

Building Information - Worthington City (45138) - Worthington Hills Elementary

Program Type	Assessment Only
Setting	Suburban
Assessment Name	Worthington Hills Elementary
Assessment Date (on-site; non-EEA)	2015-09-24
Kitchen Type	Warming Kitchen
Cost Set:	2015
Building Name	Worthington Hills Elementary
Building IRN	64089
Building Address	1221 Candlewood Dr
Building City	Columbus
Building Zipcode	43235
Building Phone	(614) 450-4700
Acreage	12.00
Current Grades:	K-6
Teaching Stations	24
Number of Floors	1
Student Capacity	606
Current Enrollment	461
Enrollment Date	2015-09-14
Enrollment Date is the date in which the current enrollment was taken.	
Number of Classrooms	24
Historical Register	NO
Building's Principal	Joe Jude
Building Type	Elementary

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North elevation photo:



East elevation photo:



South elevation photo:



West elevation photo:



GENERAL DESCRIPTION

52,506 Total Existing Square Footage

1970,1988,1999 Building Dates

K-6 Grades

461 Current Enrollment

24 Teaching Stations

12.00 Site Acreage

Worthington Hills Elementary, which is not on the National Register of Historic Buildings, and originally constructed in 1970, is a single story, 52,506 square foot brick school building located in a suburban residential setting. The existing facility features a conventionally partitioned Open Concept design, and does not utilize modular buildings. The structure of the overall facility contains brick on concrete masonry unit type exterior wall construction, with CMU and metal demountable partitions type wall construction in the interior. The floor system consists of concrete slab on grade. The roof structure is metal form deck on steel bar joist type construction. The roofing system of the overall facility is a mechanically attached PVC system installed in 2010. 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-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 fair. There is dedicated space for school buses to load and unload on the site. Parking for staff, visitors and community events is adequate.

No Significant Findings

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Building Construction Information - Worthington City (45138) - Worthington Hills Elementary (64089)

Name	Year	Handicapped Access	Floors	Square Feet	Non OSDM Addition
Worthington Hills Elementary	1970	yes	1	45,323	no
Addition 1	1988	yes	1	5,037	no
Addition 2	1999	yes	1	2,146	no

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Building Component Information - Worthington City (45138) - Worthington Hills Elementary (64089)

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
Worthington Hills Elementary (1970)		5742		3604	2686		1780							
Addition 1 (1988)		237						1585						
Addition 2 (1999)		1145												
Total	0	7,124	0	3,604	2,686	0	1,780	1,585	0	0	0	0	0	0
Master Planning Considerations														

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Existing CT Programs for Assessment

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Program Type	Program Name	Related Space	Square Feet
No Records Found			

Legend:

Not in current design manual

In current design manual but missing from assessment

Building Summary - Worthington Hills Elementary (64089)

District: Worthington City Name: Worthington Hills Elementary Address: 1221 Candlewood Dr Columbus, OH 43235 Bldg. IRN: 64089						County: Franklin Contact: Joe Jude Phone: (614) 450-4700 Date Prepared: 2015-09-24 Date Revised: 2015-12-30						Area: Central Ohio (0) By: Brian Rubenstein By: Holly Grambort																			
Current Grades		K-6		Acreage:		12.00		CEFPI Appraisal Summary																							
Proposed Grades		N/A		Teaching Stations:		24																									
Current Enrollment		461		Classrooms:		24																									
Projected Enrollment		N/A																													
Addition		Date	HA	Number of Floors		Current Square Feet		Section								Points Possible		Points Earned		Percentage		Rating		Category							
<u>Worthington Hills Elementary</u>		1970	yes	1		45,323		1.0 <u>The School Site</u>								100		68		68%				Borderline							
<u>Addition 1</u>		1988	yes	1		5,037		2.0 <u>Structural and Mechanical Features</u>								200		140		70%				Satisfactory							
<u>Addition 2</u>		1999	yes	1		2,146		3.0 <u>Plant Maintainability</u>								100		59		59%				Borderline							
								4.0 <u>Building Safety and Security</u>								200		141		71%				Satisfactory							
								5.0 <u>Educational Adequacy</u>								200		106		53%				Borderline							
								6.0 <u>Environment for Education</u>								200		120		60%				Borderline							
								<u>LEED Observations</u>								—		—		—				—							
								<u>Commentary</u>								—		—		—				—							
								Total								1000		634		63%				Borderline							
<u>Enhanced Environmental Hazards Assessment Cost Estimates</u>																															
C=Under Contract																															
FACILITY ASSESSMENT Cost Set: 2015														Rating		Dollar Assessment															
		A.		<u>Heating System</u>				1		\$0.00																					
		B.		<u>Roofing</u>				2		\$1,500.00																					
		C.		<u>Ventilation / Air Conditioning</u>				3		\$505,000.00																					
		D.		<u>Electrical Systems</u>				3		\$852,172.38																					
		E.		<u>Plumbing and Fixtures</u>				3		\$93,500.00																					
		F.		<u>Windows</u>				1		\$0.00																					
		G.		<u>Structure: Foundation</u>				2		\$10,000.00																					
		H.		<u>Structure: Walls and Chimneys</u>				2		\$61,900.00																					
		I.		<u>Structure: Floors and Roofs</u>				1		\$0.00																					
		J.		<u>General Finishes</u>				3		\$1,407,933.40																					
		K.		<u>Interior Lighting</u>				3		\$262,530.00																					
		L.		<u>Security Systems</u>				3		\$97,136.10																					
		M.		<u>Emergency/Egress Lighting</u>				3		\$52,506.00																					
		N.		<u>Fire Alarm</u>				3		\$78,759.00																					
		O.		<u>Handicapped Access</u>				3		\$60,411.20																					
		P.		<u>Site Condition</u>				2		\$132,279.00																					
		Q.		<u>Sewage System</u>				1		\$0.00																					
		R.		<u>Water Supply</u>				1		\$0.00																					
		S.		<u>Exterior Doors</u>				2		\$10,000.00																					
		T.		<u>Hazardous Material</u>				3		\$65,250.60																					
		U.		<u>Life Safety</u>				3		\$168,019.20																					
		V.		<u>Loose Furnishings</u>				3		\$157,518.00																					
		W.		<u>Technology</u>				3		\$604,344.06																					
-		X.		<u>Construction Contingency / Non-Construction Cost</u>				-		\$1,128,865.27																					

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Worthington Hills Elementary (1970) Summary

District: Worthington City				County: Franklin		Area: Central Ohio (0)	
Name: Worthington Hills Elementary				Contact: Joe Jude			
Address: 1221 Candlewood Dr Columbus, OH 43235				Phone: (614) 450-4700			
Bldg. IRN: 64089				Date Prepared: 2015-09-24		By: Brian Rubenstein	
				Date Revised: 2015-12-30		By: Holly Grambort	

Current Grades	K-6	Acreage:	12.00	CEFPI Appraisal Summary			
Proposed Grades	N/A	Teaching Stations:	24				
Current Enrollment	461	Classrooms:	24				
Projected Enrollment	N/A						

Section	Points Possible	Points Earned	Percentage	Rating	Category
Cover Sheet	—	—	—	—	—
1.0 <u>The School Site</u>	100	68	68%	Borderline	
2.0 <u>Structural and Mechanical Features</u>	200	140	70%	Satisfactory	
3.0 <u>Plant Maintainability</u>	100	59	59%	Borderline	
4.0 <u>Building Safety and Security</u>	200	141	71%	Satisfactory	
5.0 <u>Educational Adequacy</u>	200	106	53%	Borderline	
6.0 <u>Environment for Education</u>	200	120	60%	Borderline	
LEED Observations	—	—	—	—	—
Commentary	—	—	—	—	—
Total	1000	634	63%	Borderline	

