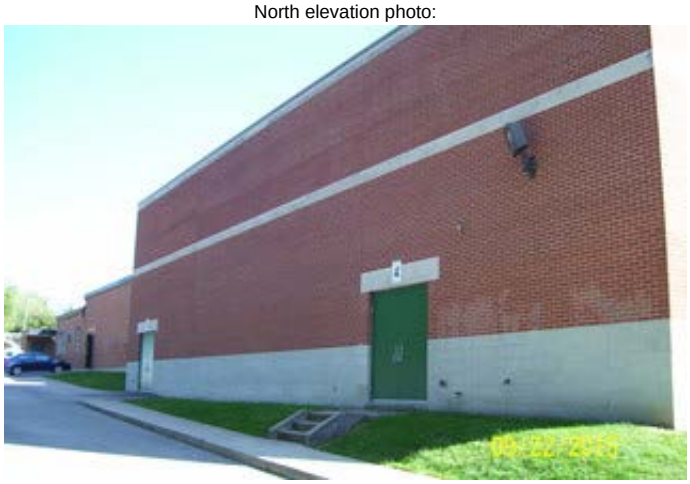
Program Type	Assessment Only
Setting	Suburban
Assessment Name	Colonial Hills Elementary
Assessment Date (on-site; non-EEA)	2015-09-22
Kitchen Type	Full Kitchen
Cost Set:	2015
Building Name	Colonial Hills Elem
Building IRN	6999
Building Address	5800 Greenwich
Building City	Worthington
Building Zipcode	43085
Building Phone	(614) 450-5400
Acreage	12.53
Current Grades:	K-6
Teaching Stations	20
Number of Floors	1
Student Capacity	498
Current Enrollment	402
Enrollment Date	2015-09-14

Enrollment Date is the date in which the current enrollment was taken.

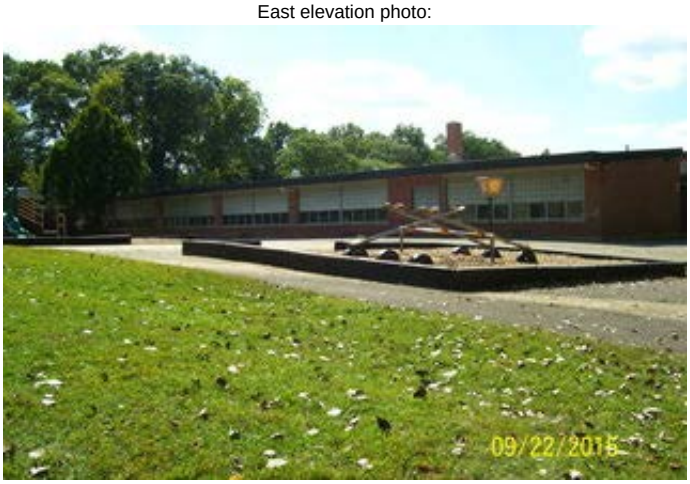
Number of Classrooms	19
Historical Register	**NO**
Building's Principal	Madeline Partlow
Building Type	Elementary

Next Page

North elevation photo:

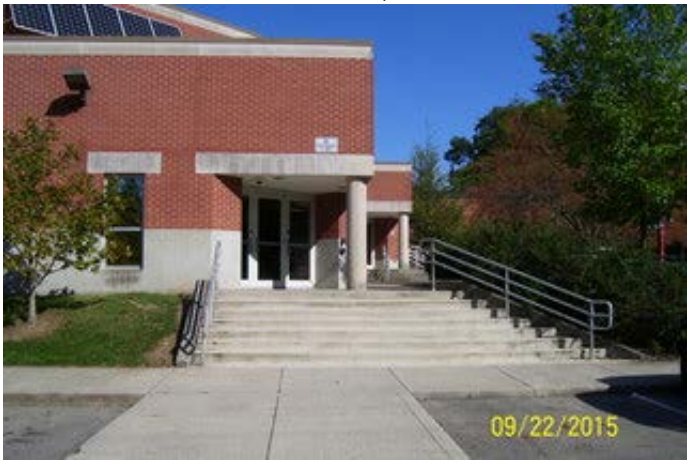


East elevation photo:



South elevation photo:

West elevation photo:



GENERAL DESCRIPTION

43,578 Total Existing Square Footage
1955,1957,1966,1979,1987 Building Dates
K-6 Grades
402 Current Enrollment
20 Teaching Stations
12.53 Site Acreage

Colonial Hills Elementary, which is not on the National Register of Historic Buildings, and originally constructed in 1955, is a 1 story, 43,578 square foot brick school building located in a suburban residential setting. The existing facility features a conventionally partitioned design, and does utilize modular buildings. The structure of the overall facility contains brick on CMU type exterior wall construction, with brick, painted CMU, and metal partition type wall construction in the interior. The floor system consists of concrete slab on grade type construction. The roof structure is steel deck on steel joist type construction. The roofing system of the Original Building, 1966 Multi-Purpose Room Addition, and 1979 Addition is EPDM installed in 2001. The roofing system of the 1966 Classroom Addition is a combination standing seam metal and built-up asphalt system that is original to the addition. The roofing system over the 1987 Addition is a combination membrane and ballast system that is original to the addition. The ventilation system of the building is inadequate to meet the needs of the users. The Classrooms are undersized in terms of the current standards established by the State of Ohio. Physical Education and Student Dining spaces consist of one Multipurpose space, one Gymnasium, and separate Student Dining. The electrical system for the facility is inadequate. The facility is equipped with a non-compliant security system. The building has a non-compliant automatic fire alarm system. The facility is not equipped with an automated fire suppression system. The building is reported to contain asbestos and other hazardous materials. The overall building is not compliant with ADA accessibility requirements. The school is located on a 12.5 acre site adjacent to residential properties. The property and playgrounds, play areas, and athletic facilities are partially fenced for security. Access onto the site is unrestricted. Site circulation is poor. There is no dedicated space for school buses to load and unload on the site. Parking for staff, visitors and community events is inadequate.

It is significant to note that due to site topography and building layout, bus loading and unloading currently occurs off school property on a residential side street.

Previous Page

Next Page

Name	Year	Handicapped Access	Floors	Square Feet	Non OSDM Addition
Original Construction	1955	yes	1	20,924	no
Addition 1	1957	yes	1	4,947	no
Addition 2	1966	yes	1	8,573	no
Addition 3	1979	yes	1	2,558	no
Addition 4	1987	yes	1	6,576	no

Previous Page

Next Page

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 (1955)		3256			1163		2981	1006						
Addition 1 (1957)		770												
Addition 2 (1966)		1222												
Addition 3 (1979)		122												
Addition 4 (1987)		906		4064										
Total	0	6,276	0	4,064	1,163	0	2,981	1,006	0	0	0	0	0	0

Master Planning Considerations Adding on to the school would be quite difficult due to site topography, which includes a ravine that bisects the site.

Previous Page

Next Page

Existing CT Programs for Assessment

Next Page

Previous Page

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 - Colonial Hills Elem (6999)

District:	Worthington City	**County:**	Franklin **Area:** Central Ohio (0)
Name:	Colonial Hills Elem	**Contact:**	Madeline Partlow
Address:	5800 Greenwich	**Phone:**	(614) 450-5400
	Worthington,OH 43085	**Date Prepared:**	2015-09-22 **By:** Brian Rubenstein
Bldg. IRN:	6999	**Date Revised:**	2015-12-23 **By:** Holly Grambort

Current Grades	K-6	Acreage:	12.53
Proposed Grades	N/A	Teaching Stations:	20
Current Enrollment	402	Classrooms:	19
Projected Enrollment	N/A		

Addition	Date	HA	Number of Floors	Current Square Feet
Original Construction	1955	yes	1	20,924
Addition 1	1957	yes	1	4,947
Addition 2	1966	yes	1	8,573
Addition 3	1979	yes	1	2,558
Addition 4	1987	yes	1	6,576
Total				**43,578**

*HA	=	Handicapped Access
*Rating	=1	Satisfactory
	=2	Needs Repair
	=3	Needs Replacement
*Const P/S	=	Present/Scheduled Construction

	FACILITY ASSESSMENT Cost Set: 2015	Rating	Dollar Assessment	C
A.	Heating System	3	$1,486,881.36	-
B.	Roofing	3	$531,480.00	-
C.	Ventilation / Air Conditioning	1	$0.00	-
D.	Electrical Systems	3	$707,270.94	-
E.	Plumbing and Fixtures	3	$290,734.00	-
F.	Windows	3	$282,000.00	-
G.	Structure: Foundation	2	$8,500.00	-
H.	Structure: Walls and Chimneys	2	$61,487.50	-
I.	Structure: Floors and Roofs	1	$0.00	-
J.	General Finishes	3	$886,780.20	-
K.	Interior Lighting	3	$217,890.00	-
L.	Security Systems	3	$124,197.30	-
M.	Emergency/Egress Lighting	3	$43,578.00	-
N.	Fire Alarm	3	$65,367.00	-
O.	Handicapped Access	3	$145,365.60	-
P.	Site Condition	2	$410,934.00	-
Q.	Sewage System	1	$0.00	-
R.	Water Supply	1	$0.00	-
S.	Exterior Doors	3	$50,100.00	-
T.	Hazardous Material	3	$77,314.80	-
U.	Life Safety	3	$139,274.40	-
V.	Loose Furnishings	3	$130,734.00	-
W.	Technology	3	$574,885.24	-
X.	Construction Contingency / Non-Construction Cost	-	$1,523,174.08	-
Total			$7,757,948.42	

CEFPI Appraisal Summary

Section	Points Possible	Points Earned	Percentage	Rating Category
Cover Sheet	—	—	—	—
1.0 The School Site	100	63	63%	Borderline
2.0 Structural and Mechanical Features	200	106	53%	Borderline
3.0 Plant Maintainability	100	49	49%	Poor
4.0 Building Safety and Security	200	103	52%	Borderline
5.0 Educational Adequacy	200	80	40%	Poor
6.0 Environment for Education	200	107	54%	Borderline
LEED Observations	—	—	—	—
Commentary	—	—	—	—
Total	1000	508	51%	Borderline

Enhanced Environmental Hazards Assessment Cost Estimates

C=Under Contract	
Renovation Cost Factor	100.00%
Cost to Renovate (Cost Factor applied)	$7,757,948.42

The Replacement Cost Per SF and the Renovate/Replace ratio are only provided when this summary is requested from a Master Plan.

Previous Page

Original Construction (1955) Summary

District:	Worthington City	**County:**	Franklin **Area:** Central Ohio (0)
Name:	Colonial Hills Elem	**Contact:**	Madeline Partlow
Address:	5800 Greenwich	**Phone:**	(614) 450-5400
	Worthington,OH 43085	**Date Prepared:**	2015-09-22 **By:** Brian Rubenstein
Bldg. IRN:	6999	**Date Revised:**	2015-12-23 **By:** Holly Grambort

Current Grades	K-6	Acreage:	12.53
Proposed Grades	N/A	Teaching Stations:	20
Current Enrollment	402	Classrooms:	19
Projected Enrollment	N/A		

Addition	Date	HA	Number of Floors	Current Square Feet
Original Construction	**1955**	**yes**	**1**	**20,924**
Addition 1	1957	yes	1	4,947
Addition 2	1966	yes	1	8,573
Addition 3	1979	yes	1	2,558
Addition 4	1987	yes	1	6,576
Total				**43,578**

*HA	=	Handicapped Access
*Rating	=1	Satisfactory
	=2	Needs Repair
	=3	Needs Replacement
*Const P/S	=	Present/Scheduled Construction

		FACILITY ASSESSMENT Cost Set: 2015	Rating	Dollar Assessment	C
	A.	Heating System	3	$713,926.88	-
	B.	Roofing	3	$246,438.80	-
	C.	Ventilation / Air Conditioning	1	$0.00	-
	D.	Electrical Systems	3	$339,596.52	-
	E.	Plumbing and Fixtures	3	$274,234.00	-
	F.	Windows	3	$180,000.00	-
	G.	Structure: Foundation	2	$2,500.00	-
	H.	Structure: Walls and Chimneys	2	$19,200.00	-
	I.	Structure: Floors and Roofs	1	$0.00	-
	J.	General Finishes	3	$526,581.60	-
	K.	Interior Lighting	3	$104,620.00	-
	L.	Security Systems	3	$59,633.40	-
	M.	Emergency/Egress Lighting	3	$20,924.00	-
	N.	Fire Alarm	3	$31,386.00	-
	O.	Handicapped Access	3	$75,124.80	-
	P.	Site Condition	2	$334,422.00	-
	Q.	Sewage System	1	$0.00	-
	R.	Water Supply	1	$0.00	-
	S.	Exterior Doors	3	$11,100.00	-
	T.	Hazardous Material	3	$37,907.40	-
	U.	Life Safety	3	$68,922.40	-
	V.	Loose Furnishings	3	$62,772.00	-
	W.	Technology	3	$275,778.32	-
-	X.	Construction Contingency / Non-Construction Cost	-	$826,982.30	-
Total				$4,212,050.42	

CEFPI Appraisal Summary

Section	Points Possible	Points Earned	Percentage	Rating Category
Cover Sheet	—	—	—	—
1.0 The School Site	100	63	63%	Borderline
2.0 Structural and Mechanical Features	200	106	53%	Borderline
3.0 Plant Maintainability	100	49	49%	Poor
4.0 Building Safety and Security	200	103	52%	Borderline
5.0 Educational Adequacy	200	80	40%	Poor
6.0 Environment for Education	200	107	54%	Borderline
LEED Observations	—	—	—	—
Commentary	—	—	—	—
Total	1000	508	51%	Borderline

Enhanced Environmental Hazards Assessment Cost Estimates

C=Under Contract	
Renovation Cost Factor	100.00%
Cost to Renovate (Cost Factor applied)	$4,212,050.42

The Replacement Cost Per SF and the Renovate/Replace ratio are only provided when this summary is requested from a Master Plan.

Addition 1 (1957) Summary

District:	Worthington City	**County:**	Franklin **Area:** Central Ohio (0)
Name:	Colonial Hills Elem	**Contact:**	Madeline Partlow
Address:	5800 Greenwich	**Phone:**	(614) 450-5400
	Worthington,OH 43085	**Date Prepared:**	2015-09-22 **By:** Brian Rubenstein
Bldg. IRN:	6999	**Date Revised:**	2015-12-23 **By:** Holly Grambort

Current Grades	K-6	Acreage:	12.53
Proposed Grades	N/A	Teaching Stations:	20
Current Enrollment	402	Classrooms:	19
Projected Enrollment	N/A		

Addition	Date	HA	Number of Floors	Current Square Feet
Original Construction	1955	yes	1	20,924
Addition 1	**1957**	**yes**	**1**	**4,947**
Addition 2	1966	yes	1	8,573
Addition 3	1979	yes	1	2,558
Addition 4	1987	yes	1	6,576
Total				**43,578**

*HA	=	Handicapped Access
*Rating	=1	Satisfactory
	=2	Needs Repair
	=3	Needs Replacement
*Const P/S	=	Present/Scheduled Construction

	FACILITY ASSESSMENT Cost Set: 2015	Rating	Dollar Assessment	C
A.	Heating System	3	$168,791.64	-
B.	Roofing	3	$55,138.90	-
C.	Ventilation / Air Conditioning	1	$0.00	-
D.	Electrical Systems	3	$80,289.81	-
E.	Plumbing and Fixtures	3	$9,000.00	-
F.	Windows	3	$60,000.00	-
G.	Structure: Foundation	2	$1,000.00	-
H.	Structure: Walls and Chimneys	2	$4,537.50	-
I.	Structure: Floors and Roofs	1	$0.00	-
J.	General Finishes	3	$78,657.30	-
K.	Interior Lighting	3	$24,735.00	-
L.	Security Systems	3	$14,098.95	-
M.	Emergency/Egress Lighting	3	$4,947.00	-
N.	Fire Alarm	3	$7,420.50	-
O.	Handicapped Access	3	$22,759.40	-
P.	Site Condition	2	$16,841.00	-
Q.	Sewage System	1	$0.00	-
R.	Water Supply	1	$0.00	-
S.	Exterior Doors	3	$4,000.00	-
T.	Hazardous Material	3	$6,734.70	-
U.	Life Safety	3	$15,296.00	-
V.	Loose Furnishings	3	$14,841.00	-
W.	Technology	3	$65,333.26	-
X.	Construction Contingency / Non-Construction Cost	-	$159,877.25	-
Total			$814,299.21	

CEFPI Appraisal Summary

Section	Points Possible	Points Earned	Percentage	Rating Category
Cover Sheet	—	—	—	—
1.0 The School Site	100	63	63%	Borderline
2.0 Structural and Mechanical Features	200	106	53%	Borderline
3.0 Plant Maintainability	100	49	49%	Poor
4.0 Building Safety and Security	200	103	52%	Borderline
5.0 Educational Adequacy	200	80	40%	Poor
6.0 Environment for Education	200	107	54%	Borderline
LEED Observations	—	—	—	—
Commentary	—	—	—	—
Total	1000	508	51%	Borderline

Enhanced Environmental Hazards Assessment Cost Estimates

C=Under Contract	
Renovation Cost Factor	100.00%
Cost to Renovate (Cost Factor applied)	$814,299.21

The Replacement Cost Per SF and the Renovate/Replace ratio are only provided when this summary is requested from a Master Plan.

