	Acoustical Panel/Tile Ceiling Removal	Reported Asbestos-Containing Material	16260	\$3.00	\$48,780.00
17.	Laboratory Table/Counter Top Removal	Not Present	0	\$100.00	\$0.00
18.	Cement Board Removal	Not Present	0	\$5.00	\$0.00
19.	Electric Cord Insulation Removal	Not Present	0	\$1.00	\$0.00
20.	Light (Reflector) Fixture Removal	Not Present	0	\$50.00	\$0.00
21.	Sheet Flooring with Friable Backer Removal	Not Present	0	\$4.00	\$0.00
22.	Fire Door Removal	Reported Asbestos-Containing Material	28	\$100.00	\$2,800.00
23.	Door and Window Panel Removal	Not Present	0	\$100.00	\$0.00
24.	Decontamination of Crawlspace/Chase/Tunnel	Not Present	0	\$3.00	\$0.00
25.	Soil Removal	Not Present	0	\$150.00	\$0.00
26.	Non-ACM Ceiling/Wall Removal (for access)	Not Present	0	\$2.00	\$0.00
27.	Window Component (Compound, Tape, or Caulk) - Reno & Demo	Reported Asbestos-Containing Material	135	\$300.00	\$40,500.00
28.	Window Component (Compound, Tape, or Caulk) - Reno Only	Not Present	0	\$300.00	\$0.00
29.	Resilient Flooring Removal, Including Mastic	Reported Asbestos-Containing Material	15555	\$3.00	\$46,665.00
30.	Carpet Mastic Removal	Not Present	0	\$2.00	\$0.00
31.	Carpet Removal (over RFC)	Not Present	0	\$1.00	\$0.00
32.	Acoustical Tile Mastic Removal	Not Present	0	\$3.00	\$0.00
33.	Sink Undercoating Removal	Reported Asbestos-Containing Material	5	\$100.00	\$500.00
34.	Roofing Removal	Not Present	0	\$2.00	\$0.00
35.	(Sum of Lines 1-34)	<b>Total Asb. Hazard Abatement Cost for Renovation Work</b>			\$295,605.00
36.	(Sum of Lines 1-34)	<b>Total Asb. Hazard Abatement Cost for Demolition Work</b>			\$295,605.00

B. Removal Of Underground Storage Tanks <input type="checkbox"/> None Reported						
Tank No.	Location	Age	Product Stored	Size	Est.Rem.Cost	
1.	(Sum of Lines 1-0)				<b>Total Cost For Removal Of Underground Storage Tanks</b>	\$0.00

C. Lead-Based Paint (LBP) - Renovation Only <input type="checkbox"/> Addition Constructed after 1980			
1.	Estimated Cost For Abatement Contractor to Perform Lead Mock-Ups		\$0.00
2.	Special Engineering Fees for LBP Mock-Ups		\$0.00
3.	(Sum of Lines 1-2)	<b>Total Cost for Lead-Based Paint Mock-Ups</b>	\$0.00

D. Fluorescent Lamps & Ballasts Recycling/Incineration <input type="checkbox"/> Not Applicable			
Area Of Building Addition	Square Feet w/Fluorescent Lamps & Ballasts	Unit Cost	Total Cost
1.	20556	\$0.10	\$0.00

E. Other Environmental Hazards/Remarks <input type="checkbox"/> None Reported		
	Description	Cost Estimate
1.	(Sum of Lines 1-0) <b>Total Cost for Other Environmental Hazards - Renovation</b>	\$0.00
2.	(Sum of Lines 1-0) <b>Total Cost for Other Environmental Hazards - Demolition</b>	\$0.00

F. Environmental Hazards Assessment Cost Estimate Summaries			
1.	A35, B1, C3, D1, and E1	<b>Total Cost for Env. Hazards Work - Renovation</b>	\$295,605.00
2.	A36, B1, D1, and E2	<b>Total Cost for Env. Hazards Work - Demolition</b>	\$295,605.00

- \* INSPECTION ASSUMPTIONS for Reported/Assumed Asbestos-Free Materials (Rep/Asm AFM):
- a. Unless reported otherwise by the District, materials installed after 1980 are assumed to be asbestos-free.
  - b. Unless reported otherwise by the District, small quantities (less than 1,000 square feet) of the following materials are assumed to be asbestos free: hard plaster, acoustical plaster and gypsum board systems; acoustical panels and tiles; fireproofing; 12"x12" floor tile and mastic.
  - c. Unless reported otherwise by the District, all roofing materials are assumed to be asbestos-free.

THESE MATERIALS SHOULD BE PROPERLY SAMPLED AND ANALYZED FOR ASBESTOS PRIOR TO DISTURBING THEM.

**Environmental Hazards - Troy City (44925) - Concord Elementary (7161) - Classroom Addition**

**Owner:** Troy City **Bldg. IRN:** 7161  
**Facility:** Concord Elementary **BuildingAdd:** Classroom Addition  
**Date On-Site:** **Consultant Name:**