Enhanced Environmental Hazards Assessment Cost Estimates			
C=Under Contract			

FACILITY ASSESSMENT		Rating	Dollar Assessment
Cost Set: 2015			
A. <u>Heating System</u>	1	\$0.00	-
B. <u>Roofing</u>	2	\$1,500.00	-
C. <u>Ventilation / Air Conditioning</u>	3	\$505,000.00	-
D. <u>Electrical Systems</u>	3	\$735,592.29	-
E. <u>Plumbing and Fixtures</u>	3	\$79,500.00	-
F. <u>Windows</u>	1	\$0.00	-
G. <u>Structure: Foundation</u>	2	\$0.00	-
H. <u>Structure: Walls and Chimneys</u>	2	\$48,875.00	-
I. <u>Structure: Floors and Roofs</u>	1	\$0.00	-
J. <u>General Finishes</u>	3	\$1,293,723.70	-
K. <u>Interior Lighting</u>	3	\$226,615.00	-
L. <u>Security Systems</u>	3	\$83,847.55	-
M. <u>Emergency/Egress Lighting</u>	3	\$45,323.00	-
N. <u>Fire Alarm</u>	3	\$67,984.50	-
O. <u>Handicapped Access</u>	3	\$58,689.60	-
P. <u>Site Condition</u>	2	\$121,504.50	-
Q. <u>Sewage System</u>	1	\$0.00	-
R. <u>Water Supply</u>	1	\$0.00	-
S. <u>Exterior Doors</u>	2	\$2,000.00	-
T. <u>Hazardous Material</u>	3	\$64,532.30	-
U. <u>Life Safety</u>	3	\$145,033.60	-
V. <u>Loose Furnishings</u>	3	\$135,969.00	-
W. <u>Technology</u>	3	\$521,667.73	-
- X. <u>Construction Contingency / Non-Construction Cost</u>	-	\$1,010,768.92	-
Total		\$5,148,126.69	

Renovation Cost Factor	100.00%
Cost to Renovate (Cost Factor applied)	\$5,148,126.69

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

Addition 1 (1988) Summary

District: Worthington City Name: Worthington Hills Elementary Address: 1221 Candlewood Dr Columbus, OH 43235 Bldg. IRN: 64089				County: Franklin Area: Central Ohio (0) Contact: Joe Jude Phone: (614) 450-4700 Date Prepared: 2015-09-24 By: Brian Rubenstein Date Revised: 2015-12-30 By: Holly Grambort			
Current Grades		K-6	Acreage:		12.00	CEFPI Appraisal Summary	
Proposed Grades		N/A	Teaching Stations:		24		
Current Enrollment		461	Classrooms:		24		
Projected Enrollment		N/A					
Addition		Date	HA	Number of Floors	Current Square Feet		
Worthington Hills Elementary		1970	yes	1	45,323		
Addition 1		1988	yes	1	5,037		
Addition 2		1999	yes	1	2,146		
Total					52,506		
*HA =		Handicapped Access					
*Rating =1		Satisfactory					
		=2 Needs Repair					
		=3 Needs Replacement					
*Const P/S =		Present/Scheduled Construction					
FACILITY ASSESSMENT				Rating		Dollar Assessment	
Cost Set: 2015							
A. Heating System				1		\$0.00	
B. Roofing				2		\$0.00	
C. Ventilation / Air Conditioning				3		\$0.00	
D. Electrical Systems				3		\$81,750.51	
E. Plumbing and Fixtures				3		\$7,000.00	
F. Windows				1		\$0.00	
G. Structure: Foundation				2		\$10,000.00	
H. Structure: Walls and Chimneys				2		\$7,275.00	
I. Structure: Floors and Roofs				1		\$0.00	
J. General Finishes				3		\$80,088.30	
K. Interior Lighting				3		\$25,185.00	
L. Security Systems				3		\$9,318.45	
M. Emergency/Egress Lighting				3		\$5,037.00	
N. Fire Alarm				3		\$7,555.50	
O. Handicapped Access				3		\$1,292.40	
P. Site Condition				2		\$7,555.50	
Q. Sewage System				1		\$0.00	
R. Water Supply				1		\$0.00	
S. Exterior Doors				2		\$8,000.00	
T. Hazardous Material				3		\$503.70	
U. Life Safety				3		\$16,118.40	
V. Loose Furnishings				3		\$15,111.00	
W. Technology				3		\$57,975.87	
X. Construction Contingency / Non-Construction Cost				-		\$83,006.01	
Total						\$422,772.64	

Section	Points Possible	Points Earned	Percentage	Rating	Category
Cover Sheet	—	—	—	—	—
1.0 The School Site	100	68	68%	Borderline	
2.0 Structural and Mechanical Features	200	140	70%	Satisfactory	
3.0 Plant Maintainability	100	59	59%	Borderline	
4.0 Building Safety and Security	200	141	71%	Satisfactory	
5.0 Educational Adequacy	200	106	53%	Borderline	
6.0 Environment for Education	200	120	60%	Borderline	
LEED Observations	—	—	—	—	—
Commentary	—	—	—	—	—
Total	1000	634	63%	Borderline	
Enhanced Environmental Hazards Assessment Cost Estimates					
C=Under Contract					
Renovation Cost Factor					
Cost to Renovate (Cost Factor applied)					
100.00%					
The Replacement Cost Per SF and the Renovate/Replace ratio are only provided when this summary is requested from a Master Plan.					

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A. Heating System

Description:

The existing system for the overall facility is a gas fired heating hot water system, installed in 1999, and is in fair condition. The heating water system in the overall facility is a 2-pipe system, with a capacity for simultaneous heating and cooling operation, which is compliant with the OSDM requirements for basic system type. The 2 gas fired boilers, manufactured by PK, were installed in 1999 and are in fair condition. Heating water is distributed to terminal units consisting of VAV boxes. The terminal equipment was installed in 1999 and is in good condition. The system does comply with the 15 CFM per person fresh air requirements of the Ohio Building Code mechanical code and Ohio School Design Manual. The DDC type system temperature controls were installed in 1999 and are in fair condition. The system does feature individual temperature controls in all spaces required by the OSDM. The overall system does not feature any central energy recovery systems. The facility is not equipped with louvered interior doors to facilitate Corridor utilization as return air plenums. The existing system is ducted, though lack of need for HVAC system replacement at this time negates any need to evaluate the potential integration of existing ductwork into a new system. The overall heating system is evaluated as being in safe and efficient working order, and long term life expectancy of the existing system is not anticipated. The structure is not equipped with central air conditioning. The site does not contain underground fuel tanks.

Rating:

1 Satisfactory

Recommendations:

Existing conditions require no renovation or replacement at this time.

Item	Cost	Unit	Whole Building	Worthington Hills Elementary (1970)	Addition 1 (1988)	Addition 2 (1999)	Sum	Comments
				45,323 ft²	5,037 ft²	2,146 ft²		
Sum:			\$0.00	\$0.00	\$0.00	\$0.00		



Gas Fired Boilers



Pumps

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B. Roofing

Description:

The roof over the overall facility is a mechanically attached PVC system that was installed in 2010 and is in good condition. There are no District reports of current leaking. No signs of past leaking were observed during the physical assessment. Access to the roof was gained by an access door that is in good condition. Access to all roof levels is provided. The access ladder to the gymnasium roof was in poor condition and should be replaced. Fall safety protection cages are not provided and are not required. There were no observations of standing water on the roof. Metal cap flashings are in good condition. Roof storm drainage is addressed through a system of roof drains, which are properly located, and in good condition. No problems requiring attention were encountered with any roof penetrations. There are not any covered walkways attached to this structure. A 2011 district roofing report summarizes the current conditions as follows: "The roof system on Worthington Hills Elementary consists of a mechanically attached PVC roof system. The current roofing is approximately 1 years old and in good serviceable condition. The roof area is typical of a school facility and rooftop equipment and projections are moderate. The roof area drains to internal roof drains. The roof system is new and with annual inspections and preventative maintenance this roof should meet its expected service life of 2025."

Rating:

2 Needs Repair

Recommendations:

Replace one roof ladder.

Item	Cost	Unit	Whole Building	Worthington Hills Elementary (1970)	Addition 1 (1988)	Addition 2 (1999)	Sum	Comments
				45,323 ft²	5,037 ft²	2,146 ft²		
Roof Access Ladder with Fall Protection Cage:	\$100.00	n.ft.		15 Required			\$1,500.00	(remove and replace)
Sum:			\$1,500.00	\$1,500.00	\$0.00	\$0.00		



Typical Roof



Access Ladder to be Replaced

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C. Ventilation / Air Conditioning

Description: The overall facility is equipped with an air cooled forced air type central air conditioning system, which is in poor condition. Rooftop units deliver conditioned air to VAV boxes, which condition the spaces. The rooftop units are in poor condition. The ventilation system in the overall facility consists of rooftop units, installed in 1999 and in poor condition, providing fresh air to Classrooms, and rooftop units, installed in 1999 and in poor condition, providing fresh air to other miscellaneous spaces such as Gymnasiums, Student Dining, and Media Center. Relief air venting is provided by ceiling plenums. The ventilation system does meet the Ohio Building Code 15 CFM per occupant fresh air requirement. The overall system is 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 inadequate. General building exhaust systems for Restrooms are adequately placed, and in fair condition.