Addition 2 (1966) Summary

District:	Worthington City	**County:**	Franklin **Area:** Central Ohio (0)
Name:	Colonial Hills Elem	**Contact:**	Madeline Partlow
Address:	5800 Greenwich	**Phone:**	(614) 450-5400
	Worthington,OH 43085	**Date Prepared:**	2015-09-22 **By:** Brian Rubenstein
Bldg. IRN:	6999	**Date Revised:**	2015-12-23 **By:** Holly Grambort

Current Grades	K-6	Acreage:	12.53
Proposed Grades	N/A	Teaching Stations:	20
Current Enrollment	402	Classrooms:	19
Projected Enrollment	N/A		

Addition	Date	HA	Number of Floors	Current Square Feet
Original Construction	1955	yes	1	20,924
Addition 1	1957	yes	1	4,947
Addition 2	**1966**	**yes**	**1**	**8,573**
Addition 3	1979	yes	1	2,558
Addition 4	1987	yes	1	6,576
Total				**43,578**

*HA	=	Handicapped Access
*Rating	=1	Satisfactory
	=2	Needs Repair
	=3	Needs Replacement
*Const P/S	=	Present/Scheduled Construction

FACILITY ASSESSMENT Cost Set: 2015			Rating	Dollar Assessment	C
A.	Heating System		3	$292,510.76	-
B.	Roofing		3	$105,625.10	-
C.	Ventilation / Air Conditioning		1	$0.00	-
D.	Electrical Systems		3	$139,139.79	-
E.	**Plumbing and Fixtures**		**3**	**$0.00**	-
F.	Windows		3	$24,000.00	-
G.	Structure: Foundation		2	$2,000.00	-
H.	Structure: Walls and Chimneys		2	$15,125.00	-
I.	Structure: Floors and Roofs		1	$0.00	-
J.	General Finishes		3	$136,310.70	-
K.	Interior Lighting		3	$42,865.00	-
L.	Security Systems		3	$24,433.05	-
M.	Emergency/Egress Lighting		3	$8,573.00	-
N.	Fire Alarm		3	$12,859.50	-
O.	Handicapped Access		3	$1,714.60	-
P.	Site Condition		2	$27,769.00	-
Q.	Sewage System		1	$0.00	-
R.	Water Supply		1	$0.00	-
S.	Exterior Doors		3	$24,000.00	-
T.	Hazardous Material		3	$27,389.30	-
U.	Life Safety		3	$26,899.20	-
V.	Loose Furnishings		3	$25,719.00	-
W.	Technology		3	$112,992.14	-
X.	Construction Contingency / Non-Construction Cost		-	$256,499.86	-
Total				$1,306,425.00	

CEFPI Appraisal Summary

Section	Points Possible	Points Earned	Percentage	Rating Category
Cover Sheet	—	—	—	—
1.0 The School Site	100	63	63%	Borderline
2.0 Structural and Mechanical Features	200	106	53%	Borderline
3.0 Plant Maintainability	100	49	49%	Poor
4.0 Building Safety and Security	200	103	52%	Borderline
5.0 Educational Adequacy	200	80	40%	Poor
6.0 Environment for Education	200	107	54%	Borderline
LEED Observations	—	—	—	—
Commentary	—	—	—	—
Total	1000	508	51%	Borderline

Enhanced Environmental Hazards Assessment Cost Estimates

C=Under Contract	
Renovation Cost Factor	100.00%
Cost to Renovate (Cost Factor applied)	$1,306,425.00

The Replacement Cost Per SF and the Renovate/Replace ratio are only provided when this summary is requested from a Master Plan.

Addition 3 (1979) Summary

District:	Worthington City	**County:**	Franklin **Area:** Central Ohio (0)
Name:	Colonial Hills Elem	**Contact:**	Madeline Partlow
Address:	5800 Greenwich	**Phone:**	(614) 450-5400
	Worthington,OH 43085	**Date Prepared:**	2015-09-22 **By:** Brian Rubenstein
Bldg. IRN:	6999	**Date Revised:**	2015-12-23 **By:** Holly Grambort

Current Grades	K-6	Acreage:	12.53
Proposed Grades	N/A	Teaching Stations:	20
Current Enrollment	402	Classrooms:	19
Projected Enrollment	N/A		

Addition	Date	HA	Number of Floors	Current Square Feet
Original Construction	1955	yes	1	20,924
Addition 1	1957	yes	1	4,947
Addition 2	1966	yes	1	8,573
Addition 3	**1979**	**yes**	**1**	**2,558**
Addition 4	1987	yes	1	6,576
Total				**43,578**

*HA	=	Handicapped Access
*Rating	=1	Satisfactory
	=2	Needs Repair
	=3	Needs Replacement
*Const P/S	=	Present/Scheduled Construction

FACILITY ASSESSMENT Cost Set: 2015			Rating	Dollar Assessment	C
A.	Heating System		3	$87,278.96	-
B.	Roofing		3	$33,434.60	-
C.	Ventilation / Air Conditioning		1	$0.00	-
D.	Electrical Systems		3	$41,516.34	-
E.	Plumbing and Fixtures		3	$6,000.00	-
F.	Windows		3	$18,000.00	-
G.	Structure: Foundation		2	$1,000.00	-
H.	Structure: Walls and Chimneys		2	$6,050.00	-
I.	Structure: Floors and Roofs		1	$0.00	-
J.	General Finishes		3	$40,672.20	-
K.	Interior Lighting		3	$12,790.00	-
L.	Security Systems		3	$7,290.30	-
M.	Emergency/Egress Lighting		3	$2,558.00	-
N.	Fire Alarm		3	$3,837.00	-
O.	Handicapped Access		3	$27,366.60	-
P.	Site Condition		2	$9,674.00	-
Q.	Sewage System		1	$0.00	-
R.	Water Supply		1	$0.00	-
S.	Exterior Doors		3	$5,500.00	-
T.	Hazardous Material		3	$1,845.80	-
U.	Life Safety		3	$7,648.00	-
V.	Loose Furnishings		3	$7,674.00	-
W.	Technology		3	$34,109.84	-
X.	Construction Contingency / Non-Construction Cost		-	$86,543.27	-
Total				$440,788.91	

CEFPI Appraisal Summary

Section	Points Possible	Points Earned	Percentage	Rating Category
Cover Sheet	—	—	—	—
1.0 The School Site	100	63	63%	Borderline
2.0 Structural and Mechanical Features	200	106	53%	Borderline
3.0 Plant Maintainability	100	49	49%	Poor
4.0 Building Safety and Security	200	103	52%	Borderline
5.0 Educational Adequacy	200	80	40%	Poor
6.0 Environment for Education	200	107	54%	Borderline
LEED Observations	—	—	—	—
Commentary	—	—	—	—
Total	1000	508	51%	Borderline

Enhanced Environmental Hazards Assessment Cost Estimates

C=Under Contract	
Renovation Cost Factor	100.00%
Cost to Renovate (Cost Factor applied)	$440,788.91

The Replacement Cost Per SF and the Renovate/Replace ratio are only provided when this summary is requested from a Master Plan.

Addition 4 (1987) Summary

District:	Worthington City	**County:**	Franklin **Area:** Central Ohio (0)
Name:	Colonial Hills Elem	**Contact:**	Madeline Partlow
Address:	5800 Greenwich	**Phone:**	(614) 450-5400
	Worthington,OH 43085	**Date Prepared:**	2015-09-22 **By:** Brian Rubenstein
Bldg. IRN:	6999	**Date Revised:**	2015-12-23 **By:** Holly Grambort

Current Grades	K-6	Acreage:	12.53
Proposed Grades	N/A	Teaching Stations:	20
Current Enrollment	402	Classrooms:	19
Projected Enrollment	N/A		

Addition	Date	HA	Number of Floors	Current Square Feet
Original Construction	1955	yes	1	20,924
Addition 1	1957	yes	1	4,947
Addition 2	1966	yes	1	8,573
Addition 3	1979	yes	1	2,558
Addition 4	**1987**	**yes**	**1**	**6,576**
Total				**43,578**

*HA	=	Handicapped Access
*Rating	=1	Satisfactory
	=2	Needs Repair
	=3	Needs Replacement
*Const P/S	=	Present/Scheduled Construction

	FACILITY ASSESSMENT Cost Set: 2015	Rating	Dollar Assessment	C
A.	Heating System	3	$224,373.12	-
B.	Roofing	3	$90,842.60	-
C.	Ventilation / Air Conditioning	1	$0.00	-
D.	Electrical Systems	3	$106,728.48	-
E.	Plumbing and Fixtures	3	$1,500.00	-
F.	**Windows**	**3**	**$0.00**	-
G.	Structure: Foundation	2	$2,000.00	-
H.	Structure: Walls and Chimneys	2	$16,575.00	-
I.	Structure: Floors and Roofs	1	$0.00	-
J.	General Finishes	3	$104,558.40	-
K.	Interior Lighting	3	$32,880.00	-
L.	Security Systems	3	$18,741.60	-
M.	Emergency/Egress Lighting	3	$6,576.00	-
N.	Fire Alarm	3	$9,864.00	-
O.	Handicapped Access	3	$18,400.20	-
P.	Site Condition	2	$22,228.00	-
Q.	Sewage System	1	$0.00	-
R.	Water Supply	1	$0.00	-
S.	Exterior Doors	3	$5,500.00	-
T.	Hazardous Material	3	$3,437.60	-
U.	Life Safety	3	$20,508.80	-
V.	Loose Furnishings	3	$19,728.00	-
W.	Technology	3	$86,671.68	-
X.	Construction Contingency / Non-Construction Cost	-	$193,271.40	-
Total			$984,384.88	

CEFPI Appraisal Summary

Section	Points Possible	Points Earned	Percentage	Rating Category
Cover Sheet	—	—	—	—
1.0 The School Site	100	63	63%	Borderline
2.0 Structural and Mechanical Features	200	106	53%	Borderline
3.0 Plant Maintainability	100	49	49%	Poor
4.0 Building Safety and Security	200	103	52%	Borderline
5.0 Educational Adequacy	200	80	40%	Poor
6.0 Environment for Education	200	107	54%	Borderline
LEED Observations	—	—	—	—
Commentary	—	—	—	—
Total	1000	508	51%	Borderline

Enhanced Environmental Hazards Assessment Cost Estimates

C=Under Contract	
Renovation Cost Factor	100.00%
Cost to Renovate (Cost Factor applied)	$984,384.88

The Replacement Cost Per SF and the Renovate/Replace ratio are only provided when this summary is requested from a Master Plan.

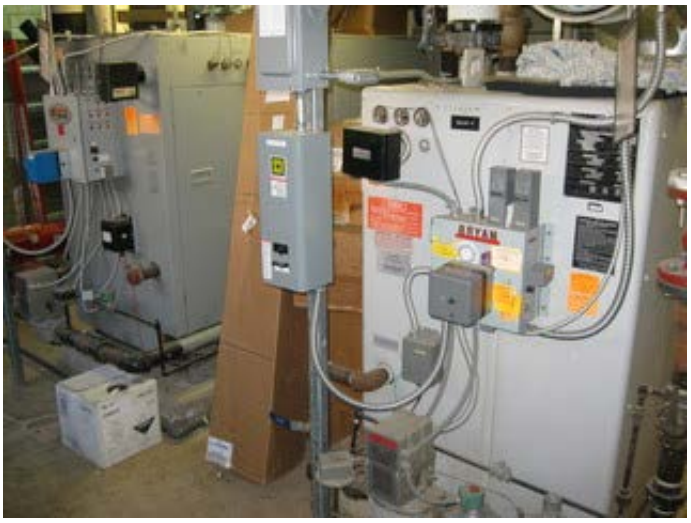
A. Heating System

Description: The existing system for the overall facility is a gas fired heating hot water system, installed in 1955, and is in poor condition. The heating and chilled water system in the overall facility is a 2-pipe system, without a capacity for simultaneous heating and cooling operation, which is not compliant with the OSDM requirements for basic system type. The 3 gas fired boilers, manufactured by Bryan and Thermal Solutions, were installed in 1955, 2008, and 2015 and are in poor-to-good condition. Heating water is distributed to terminal units consisting of unit ventilators, cabinet heaters, unit heaters, and air handlers. The terminal equipment was installed in 2012 and is in good condition. The system does not comply with the 15 CFM per person fresh air requirements of the Ohio Building Code mechanical code and Ohio School Design Manual. The DDC type system temperature controls were installed in 2008 and are in good condition. The system does feature individual temperature controls in all spaces required by the OSDM. The overall system does not feature any central energy recovery systems. The facility is not equipped with louvered interior doors to facilitate Corridor utilization as return air plenums. The existing system is ducted in the Gymnasium, Dining, Library, Main Office, and 1966 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 Classrooms, and floor to structural deck heights will not accommodate the installation of properly sized ductwork for a future Ohio School Design Manual approved system. The overall heating system is evaluated as being in safe but inefficient working order, and long term life expectancy of the existing system is not anticipated. The structure is 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. Convert to ducted system to facilitate efficient exchange of conditioned air. Provide architectural soffits to accommodate the installation of ductwork.

Item	Cost	Unit	Whole Building	Original Construction (1955) 20,924 ft²	Addition 1 (1957) 4,947 ft²	Addition 2 (1966) 8,573 ft²	Addition 3 (1979) 2,558 ft²	Addition 4 (1987) 6,576 ft²	Sum	Comments
HVAC System Replacement:	$26.12	sq.ft. (of entire building addition)		Required	Required	Required	Required	Required	$1,138,257.36	(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	$348,624.00	(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)
Sum:			$1,486,881.36	$713,926.88	$168,791.64	$292,510.76	$87,278.96	$224,373.12		



Gas Fired Boilers

Gas Fired Boiler

Back to Assessment Summary

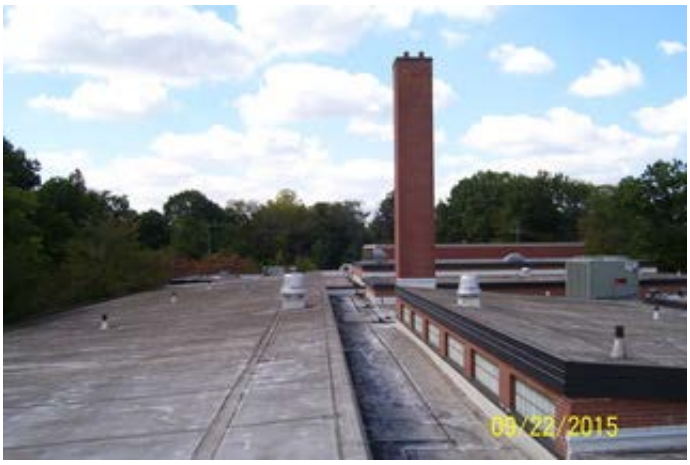
B. Roofing

Description: The roof over the Original Construction is an EPDM system that was installed in 2001 and is in fair condition. Metal cap flashings are in fair to poor condition. Roof storm drainage is addressed through a system of gutters and downspouts, roof drains, and through-wall scuppers with downspouts, which are properly located, and in fair condition. The roof is not equipped with overflow roof drains though they are needed on this building. The roof over the 1966 Classroom Addition is a combination standing seam metal and built-up asphalt system that is original to the addition and is in poor condition. Metal cap flashings are in poor condition. Roof storm drainage is addressed through a system of roof drains, which are properly located, and in poor condition. The roof is not equipped with overflow roof drains though they are needed on this building. The roof over the 1966 Multi-Purpose Room Addition is a membrane system that was installed in 2001, and is in fair to poor condition. The roof over the 1979 Addition is an EPDM system that was installed in 2001, and is in fair condition. The roof over the 1988 Addition is a combination membrane and ballast system that is original to the addition and is in fair condition. There are no District reports of current leaking, however, signs of past leaking were observed during the physical assessment. Access to the majority of the roof was gained by an access hatch located in the 1966 Classroom Addition that is in fair condition, but poorly located. Fall protection should be provided adjacent to the opening. Access to the highest roof was not available. The Gymnasium roof has a separate roof hatch that is in fair condition. Fall safety protection cages are not required, and have not been provided. There were observations of standing water on the roof near the recently installed mechanical units above the boiler room in the Original Building, and on the 1966 Classroom Addition. Metal cap flashings are in fair condition. Roof storm drainage is addressed through a system of gutters and downspouts, roof drains, and through-wall scuppers, which are properly located, and in fair condition. The roof is not equipped with overflow roof drains though they are needed on this building. No problems requiring attention were encountered with any roof penetrations. There are no covered walkways attached to this structure. A report provided by the District summarized the roof as the following: ''The roof on Colonial Hills Elementary consists of two different roof systems. A mechanically attached heat welded roof system, and a ballasted EPDM roof system are installed on this facility. The roof area is typical of a school facility and rooftop equipment and projections are moderate. The roof area drains to internal roof drains. With recommended preventative maintenance and repairs the mechanically attached heat welded roof system should afford 4 to 5 more years of satisfactory service life. The ballasted EPDM roof system is failing and is in very poor condition. The ballasted EPDM roof system over the gym should be replaced immediately.''