A. Asbestos Containing Material (ACM)		AFM=Asbestos Free Material		
ACM Found	Status	Quantity	Unit Cost	Estimated Cost
1. Boiler/Furnace Insulation Removal	Not Present	0	\$10.00	\$0.00
2. Breeching Insulation Removal	Not Present	0	\$10.00	\$0.00
3. Tank Insulation Removal	Not Present	0	\$8.00	\$0.00
4. Duct Insulation Removal	Not Present	0	\$8.00	\$0.00
5. Pipe Insulation Removal	Reported Asbestos-Containing Material	650	\$10.00	\$6,500.00
6. Pipe Fitting Insulation Removal	Not Present	0	\$20.00	\$0.00
7. Pipe Insulation Removal (Crawlspace/Tunnel)	Not Present	0	\$12.00	\$0.00
8. Pipe Fitting Insulation Removal (Crawlspace/Tunnel)	Not Present	0	\$30.00	\$0.00
9. Pipe Insulation Removal (Hidden in Walls/Ceilings)	Not Present	0	\$15.00	\$0.00
10. Dismantling of Boiler/Furnace/Incinerator	Not Present	0	\$2,000.00	\$0.00
11. Flexible Duct Connection Removal	Not Present	0	\$100.00	\$0.00
12. Acoustical Plaster Removal	Not Present	0	\$7.00	\$0.00
13. Fireproofing Removal	Not Present	0	\$25.00	\$0.00
14. Hard Plaster Removal	Not Present	0	\$7.00	\$0.00
15. Gypsum Board Removal	Not Present	0	\$6.00	\$0.00
16. Acoustical Panel/Tile Ceiling Removal	Not Present	0	\$3.00	\$0.00
17. Laboratory Table/Counter Top Removal	Not Present	0	\$100.00	\$0.00
18. Cement Board Removal	Not Present	0	\$5.00	\$0.00
19. Electric Cord Insulation Removal	Not Present	0	\$1.00	\$0.00
20. Light (Reflector) Fixture Removal	Not Present	0	\$50.00	\$0.00
21. Sheet Flooring with Friable Backer Removal	Not Present	0	\$4.00	\$0.00
22. Fire Door Removal	Reported Asbestos-Containing Material	9	\$100.00	\$900.00
23. Door and Window Panel Removal	Not Present	0	\$100.00	\$0.00
24. Decontamination of Crawlspace/Chase/Tunnel	Not Present	0	\$3.00	\$0.00
25. Soil Removal	Not Present	0	\$150.00	\$0.00
26. Non-ACM Ceiling/Wall Removal (for access)	Not Present	0	\$2.00	\$0.00
27. Window Component (Compound, Tape, or Caulk) - Reno & Demo	Reported Asbestos-Containing Material	45	\$300.00	\$13,500.00
28. Window Component (Compound, Tape, or Caulk) - Reno Only	Not Present	0	\$300.00	\$0.00
29. Resilient Flooring Removal, Including Mastic	Reported Asbestos-Containing Material	3925	\$3.00	\$11,775.00
30. Carpet Mastic Removal	Reported Asbestos-Containing Material	420	\$2.00	\$840.00
31. Carpet Removal (over RFC)	Not Present	0	\$1.00	\$0.00
32. Acoustical Tile Mastic Removal	Not Present	0	\$3.00	\$0.00
33. Sink Undercoating Removal	Not Present	0	\$100.00	\$0.00
34. Roofing Removal	Not Present	0	\$2.00	\$0.00
35. (Sum of Lines 1-34)	<b>Total Asb. Hazard Abatement Cost for Renovation Work</b>			\$33,515.00
36. (Sum of Lines 1-34)	<b>Total Asb. Hazard Abatement Cost for Demolition Work</b>			\$33,515.00

B. Removal Of Underground Storage Tanks <input checked="" type="checkbox"/> None Reported					
Tank No.	Location	Age	Product Stored	Size	Est.Rem.Cost
1. (Sum of Lines 1-0)	<b>Total Cost For Removal Of Underground Storage Tanks</b>				\$0.00

C. Lead-Based Paint (LBP) - Renovation Only <input type="checkbox"/> Addition Constructed after 1980	
1. Estimated Cost For Abatement Contractor to Perform Lead Mock-Ups	\$0.00
2. Special Engineering Fees for LBP Mock-Ups	\$0.00
3. (Sum of Lines 1-2)	<b>Total Cost for Lead-Based Paint Mock-Ups</b> \$0.00

D. Fluorescent Lamps & Ballasts Recycling/Incineration <input type="checkbox"/> Not Applicable			
Area Of Building Addition	Square Feet w/Fluorescent Lamps & Ballasts	Unit Cost	Total Cost
1. 6653	5323	\$0.10	\$532.30

E. Other Environmental Hazards/Remarks <input checked="" type="checkbox"/> None Reported		
	Description	Cost Estimate
1. (Sum of Lines 1-0)	<b>Total Cost for Other Environmental Hazards - Renovation</b>	\$0.00
2. (Sum of Lines 1-0)	<b>Total Cost for Other Environmental Hazards - Demolition</b>	\$0.00

F. Environmental Hazards Assessment Cost Estimate Summaries		
1. A35, B1, C3, D1, and E1	<b>Total Cost for Env. Hazards Work - Renovation</b>	\$34,047.30
2. A36, B1, D1, and E2	<b>Total Cost for Env. Hazards Work - Demolition</b>	\$34,047.30

\* INSPECTION ASSUMPTIONS for Reported/Assumed Asbestos-Free Materials (Rep/Asm AFM):

- a. Unless reported otherwise by the District, materials installed after 1980 are assumed to be asbestos-free.
- b. Unless reported otherwise by the District, small quantities (less than 1,000 square feet) of the following materials are assumed to be asbestos free: hard plaster, acoustical plaster and gypsum board systems; acoustical panels and tiles; fireproofing; 12"x12" floor tile and mastic.
- c. Unless reported otherwise by the District, all roofing materials are assumed to be asbestos-free.

THESE MATERIALS SHOULD BE PROPERLY SAMPLED AND ANALYZED FOR ASBESTOS PRIOR TO DISTURBING THEM.