Rating: 3 Needs Replacement

Recommendations: Replace the existing rooftop units due to existing condition. Provide a new kiln exhaust system.

Item	Cost	Unit	Whole Building	Worthington Hills Elementary (1970) 45,323 ft²	Addition 1 (1988) 5,037 ft²	Addition 2 (1999) 2,146 ft²	Sum	Comments
Kiln Exhaust System:	\$5,000.00	each		1 Required			\$5,000.00	
Other: Rooftop Unit Replacement	\$500,000.00	ump sum		Required			\$500,000.00	Cost includes the replacement of all of the rooftop units.
Sum:			\$505,000.00	\$505,000.00	\$0.00	\$0.00		



Rooftop Units



Rooftop Unit

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D. Electrical Systems

Description: The electrical system provided to the overall facility is a 480/277-volt, 3-phase, 4-wire, 800-amp system installed in 1970, and is in poor condition. Power is provided to the school by a single utility owned, pad-mounted transformer located in exterior fenced-in area, and in good condition. The panel system, installed in 1990 and 1998, 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 14 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 12 general purpose outlets, while others are equipped with as few as 12 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 provided. The existing facility is not equipped with a permanent Stage. 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 Classroom capacity, due to condition and age, lack of OSDM-required features, to accommodate the addition of an air conditioning system, and to facilitate the scope of work outlined in Item U.

Item	Cost	Unit	Whole Building	Worthington Hills Elementary (1970)	Addition 1 (1988)	Addition 2 (1999)	Sum	Comments
System Replacement:	\$16.23	sq.ft. (of entire building addition)		45,323 ft²	5,037 ft²	2,146 ft²	\$852,172.38	(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:			\$852,172.38	\$735,592.29	\$81,750.51	\$34,829.58		



Electrical Distribution Equipment



Main Distribution Panel

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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, was installed in 1970, and is in fair condition. The waste piping in the overall facility is cast iron and PVC, was installed in 1970, and is in fair condition. The facility is equipped with a 100-gallon gas water heater in good condition. The school contains 2 Large Group Restrooms for boys, 2 Large Group Restrooms for girls, 2 Restrooms associated with specialty Classrooms, and 8 Restrooms for staff. Boys' Large Group Restrooms contain 0 ADA and 6 non-ADA wall mounted flush valve toilets, 5 ADA and 6 non-ADA wall mounted flush valve urinals, as well as 6 ADA and 4 non-ADA wall mounted lavatories. Girls' Large Group Restrooms contain 0 ADA and 12 non-ADA wall mounted flush valve toilets, as well as 6 ADA and 4 non-ADA wall mounted lavatories. Staff Restrooms contain 1 ADA and 6 non-ADA wall mounted flush valve toilets, 0 ADA and 2 non-ADA wall mounted urinals, as well as 1 ADA and 7 non-ADA wall mounted lavatories. Condition of fixtures is good. The facility is equipped with 0 ADA and 0 non-ADA drinking fountains, as well as 3 ADA and 4 non-ADA electric water coolers, in good condition. The 10 Elementary Classrooms are equipped with 0 ADA and 10 non-ADA sink mounted type drinking fountains, in fair condition. The Special Education Classroom is not equipped with the required Restroom facilities, and fixtures are in fair condition. The Kitchen is equipped with the required Restroom, and fixtures are in fair condition. The Heath Clinic is equipped with the required Restroom, and fixtures are in fair condition. The Kindergarten Classrooms are equipped with Restroom facilities, and fixtures are in poor condition. Kitchen fixtures consist of 1 hand sink, 1 double-compartment sink, and 1 triple-compartment sink, which are in good condition. The Kitchen is 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. 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 31 toilets, 13 urinals, 38 lavatories, 22 Classroom sink mounted drinking fountains, and 19 electric water coolers. Observations revealed that the school is currently equipped with 25 toilets, 13 urinals, 23 lavatories, 10 Classroom sink mounted drinking fountains, and 7 electric water coolers. ADA requirements are not met for fixtures and drinking fountains. Custodial Closets are properly located and are adequately provided with required service sinks or floor drain sinks, which are in fair condition. Adequate exterior wall hydrants are provided.

Rating:

3 Needs Replacement

Recommendations:

To facilitate the school's compliance with OBC and OSFC fixture requirements, due to age, condition, LEED, provide 6 new toilets / 15 new lavatories / 0 new urinals, 15 new electric water coolers, 12 new lavatory mounted type drinking fountains. Provide reduced pressure backflow preventer.

Item	Cost	Unit	Whole Building	Worthington Hills Elementary	Addition 1 (1970)	Addition 2 (1999)	Sum	Comments
				45,323 ft²	5,037 ft²	2,146 ft²		
Back Flow Preventer:	\$5,000.00	unit		1 Required			\$5,000.00	
Toilet:	\$1,500.00	unit		6 Required			\$9,000.00	(remove / replace) See Item O
Sink:	\$2,500.00	unit		4 Required	1 Required	1 Required	\$15,000.00	(new)
Sink:	\$1,500.00	unit		7 Required	1 Required	1 Required	\$13,500.00	(remove / replace)
Electric water cooler:	\$3,000.00	unit		13 Required	1 Required	1 Required	\$45,000.00	(double ADA)
Other: Lavatory Mounted Type Drinking Fountain	\$500.00	per unit		12 Required			\$6,000.00	(new lavatory mounted drinking fountain)
Sum:			\$93,500.00	\$79,500.00	\$7,000.00	\$7,000.00		



Domestic Water Heater



Restroom

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F. Windows

Description: The Original Building, 1988 Addition, and 1999 Addition are equipped with thermally broken, aluminum windows with a double glazed insulated glazing type window system, which is estimated to be less than twenty years old, and is in good condition. The window system features inoperable windows throughout of the building. Window system seals are in fair condition, with minimal air and water infiltration being experienced. The window system features surface mounted blinds, which are in fair condition. This facility is not equipped with any curtain wall systems. This facility does not feature any glass block windows. The exterior doors in the overall facility are equipped with thermally broken aluminum sidelights and transoms with tempered, double glazed insulated glazing, in fair condition. Exterior door vision panels are tempered, double glazed insulated glazing. The school does contain four acrylic bubble type skylights in fair condition. The school does not contain any clerestories. Interior glass is OSDM-compliant. Window security grilles are not provided for ground floor windows. There is not a Greenhouse associated with this school.

Rating: 1 Satisfactory

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

Item	Cost	Unit	Whole Building	Worthington Hills Elementary (1970)	Addition 1 (1988)	Addition 2 (1999)	Sum	Comments
				45,323 ft²	5,037 ft²	2,146 ft²		
Sum:			\$0.00	\$0.00	\$0.00	\$0.00		



Typical Windows



Typical Windows

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G. Structure: Foundation

Description: The Original Building and 1999 Addition are equipped with concrete masonry unit foundation walls on concrete footings, which displayed no locations of significant differential settlement, cracking, or leaking, and are in fair condition. The 1988 Addition is equipped with poured concrete foundation walls on concrete footings, which displayed no locations of significant differential settlement, cracking, or leaking, and are in fair condition. Minor issues related to foundation cracking or spalling were encountered around the 1988 addition. 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 to or could contribute to foundation or wall structural deterioration.

Rating: 2 Needs Repair

Recommendations: Repair areas of cracking and spalling through the 1988 Addition.