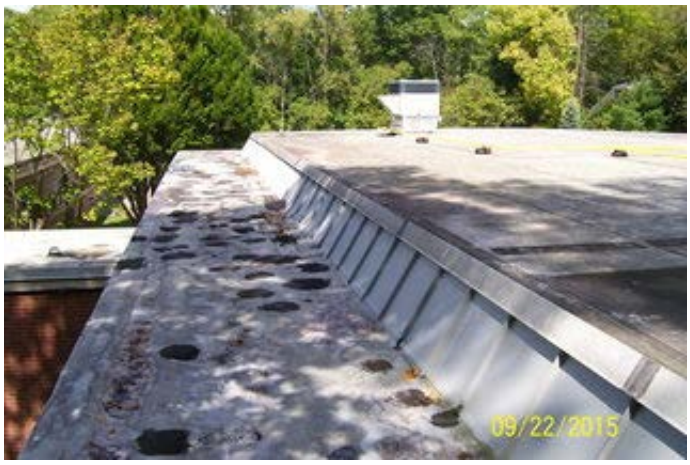
Rating: 3 Needs Replacement

Recommendations: The roof over the overall facility requires replacement to meet Ohio School Design Manual guidelines due to condition, age, and projected lifecycles of systems. Replace cap flashings through the overall facility. Add overflow drains as required in conjunction with the roof replacement. Provide fall protection adjacent to existing roof hatch.

Item	Cost	Unit	Whole Building	Original Construction (1955) 20,924 ft²	Addition 1 (1957) 4,947 ft²	Addition 2 (1966) 8,573 ft²	Addition 3 (1979) 2,558 ft²	Addition 4 (1987) 6,576 ft²	Sum	Comments
Membrane (all types):	$8.70	sq.ft. (Qty)		20,924 Required	4,947 Required	8,573 Required	2,558 Required	2,558 Required	$344,172.00	(unless under 10,000 sq.ft.)
Repair/replace cap flashing and coping:	$18.40	ln.ft.		1,000 Required	250 Required	600 Required	200 Required	325 Required	$43,700.00	
Overflow Roof Drains and Piping:	$2,500.00	each		18 Required	3 Required	8 Required	3 Required	4 Required	$90,000.00	
Roofing Replacement	$8.00	sq.ft. (Qty)						6,576 Required	$52,608.00	(Hazardous Material Replacement Cost - See T.)
Other: Fall Protection	$1,000.00	unit		1 Required					$1,000.00	Fall protection adjacent to hatch.
Sum:			$531,480.00	$246,438.80	$55,138.90	$105,625.10	$33,434.60	$90,842.60		



Typical 2001 Roof



1966 Classroom Addition Roof

Back to Assessment Summary

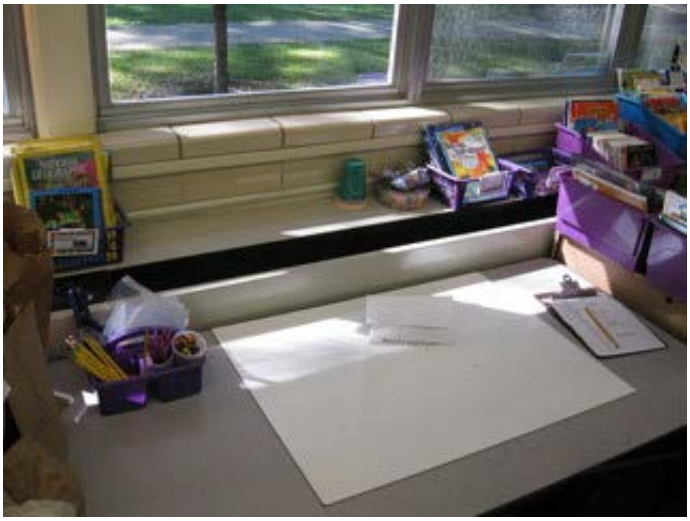
C. Ventilation / Air Conditioning

Description: The overall facility is equipped with a chilled water type central air conditioning system, which is in fair condition. An air cooled condenser supplies refrigerant to an evaporator that provides chilled water to terminal units. The equipment is in good condition. Rooftop units are provided in the 1966 Addition and Main Office locations. The ventilation system in the overall facility consists of unit ventilators, installed in 2012 and in good condition, providing fresh air to Classrooms, and air handlers, installed in 2012 and in good condition, providing fresh air to other miscellaneous spaces such as Gymnasiums, Student Dining, and Media Center. Relief air venting is provided by ceiling plenums. The ventilation system does not 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 existing kiln ventilation is adequate, and in good condition. General building exhaust systems for Restrooms and Storage Rooms are adequately placed, and in fair condition.

Rating: 1 Satisfactory

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, and Custodial Closets. Pricing included in Item A.

Item	Cost	Unit	Whole Building	Original Construction (1955)	Addition 1 (1957)	Addition 2 (1966)	Addition 3 (1979)	Addition 4 (1987)	Sum	Comments
				20,924 ft²	4,947 ft²	8,573 ft²	2,558 ft²	6,576 ft²		
Sum:			$0.00	$0.00	$0.00	$0.00	$0.00	$0.00		



Unit Ventilator

Air Cooled Condenser

Back to Assessment Summary

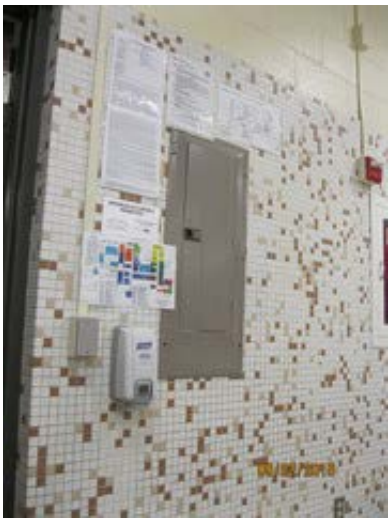
D. Electrical Systems

Description: The electrical system provided to the overall facility is a 120/208-volt, 3-phase, 4-wire, 1,200-amp main fused switch system installed in the 1980s, and is in good condition. Original equipment was installed in 1955 and is in poor condition. Power is provided to the school by a multiple utility owned, pole-mounted transformer located in exterior parking lot, and in good condition. The panel system, installed in 1955 and the 1980s, is in poor condition, and cannot be expanded to add additional capacity. The Classrooms are not equipped with adequate electrical outlets. The typical Classroom contains 18 general purpose outlets, 2 dedicated outlets for each Classroom computer, and 2 dedicated outlets for each Classroom television. Some Classrooms are equipped with as many as 20 general purpose outlets, while others are equipped with as few as 16 general purpose outlets. There are not any spaces that have no electrical outlets. The Corridors are not 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 are not provided. Stage lighting power system including control panel, breakers, and dimmers is inadequately provided and does not meet OSDM requirements. The overall electrical system does not meet Ohio School Design Manual requirements in supporting the current needs of the school, and will be inadequate to meet the facility's future needs.

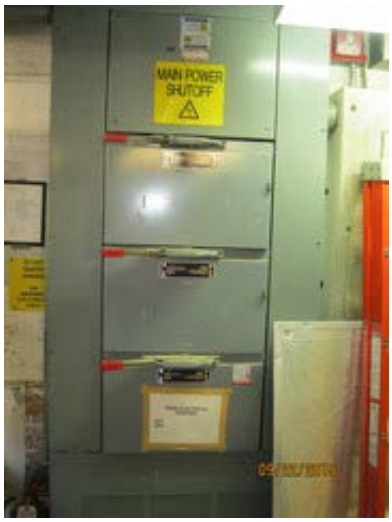
Rating: 3 Needs Replacement

Recommendations: The entire electrical system requires replacement to meet Ohio School Design Manual guidelines for overall capacity, Classroom capacity, due to condition and age, lack of OSDM-required features, and to facilitate the scope of work outlined in Item U.

Item	Cost	Unit	Whole Building	Original Construction (1955) 20,924 ft²	Addition 1 (1957) 4,947 ft²	Addition 2 (1966) 8,573 ft²	Addition 3 (1979) 2,558 ft²	Addition 4 (1987) 6,576 ft²	Sum	Comments
System Replacement:	$16.23	sq.ft. (of entire building addition)		Required	Required	Required	Required	Required	$707,270.94	(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:			$707,270.94	$339,596.52	$80,289.81	$139,139.79	$41,516.34	$106,728.48		



Electrical Panelboard



Main Switchgear

Back to Assessment Summary

E. Plumbing and Fixtures

Description: The service entrance is not equipped with a reduced pressure backflow preventer. A water treatment system is not provided. The domestic water supply piping in the overall facility is copper, is original to each addition, and is in good condition. The waste piping in the overall facility is cast iron and galvanized, is original to each addition, and is in fair condition. The facility is equipped with a gas water heater in poor condition, with a separate 119-gallon storage tank in good condition. The school contains 2 Large Group Restrooms for boys, 2 Large Group Restrooms for girls, 0 Locker Room Restrooms for boys, 0 Locker Room Restrooms for girls, 0 Restrooms associated with specialty Classrooms, and 2 Restrooms for staff. Boys' Large Group Restrooms contain 0 ADA and 6 non-ADA floor mounted flush valve toilets, 0 ADA and 10 non-ADA floor mounted central flush urinals, as well as 0 ADA and 4 non-ADA wall mounted lavatories. Girls' Large Group Restrooms contain 0 ADA and 12 non-ADA floor mounted flush valve toilets, as well as 0 ADA and 4 non-ADA wall mounted lavatories. There are no student locker rooms due to grade level. Staff Restrooms contain 0 ADA and 3 non-ADA floor mounted flush valve toilets, 0 ADA and 1 non-ADA wall mounted urinals, as well as 0 ADA and 2 non-ADA countertop lavatories. Condition of fixtures is fair. The facility is equipped with 0 ADA and 0 non-ADA drinking fountains, as well as 2 ADA and 5 non-ADA electric water coolers, in fair condition. The 18 Elementary Classrooms are equipped with 0 ADA and 18 non-ADA sink mounted type drinking fountains, in poor condition. Special Education Classroom is not equipped with the required Restroom facilities. Kitchen is equipped with the required Restroom, and fixtures are in fair condition. Heath Clinic is equipped with the required Restroom, and fixtures are in fair condition. Kindergarten / Pre-K Classrooms are not equipped with Restroom facilities 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 59 toilets, 15 urinals, 55 lavatories, 18 Classroom sink mounted drinking fountains, and 11 electric water coolers. Kitchen fixtures consist of 1 hand sink and 1 triple-compartment sink, which are in fair condition. The Kitchen is not equipped with a satisfactory grease interceptor. The Kitchen is provided the required 140 degree hot water supply via a mixing valve, which is in good condition. Observations revealed that the school is currently equipped with 25 toilets, 11 urinals, 14 lavatories, 18 Classroom sink mounted drinking fountains, and 7 electric water coolers. ADA requirements are not met for fixtures and drinking fountains (see Item O). Custodial Closets are properly located and are adequately provided with required service sinks or floor drain sinks, which are in fair 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 provided.

Rating: 3 Needs Replacement

Recommendations: To facilitate the school's compliance with OBC and OSFC fixture requirements, provide 34 new toilets, 41 new lavatories, 4 new urinals, 4 new electric water. See Item O for replacement of fixtures related to ADA requirements. Replace required sink mounted type drinking fountains in Elementary Classroom spaces. Provide a new Backflow Preventer. Replace existing water heater with new. Provide Grease Interceptor.

Item	Cost	Unit	Whole Building	Original Construction (1955) 20,924 ft²	Addition 1 (1957) 4,947 ft²	Addition 2 (1966) 8,573 ft²	Addition 3 (1979) 2,558 ft²	Addition 4 (1987) 6,576 ft²	Sum	Comments
Back Flow Preventer:	$5,000.00	unit		1 Required					$5,000.00	
Sanitary Waste Piping:	$3.50	sq.ft. (of entire building addition)		Required					$73,234.00	(remove / replace)
Domestic Water Heater:	$5,100.00	per unit		1 Required					$5,100.00	(remove / replace)
Toilet:	$3,800.00	unit		9 Required					$34,200.00	(new)
Toilet:	$1,500.00	unit		14 Required	6 Required		4 Required	1 Required	$37,500.00	(remove / replace) See Item O
Urinal:	$3,800.00	unit		4 Required					$15,200.00	(new)
Sink:	$2,500.00	unit		41 Required					$102,500.00	(new)
Electric water cooler:	$3,000.00	unit		4 Required					$12,000.00	(double ADA)
HIGH BAY/INDUSTRIAL SPACE - LAB TYPES 5,6,7 - Grease Trap or Oil Interceptor	$6,000.00	each		1 Required					$6,000.00	
Sum:			$290,734.00	$274,234.00	$9,000.00	$0.00	$6,000.00	$1,500.00		

Domestic Hot Water System

Boy's Restroom - Central Flush Urinals

Back to Assessment Summary

F. Windows

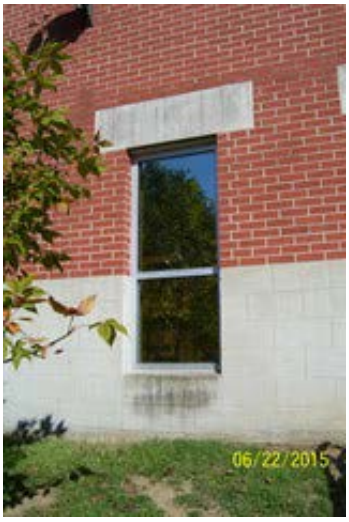
Description: The Original Building, 1957 Addition, and 1966 Additions are equipped with aluminum frame windows with single glazed type window system, which were installed in each respective construction year, and are in poor condition. The window system features operable windows throughout the additions and operable windows are equipped with opening limiters in fair condition and insect screens in poor condition. Window system seals are in poor condition, with moderate air and water infiltration being experienced. Window system hardware is in poor condition. The window system features surface mounted blinds, which are in poor condition. The 1979 Addition is equipped with aluminum frame windows with single glazed type window system, and is in fair to poor condition. The window system features operable windows throughout the additions and operable windows are equipped with opening limiters in fair condition and insect screens in poor condition. Window system seals are in poor condition, with moderate air and water infiltration being experienced. Window system hardware is in poor condition. The window system features surface mounted blinds, which are in poor condition. The 1987 Addition is equipped with aluminum frame windows with double glazed, insulated type window system, and is in fair condition. The window system features inoperable windows throughout the addition. Window system seals are in fair condition, with minimal air and water infiltration being experienced. The window system features no blinds. This facility is not equipped with any curtain wall systems. There are glass block windows in the 1955 Original Construction and in the 1957 Addition, in poor condition. The exterior doors in the 1955 Original Construction and in the 1957, 1966, 1979 Addition are equipped with wood framed sidelights and transoms with single pane glazing, in poor condition. Exterior door vision panels are single pane. The exterior doors in the 1987 Addition are equipped with aluminum sidelights and transoms with tempered, in good condition. Exterior door vision panels are tempered. The school does not contain skylights. The school does contain glass block type clerestories, and clerestory windows are in poor condition. Interior glass is not OSDM-compliant due to non-compliance with current Ohio Building Codes. Window security grilles are not provided for ground floor windows. There is not a Greenhouse associated with this school.

Rating: 3 Needs Replacement

Recommendations: Replace the existing non-insulated window system and glass block in the Original Building, 1957 Addition, 1966 Additions, and 1979 Addition with a new insulated window system to match existing insulated system in the 1987 Addition and comply with Ohio School Design Manual requirements.

Item	Cost	Unit	Whole Building	Original Construction (1955) 20,924 ft²	Addition 1 (1957) 4,947 ft²	Addition 2 (1966) 8,573 ft²	Addition 3 (1979) 2,558 ft²	Addition 4 (1987) 6,576 ft²	Sum	Comments
Insulated Glass/Panels:	$60.00	sq.ft. (Qty)		3,000 Required	1,000 Required	400 Required	300 Required		$282,000.00	(includes blinds)
Sum:			$282,000.00	$180,000.00	$60,000.00	$24,000.00	$18,000.00	$0.00		

Typical Windows to be Replaced



Typical 1987 Addition

Back to Assessment Summary

G. Structure: Foundation

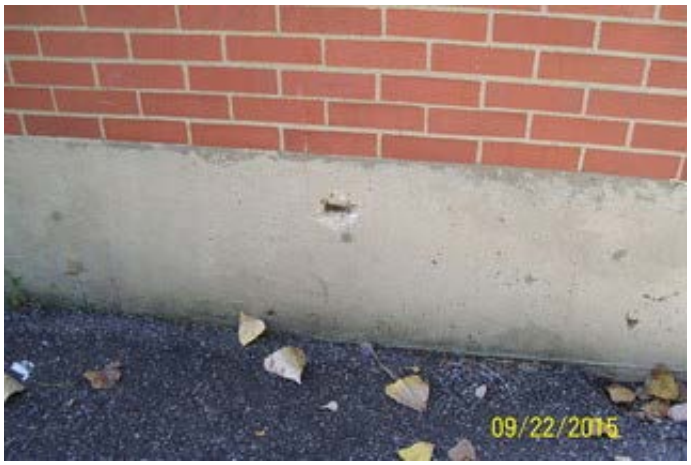
Description: The overall facility is equipped with poured concrete and concrete masonry unit foundation walls on concrete footings, which displayed no locations of significant differential settlement, cracking, or leaking, and are in fair condition. Areas of minor cracking and spalling were observed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

Rating: 2 Needs Repair

Recommendations: Repair areas of cracking and spalling through the overall facility.

Item	Cost	Unit	Whole Building	Original Construction (1955) 20,924 ft²	Addition 1 (1957) 4,947 ft²	Addition 2 (1966) 8,573 ft²	Addition 3 (1979) 2,558 ft²	Addition 4 (1987) 6,576 ft²	Sum	Comments
Other: Repair Hairline Cracks and Spalling	$50.00	ln.ft.		50 Required	20 Required	40 Required	20 Required	40 Required	$8,500.00	Repair minor cracking and spalling.
Sum:			$8,500.00	$2,500.00	$1,000.00	$2,000.00	$1,000.00	$2,000.00		

Typical Foundation



Spalling to be Repaired

Back to Assessment Summary

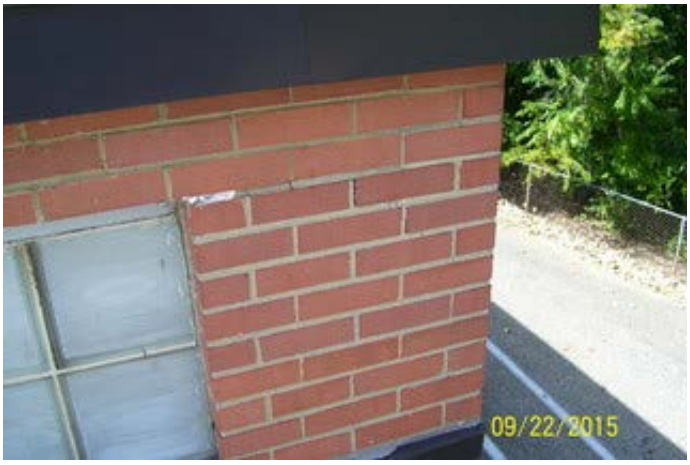
H. Structure: Walls and Chimneys

Description: The Original Building, 1957 Addition, 1966 Additions, and 1979 Addition have a brick veneer on load bearing masonry wall system, which displayed locations of deterioration, and is in fair condition. The 1987 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 fair condition. In the Original Building and 1957 Addition, control joints are not provided at lintel locations, at doors and windows, building corners, and wall offsets. In the 1966 Additions, 1979 Addition, and 1987 Addition control joints are provided at lintel locations, at doors and windows, building corners, and wall offsets. The school does have sufficient expansion joints, and they are in fair condition. Exterior walls in the Original Building, 1957 Addition, and 1966 Additions are inadequately insulated. Brick veneer masonry walls are not cavity walls. Exterior walls in the 1979 Addition and 1987 Addition are adequately insulated. Brick veneer masonry walls are cavity walls. Weep holes are not provide in the locations where the walls are not cavity walls. Weep holes are provided in sufficient quantity in the 1979 Addition and 1987 Additions at lintels, below sills, and the base of masonry cavity walls, and are in fair condition. Weep holes are not rope type weeps. Vents are not provided. The exterior masonry has not been cleaned and sealed in recent years, and has locations of efflorescence, mold, and graffiti. Architectural exterior accent materials consist of ashlar stone and cast, which are in fair condition. Exterior building fenestration in the Original Building represents 37% of the exterior surfaces, in the 1957 Addition represents 40% of the exterior surfaces, in the 1966 Additions represents 8% of the exterior surfaces, in the 1979 Addition represents 15% of the exterior surfaces, and in the 1987 Addition represents 5% of the exterior surfaces. Interior Corridor and demising walls are brick, CMU, and metal partitions which project full height from floor to bottom of deck, and are in fair condition. Interior masonry appears to have adequately spaced and caulked control joints in fair condition. Interior soffits are of stud and gypsum board type construction, and in fair condition. The window sills are stone and brick veneer over masonry, and are in fair condition. The exterior lintels are steel, and are in fair condition. The chimney is in fair condition. Exterior soffits are of exterior drywall type construction, and in fair condition. The school is not equipped with a loading dock.

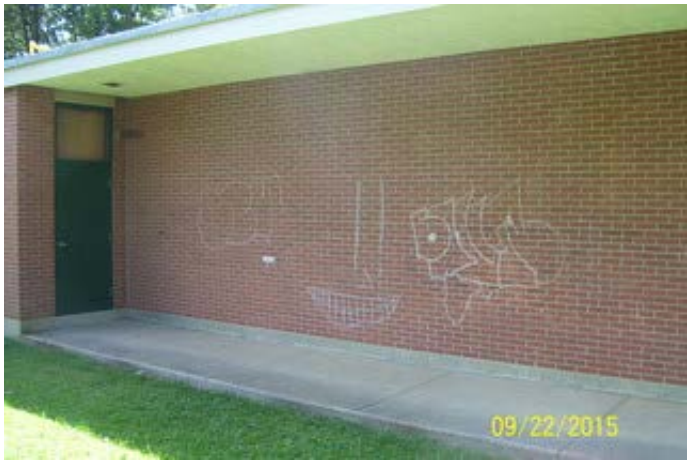
Rating: 2 Needs Repair

Recommendations: Provide tuckpointing in all areas of mortar deterioration as required through the overall facility. Provide masonry cleaning and sealing as required through the overall facility.

Item	Cost	Unit	Whole Building	Original Construction (1955) 20,924 ft²	Addition 1 (1957) 4,947 ft²	Addition 2 (1966) 8,573 ft²	Addition 3 (1979) 2,558 ft²	Addition 4 (1987) 6,576 ft²	Sum	Comments
Tuckpointing:	$5.25	sq.ft. (Qty)		800 Required	150 Required	500 Required	200 Required	300 Required	$10,237.50	(wall surface)
Exterior Masonry Cleaning:	$1.50	sq.ft. (Qty)		6,000 Required	1,500 Required	5,000 Required	2,000 Required	6,000 Required	$30,750.00	(wall surface)
Exterior Masonry Sealing:	$1.00	sq.ft. (Qty)		6,000 Required	1,500 Required	5,000 Required	2,000 Required	6,000 Required	$20,500.00	(wall surface)
Sum:			$61,487.50	$19,200.00	$4,537.50	$15,125.00	$6,050.00	$16,575.00		



Typical Brick to be Tuckpointed



Typical Brick to be Cleaned

Back to Assessment Summary

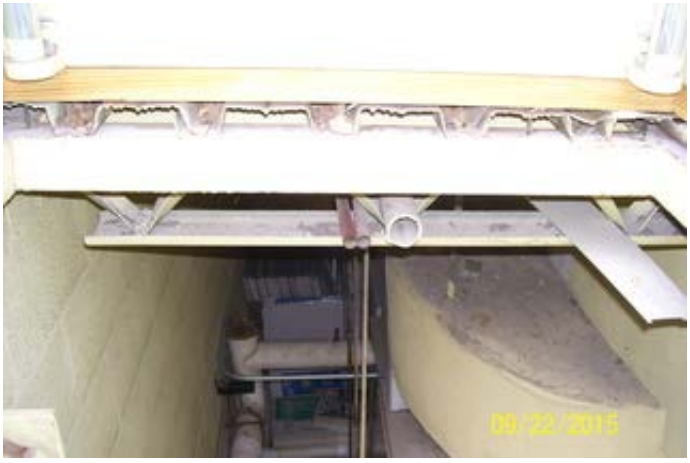
I. Structure: Floors and Roofs

Description: The floor construction of the base floor of the overall facility is concrete slab on grade type construction, and is in fair condition. Crawl space is located under Original Construction section of the facility. There are no intermediate floors in this single story structure. Ceiling to structural deck spaces are sufficient to accommodate HVAC, electrical, and plumbing scopes of work in required renovations. The roof construction of the overall facility steel deck on steel joist type construction, and is in fair condition.

Rating: 1 Satisfactory

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

Item	Cost	Unit	Whole Building	Original Construction (1955) 20,924 ft²	Addition 1 (1957) 4,947 ft²	Addition 2 (1966) 8,573 ft²	Addition 3 (1979) 2,558 ft²	Addition 4 (1987) 6,576 ft²	Sum	Comments
Sum:			$0.00	$0.00	$0.00	$0.00	$0.00	$0.00		



Typical Roof Structure

Gymnasium Roof Structure

Back to Assessment Summary

J. General Finishes

Description: The overall facility features conventionally partitioned Classrooms with carpet tile and vinyl type flooring, 2x4 ACT type ceilings, as well as metal partition and paint CMU type wall finishes, and they are in good condition. The overall facility has Corridors with terrazzo type flooring, 2x4 ACT type ceilings, as well as painted CMU, tile, and metal partition type wall finishes, and they are in fair condition. The overall facility has Restrooms with terrazzo type flooring, gypsum type ceilings, as well as painted CMU, tile type wall finishes, and they are in fair condition. Toilet partitions are plastic, and are in good condition. Classroom casework in the overall facility is wood type construction with plastic laminate tops, is adequately provided, and in good condition. The typical Classroom contains 12 lineal feet of casework, and Classroom casework provided ranges from 9 to 12 feet. Classrooms are provided adequate chalkboards, markerboards, tackboards which are in good condition. The lockers / Classroom storage cubbies, located in the Classrooms, are adequately provided, and in fair condition. The Art program is not equipped with a kiln. The facility is equipped with wood louvered interior doors that are flush mounted with proper ADA hardware and clearances, and in good condition. The Gymnasium space(s) have VCT type flooring, open type ceilings, as well as painted CMU type wall finishes, and they are in good condition. Gymnasium basketball backboards are electrically operated type, and are in good condition. The Media Center, located in the 1955 Addition, has carpet type flooring, 2x4 ACT type ceilings, as well as painted CMU type wall finishes, and they are in good condition. Student Dining, located in the 1966 Addition, has VCT type flooring, 2x4 ACT type ceilings, as well as painted CMU and tile type wall finishes, and they are in fair condition. OSDM-required fixed equipment for Stage is inadequately provided, and in poor condition. Existing Gymnasium, Student Dining, Media Center, and Music spaces are adequately provided with appropriate sound attenuation acoustical surface treatments. The existing Kitchen is full service, is undersized based on current enrollment, and the existing Kitchen equipment, installed in 1966, is in fair condition.

Rating: 3 Needs Replacement

Recommendations: Provide complete replacement of finishes and casework. Provide for the replacement of kitchen equipment due to age of equipment. Provide Art Program kiln.

Item	Cost	Unit	Whole Building	Original Construction (1955) 20,924 ft²	Addition 1 (1957) 4,947 ft²	Addition 2 (1966) 8,573 ft²	Addition 3 (1979) 2,558 ft²	Addition 4 (1987) 6,576 ft²	Sum	Comments
Complete Replacement of Finishes and Casework (Elementary):	$15.90	sq.ft. (of entire building addition)		Required	Required	Required	Required	Required	$692,890.20	(elementary, per building area, with removal of existing)
Art Program Kiln:	$2,750.00	each		1 Required					$2,750.00	
Total Kitchen Equipment Replacement:	$190.00	sq.ft. (Qty)		1,006 Required					$191,140.00	(square footage based upon only existing area of food preparation, serving, kitchen storage areas and walk-ins. Includes demolition and removal of existing kitchen equipment)
Sum:			$886,780.20	$526,581.60	$78,657.30	$136,310.70	$40,672.20	$104,558.40		

kitchen

cabinets

Back to Assessment Summary

K. Interior Lighting

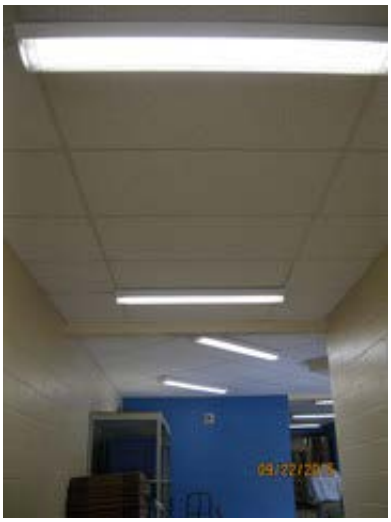
Description: The typical Classrooms in the overall facility are equipped with T-8 1x4 indirect suspended fluorescent fixtures with multi-level switching. Classroom fixtures are in good condition, providing an average illumination of 59 FC, thus complying with the 50 FC recommended by the OSDM. The typical Corridors in the overall facility are equipped with T-8 1x4 surface mount fluorescent fixtures with single level switching. Corridor fixtures are in good condition, providing an average illumination of 25 FC, thus complying with the 20 FC recommended by the OSDM. The Primary Gymnasium spaces are equipped with pendant T-8 2x4 fluorescent fixture type lighting, in good condition, providing an average illumination of 58 FC, thus complying with the 50 ES FC recommended by the OSDM. The Media Center is equipped with 1x4 indirect suspended T-8 fluorescent fixture type lighting in good condition, providing an average illumination of 53 FC, thus complying with the 50 FC recommended by the OSDM. The Student Dining spaces are equipped with lay-in 2x4 T-8 fluorescent fixture type lighting with single level switching. Student Dining fixtures are in good condition, providing an average illumination of 66 FC, thus complying with the 50 FC recommended by the OSDM. The Kitchen spaces are equipped with 2x4 surface mount T-8 fluorescent fixture type lighting with multi-level switching. Kitchen fixtures are in good condition, providing an average illumination of 51 FC, which is less than the 75-80 FC recommended by the OSDM. The Service Areas in the overall facility are equipped with 1x4 surface mount T-8 fluorescent fixture type lighting in good condition. The typical Administrative spaces in the overall facility are equipped with lay-in 2x4 T-8 fluorescent fixture type lighting in good condition, providing adequate illumination based on OSDM requirements. The overall lighting systems of the facility are not fully compliant with Ohio School Design Manual requirements due to inadequate lighting levels and lack of multi-level switching.

Rating: 3 Needs Replacement

Recommendations: Provide complete replacement of lighting system due to lighting levels, lack of multi-level switching, and installation of systems outlined in Item U.