Item	Cost	Unit	Whole Building	Worthington Hills Elementary (1970)	Addition 1 (1988)	Addition 2 (1999)	Sum	Comments
				45,323 ft²	5,037 ft²	2,146 ft²		
Other: Repair Cracked and Spalling Foundation	\$50.00	ln.ft.			200 Required		\$10,000.00	Repair cracking and spalling.
Sum:			\$10,000.00	\$0.00	\$10,000.00	\$0.00		



Minor Cracking to be Repaired



Minor Spalling to be Repaired

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H. Structure: Walls and Chimneys

Description:

The Original Building, 1988 Addition, and 1999 Addition have a brick veneer on load bearing masonry wall system, which displayed few locations of deterioration, and is in fair condition. In the overall facility, the exterior masonry appears to have appropriately spaced and adequately caulked control joints in fair condition. Control joints are provided at lintel locations, at doors and windows, building corners, and wall offsets and are in fair condition. The school does have sufficient expansion joints, and they are in fair condition. Exterior walls in the Original Building are inadequately insulated. Brick veneer masonry walls are not cavity walls. Exterior walls in the 1988 Addition and 1999 Addition are adequately insulated. Brick veneer masonry walls are cavity walls. In the Original Building, weep holes are not provided. Weep holes in the 1988 and 1999 Additions are provided in sufficient quantity at 24"-48" on center 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 in the Original Building or the 1988 Addition, but are provided in sufficient quantity in the 1999 Addition. The exterior masonry has not been cleaned and sealed in recent years, and shows minor evidence of mortar deterioration in the Original Building. There are also few locations of efflorescence and mold. Architectural exterior accent materials consist of ribbed concrete panels, which are in fair condition and need to be re-jointed. Exterior building fenestration in the Original Building represents 10.5% of the exterior surfaces. Exterior building fenestration in the 1988 Addition represents 1.8% of the exterior surfaces. Exterior building fenestration in the 1999 Addition represents 3.5% of the exterior surfaces. Interior Corridor and demising walls are concrete masonry units and demountable partitions, project full height from floor to bottom of deck, and are in good condition. Interior masonry appears to have adequately spaced and caulked control joints in good condition. Interior soffits are of stud and drywall type construction, and in fair condition. The window sills are brick or stone, 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 to poor condition. Several locations were observed with cracking of plaster that should be repaired. The school is provided with an uncovered, concrete conventional loading dock to facilitate the receipt of product, supplies, and foodstuffs, ~200 square feet in size. The dock itself is in fair to poor condition, and is equipped with bumper pads in fair condition. Dock repairs are covered in item P Site Condition.

Rating:

2 Needs Repair

Recommendations:

Provide tuckpointing in all areas of mortar deterioration as required in the Original Building, and at the joints between the ribbed concrete panels as required. Provide masonry cleaning and sealing as required through the overall facility. Repair and repaint areas of cracking at exterior soffits on the Original Building and 1988 Addition.

Item	Cost	Unit	Whole Building	Worthington Hills Elementary (1970)	Addition 1 (1988)	Addition 2 (1999)	Sum	Comments
				45,323 ft²	5,037 ft²	2,146 ft²		
Tuckpointing:	\$5.25	sq.ft. (Qty)		500 Required	100 Required		\$3,150.00	(wall surface)
Exterior Masonry Cleaning:	\$1.50	sq.ft. (Qty)		14,500 Required	1,900 Required	2,300 Required	\$28,050.00	(wall surface)
Exterior Masonry Sealing:	\$1.00	sq.ft. (Qty)		14,500 Required	1,900 Required	2,300 Required	\$18,700.00	(wall surface)
Other: Repair and Paint Exterior Soffit	\$20.00	sq.ft. (Qty)		500 Required	100 Required		\$12,000.00	Repair and paint exterior soffit.
Sum:			\$61,900.00	\$48,875.00	\$7,275.00	\$5,750.00		



Typical Exterior Materials



Typical Soffit to be Repaired

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I. Structure: Floors and Roofs

Description: The floor construction of the base floor of the overall facility and the subsequent additions is concrete slab on grade type construction, and is in fair condition. There is no crawl space. 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 is metal form deck on steel bar joist type construction, and is in good condition.

Rating: 1 Satisfactory

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

Item	Cost	Unit	Whole Building	Worthington Hills Elementary (1970)	Addition 1 (1988)	Addition 2 (1999)	Sum	Comments
				45,323 ft²	5,037 ft²	2,146 ft²		
Sum:			\$0.00	\$0.00	\$0.00	\$0.00		



Typical Deck and Joists

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J. General Finishes

Description:

The overall facility features conventionally partitioned Open Space Classrooms with VCT and carpet tile type flooring, 2x4 ACT type ceilings, as well as painted CMU, metal partitions, and brick type wall finishes, and they are in good condition. The overall facility has Corridors with rubber type flooring, 2x4 ACT type ceilings, as well as painted metal partition type wall finishes, and they are in fair condition. The overall facility has Restrooms with concrete type flooring, 2x4 ACT type ceilings, as well as painted CMU type wall finishes, and they are in good condition. Toilet partitions are plastic, and are in fair condition. Classroom casework in the overall facility is wood type construction with plastic laminate tops, is adequately provided, and in fair condition. The typical Classroom contains 5'-4" lineal feet of casework, and Classroom casework provided ranges from 5 to 6 feet. Classrooms are provided adequate chalkboards, markerboards, tackboards which are in good condition. The Classroom storage cubbies, located in the Classrooms, are adequately provided, and in good condition. The Art program is equipped with a kiln. The facility is equipped with wood non-louvered interior doors that are flush mounted with proper ADA hardware and clearances, and in good condition. The Gymnasium space have VCT type flooring, open type ceilings, as well as painted CMU type wall finishes, and they are in fair condition. Gymnasium basketball backboards are fixed type, and are in fair condition. The Media Center has carpet tile type flooring, 2x4 ACT type ceilings, as well as metal partition type wall finishes, and they are in fair condition. Student Dining, located in the 1999 Addition, has VCT type flooring, 2x4 ACT type ceilings, as well as Painted CMU and painted CMU type wall finishes, and they are in good condition. No stage is provided. Existing Gymnasium, Student Dining, Media Center, and Music spaces are inadequately 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 1977-2000, is in good/fair condition.

Rating:

3 Needs Replacement

Recommendations:

Provide replacement of all finishes and casework due to condition and age. Provide cubbies in lieu of inadequate student storage space, currently addressed with exposed hooks and a shelf. Provide for the replacement of kitchen equipment due to age.

Item	Cost	Unit	Whole Building	Worthington Hills Elementary (1970)	Addition 1 (1988)	Addition 2 (1999)	Sum	Comments
Complete Replacement of Finishes and Casework (Elementary):	\$15.90	sq.ft. (of entire building addition)		45,323 ft ² Required	5,037 ft ² Required	2,146 ft ² Required	\$834,845.40	(elementary, per building area, with removal of existing)
Additional Wall Insulation	\$6.00	sq.ft. (Qty)		45,323 Required			\$271,938.00	(includes the furring out of the existing walls, insulation and abuse resistant GWB)
Total Kitchen Equipment Replacement:	\$190.00	sq.ft. (Qty)		1,585 Required			\$301,150.00	(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:			\$1,407,933.40	\$1,293,723.70	\$80,088.30	\$34,121.40		



Gym Floor



Classroom Casework

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K. Interior Lighting

Description:

The typical Classrooms in the overall facility are equipped with T-8 lay-in fluorescent fixtures with dual level switching. Classroom fixtures are in good condition, providing an average illumination of 60 FC, thus complying with the 50 FC recommended by the OSDM. The typical Corridors in the overall facility are equipped with T-8 lay-in 2x4 fluorescent fixtures with single level switching. Corridor fixtures are in good condition, providing an average illumination of 31 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 40 FC, which is less than the 50 ES FC recommended by the OSDM. The Media Center is equipped with lay-in 2x4 T-8 fluorescent fixture type lighting in good condition, providing an average illumination of 47 FC, which is less than the 50 FC recommended by the OSDM. The Student Dining spaces are equipped with 4x4 lay-in and 2x4 lay-in T-8 fluorescent fixture type lighting with multi level switching. Student Dining fixtures are in good condition, providing an average illumination of 43 FC, which is less than the 50 FC recommended by the OSDM. The Kitchen spaces are equipped with lay-in 2x4 T-8 fluorescent fixture type lighting with multi level switching. Kitchen fixtures are in good condition, providing an average illumination of 37 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 fair 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 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 multilevel switching, and installation of systems outlined in Item U.

Item	Cost	Unit	Whole Building	Worthington Hills Elementary (1970)	Addition 1 (1988)	Addition 2 (1999)	Sum	Comments
				45,323 ft²	5,037 ft²	2,146 ft²		
Complete Building Lighting Replacement	\$5.00	sq. ft. (of entire building addition)		Required	Required	Required	\$262,530.00	Includes demo of existing fixtures
Sum:			\$262,530.00	\$226,615.00	\$25,185.00	\$10,730.00		



Gym Lighting



Dining Room Lighting

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L. Security Systems

Description: The overall facility contains a private labeled motion detector, intrusion, and door contact type security system in good condition. Motion detectors are inadequately provided in main entries, central gathering areas, offices, main Corridors, and spaces where 6 or more computers are located. Exterior doors are equipped with door contacts. An automatic visitor control system is not provided. Compliant color CCTV cameras are not provided at main entry areas, parking lots, central gathering areas, and main Corridors. CCTV is not monitored in Administrative Area. 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. Pedestrian walkways are illuminated with pole fixtures in good condition. Parking and bus pick-up / drop off areas are illuminated by pole mounted LED fixtures in good condition. The exterior site lighting system provides adequate illumination.