Item	Cost	Unit	Whole Building	Original Construction (1955) 20,924 ft²	Addition 1 (1957) 4,947 ft²	Addition 2 (1966) 8,573 ft²	Addition 3 (1979) 2,558 ft²	Addition 4 (1987) 6,576 ft²	Sum	Comments
Complete Building Lighting Replacement	$5.00	sq.ft. (of entire building addition)		Required	Required	Required	Required	Required	$217,890.00	Includes demo of existing fixtures
Sum:			$217,890.00	$104,620.00	$24,735.00	$42,865.00	$12,790.00	$32,880.00		

Gym Lighting



Corridor Lighting

Back to Assessment Summary

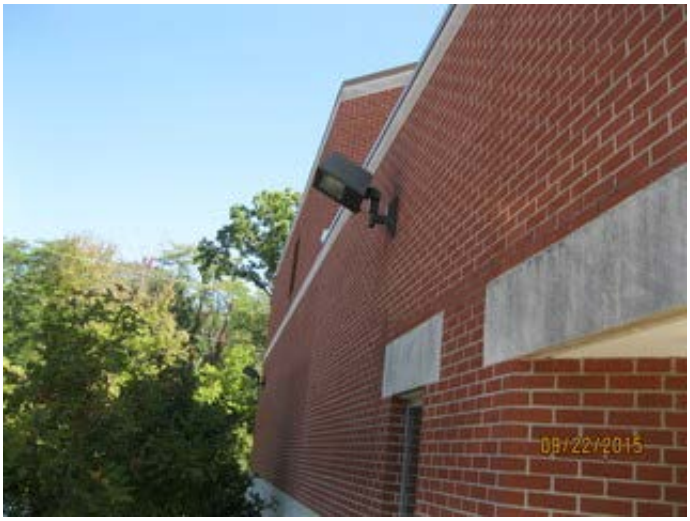
L. Security Systems

Description: The overall facility contains a Security Command intrusion, door contact type security system in good condition. Motion detectors are not adequately provided in main entries, central gathering areas, offices, main Corridors, and spaces where 6 or more computers are located. Exterior doors are equipped with door contacts. An automatic visitor control system is provided. Compliant color CCTV cameras are not provided at parking lots, central gathering areas, and main Corridors. CCTV is monitored in Administrative Area with the use of a TV. 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 compliant with Ohio School Design Manual guidelines. The exterior site lighting system is equipped with surface mounted HID entry lights in good condition. Pedestrian walkways are illuminated with high pressure sodium fixtures in good condition. Parking and bus pick-up / drop off areas are not illuminated. The exterior site lighting system provides inadequate illumination due to insufficient fixture capacity and sparse placement of fixtures.

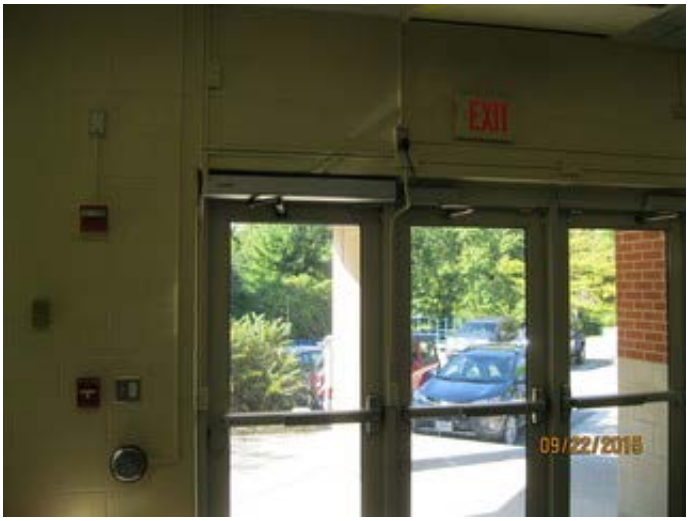
Rating: 3 Needs Replacement

Recommendations: Provide new security system and exterior lighting to meet Ohio School Design Manual guidelines. Add exterior site lighting to provide adequate illumination.

Item	Cost	Unit	Whole Building	Original Construction (1955) 20,924 ft²	Addition 1 (1957) 4,947 ft²	Addition 2 (1966) 8,573 ft²	Addition 3 (1979) 2,558 ft²	Addition 4 (1987) 6,576 ft²	Sum	Comments
Security System:	$1.85	sq.ft. (of entire building addition)		Required	Required	Required	Required	Required	$80,619.30	(complete, area of building)
Exterior Site Lighting:	$1.00	sq.ft. (of entire building addition)		Required	Required	Required	Required	Required	$43,578.00	(complete, area of building)
Sum:			$124,197.30	$59,633.40	$14,098.95	$24,433.05	$7,290.30	$18,741.60		



Parking Lot Lighting



Door Contacts/Exit Signs/FA Devices

Back to Assessment Summary

M. Emergency/Egress Lighting

Description: The overall facility is equipped with an emergency egress lighting system consisting of non-compliant incandescent, plastic construction exit signs, as well as OSDM compliant red lettered, LED illuminated exit signs, and the system is in good condition. The facility is equipped with emergency egress floodlighting, and the system is in good condition. The system is provided with appropriate battery backup. The system is adequately provided throughout, and does not meet Ohio School Design Manual and Ohio Building Code requirements.

Rating: 3 Needs Replacement

Recommendations: Provide new emergency / egress lighting system to meet Ohio School Design Manual and Ohio Building Code guidelines and in conjunction with work in Item U.

Item	Cost	Unit	Whole Building	Original Construction (1955) 20,924 ft²	Addition 1 (1957) 4,947 ft²	Addition 2 (1966) 8,573 ft²	Addition 3 (1979) 2,558 ft²	Addition 4 (1987) 6,576 ft²	Sum	Comments
Emergency/Egress Lighting:	$1.00	sq.ft. (of entire building addition)		Required	Required	Required	Required	Required	$43,578.00	(complete, area of building)
Sum:			$43,578.00	$20,924.00	$4,947.00	$8,573.00	$2,558.00	$6,576.00		

Exit Sign

Battery Pack

Back to Assessment Summary

N. Fire Alarm

Description: The overall facility is equipped with a Simplex type fire alarm system in good condition, consisting of manual pull stations, bells, and horn and strobe indicating devices. The system is automatic and is monitored by a third party. The system is equipped with sufficient audible horns and strobe indicating devices. The system is not equipped with sufficient smoke detectors or heat sensors. The system is not equipped with any flow switches or tamper switches. The system thus will not support future fire suppression systems. The system is adequately provided throughout, and does not have additional zone capabilities. The system is not compliant with Ohio Building Code, NFPA, and Ohio School Design Manual requirements.

Rating: 3 Needs Replacement

Recommendations: Provide new fire alarm system to meet OBC, NFPA, and Ohio School Design Manual guidelines.

Item	Cost	Unit	Whole Building	Original Construction (1955) 20,924 ft²	Addition 1 (1957) 4,947 ft²	Addition 2 (1966) 8,573 ft²	Addition 3 (1979) 2,558 ft²	Addition 4 (1987) 6,576 ft²	Sum	Comments
Fire Alarm System:	$1.50	sq.ft. (of entire building addition)		Required	Required	Required	Required	Required	$65,367.00	(complete new system, including removal of existing)
Sum:			$65,367.00	$31,386.00	$7,420.50	$12,859.50	$3,837.00	$9,864.00		

FA Remote Annunciator/Pull Station

FA Pull Station/Exit Sign/Door Contact

Back to Assessment Summary

O. Handicapped Access

Description: On the interior of the building, space allowances and reach ranges are not compliant. There is not an accessible route through the building, which does include protruding objects. Ground and floor surfaces are not compliant due to elevation of ramps. Ramps and stairs do not meet all ADA requirements, and are insufficient due to incline. Elevation changes within the overall facility are facilitated by 2 non-compliant ramps in poor condition. Special provisions for floor level changes in this 1 story structure are insufficient due to ramps' incline being too great. Access to the Stage is not facilitated by a chair lift /ramp / other. The facility is provided with a power assisted ADA door opener in good condition in the Gymnasium addition. Interior doors are not recessed, are not provided adequate clearances, and are provided with ADA-compliant hardware. 11 ADA-compliant toilets are required, and 0 are currently provided. 11 ADA-compliant Restroom lavatories are required, and 0 are currently provided. 2 ADA-compliant urinals are required, and 10 are currently provided. 6 ADA-compliant electric water coolers are required, and 2 are currently provided. Toilet partitions are plastic, and do not provide appropriate ADA clearances. ADA-compliant accessories are not adequately provided and mounted. Mirrors do not meet ADA requirements for mounting heights. Due to existing grade configuration, no Science Classroom considerations require evaluation. Health Clinic and Special Education Restrooms are not compliant with ADA requirements due to size of space. ADA signage is not provided on both the interior and the exterior of the building.

Rating: 3 Needs Replacement

Recommendations: Provide ADA-compliant signage, ramps, chair lifts, electric water coolers, toilets, sinks, remounted restroom mirrors, toilet partitions, toilet accessories in the overall facility to facilitate the school's meeting of ADA requirements.

Item	Cost	Unit	Whole Building	Original Construction (1955) 20,924 ft²	Addition 1 (1957) 4,947 ft²	Addition 2 (1966) 8,573 ft²	Addition 3 (1979) 2,558 ft²	Addition 4 (1987) 6,576 ft²	Sum	Comments
Signage:	$0.20	sq.ft. (of entire building addition)		Required	Required	Required	Required	Required	$8,715.60	(per building area)
Ramps:	$40.00	sq.ft. (Qty)						180 Required	$7,200.00	(per ramp/interior-exterior complete)
Lifts:	$15,000.00	unit		1 Required					$15,000.00	(complete)
Toilet/Urinals/Sinks:	$3,800.00	unit		11 Required	4 Required		5 Required	2 Required	$83,600.00	(new ADA)
Toilet Partitions:	$1,000.00	stall		2 Required	2 Required		2 Required		$6,000.00	(ADA - grab bars, accessories included)
Remount Restroom Mirrors to Handicapped Height:	$285.00	per restroom		4 Required	2 Required	0 Required	3 Required	1 Required	$2,850.00	
Provide Toilet Accessories:	$1,000.00	per restroom		11 Required	4 Required		5 Required	2 Required	$22,000.00	
Sum:			$145,365.60	$75,124.80	$22,759.40	$1,714.60	$27,366.60	$18,400.20		

Inaccessible Entrance

Boy's Restroom - Central Flush Urinals

Back to Assessment Summary

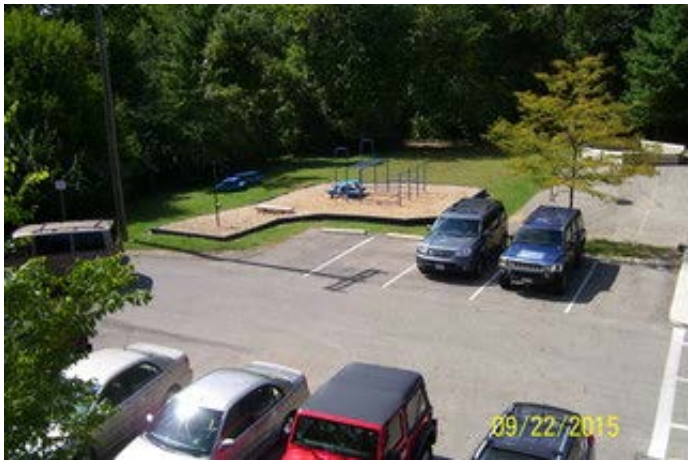
P. Site Condition

Description: The 12.5 acre site is located in a suburban, residential setting with moderate tree and shrub type landscaping. The property is a combination of moderately and steeply sloped terrain. Outbuildings include a maintenance building. There are no apparent problems with ponding, however, erosion appears to be occurring at the edges of the ravine that bisects the site. The site is bordered by lightly traveled city streets. A single entrance onto the site impedes proper separation of bus and other vehicular traffic, and one way bus traffic is not provided. There is a curbside bus loading and unloading zone on the street adjacent to the school, which is not separated from other vehicular street traffic. Staff and visitor parking is facilitated by a multiple asphalt parking areas in fair to poor condition, containing 49 and two accessible parking places, which provide adequate parking for staff members, visitors, and the disabled. The site and parking lot drainage design, consisting of sheet drainage, provides adequate evacuation of storm water, and no problems with parking lot ponding were observed. The site features no concrete curbing due to sheet drainage storm water management design. Concrete sidewalks are not properly sloped in all locations, but are located to provide a logical flow of pedestrian traffic, and are in fair condition. Trash pick-up and service drive pavement is heavy duty, is in fair condition, and is not equipped with a concrete pad area for dumpsters. Exterior steps, stairwells, and handrails are in fair condition, with some pipe railing needing to be repainted. Site fencing is primarily chain link, and located along the perimeter of the parking lot and drive adjacent to the ravine, and is in fair to poor condition. Fencing is also present which can separate playgrounds from vehicular traffic when the gates are closed. Other fencing along the property boundaries appears to belong to the individual residences adjacent to the school. The playground equipment is primarily constructed of coated steel and high density plastic, and is in fair condition. Playground equipment is placed to provide compliant fall zones, and on a compliant wood fiber mulch sufficient and a combination of hard and compliant soft surfaces, with a basketball court, dropshot, funnel ball being provided on an asphalt surface in fair condition. Replacement of playground equipment would allow for inclusion of more ADA-compliant play structures. The site is not equipped with sufficient tables and benches, and those provided are in fair to poor condition. The athletic facilities are comprised of basketball courts, hard-surface play spaces, and playing fields, and are in fair condition. The playing fields are located on the northern half of the site on the other side of the ravine which may limit ease of use for programmed activities. Site features are suitable for outdoor instruction, which is enhanced through the District's provision of playground and related athletic equipment.

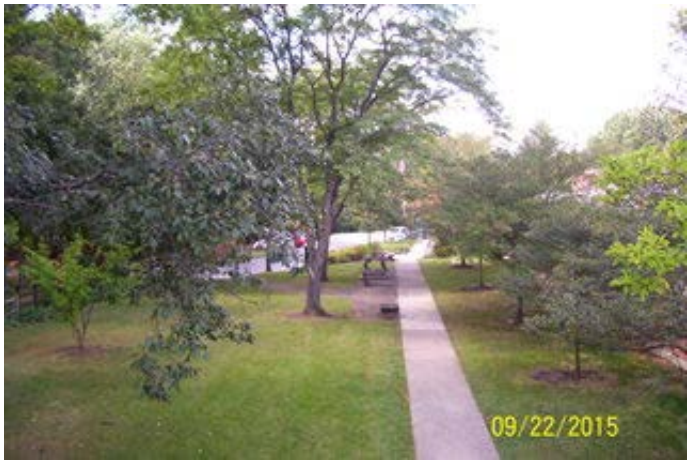
Rating: 2 Needs Repair

Recommendations: Provide on-site bus loop. Provide erosion stabilization work adjacent to ravine. Provide new chain link fencing where grade is steep adjacent to ravine. Provide new heavy duty concrete dumpster pad. Repaint exterior handrails where required. Provide new playground equipment. Provide new asphalt wearing course as required for areas in poor condition.

Item	Cost	Unit	Whole Building	Original Construction (1955) 20,924 ft²	Addition 1 (1957) 4,947 ft²	Addition 2 (1966) 8,573 ft²	Addition 3 (1979) 2,558 ft²	Addition 4 (1987) 6,576 ft²	Sum	Comments
Playground Equipment:	$1.50	sq.ft. (Qty)		20,924 Required	4,947 Required	8,573 Required	2,558 Required	6,576 Required	$65,367.00	(up to $100,000, per sq.ft. of school)
Removal of existing Playground Equipment:	$2,000.00	lump sum		Required	Required	Required	Required	Required	$10,000.00	
Asphalt Paving / New Wearing Course:	$19.00	sq. yard		2,000 Required					$38,000.00	(includes minor crack repair in less than 5% of paved area)
Bus Drop-Off for Elementary	$110.00	per student		400 Required					$44,000.00	(**Number of students should be rounded up to the nearest 100.** $5500 per bus; 40 students per bus; 80% of elementary school students riding)
Stabilize soil erosion:	$2.50	sq.ft. (Qty)		50,000 Required					$125,000.00	(includes stripping and re-grading)
Provide Concrete Dumpster Pad:	$2,400.00	each		1 Required					$2,400.00	(for two dumpsters)
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	$65,367.00	Include this one **or** the next. (Each addition should have this item)
Other: repaint steel handrails	$5.00	ln.ft.		50 Required		10 Required		100 Required	$800.00	Repaint handrails.
Other: Replace Chain Link Fencing	$20.00	ln.ft.		500 Required					$10,000.00	Chain link fencing.
Sum:			$410,934.00	$334,422.00	$16,841.00	$27,769.00	$9,674.00	$22,228.00		



Parking & Play Area



Typical Site Landscape

Back to Assessment Summary

Q. Sewage System

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

Rating: 1 Satisfactory

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

Item	Cost	Unit	Whole Building	Original Construction (1955) 20,924 ft²	Addition 1 (1957) 4,947 ft²	Addition 2 (1966) 8,573 ft²	Addition 3 (1979) 2,558 ft²	Addition 4 (1987) 6,576 ft²	Sum	Comments
Sum:			$0.00	$0.00	$0.00	$0.00	$0.00	$0.00		

Kitchen Sink Waste

Back to Assessment Summary

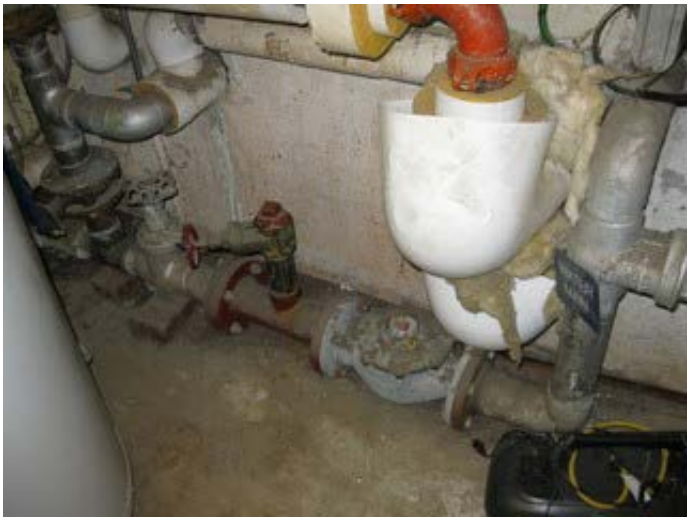
R. Water Supply

Description: The domestic water supply system is tied in to the city system, features 3'' service and 3'' water meter, 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 not equipped with a water booster pump. The system provides adequate pressure for the future needs of the school.

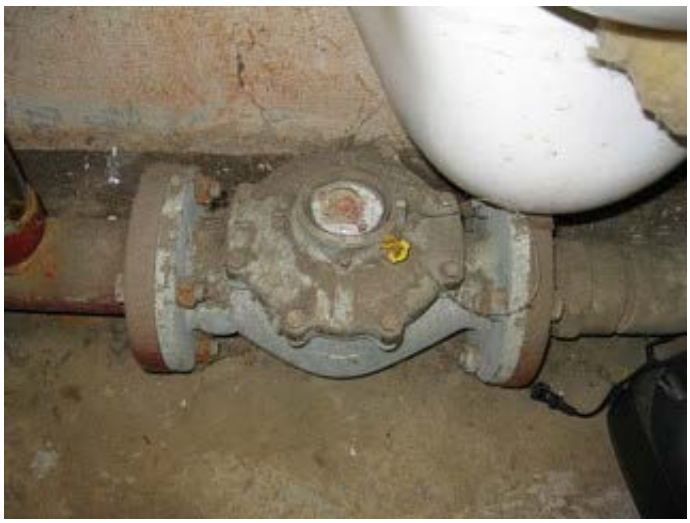
Rating: 1 Satisfactory

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

Item	Cost	Unit	Whole Building	Original Construction (1955)	Addition 1 (1957)	Addition 2 (1966)	Addition 3 (1979)	Addition 4 (1987)	Sum	Comments
				20,924 ft²	4,947 ft²	8,573 ft²	2,558 ft²	6,576 ft²		
Sum:			$0.00	$0.00	$0.00	$0.00	$0.00	$0.00		



Water Main



Water Meter

Back to Assessment Summary

S. Exterior Doors

Description: Typical exterior doors in the 1955 Original Construction and in the 1957 Addition are wood type construction, installed on wood frames, and in poor condition. Typical exterior doors feature single glazed unprotected vision panels, and inappropriate hardware. Typical exterior doors in the 1966 Addition are wood type construction, installed on hollow metal frames, and in fair condition. Typical exterior doors feature single glazed unprotected vision panels, and appropriate hardware. There are no exterior doors associated with the 1979 Addition. Typical exterior doors in the 1987 Addition are metal doors installed on hollow metal frames, and in good condition. Typical exterior doors feature single glazed tempered glass vision panels, and appropriate hardware. Entrance doors in the 1955 Original Construction and in the 1957, 1966, 1979 Additions are wood type construction, installed on wood frames, and in fair condition. Entrance doors feature single glazed unprotected vision panels, transoms, sidelights, and appropriate hardware. Entrance doors in the 1987 Addition are aluminum type construction, installed on aluminum frames, and in good condition. Entrance doors feature double glazed tempered glass vision panels, transoms, sidelights, and appropriate hardware. The facility is not equipped with any roof access doors. There are no overhead doors in the facility.

Rating: 3 Needs Replacement

Recommendations: Replace all exterior and entrance doors in the Original Building, 1957 Addition, and 1966 Additions to comply with Ohio Building Code, ADA, and Ohio School Design Manual guidelines.

Item	Cost	Unit	Whole Building	Original Construction (1955) 20,924 ft²	Addition 1 (1957) 4,947 ft²	Addition 2 (1966) 8,573 ft²	Addition 3 (1979) 2,558 ft²	Addition 4 (1987) 6,576 ft²	Sum	Comments
Door Leaf/Frame and Hardware:	$2,000.00	per leaf		5 Required	2 Required	12 Required			$38,000.00	(includes removal of existing)
Fire Door Replacement	$1,100.00	each		1 Required			5 Required	5 Required	$12,100.00	(Hazardous Material Replacement Cost - See T.)
Sum:			$50,100.00	$11,100.00	$4,000.00	$24,000.00	$5,500.00	$5,500.00		

Original Building Wood Entrance Doors

1987 Entrance Doors to Remain

Back to Assessment Summary

T. Hazardous Material

Description: The School District provided the AHERA Three Year Reinspection Reports, prepared by Gandee & Associates, Inc. and dated May 2014, documenting known and assumed locations of asbestos and other hazardous materials. The district did not provide documentation of any abatement projects since that time. In the 1955 Original Construction , Resilient Floor Covering and Mastic containing hazardous materials are reported and with no level of condition. These materials were described in the report to be in non-friable condition with no reported damage. (11905 SF) Additionally, one fire door at the boiler room was reported, also non-friable. In the 1957 Addition, Flooring Mastic containing hazardous materials are are reported and with no level of condition. These materials were described in the report to be in non-friable condition with no reported damage. (3120 SF) In the 1966 Addition , Resilient Floor Covering and Flooring Mastic containing hazardous materials are reported and with no level of condition. These materials were described in the report to be in non-friable condition with no reported damage. (6640 SF) Additionally, Acoustic Panel/Tile is reported as friable, in good condition, with light damage and requiring further analysis. (2204 SF) In the 1980 Addition , Flooring Mastic containing hazardous materials are reported and with no level of condition. These materials were described in the report to be in non-friable condition with no reported damage. (545 SF) Additionally, five fire doors were reported, also non-friable. In the 1988 Addition , Resilient Floor Covering containing hazardous materials are reported and with no level of condition. These materials were described in the report to be in non-friable condition with no reported damage. (760 SF) Additionally, five fire doors were reported, also non-friable. 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, as noted in the attached AHERA Three Year Reinspection Report. 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 (1955) 20,924 ft²	Addition 1 (1957) 4,947 ft²	Addition 2 (1966) 8,573 ft²	Addition 3 (1979) 2,558 ft²	Addition 4 (1987) 6,576 ft²	Sum	Comments
Environmental Hazards Form				EEHA Form	EEHA Form	EEHA Form	EEHA Form	EEHA Form	—	
Fluorescent Lamps & Ballasts Recycling/Incineration	$0.10	sq.ft. (Qty)		20,924 Required	4,947 Required	8,573 Required	2,558 Required	6,576 Required	$4,357.80	
Fire Door Removal	$100.00	each		1 Required	0 Required	0 Required	5 Required	5 Required	$1,100.00	See S
Resilient Flooring Removal, Including Mastic	$3.00	sq.ft. (Qty)		11,905 Required	0 Required	6,640 Required	0 Required	760 Required	$57,915.00	See J
Carpet Mastic Removal	$2.00	sq.ft. (Qty)		0 Required	3,120 Required	0 Required	545 Required	0 Required	$7,330.00	
Acoustical Tile Mastic Removal	$3.00	sq.ft. (Qty)		0 Required	0 Required	2,204 Required	0 Required	0 Required	$6,612.00	
Sum:			$77,314.80	$37,907.40	$6,734.70	$27,389.30	$1,845.80	$3,437.60		

Back to Assessment Summary

U. Life Safety

Description: The overall facility is not equipped an automated fire suppression system. Exit Corridors are situated such that dead-end Corridors are not present. Stair towers and guardrails are not present in this single story structure. The facility does not have any exterior stairways from intermediate floors. The Kitchen hood is in poor condition, and is equipped with the required UL 300 compliant wet chemical fire suppression system. The cooking equipment is not interlocked to shut down in the event of discharge of the fire suppression system. 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 city 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 interlock to de-energize cooking equipment upon discharge of the Kitchen hood fire suppression system.

Item	Cost	Unit	Whole Building	Original Construction (1955) 20,924 ft²	Addition 1 (1957) 4,947 ft²	Addition 2 (1966) 8,573 ft²	Addition 3 (1979) 2,558 ft²	Addition 4 (1987) 6,576 ft²	Sum	Comments
Sprinkler / Fire Suppression System:	$3.20	sq.ft. (Qty)		20,757 Required	4,780 Required	8,406 Required	2,390 Required	6,409 Required	$136,774.40	(includes increase of service piping, if required)
Other: Interlock Cooking Equipment with Hood Suppression System	$2,500.00	each		1 Required					$2,500.00	Includes the installation of interlocking the cooking equipment with the hood suppression system.
Sum:			$139,274.40	$68,922.40	$15,296.00	$26,899.20	$7,648.00	$20,508.80		

Kitchen Hood

Back to Assessment Summary

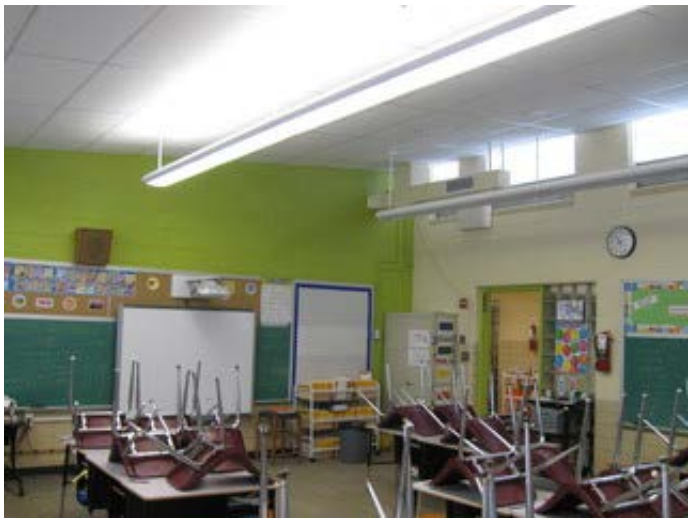
V. Loose Furnishings

Description: The typical Classroom furniture is mismatched, and in generally good condition, consisting of student desks & chairs, teacher desks & chairs, desk height file cabinets, reading tables, computer workstations, bookcases, wastebaskets, and other. The facility's furniture and loose equipment were evaluated in item 6.17 in the CEFPI section of this report, and on a scale of 1 to 10 the overall facility received a rating of 6 due to observed conditions, and due to the fact that it lacks some of the Design Manual required elements.

Rating: 3 Needs Replacement

Recommendations: Provide for replacement of outdated or inadequate furnishings.

Item	Cost	Unit	Whole Building	Original Construction (1955) 20,924 ft²	Addition 1 (1957) 4,947 ft²	Addition 2 (1966) 8,573 ft²	Addition 3 (1979) 2,558 ft²	Addition 4 (1987) 6,576 ft²	Sum	Comments
CEFPI Rating 6	$3.00	sq.ft. (of entire building addition)		Required	Required	Required	Required	Required	$130,734.00	
Sum:			$130,734.00	$62,772.00	$14,841.00	$25,719.00	$7,674.00	$19,728.00		



Classroom

Classroom

Back to Assessment Summary

W. Technology

Description: The typical Classroom is equipped with the required four technology data ports for student use, one data port for teacher use, one voice port with a digitally based phone system, one cable port and monitor, and a 2-way PA system that can be initiated by either party to meet Ohio School Design Manual requirements. The facility is equipped with a centralized clock system. Specialized electrical / sound system requirements of Gymnasium, Stage, Student Dining, and Music spaces are inadequately provided, and in good condition. OSDM-compliant computer network infrastructure is provided. The facility does contain a media distribution center, and provides Computer Labs for use by students.

Rating: 3 Needs Replacement

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

Item	Cost	Unit	Whole Building	Original Construction (1955) 20,924 ft²	Addition 1 (1957) 4,947 ft²	Addition 2 (1966) 8,573 ft²	Addition 3 (1979) 2,558 ft²	Addition 4 (1987) 6,576 ft²	Sum	Comments
ES portion of building with total SF < 50,000	$13.18	sq.ft. (Qty)		20,924 Required	4,957 Required	8,573 Required	2,588 Required	6,576 Required	$574,885.24	
Sum:			$574,885.24	$275,778.32	$65,333.26	$112,992.14	$34,109.84	$86,671.68		

Projector

Smartboard

Back to Assessment Summary

X. Construction Contingency / Non-Construction Cost

Renovation Costs (A-W)		$6,234,774.34
7.00%	Construction Contingency	$436,434.20
Subtotal		$6,671,208.54
16.29%	Non-Construction Costs	$1,086,739.87
Total Project		**$7,757,948.42**

Construction Contingency	$436,434.20
Non-Construction Costs	$1,086,739.87
Total for X.	**$1,523,174.08**

Non-Construction Costs Breakdown		
Land Survey	0.03%	$2,001.36
Soil Borings / Phase I Envir. Report	0.10%	$6,671.21
Agency Approval Fees (Bldg. Code)	0.25%	$16,678.02
Construction Testing	0.40%	$26,684.83
Printing - Bid Documents	0.15%	$10,006.81
Advertising for Bids	0.02%	$1,334.24
Builder’s Risk Insurance	0.12%	$8,005.45
Design Professional’s Compensation	7.50%	$500,340.64
CM Compensation	6.00%	$400,272.51
Commissioning	0.60%	$40,027.25
Non-Construction Contingency (includes partnering and mediation services)	1.12%	$74,717.54
Total Non-Construction Costs	**16.29%**	**$1,086,739.87**

Back to Assessment Summary

Name of Appraiser	Holly Grambort	**Date of Appraisal**	2015-09-22
Building Name	Colonial Hills Elem		
Street Address	5800 Greenwich		
City/Town, State, Zip Code	Worthington, OH 43085		
Telephone Number(s)	(614) 450-5400		
School District	Worthington City		

Setting: Suburban

Site-Acreage	12.53	Building Square Footage	43,578
Grades Housed	K-6	Student Capacity	498
Number of Teaching Stations	20	Number of Floors	1
Student Enrollment	402		
Dates of Construction	1955,1957,1966,1979,1987		

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	**Exterior Surfacing**	**Floor Construction**
☐ Load bearing masonry	☐ Brick	☐ Wood Joists
☐ Steel frame	☐ Stucco	☐ Steel Joists
☐ Concrete frame	☐ Metal	☐ Slab on grade
☐ Wood	☐ Wood	☐ Structural slab
☐ Steel Joists	☐ Stone	