Rating: 3 Needs Replacement

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

Item	Cost	Unit	Whole Building	Worthington Hills Elementary (1970)	Addition 1 (1988)	Addition 2 (1999)	Sum	Comments
				45,323 ft²	5,037 ft²	2,146 ft²		
Security System:	\$1.85	sq.ft. (of entire building addition)		Required	Required	Required	\$97,136.10	(complete, area of building)
Sum:			\$97,136.10	\$83,847.55	\$9,318.45	\$3,970.10		



Site Lighting/LED Pole Lights



Security System Detector and Corridor Lighting

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M. Emergency/Egress Lighting

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

Rating: 3 Needs Replacement

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

Item	Cost	Unit	Whole Building	Worthington Hills Elementary (1970)	Addition 1 (1988)	Addition 2 (1999)	Sum	Comments
Emergency/Egress Lighting:	\$1.00	sq.ft. (of entire building addition)		45,323 ft²	5,037 ft²	2,146 ft²	\$52,506.00	(complete, area of building)
Sum:			\$52,506.00	\$45,323.00	\$5,037.00	\$2,146.00		



Exit Sign/Remote Head/FA Pull Station



Recessed Lighting With Battery Pack

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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 fully 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	Worthington Hills Elementary	Addition 1 (1988)	Addition 2 (1999)	Sum	Comments
				45,323 ft²	5,037 ft²	2,146 ft²		
Fire Alarm System:	\$1.50	sq.ft. (of entire building addition)		Required	Required	Required	\$78,759.00	(complete new system, including removal of existing)
Sum:			\$78,759.00	\$67,984.50	\$7,555.50	\$3,219.00		



FA Remote Annunciator/Security System Panel



Fire Alarm Control Panel

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O. Handicapped Access

Description: At the site, there is an accessible route provided from the public right-of-way, the accessible parking areas, and from the passenger unloading zone to the main entrance of the school. There is an accessible route connecting all or most areas of the site. The exterior entrances are mostly ADA accessible. Access from the parking and drop-off area to the building entries is not compromised by steps or steep ramps. Adequate handicap parking is provided. Exterior doors are equipped with ADA hardware. Building entrances should be equipped with one ADA power assist door, and one is provided, which is in fair condition. Playground layout and equipping are mostly compliant. On the interior of the building, space allowances and reach ranges are mostly compliant. There is an accessible route through the building which does not include protruding objects. Ground and floor surfaces are compliant. Special provisions for floor level changes in this single story structure are not required. No Stage is provided. Interior doors are not recessed, are provided with adequate clearances, and are not provided with ADA-compliant hardware. 10 ADA-compliant toilets are required, and 3 are currently provided. 10 ADA-compliant Restroom lavatories are required, and 3 are currently provided. 5 ADA-compliant urinals are required, and 5 are currently provided. 10 ADA-compliant electric water coolers are required, and 3 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. 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, electric water coolers, toilets, sinks, toilet partitions, toilet accessories, re-mounting of mirrors, doors and frames, door hardware in the overall facility to facilitate the school's meeting of ADA requirements. Plumbing fixtures corrected in Item E.

Item	Cost	Unit	Whole Building	Worthington Hills Elementary (1970)	Addition 1 (1988)	Addition 2 (1999)	Sum	Comments
Handicapped Hardware:	\$350.00	set		45,323 ft²	5,037 ft²	2,146 ft²		
Signage:	\$0.20	sq.ft. (of entire building addition)		12 Required	0 Required	0 Required	\$4,200.00	(includes installation / hardware only)
Toilet Partitions:	\$1,000.00	stall		Required	Required	Required	\$10,501.20	(per building area)
Replace Doors:	\$5,000.00	leaf		12 Required			\$12,000.00	(ADA - grab bars, accessories included)
Remount Restroom Mirrors to Handicapped Height:	\$285.00	per restroom		4 Required			\$20,000.00	(rework narrow opening to provide 3070 wood door, HM frame, door/light, includes hardware)
Provide Toilet Accessories:	\$1,000.00	per restroom		5 Required	1 Required		\$1,710.00	
Sum:			\$60,411.20	\$58,689.60	\$1,292.40	\$429.20	\$12,000.00	



Single Occupant Restroom



Typical Restroom Door

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P. Site Condition

Description:

The 12-acre flat site is located in a suburban, residential setting with generous tree, shrub, floral type landscaping. There are no outbuildings. There are no apparent problems with erosion or ponding. The site is bordered by lightly traveled city streets. A single entrance onto the site facilitates proper separation of bus and other vehicular traffic, and one way bus traffic is provided. There is a street-side student loading and unloading zone in front of the school for private vehicles. A bus loop is provided on the property for student loading and unloading adjacent to the main entrance. Staff and visitor parking is facilitated by an asphalt parking lot in fair condition, containing 61 total spaces, three of which are accessible parking places. The lot provides adequate parking for staff members, visitors, and the disabled. The site and parking lot drainage design, consisting of sheet drainage and catch basins, provides adequate evacuation of storm water, and no problems with parking lot ponding were observed. Concrete curbs in fair condition are located at the bus drop-off lane only due to sheet drainage storm water management design. Concrete sidewalks are properly sloped, are located to provide a logical flow of pedestrian traffic, and are in fair condition. Trash pick-up and service drive pavement is not heavy duty and is not equipped with a concrete pad area for dumpsters. The only exterior steps and handrails on site are associated with the loading dock and are in fair condition. They are formed concrete and have damage one tread corner which should be repaired. Handrails at the loading dock are in fair condition. Playgrounds are generally separated from vehicular traffic, however proper fencing should be provided adjacent to the loading dock where dumpsters and parking curbs are currently being used as a barrier between the playground and parking lot. 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, with a basketball court being provided on an asphalt surface in fair condition. The playground area is equipped with tables and benches in fair condition. The site is also equipped with bike racks, which are in fair condition. The athletic facilities are comprised of kickball, soccer and an open play field, and are in fair condition. Site features are suitable for outdoor instruction, which is enhanced through the District's provision of multiple playground equipment structures.

Rating:

2 Needs Repair

Recommendations:

Provide fencing adjacent to the loading dock to provide a vehicular barrier between the playground and parking lot. Repair the exterior steps associated with the loading dock, and provide heavy duty concrete pads for the dumpsters.

Item	Cost	Unit	Whole Building	Worthington Hills Elementary (1970) 45,323 ft²	Addition 1 (1988) 5,037 ft²	Addition 2 (1999) 2,146 ft²	Sum	Comments
Replace Concrete Steps:	\$32.00	sq.ft. (Qty)		10 Required			\$320.00	
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	\$78,759.00	Include this one or the next. (Each addition should have this item)
Other: Provide Fencing	\$20.00	lin.ft.		40 Required			\$800.00	Provide fencing.
Sum:			\$132,279.00	\$121,504.50	\$7,555.50	\$3,219.00		



Typical Playground Area



Location to be Fenced

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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	Worthington Hills Elementary (1970)	Addition 1 (1988)	Addition 2 (1999)	Sum	Comments
				45,323 ft ²	5,037 ft ²	2,146 ft ²		
Sum:			\$0.00	\$0.00	\$0.00	\$0.00		



Kitchen Sink Waste



Grease Interceptor

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R. Water Supply

- Description:** The domestic water supply system is tied in to the city system, features 4" service and 4" water meter, and is in good condition. The District was not able to provide water supply flow test data. The existing domestic water service appears to meet the facility's current needs. The facility is not equipped with an automated fire suppression system, and the existing water supply will not provide adequate support for a future system. The domestic water service is not equipped with a water booster pump. The system provides adequate pressure for the future needs of the school.
- Rating:** 1 Satisfactory
- Recommendations:** Provide a new city water supply line of adequate capacity to support the existing needs of the facility, as well as a future automated fire suppression system. Funding provided in Item U.