Back to Assessment Summary

1.0 The School Site

School Facility Appraisal

			Points Allocated	Points
1.1		**Site is large enough** to meet educational needs as defined by state and local requirements	25	5
		The site is 12.5 acres compared to 28 acres required by the OSDM.		
1.2		**Site is easily accessible** and conveniently located for the present and future population	20	16
		The School is centrally located within the district that it serves, and is easily accessible.		
1.3		**Location** is removed from undesirable business, industry, traffic, and natural hazards	10	8
		The site is adjacent to residential uses, which are suitable for educational instruction.		
1.4		Site is **well landscaped and developed** to meet educational needs	10	7
		The site is moderately landscaped with mature shade trees, and shrubs which define the property and emphasize the building entrance. Lawn areas where mowing is required do not exceed 3:1 slope.		
1.5	ES	Well equipped **playgrounds are separated** from streets and parking areas	10	7
	MS	Well equipped **athletic and intermural areas are separated** from streets and parking		
	HS	Well equipped **athletic areas** are adequate with sufficient solid-surface parking		
		Playground areas consist of metal and composite plastic type play equipment, which is in good 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 provided to separate vehicular traffic from pedestrians. Hard surface play areas provide educational features painted on an asphalt surface, which is in good condition. A basketball court is provided on the hard surface, and some areas are separated from vehicular use areas with a fence. Athletic facilities include a multi-purpose field, softball/kickball field, a track, which are provided with proper separation from vehicular use areas.		
1.6		**Topography** is varied enough to provide desirable appearance and without steep inclines	5	4
		The site is gently sloped to provide positive drainage across the site. A flat area is provided to accommodate buildings, perimeter walks, vehicular circulation, parking areas, outdoor play areas, and physical education spaces, and is desirable.		
1.7		Site has stable, well drained **soil free of erosion**	5	4
		Soils appear to be stable and well drained, and no erosion was observed.		
1.8		Site is suitable for **special instructional needs**, e.g., outdoor learning	5	4
		The site has been developed to accommodate outdoor learning, including benches and picnic tables to facilitate instruction.		
1.9		**Pedestrian services** include adequate sidewalk with designated crosswalks, curb cuts, and correct slopes	5	4
		Sidewalks are adequately provided to accommodate safe pedestrian circulation including designated crosswalks, curb cuts, and correct slopes.		
1.10	ES/MS	Sufficient **on-site, solid surface parking** for faculty and staff is provided	5	4
	HS	Sufficient **on-site, solid surface parking** is provided for faculty, students, staff and community		
		Adequate parking is provided for faculty, staff, community and student parking, and is located on asphalt pavement in good condition.		
		TOTAL - The School Site	**100**	**63**

Back to Assessment Summary

2.0 Structural and Mechanical Features

School Facility Appraisal

Structural		Points Allocated	Points
2.1	Structure meets all **barrier-free** requirements both externally and internally	15	2
	Entire building is not ADA-compliant, with the exception of door hardware and corridor water coolers.		
2.2	**Roofs** appear sound, have positive drainage, and are weather tight	15	6
	The roofs over the entire building are in fair condition but require replacement due to age of systems.		
2.3	**Foundations** are strong and stable with no observable cracks	10	9
	Foundations are in good condition with no observable cracks.		
2.4	**Exterior and interior walls** have sufficient expansion joints and are free of deterioration	10	5
	Exterior and interior walls are in fair condition, have sufficient control and expansion joints which are starting to show signs of deterioration.		
2.5	**Entrances and exits** are located so as to permit efficient student traffic flow	10	6
	Due to multiple additions, circulation throughout the building is confusing. Entry and exit points to the building have been adequately provided.		
2.6	**Building ''envelope''** generally provides for energy conservation (see criteria)	10	8
	Building envelope meets minimum energy requirements.		
2.7	Structure is **free of friable asbestos** and **toxic materials**	10	4
	The building is reported to contain asbestos and other hazardous materials.		
2.8	Interior walls permit sufficient **flexibility** for a variety of class sizes	10	4
	Interior walls throughout the facility are fixed walls and are not flexible.		

Mechanical/Electrical		Points Allocated	Points
2.9	**Adequate light sources** are well maintained, and properly placed and are not subject to overheating	15	12
	Adeqaute light sources are well maintained and properly place, fixtures are not subject to overheating.		
2.10	**Internal water supply** is adequate with sufficient pressure to meet health and safety requirements	15	14
	Water pressure was measured at 60 PSI.		
2.11	Each teaching/learning area has adequate convenient **wall outlets**, phone and computer cabling for technology applications	15	7
	Computer cabling for technology is adeqautley installed, electrical wall outlets are inadeqautely installed throughout the space.		

2.12	**Electrical controls** are safely protected with **disconnect switches** easily accessible	10	2
	Electrical controls are placed in hard to access areas and no longer comply with NEC.		
2.13	**Drinking fountains** are adequate in number and placement, and are properly maintained including provisions for the disabled	10	4
	Drinking fountains are not adequate in number and placement, and do not meet ADA requirements. Drinking fountains are properly maintained.		
2.14	Number and size of **restrooms meet requirements**	10	2
	The number and size of Restrooms do not meet requirements.		
2.15	**Drainage systems** are properly maintained and meet requirements	10	5
	The gutters and downspouts are in poor condition and are properly located. The roof drains are adequate in number and placement. There are floor drains in the restrooms and the mechanical rooms.		
2.16	**Fire alarms, smoke detectors, and sprinkler systems** are properly maintained and meet requirements	10	4
	Fire alarm devices are adequately installed. There are no smoke or heat detectors installed in the school.		
2.17	**Intercommunication system** consists of a central unit that allows dependable **two-way communication** between the office and instructional areas	10	8
	An intercommunication system is installed.		
2.18	**Exterior water supply** is sufficient and available for normal usage	5	4
	Hose bibs are provided on all sides of the building.		
	TOTAL - Structural and Mechanical Features	**200**	**106**

Back to Assessment Summary

3.0 Plant Maintainability

School Facility Appraisal

		Points Allocated	Points
3.1	**Windows, doors, and walls** are of material and finish requiring minimum maintenance	15	7
	Exterior materials for walls require minimum maintenance. Materials and finishes for doors and windows require substantial maintenance.		
3.2	**Floor surfaces** throughout the building require minimum care	15	6
	Flooring throughout the facility consists of VCT, rubber, carpte tile, and carpet, which is not well maintained throughout the facility.		
3.3	**Ceilings and walls** throughout the building, including service areas, are easily cleaned and resistant to stain	10	6
	Acoustical tile ceilings are not easily cleaned or resistant to stain. Painted block is easily cleaned and resistant to stain. Glazed block is easily cleaned and resistant to stain.		
3.4	**Built-in equipment** is designed and constructed for ease of maintenance	10	4
	Casework consists of miscellaneous wood and metal shelving units in poor condition.		
3.5	**Finishes and hardware**, with compatible keying system, are of durable quality	10	6
	Due to multiple additions throughout the facility, keying systems are not compatible and are worn.		
3.6	**Restroom fixtures** are wall mounted and of quality finish	10	4
	Fixtures are floor and wall mounted and are of poor quality.		
3.7	Adequate **custodial storage space** with water and drain is accessible throughout the building	10	6
	Custodial storage space is adequately located throughout the facility, including provisions for water and drains.		
3.8	Adequate **electrical outlets and power**, to permit routine cleaning, are available in every area	10	4
	There are not adequate electrical outlets installed within the building.		
3.9	**Outdoor light fixtures, electrical outlets**, equipment, and other fixtures are accessible for repair and replacement	10	6
	Outdoor light fixtures are easily maintainable. There are not adequate electrical outlets on the exterior of the building.		
	TOTAL - Plant Maintainability	**100**	**49**

Back to Assessment Summary

4.0 Building Safety and Security

School Facility Appraisal

Site Safety			Points Allocated	Points
4.1		**Student loading areas** are segregated from other vehicular traffic and pedestrian walkways	15	3
		Student loading is not separated from other vehicular traffic.		
4.2		**Walkways**, both on and offsite, are available for safety of pedestrians	10	8
		Walkways are adequately provided both on and off-site for pedestrian safety.		
4.3		**Access streets** have sufficient signals and signs to permit safe entrance to and exit from school area	5	1
		School signs and signals are not located as required on adjacent access streets.		
4.4		**Vehicular entrances and exits** permit safe traffic flow	5	1
		Buses and other vehicular traffic use the same entrance and exit points to the site, which do not provide safe vehicular traffic flow.		
4.5	ES	**Playground equipment** is free from hazard	5	4
	MS	Location and types of **intramural equipment** are free from hazard		
	HS	**Athletic field equipment** is properly located and is free from hazard		
		Playground equipment consists of plastic coated steel and high density plastic type equipment in good condition, appears to be free from hazard, and is located on an approved soft surface material to a sufficient depth.		

Building Safety			Points Allocated	Points
4.6		**The heating unit(s)** is located away from student occupied areas	20	8
		The building has unit ventilators in the classrooms.		
4.7		Multi-story buildings have at least **two stairways** for student egress	15	0
		The overall facility is one story without stairways.		
4.8		**Exterior doors** open outward and are equipped with panic hardware	10	7
		Exterior doors open in the direction of travel and are equipped with panic hardware.		
4.9		**Emergency lighting** is provided throughout the entire building with exit signs on separate electrical circuits	10	8
		Emergency lighting is provided throughout the entire building. Fixtures are powered via emergency battery packs.		
4.10		**Classroom doors** are recessed and open outward	10	4
		Classroom doors are not recessed from the Corridor and open outward, which impede traffic flow in the Corridors.		
4.11		**Building security systems** are provided to assure uninterrupted operation of the educational program	10	5

Building security system is equipped with door sensors and intrusion detection. There are no cameras in corridors, gathering areas and areas where there are 6 or more computers.

4.12	**Flooring** (including ramps and stairways) is maintained in a non-slip condition	5	4

Terrazzo and VCT flooring have been well maintained throughout the facility.

4.13	**Stair risers** (interior and exterior) do not exceed 6 1/2 inches and range in number from 3 - 16	5	0

The overall facility is one story without stairways.

4.14	**Glass** is properly located and protected with wire or safety material to prevent accidental student injury	5	1

Glass lights within the classroom doors are not tempered or provided with a wire mesh for safety.

4.15	**Fixed Projections** in the traffic areas do not extend more than eight inches from the corridor wall	5	2

Water coolers extend more than eight inches from the Corridor wall, which impede traffic flow in the Corridors.

4.16	**Traffic areas** terminate at an exit or a stairway leading to an egress	5	3

Due to multiple additions, circulation throughout the building is confusing. Entry and exit points to the building have been adequately provided.

Emergency Safety		Points Allocated	Points
4.17	Adequate **fire safety equipment** is properly located	15	13

The fire safety equipment is properly located.

4.18	There are at least **two independent exits** from any point in the building	15	12

Multiple exits are provided from Corridors throughout the facility.

4.19	**Fire-resistant materials** are used throughout the structure	15	12

The structure is a masonry load bearing system with steel joist and concrete deck. Interior walls are masonry.

4.20	Automatic and manual **emergency alarm system** with a distinctive sound and flashing light is provided	15	7

A Manual fire alarm system is in place and is equipped with flashing lights and distinctive sounds.

	TOTAL - Building Safety and Security	**200**	**103**

Back to Assessment Summary

5.0 Educational Adequacy

School Facility Appraisal

Academic Learning Space			Points Allocated	Points
5.1		**Size of academic learning areas** meets desirable standards	25	11
		The average Classroom is 850 SF compared to 900 SF required by the OSDM.		
5.2		**Classroom space** permits arrangements for small group activity	15	3
		Undersized Classrooms do not allow sufficient space for effective small group activities.		
5.3		**Location of academic learning areas** is near related educational activities and away from disruptive noise	10	8
		The Gymnasium and Music program are properly isolated from the academic learning areas to reduce distractions.		
5.4		**Personal space** in the classroom away from group instruction allows privacy time for individual students	10	2
		Undersized Classrooms do not permit privacy time for individual students.		
5.5		**Storage for student materials** is adequate	10	2
		Storage cubbies, located in the Classroom, are inadequately provided for student storage. Coat hooks and shelving, located in the Classroom, are inadequately provided for student storage.		
5.6		**Storage for teacher materials** is adequate	10	4
		Miscellaneous wood and metal shelving units are inadequately provided for teacher storage.		

Special Learning Space			Points Allocated	Points
5.7		**Size of special learning area(s)** meets standards	15	3
		Special Education Classrooms are undersized compared to standards.		
5.8		**Design of specialized learning area(s)** is compatible with instructional need	10	4
		Special Education spaces are not adequately provided to meet instructional needs.		
5.9		**Library/Resource/Media Center** provides appropriate and attractive space	10	4
		The Media Center is 1162 SF compared to 1494 SF recommended in the OSDM. (HS/MS/ES)		
5.10		**Gymnasium (or covered P.E. area)** adequately serves physical education instruction	5	4
		The Gymnasium is 4,064 SF compared to 3,500 - 5,000 SF recommended in the OSDM.		
5.11	ES	**Pre-kindergarten and kindergarten space** is appropriate for age of students and nature of instruction	10	6
	MS/HS	**Science** program is provided sufficient space and equipment		

Pre-K and Kindergarten spaces are undersized, and do not provide adequate instruction space.

5.12	**Music Program** is provided adequate sound treated space	5	1

The Music Room is 850SF compared to 1,800-3,000 recommended in the OSDM. Music instruction is provided in a standard Classroom without any sound treatment.

5.13	**Space for art** is appropriate for special instruction, supplies, and equipment	5	4

The Art Room is 1253 SF compared to 1,200 SF recommended in the OSDM. The Art Room is appropriately designed for instruction and includes sufficient space for storage of supplies and equipment.

School Facility Appraisal

		Points Allocated	Points
5.14	**Space for technology education** permits use of state-of-the-art equipment	5	1

The facility is not provided with Computer Labs for student use.

5.15	Space for **small groups and remedial instruction** is provided adjacent to classrooms	5	3

Work Rooms are provided adjacent to the Classrooms for small groups and remedial instruction.

5.16	**Storage for student and teacher material** is adequate	5	2

Storage for teachers and students has not been adequately provided throughout the facility.

Support Space

		Points Allocated	Points
5.17	**Teacher's lounge and work areas** reflect teachers as professionals	10	4

The Teacher's Lounge is 390 SF compared to 450-900 SF, for 8-24 staff, recommended in the OSDM. The Teacher's Lounge does not reflect a professional environment. The Teacher's Lounge does reflect a professional environment and includes adequate work space for preparation of teacher materials. Limited work space is provided for preparation of teacher materials.

5.18	**Cafeteria/Kitchen** is attractive with sufficient space for seating/dining, delivery, storage, and food preparation	10	4

The Student Dining space is 2981 SF compared to 3,000 SF recommended in the OSDM. The Kitchen space is 1006 SF compared to 996 SF recommended in the OSDM. The Student Dining space has limited visual appeal with adequate space for seating.

5.19	**Administrative offices** provided are consistent in appearance and function with the maturity of the students served	5	2

Administrative Offices are not adequately provided for Elementary School students.

5.20	**Counselor's office** insures privacy and sufficient storage	5	2

The space provided for the Counselor does not insure privacy, and lacks sufficient storage space.

5.21	**Clinic** is near administrative offices and is equipped to meet requirements	5	2

The Clinic is 165 SF compared to 370 SF recommended in the OSDM. The Clinic is located within the Administrative Offices and is provided with required equipment. The Clinic is not located within the Administrative Offices and lacks required equipment.

5.22	**Suitable reception space** is available for students, teachers, and visitors	5	2

There is a very small area for reception in the front office.

5.23	**Administrative personnel** are provided **sufficient work space and privacy**	5	2
	Administrative offices are not adequate.		
	TOTAL - Educational Adequacy	**200**	**80**

Back to Assessment Summary

6.0 Environment for Education

School Facility Appraisal

Exterior Environment		Points Allocated	Points
6.1	Overall **design is aesthetically pleasing** to age of students	15	12
	The building is a modern design with modern detailing, which is aesthetically pleasing.		
6.2	Site and building are **well landscaped**	10	6
	The site has limited landscaping, which does not enhance the property or emphasize the building entrance.		
6.3	**Exterior noise and poor environment** do not disrupt learning	10	8
	The site is adjacent to residential uses, and there are no undesirable features adjacent to the school site.		
6.4	**Entrances and walkways** are **sheltered** from sun and inclement weather	10	4
	The main entrance to the School is not sheltered. Exits are not sheltered from sun and inclement weather. On-site walkways to accessory buildings are not covered.		
6.5	**Building materials** provide attractive color and texture	5	4
	Exterior building materials consist of brick and stone which do provide an attractive color and texture. Interior building materials consist of glazed block and ainted block which does provide an attractive color and texture.		