Item	Cost	Unit	Whole Building	Worthington Hills Elementary (1970)	Addition 1 (1988)	Addition 2 (1999)	Sum	Comments
				45,323 ft²	5,037 ft²	2,146 ft²		
Sum:			\$0.00	\$0.00	\$0.00	\$0.00		



Water Main



Water Meter

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S. Exterior Doors

Description: Typical exterior doors in the overall facility are hollow metal type construction, installed on hollow metal frames, and in fair condition. Typical exterior doors feature glazed tempered glass vision panels, and appropriate hardware. It was noted that certain doors, one at the Original Building, and four at the 1988 Addition were dented or damaged and the leaf only should be replaced. Entrance doors in the overall facility are aluminum type construction, installed on aluminum frames, and in fair condition. Entrance doors feature single glazed tempered glass vision panels, transoms, sidelights, and appropriate hardware. The facility is equipped with one roof access door, which is in good condition. There are no overhead doors in the facility.

Rating: 2 Needs Repair

Recommendations: Replace five exterior doors due to poor condition.

Item	Cost	Unit	Whole Building	Worthington Hills Elementary (1970)	Addition 1 (1988)	Addition 2 (1999)	Sum	Comments
				45,323 ft²	5,037 ft²	2,146 ft²		
Door Leaf/Frame and Hardware:	\$2,000.00	per leaf		1 Required	4 Required		\$10,000.00	(includes removal of existing)
Sum:			\$10,000.00	\$2,000.00	\$8,000.00	\$0.00		



Main Entrance Doors



Damaged Door to be Replaced

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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 1970 Original Construction , Resilient Floor Covering and Mastic containing hazardous materials are reported and of new condition. These materials were described in the report to be in non-friable condition with no reported damage. No estimated quantity was given in the report. Quantities added to the assessment are assumed based on existing square feet in the areas listed. 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	Worthington Hills Elementary (1970)	Addition 1 (1988)	Addition 2 (1999)	Sum	Comments
				45,323 ft²	5,037 ft²	2,146 ft²		
<i>Environmental Hazards Form</i>				EEHA Form	EEHA Form	EEHA Form	—	
Fluorescent Lamps & Ballasts Recycling/Incineration	\$0.10	sq.ft. (Qty)		45,323 Required	5,037 Required	2,146 Required	\$5,250.60	
Resilient Flooring Removal, Including Mastic	\$3.00	sq.ft. (Qty)		20,000 Required	0 Required	0 Required	\$60,000.00	See J
Sum:			\$65,250.60	\$64,532.30	\$503.70	\$214.60		

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U. Life Safety

Description: The overall facility is not equipped with an automated fire suppression system. The Kitchen hood is in good condition, and is equipped with the required UL 300 compliant wet chemical fire suppression system. The cooking equipment is interlocked to shut down in the event of discharge of the fire suppression system. Fire extinguishers are provided in sufficient quantity. Existing fire extinguishers are adequately 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.

Item	Cost	Unit	Whole Building	Worthington Hills Elementary (1970)	Addition 1 (1988)	Addition 2 (1999)	Sum	Comments
Sprinkler / Fire Suppression System:	\$3.20	sq.ft. (Qty)		45,323 Required	5,037 Required	2,146 Required	\$168,019.20	(includes increase of service piping, if required)
Sum:			\$168,019.20	\$145,033.60	\$16,118.40	\$6,867.20		



Kitchen Hood

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V. Loose Furnishings

Description: The typical Classroom furniture is of consistent design, and in generally fair condition, consisting of student desks & chairs, teacher desks & chairs, desk height file cabinets, reading tables, computer workstations, bookcases, wastebaskets, 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	Worthington Hills Elementary (1970)	Addition 1 (1988)	Addition 2 (1999)	Sum	Comments
				45,323 ft²	5,037 ft²	2,146 ft²		
CEFPI Rating 6	\$3.00	sq.ft. (of entire building addition)		Required	Required	Required	\$157,518.00	
Sum:			\$157,518.00	\$135,969.00	\$15,111.00	\$6,438.00		



classroom



classroom

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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 not provided. 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	Worthington Hills Elementary (1970)	Addition 1 (1988)	Addition 2 (1999)	Sum	Comments
				45,323 ft ²	5,037 ft ²	2,146 ft ²		
ES portion of building with total SF 50,000 to 69,360	\$11.51	sq.ft. (Qty)		45,323 Required	5,037 Required	2,146 Required	\$604,344.06	
Sum:			\$604,344.06	\$521,667.73	\$57,975.87	\$24,700.46		



Classroom Projector



Classroom Smartboard

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X. Construction Contingency / Non-Construction Cost

Renovation Costs (A-W)		\$4,620,758.94
7.00%	Construction Contingency	\$323,453.13
Subtotal		\$4,944,212.07
16.29%	Non-Construction Costs	\$805,412.15
Total Project		\$5,749,624.21

Construction Contingency	\$323,453.13
Non-Construction Costs	\$805,412.15
Total for X.	\$1,128,865.27

Non-Construction Costs Breakdown		
Land Survey	0.03%	\$1,483.26
Soil Borings / Phase I Envir. Report	0.10%	\$4,944.21
Agency Approval Fees (Bldg. Code)	0.25%	\$12,360.53
Construction Testing	0.40%	\$19,776.85
Printing - Bid Documents	0.15%	\$7,416.32
Advertising for Bids	0.02%	\$988.84
Builder's Risk Insurance	0.12%	\$5,933.05
Design Professional's Compensation	7.50%	\$370,815.90
CM Compensation	6.00%	\$296,652.72
Commissioning	0.60%	\$29,665.27
Non-Construction Contingency (includes partnering and mediation services)	1.12%	\$55,375.18
Total Non-Construction Costs	16.29%	\$805,412.15

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Name of Appraiser	Holly Grambort	Date of Appraisal	2015-09-24
Building Name	Worthington Hills Elementary		
Street Address	1221 Candlewood Dr		
City/Town, State, Zip Code	Columbus, OH 43235		
Telephone Number(s)	(614) 450-4700		
School District	Worthington City		

Setting: Suburban

Site-Acreage	12.00	Building Square Footage	52,506
Grades Housed	K-6	Student Capacity	606
Number of Teaching Stations	24	Number of Floors	1
Student Enrollment	461		
Dates of Construction	1970,1988,1999		

Energy Sources: ☐ Fuel Oil ☒ Gas ☒ Electric ☐ Solar

Air Conditioning: ☒ Roof Top ☐ Windows Units ☐ Central ☐ Room Units

Heating: ☒ Central ☐ Roof Top ☐ Individual Unit ☐ Forced Air

☒ Hot Water ☐ Steam

Type of Construction

☒ Load bearing masonry

☐ Steel frame

☐ Concrete frame

☐ Wood

☐ Steel Joists

Exterior Surfacing

☒ Brick

☐ Stucco

☐ Metal

☐ Wood

☐ Stone

Floor Construction

☐ Wood Joists

☐ Steel Joists

☒ Slab on grade

☐ Structural slab

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1.0 The School Site

School Facility Appraisal

			Points Allocated	Points
1.1		Site is large enough to meet educational needs as defined by state and local requirements	25	10
<i>The site is 10 acres compared to 16 acres required by the OSDM.</i>				
1.2		Site is easily accessible and conveniently located for the present and future population	20	16
<i>The School is centrally located within the School District, and is easily accessible.</i>				
1.3		Location is removed from undesirable business, industry, traffic, and natural hazards	10	8
<i>The site is adjacent to residential uses, which are suitable for educational instruction.</i>				
1.4		Site is well landscaped and developed to meet educational needs	10	8
<i>The site is moderately landscaped with mature shade trees, ornamental trees, and shrubs which define the property and emphasize the building entrance. Lawn areas where mowing is required do not exceed 3:1 slope.</i>				
1.5	ES	Well equipped playgrounds are separated from streets and parking areas	10	6
	MS	Well equipped athletic and intermural areas are separated from streets and parking		
	HS	Well equipped athletic areas are adequate with sufficient solid-surface parking		
<i>Playground areas consist of coated steel and high density plastic type play equipment, which is in fair condition, and is located on wood fiber mulch which is an approved soft surface material. Play equipment is not ADA accessible, and includes an accessible route to equipment. Fencing is provided to separate vehicular traffic from pedestrians.</i>				
1.6		Topography is varied enough to provide desirable appearance and without steep inclines	5	4
<i>The site is gently sloped to provide positive drainage across the site. A flat area is provided to accommodate buildings, perimeter walks, vehicular circulation, parking areas, outdoor play areas, and physical education spaces, and is desirable.</i>				
1.7		Site has stable, well drained soil free of erosion	5	4
<i>Soils appear to be stable and well drained, and no erosion was observed.</i>				
1.8		Site is suitable for special instructional needs , e.g., outdoor learning	5	4
<i>The site has been developed to accommodate outdoor learning, including benches and picnic tables to facilitate instruction.</i>				
1.9		Pedestrian services include adequate sidewalk with designated crosswalks, curb cuts, and correct slopes	5	4
<i>Sidewalks are adequately provided to accommodate safe pedestrian circulation including designated crosswalks, curb cuts, and correct slopes.</i>				
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		
<i>Adequate parking is provided for faculty, staff, community and student parking, and is located on asphalt pavement in good condition.</i>				
TOTAL - The School Site			100	68

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 <i>Entire building meets all ADA requirements except, Restrooms, Stage access, signage, door hardware.</i>	15	4
2.2	Roofs appear sound, have positive drainage, and are weather tight <i>The roofs over the entire building are in good condition.</i>	15	14
2.3	Foundations are strong and stable with no observable cracks <i>Foundations are in good condition with no observable cracks.</i>	10	9
2.4	Exterior and interior walls have sufficient expansion joints and are free of deterioration <i>Exterior and interior walls are in fair condition, have sufficient control and expansion joints which are starting to show signs of deterioration.</i>	10	6
2.5	Entrances and exits are located so as to permit efficient student traffic flow <i>Exits are properly located to allow safe egress from the building.</i>	10	8
2.6	Building "envelope" generally provides for energy conservation (see criteria) <i>Building envelope meets minimum energy requirements.</i>	10	8
2.7	Structure is free of friable asbestos and toxic materials <i>The building is reported to contain asbestos and other hazardous materials.</i>	10	4
2.8	Interior walls permit sufficient flexibility for a variety of class sizes <i>Flexible partition walls have been provided between Classrooms and allow for a variety of class sizes.</i>	10	8
Mechanical/Electrical		Points Allocated	Points
2.9	Adequate light sources are well maintained, and properly placed and are not subject to overheating <i>Light sources are well maintained and not subject to overheating.</i>	15	12
2.10	Internal water supply is adequate with sufficient pressure to meet health and safety requirements <i>The water pressure was measured at 60 PSI.</i>	15	14
2.11	Each teaching/learning area has adequate convenient wall outlets , phone and computer cabling for technology applications <i>There is an inadequate amount of receptacles in classrooms throughout the building. Computer cabling is adequate throughout.</i>	15	9
2.12	Electrical controls are safely protected with disconnect switches easily accessible	10	8

Electrical controls are safely protected and easily accessible.

2.13	Drinking fountains are adequate in number and placement, and are properly maintained including provisions for the disabled	10	4
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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	4
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The number and size of Restrooms do not meet requirements.

2.15	Drainage systems are properly maintained and meet requirements	10	8
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The roof drains are adequate in number and placement. There are floor drains in the mechanical rooms.

2.16	Fire alarms, smoke detectors, and sprinkler systems are properly maintained and meet requirements	10	8
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Fire alarms and smoke detectors are adequately provided throughout.

2.17	Intercommunication system consists of a central unit that allows dependable two-way communication between the office and instructional areas	10	8
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An intercommunication system provided reliable 2-way communication.

2.18	Exterior water supply is sufficient and available for normal usage	5	4
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Hose bibbs are provided on all sides of the building.

TOTAL - Structural and Mechanical Features

200

140

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3.0 Plant Maintainability

School Facility Appraisal

		Points Allocated	Points
3.1	Windows, doors, and walls are of material and finish requiring minimum maintenance <i>Exterior materials for walls require minimum maintenance. Materials and finishes for doors and windows require some maintenance.</i>	15	9
3.2	Floor surfaces throughout the building require minimum care <i>Flooring throughout the facility consists of VCT, terrazzo, sealed concrete, ceramic tile, which is not well maintained throughout the facility.</i>	15	9
3.3	Ceilings and walls throughout the building, including service areas, are easily cleaned and resistant to stain <i>Acoustical tile ceilings are not easily cleaned or resistant to stain. Painted block is easily cleaned and resistant to stain.</i>	10	6
3.4	Built-in equipment is designed and constructed for ease of maintenance <i>Casework is wood type construction with plastic laminate tops, is well constructed and in poor condition.</i>	10	4
3.5	Finishes and hardware , with compatible keying system, are of durable quality <i>Door hardware is consistent throughout the facility, and meets ADA requirements.</i>	10	6
3.6	Restroom fixtures are wall mounted and of quality finish <i>Fixtures are wall mounted and are of fair quality.</i>	10	7
3.7	Adequate custodial storage space with water and drain is accessible throughout the building <i>Custodial storage space is adequately located throughout the facility, including provisions for water and drains.</i>	10	8
3.8	Adequate electrical outlets and power , to permit routine cleaning, are available in every area <i>Adequate electrical outlets are not provided.</i>	10	5
3.9	Outdoor light fixtures, electrical outlets , equipment, and other fixtures are accessible for repair and replacement <i>Outdoor light fixtures are easily accessible, there is an inadequate amount of exterior receptacles.</i>	10	5
TOTAL - Plant Maintainability		100	59

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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 <i>Student loading is not separated from other vehicular traffic.</i>	15	6
4.2	Walkways , both on and offsite, are available for safety of pedestrians <i>Walkways are adequately provided on-site for pedestrian safety, though no sidewalks are provided off-site for safe pedestrian circulation.</i>	10	6
4.3	Access streets have sufficient signals and signs to permit safe entrance to and exit from school area <i>School signs and signals are located as required on adjacent access streets.</i>	5	4
4.4	Vehicular entrances and exits permit safe traffic flow <i>Buses and other vehicular traffic use the same entrance and exit points to the site, which do not provide safe vehicular traffic flow.</i>	5	2
4.5	ES Playground equipment is free from hazard MS Location and types of intramural equipment are free from hazard HS Athletic field equipment is properly located and is free from hazard <i>Playground equipment consists of plastic coated steel and high density plastic type equipment in fair condition, appears to be free from hazard, and is located on an approved soft surface material to a sufficient depth.</i>	5	3
Building Safety		Points Allocated	Points
4.6	The heating unit(s) is located away from student occupied areas <i>The heating units are not located in the classrooms.</i>	20	18
4.7	Multi-story buildings have at least two stairways for student egress <i>The overall facility is one story without stairways.</i>	15	12
4.8	Exterior doors open outward and are equipped with panic hardware <i>Exterior doors open in the direction of travel and are equipped with panic hardware.</i>	10	8
4.9	Emergency lighting is provided throughout the entire building with exit signs on separate electrical circuits <i>Emergency lighting is provided throughout.</i>	10	8
4.10	Classroom doors are recessed and open outward <i>Classroom doors are not recessed from the Corridor and open outward, which impede traffic flow in the Corridors.</i>	10	2
4.11	Building security systems are provided to assure uninterrupted operation of the educational program	10	5

Building security system is not provided with cameras in areas with 6 or more computers, corridors or gathering areas.

4.12	Flooring (including ramps and stairways) is maintained in a non-slip condition <i>Terrazzo and VCT flooring have been well maintained throughout the facility.</i>	5	3
4.13	Stair risers (interior and exterior) do not exceed 6 1/2 inches and range in number from 3 - 16 <i>The overall facility is one story without stairways.</i>	5	4
4.14	Glass is properly located and protected with wire or safety material to prevent accidental student injury <i>Glass at door transoms and sidelights is provided with wire mesh for safety.</i>	5	4
4.15	Fixed Projections in the traffic areas do not extend more than eight inches from the corridor wall <i>Water coolers have been recessed in the Corridor wall.</i>	5	4
4.16	Traffic areas terminate at an exit or a stairway leading to an egress <i>Exits are properly located to allow safe egress from the building.</i>	5	4

Emergency Safety		Points Allocated	Points
4.17	Adequate fire safety equipment is properly located <i>Fire extinguishers are adequately provided.</i>	15	12
4.18	There are at least two independent exits from any point in the building <i>Multiple exits are provided from Corridors throughout the facility.</i>	15	12
4.19	Fire-resistant materials are used throughout the structure <i>The structure is a masonry load bearing system with steel joist and concrete deck. Interior walls are brick, masonry and metal, demountable partitions.</i>	15	12
4.20	Automatic and manual emergency alarm system with a distinctive sound and flashing light is provided <i>An automatic fire alarm system is adequately provided throughout.</i>	15	12
TOTAL - Building Safety and Security		200	141