Interior Environment		Points Allocated	Points
6.6	**Color schemes, building materials, and decor** provide an impetus to learning	20	12
	The color palette is comprised of achromatic hues. School colors are not reflected in the athletic areas. The use of repeated colors and materials gives the building some unity and a sense of consistency. Due to multiple additions and multiple building materials, the overall design is inconsistent, which does not enhance learning. Overall building design and materials reflect a dated décor which does not enhance learning.		
6.7	**Year around comfortable temperature and humidity** are provided throughout the building	15	13
	The building has a central air conditioning system. The facility contains rooftop units in isolated areas.		
6.8	**Ventilating system** provides adequate quiet circulation of clean air and meets 15cfm VBC requirement	15	7
	It does not provide the minimum 15 CFM ventilation as required by the OBCMC.		
6.9	**Lighting system** provides proper intensity, diffusion, and distribution of illumination	15	6
	Lighting system provides improper lighting levels.		
6.10	**Drinking fountains and restroom facilities** are conveniently located	15	3
	Drinking fountains and Restroom facilities are not conveniently located.		
6.11	**Communication among students** is enhanced by commons area(s) for socialization	10	6
	There are areas for students to gather in the Student Dining area, Auditorium, and Gymnasium, as well as a small gathering area at the entrance to the school.		

6.12	**Traffic flow** is aided by appropriate foyers and corridors	10	4
	Classroom doorways are not recessed and impede traffic flow.		
6.13	**Areas for students to interact** are suitable to the age group	10	4
	There are limited areas for students to gather outside of the Student Dining area and Gymnasium. The small gathering area at the entrance to the school is unsuitable for groups.		
6.14	**Large group areas are designed** for effective management of students	10	6
	The Gymnasium is adequately designed to manage large groups of students.		
6.15	**Acoustical treatment** of ceilings, walls, and floors provides effective sound control	10	4
	Limited consideration has been given to acoustical treatment of Classrooms and Corridors.		
6.16	**Window design** contributes to a pleasant environment	10	2
	The windows are not designed well, and do not contribute to a pleasant environment.		
6.17	**Furniture and equipment** provide a pleasing atmosphere	10	6
	Classroom furniture is consistent in design and in good condition.		
	TOTAL - Environment for Education	**200**	**107**

Back to Assessment Summary

LEED Observation Notes

School District:	Worthington City
County:	Franklin
School District IRN:	45138
Building:	Colonial Hills Elem
Building IRN:	6999

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)

A major renovation to the school may be able to attain points in several site-related areas. Alternative Transportation points may be possible with the addition of parking areas designated for low-emission vehicles and car pools. Bike racks are provided and changing rooms could be added. Other transportation credits are unlikely to be achieved due to the schools relatively suburban location. A reduction in impervious paving, and use of alternative paving materials could aid in achieving Stormwater Design and Heat Island Effect Nonroof points. The school has a light colored, and therefore light-reflective, high-albedo roof material which could qualify for Heat Island Effect Roof points. Light Pollution Reduction could be achieved with updates to the site lighting.

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)

Installing more efficient fixtures, reducing or eliminating water usage for landscaping and playfields, and incorporating innovative wastewater technologies may all be opportunities to achieve points in this category.

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)

Replacement of the HVAC systems would be necessary to achieve many of the energy-related points in this category. Metering and commissioning should be included in those efforts. On-Site Renewable Energy credits may be attainable with wind or solar installations. Green Power credits may also be attainable.

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 then 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)

Depending on future programmatic needs, it may be possible to renovate the building in such a way as to achieve Building Reuse credits. Construction Waste Management credits should be considered, but may be difficult to achieve due to the schools small town setting. Due to the age of the school, it is unlikely that many materials could be salvaged for reuse. However, replacement interior finishes can be specified in order to be compliant with LEED guidelines, including products that would help achieve Recycled Content, Regional Materials, and Rapidly Renewable Materials, and/or Certified Wood credits.

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)

As noted in Energy & Atmosphere, replacement of the HVAC systems would be necessary to achieve several of these credits, including Outdoor Air Delivery Monitoring, Increased Ventilation, Controllability of Systems Thermal Comfort, both Thermal Comfort credits. The Low Emitting Materials credit could be achieved with proper specification of finishes and applications. Other credits in this category that could be realized are Controllability of Systems Lighting, both Daylight and Views, and Mold Prevention.

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)

For a major renovation project such as would be needed at the school, a LEED AP should be part of the A/E team and his or her inclusion would garner one ID point. The School as a Teaching Tool credit would be the next most easily achieved in this category. Instituting green cleaning strategies should also be considered.

Justification for Allocation of Points

Building Name and Level: **Colonial Hills Elem**

K-6

Building features that clearly exceed criteria:

1. Physical education facilities provide adequate space and are well maintained.
2.
3.
4.
5.
6.

Building features that are non-existent or very inadequate:

1. Overall building is not ADA accessible.
2. The building is reported to contain asbestos and other hazardous materials.
3. Computer Labs are not provided for student use.
4. The site does not provide for adequate designated bus and vehicular loading/unloading zones.
5.
6.

Back to Assessment Summary

Environmental Hazards Assessment Cost Estimates

Owner:	Worthington City
Facility:	Colonial Hills Elem
Date of Initial Assessment:	Sep 22, 2015
Date of Assessment Update:	Dec 23, 2015
Cost Set:	2015

District IRN:	45138
Building IRN:	6999
Firm:	Van Auken Akins Architects

Scope remains unchanged after cost updates.

Building Addition	Addition Area (sf)	Total of Environmental Hazards Assessment Cost Estimates	
		Renovation	Demolition
1955 Original Construction	20,924	$37,907.40	$37,907.40
1957 Addition 1	4,947	$6,734.70	$6,734.70
1966 Addition 2	8,573	$27,389.30	$27,389.30
1979 Addition 3	2,558	$1,845.80	$1,845.80
1987 Addition 4	6,576	$3,437.60	$3,437.60
Total	43,578	$77,314.80	$77,314.80
Total with Regional Cost Factor (100.00%)	—	$77,314.80	$77,314.80
Regional Total with Soft Costs & Contingency	—	$96,203.04	$96,203.04

Environmental Hazards(Enhanced) - Worthington City (45138) - Colonial Hills Elem (6999) - Original Construction

Owner:	Worthington City	**Bldg. IRN:**	6999
Facility:	Colonial Hills Elem	**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	Not Present	0	$10.00	$0.00
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	Assumed Asbestos-Containing Material	1	$100.00	$100.00
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	Not Present	0	$300.00	$0.00
28.	Window Component (Compound, Tape, or Caulk) - Reno Only	Not Present	0	$300.00	$0.00
29.	Resilient Flooring Removal, Including Mastic	Assumed Asbestos-Containing Material	11905	$3.00	$35,715.00
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)	**Total Asb. Hazard Abatement Cost for Renovation Work**			$35,815.00
36.	(Sum of Lines 1-34)	**Total Asb. Hazard Abatement Cost for Demolition Work**			$35,815.00

B. Removal Of Underground Storage Tanks ☐ None Reported

	Tank No.	Location	Age	Product Stored	Size	Est.Rem.Cost
1.	(Sum of Lines 1-0)			**Total Cost For Removal Of Underground Storage Tanks**		$0.00

C. Lead-Based Paint (LBP) - Renovation Only ☐ 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)	**Total Cost for Lead-Based Paint Mock-Ups**	$0.00

D. Fluorescent Lamps & Ballasts Recycling/Incineration ☐ Not Applicable

	Area Of Building Addition	Square Feet w/Fluorescent Lamps & Ballasts	Unit Cost	Total Cost
1.	20924	20924	$0.10	$2,092.40

E. Other Environmental Hazards/Remarks ☐ None Reported

		Description	Cost Estimate
1.	(Sum of Lines 1-0)	**Total Cost for Other Environmental Hazards - Renovation**	$0.00
2.	(Sum of Lines 1-0)	**Total Cost for Other Environmental Hazards - Demolition**	$0.00

F. Environmental Hazards Assessment Cost Estimate Summaries

1.	A35, B1, C3, D1, and E1	**Total Cost for Env. Hazards Work - Renovation**	$37,907.40
2.	A36, B1, D1, and E2	**Total Cost for Env. Hazards Work - Demolition**	$37,907.40

* 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"×12" 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(Enhanced) - Worthington City (45138) - Colonial Hills Elem (6999) - Addition 1

Owner:	Worthington City	**Bldg. IRN:**	6999
Facility:	Colonial Hills Elem	**BuildingAdd:**	Addition 1
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	Not Present	0	$10.00	$0.00
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	Not Present	0	$100.00	$0.00
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	Not Present	0	$300.00	$0.00
28.	Window Component (Compound, Tape, or Caulk) - Reno Only	Not Present	0	$300.00	$0.00
29.	Resilient Flooring Removal, Including Mastic	Not Present	0	$3.00	$0.00
30.	Carpet Mastic Removal	Assumed Asbestos-Containing Material	3120	$2.00	$6,240.00
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)	**Total Asb. Hazard Abatement Cost for Renovation Work**			$6,240.00
36.	(Sum of Lines 1-34)	**Total Asb. Hazard Abatement Cost for Demolition Work**			$6,240.00

B. Removal Of Underground Storage Tanks ☐ None Reported

	Tank No.	Location	Age	Product Stored	Size	Est.Rem.Cost
1.	(Sum of Lines 1-0)			**Total Cost For Removal Of Underground Storage Tanks**		$0.00

C. Lead-Based Paint (LBP) - Renovation Only ☐ 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)	**Total Cost for Lead-Based Paint Mock-Ups**	$0.00

D. Fluorescent Lamps & Ballasts Recycling/Incineration ☐ Not Applicable

	Area Of Building Addition	Square Feet w/Fluorescent Lamps & Ballasts	Unit Cost	Total Cost
1.	4947	4947	$0.10	$494.70

E. Other Environmental Hazards/Remarks ☐ None Reported

	Description		Cost Estimate
1.	(Sum of Lines 1-0)	**Total Cost for Other Environmental Hazards - Renovation**	$0.00
2.	(Sum of Lines 1-0)	**Total Cost for Other Environmental Hazards - Demolition**	$0.00

F. Environmental Hazards Assessment Cost Estimate Summaries

1.	A35, B1, C3, D1, and E1	**Total Cost for Env. Hazards Work - Renovation**	$6,734.70
2.	A36, B1, D1, and E2	**Total Cost for Env. Hazards Work - Demolition**	$6,734.70

* 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"×12" 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(Enhanced) - Worthington City (45138) - Colonial Hills Elem (6999) - Addition 2

Owner:	Worthington City	**Bldg. IRN:**	6999
Facility:	Colonial Hills Elem	**BuildingAdd:**	Addition 2
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	Not Present	0	$10.00	$0.00
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	Not Present	0	$100.00	$0.00
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	Not Present	0	$300.00	$0.00
28.	Window Component (Compound, Tape, or Caulk) - Reno Only	Not Present	0	$300.00	$0.00
29.	Resilient Flooring Removal, Including Mastic	Assumed Asbestos-Containing Material	6640	$3.00	$19,920.00
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	Assumed Asbestos-Containing Material	2204	$3.00	$6,612.00
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)	**Total Asb. Hazard Abatement Cost for Renovation Work**			$26,532.00
36.	(Sum of Lines 1-34)	**Total Asb. Hazard Abatement Cost for Demolition Work**			$26,532.00

B. Removal Of Underground Storage Tanks ☐ None Reported

	Tank No.	Location	Age	Product Stored	Size	Est.Rem.Cost
1.	(Sum of Lines 1-0)			**Total Cost For Removal Of Underground Storage Tanks**		$0.00

C. Lead-Based Paint (LBP) - Renovation Only ☐ 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)	**Total Cost for Lead-Based Paint Mock-Ups**	$0.00

D. Fluorescent Lamps & Ballasts Recycling/Incineration ☐ Not Applicable

	Area Of Building Addition	Square Feet w/Fluorescent Lamps & Ballasts	Unit Cost	Total Cost
1.	8573	8573	$0.10	$857.30

E. Other Environmental Hazards/Remarks ☐ None Reported

	Description		Cost Estimate
1.	(Sum of Lines 1-0)	**Total Cost for Other Environmental Hazards - Renovation**	$0.00
2.	(Sum of Lines 1-0)	**Total Cost for Other Environmental Hazards - Demolition**	$0.00

F. Environmental Hazards Assessment Cost Estimate Summaries

1.	A35, B1, C3, D1, and E1	**Total Cost for Env. Hazards Work - Renovation**	$27,389.30
2.	A36, B1, D1, and E2	**Total Cost for Env. Hazards Work - Demolition**	$27,389.30

* 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"×12" 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(Enhanced) - Worthington City (45138) - Colonial Hills Elem (6999) - Addition 3

Owner:	Worthington City	**Bldg. IRN:**	6999
Facility:	Colonial Hills Elem	**BuildingAdd:**	Addition 3
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	Not Present	0	$10.00	$0.00
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	Assumed Asbestos-Containing Material	5	$100.00	$500.00
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	Not Present	0	$300.00	$0.00
28.	Window Component (Compound, Tape, or Caulk) - Reno Only	Not Present	0	$300.00	$0.00
29.	Resilient Flooring Removal, Including Mastic	Not Present	0	$3.00	$0.00
30.	Carpet Mastic Removal	Assumed Asbestos-Containing Material	545	$2.00	$1,090.00
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)	**Total Asb. Hazard Abatement Cost for Renovation Work**			$1,590.00
36.	(Sum of Lines 1-34)	**Total Asb. Hazard Abatement Cost for Demolition Work**			$1,590.00

B. Removal Of Underground Storage Tanks ☐ None Reported

	Tank No.	Location	Age	Product Stored	Size	Est.Rem.Cost
1.	(Sum of Lines 1-0)			**Total Cost For Removal Of Underground Storage Tanks**		$0.00

C. Lead-Based Paint (LBP) - Renovation Only ☐ 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)	**Total Cost for Lead-Based Paint Mock-Ups**	$0.00

D. Fluorescent Lamps & Ballasts Recycling/Incineration ☐ Not Applicable

	Area Of Building Addition	Square Feet w/Fluorescent Lamps & Ballasts	Unit Cost	Total Cost
1.	2558	2558	$0.10	$255.80

E. Other Environmental Hazards/Remarks ☐ None Reported

		Description	Cost Estimate
1.	(Sum of Lines 1-0)	**Total Cost for Other Environmental Hazards - Renovation**	$0.00
2.	(Sum of Lines 1-0)	**Total Cost for Other Environmental Hazards - Demolition**	$0.00

F. Environmental Hazards Assessment Cost Estimate Summaries

1.	A35, B1, C3, D1, and E1	**Total Cost for Env. Hazards Work - Renovation**	$1,845.80
2.	A36, B1, D1, and E2	**Total Cost for Env. Hazards Work - Demolition**	$1,845.80

* 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"×12" 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(Enhanced) - Worthington City (45138) - Colonial Hills Elem (6999) - Addition 4

Owner:	Worthington City	**Bldg. IRN:**	6999
Facility:	Colonial Hills Elem	**BuildingAdd:**	Addition 4
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	Not Present	0	$10.00	$0.00
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	Assumed Asbestos-Containing Material	5	$100.00	$500.00
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	Not Present	0	$300.00	$0.00
28.	Window Component (Compound, Tape, or Caulk) - Reno Only	Not Present	0	$300.00	$0.00
29.	Resilient Flooring Removal, Including Mastic	Assumed Asbestos-Containing Material	760	$3.00	$2,280.00
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)	**Total Asb. Hazard Abatement Cost for Renovation Work**			$2,780.00
36.	(Sum of Lines 1-34)	**Total Asb. Hazard Abatement Cost for Demolition Work**			$2,780.00

B. Removal Of Underground Storage Tanks ☐ None Reported

	Tank No.	Location	Age	Product Stored	Size	Est.Rem.Cost
1.	(Sum of Lines 1-0)			**Total Cost For Removal Of Underground Storage Tanks**		$0.00

C. Lead-Based Paint (LBP) - Renovation Only ☐ 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)	**Total Cost for Lead-Based Paint Mock-Ups**	$0.00

D. Fluorescent Lamps & Ballasts Recycling/Incineration ☐ Not Applicable

	Area Of Building Addition	Square Feet w/Fluorescent Lamps & Ballasts	Unit Cost	Total Cost
1.	6576	6576	$0.10	$657.60

E. Other Environmental Hazards/Remarks ☐ None Reported

	Description		Cost Estimate
1.	(Sum of Lines 1-0)	**Total Cost for Other Environmental Hazards - Renovation**	$0.00
2.	(Sum of Lines 1-0)	**Total Cost for Other Environmental Hazards - Demolition**	$0.00

F. Environmental Hazards Assessment Cost Estimate Summaries

1.	A35, B1, C3, D1, and E1	**Total Cost for Env. Hazards Work - Renovation**	$3,437.60
2.	A36, B1, D1, and E2	**Total Cost for Env. Hazards Work - Demolition**	$3,437.60

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

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