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5.0 Educational Adequacy

School Facility Appraisal

Academic Learning Space			Points Allocated	Points
5.1		Size of academic learning areas meets desirable standards	25	20
		<i>The average Classroom is 975 SF compared to 900 SF required by the OSDM.</i>		
5.2		Classroom space permits arrangements for small group activity	15	12
		<i>Classrooms are large enough to allow effective small group activity spaces.</i>		
5.3		Location of academic learning areas is near related educational activities and away from disruptive noise	10	8
		<i>The Gymnasium and Music program are properly isolated from the academic learning areas to reduce distractions.</i>		
5.4		Personal space in the classroom away from group instruction allows privacy time for individual students	10	8
		<i>Classrooms are large enough to allow privacy time for individual students.</i>		
5.5		Storage for student materials is adequate	10	4
		<i>Coat hooks and shelving, located in the Classroom, are inadequately provided for student storage.</i>		
5.6		Storage for teacher materials is adequate	10	4
		<i>Miscellaneous wood and metal shelving units are inadequately provided for teacher storage.</i>		
<hr/>				
Special Learning Space			Points Allocated	Points
5.7		Size of special learning area(s) meets standards	15	6
		<i>The Special Education Classroom is 800 SF compared to 900 SF recommended in the OSDM.</i>		
5.8		Design of specialized learning area(s) is compatible with instructional need	10	6
		<i>Special Education spaces are not adequately provided to meet instructional needs.</i>		
5.9		Library/Resource/Media Center provides appropriate and attractive space	10	4
		<i>The Media Center is 2686SF compared to 1818 SF recommended in the OSDM. (ES) The Media Center is an attractive space, including natural light and sufficient book storage space. The Media Center is not visually appealing and does not provide natural light.</i>		
5.10		Gymnasium (or covered P.E. area) adequately serves physical education instruction	5	1
		<i>The Gymnasium is 3,604 SF compared to 4,000 - 4,700 SF recommended in the OSDM. (ES)</i>		
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 adequate for age of students served.

5.12	Music Program is provided adequate sound treated space	5	2
	<i>The Music Room is 880 SF compared to 1,800-3,000 recommended in the OSDM. Music instruction is provided in a standard Classroom without any sound treatment.</i>		
5.13	Space for art is appropriate for special instruction, supplies, and equipment	5	2
	<i>The Art Room is 1,173 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. The Art Room is undersized and does not provide sufficient space for storage of supplies and equipment.</i>		

School Facility Appraisal	Points Allocated	Points
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5.14	Space for technology education permits use of state-of-the-art equipment	5	1
	<i>The facility is not provided with Computer Labs for student use.</i>		
5.15	Space for small groups and remedial instruction is provided adjacent to classrooms	5	2
	<i>No spaces have been provided adjacent to Classrooms for small groups or remedial instruction.</i>		
5.16	Storage for student and teacher material is adequate	5	2
	<i>Storage for teachers and students has not been adequately provided throughout the facility.</i>		

Support Space	Points Allocated	Points
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5.17	Teacher's lounge and work areas reflect teachers as professionals	10	2
	<i>The Teacher's Lounge is 365 SF compared to 450-900 SF, for 8-24 staff, recommended in the OSDM. Limited work space is provided for preparation of teacher materials.</i>		
5.18	Cafeteria/Kitchen is attractive with sufficient space for seating/dining, delivery, storage, and food preparation	10	4
	<i>The Student Dining space is 1,780 SF compared to 3,000 SF recommended in the OSDM. The Kitchen space is 1,585 SF compared to 2,121 SF recommended in the OSDM.</i>		
5.19	Administrative offices provided are consistent in appearance and function with the maturity of the students served	5	3
	<i>Administrative Offices are not adequately provided for Elementary School students.</i>		
5.20	Counselor's office insures privacy and sufficient storage	5	2
	<i>The Counselor's Office is 120 SF compared to 120 SF, plus 100 SF for Storage and 200 SF for Conference, recommended in the OSDM. The space provided for the Counselor does insure privacy, but lacks sufficient storage space. The space provided for the Counselor does not insure privacy, and lacks sufficient storage space.</i>		
5.21	Clinic is near administrative offices and is equipped to meet requirements	5	3
	<i>The Clinic is 250SF compared to 370 SF recommended in the OSDM. The Clinic is located within the Administrative Offices and is provided with required equipment.</i>		
5.22	Suitable reception space is available for students, teachers, and visitors	5	2
	<i>There is a very small area for reception in the front office.</i>		

5.23	Administrative personnel are provided sufficient work space and privacy	5	2
	<i>Administrative offices are not adequate.</i>		
TOTAL - Educational Adequacy		200	106

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6.0 Environment for Education

School Facility Appraisal

Exterior Environment		Points Allocated	Points
6.1	Overall design is aesthetically pleasing to age of students <i>The building is a modern design with modern detailing, which is aesthetically pleasing.</i>	15	9
6.2	Site and building are well landscaped <i>The site is moderately landscaped with mature shade trees, ornamental trees, and shrubs which define the property and emphasize the building entrance. Lawn areas where mowing is required do not exceed 3:1 slope.</i>	10	8
6.3	Exterior noise and poor environment do not disrupt learning <i>The site is adjacent to residential uses, and there are no undesirable features adjacent to the school site.</i>	10	8
6.4	Entrances and walkways are sheltered from sun and inclement weather <i>The main entrance to the School is partially sheltered. Exits are not sheltered from sun and inclement weather. On-site walkways to accessory buildings are not covered.</i>	10	4
6.5	Building materials provide attractive color and texture <i>Exterior building materials consist of brick wall and a corrugated metal fascia, do not provide an attractive color and texture.</i>	5	2
Interior Environment		Points Allocated	Points
6.6	Color schemes, building materials, and decor provide an impetus to learning <i>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.</i>	20	8
6.7	Year around comfortable temperature and humidity are provided throughout the building <i>The building has a rooftop units that condition the school.</i>	15	14
6.8	Ventilating system provides adequate quiet circulation of clean air and meets 15cfm VBC requirement <i>It does provide the 15 CFM ventilation as required by the OBCMC.</i>	15	13
6.9	Lighting system provides proper intensity, diffusion, and distribution of illumination <i>Lighting levels are inadequate throughout the building.</i>	15	9
6.10	Drinking fountains and restroom facilities are conveniently located <i>Drinking fountains and Restroom facilities are not conveniently located.</i>	15	3
6.11	Communication among students is enhanced by commons area(s) for socialization <i>There are areas for students to gather in the Student Dining area and Gymnasium, as well as a small gathering area at the entrance to the school.</i>	10	6

6.12	Traffic flow is aided by appropriate foyers and corridors <i>Corridors and Foyers are adequately designed for efficient traffic flow. Classroom doorways are not recessed and impede traffic flow.</i>	10	8
6.13	Areas for students to interact are suitable to the age group <i>There are areas for students to gather in the Student Dining area and Gymnasium, as well as a small gathering area at the entrance to the school.</i>	10	6
6.14	Large group areas are designed for effective management of students <i>The Gymnasium is adequately designed to manage large groups of students.</i>	10	8
6.15	Acoustical treatment of ceilings, walls, and floors provides effective sound control <i>Limited consideration has been given to acoustical treatment of Classrooms and Corridors.</i>	10	4
6.16	Window design contributes to a pleasant environment <i>The windows are not designed well, and do not contribute to a pleasant environment.</i>	10	4
6.17	Furniture and equipment provide a pleasing atmosphere <i>Classroom furniture is mismatched and in fair to poor condition.</i>	10	6
TOTAL - Environment for Education		200	120

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LEED Observation Notes

School District:	Worthington City
County:	Franklin
School District IRN:	45138
Building:	Worthington Hills Elementary
Building IRN:	64089

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 Reduction 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 them from ending up at landfills. It also reduces habitat disturbance and minimizes the need for the surrounding infrastructure. While using new materials one should take into account different material sources. Salvaged materials provide savings on material costs, recycled content material minimizes waste products and local materials reduce the environmental impact of transportation. Finally, using rapidly renewable materials and certified wood decreases the consumption of natural resources. Recycling and reusing construction waste is another strategy to be taken into consideration in sustainable design.

(source: LEED Reference Guide, 2001:167)

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: **Worthington Hills Elementary**

K-6

Building features that clearly exceed criteria:

1. The site has been developed to accommodate outdoor learning, including benches and picnic tables to facilitate instruction.
2. Flexible partition walls have been provided between Classrooms and allow for a variety of class sizes.
3. The Media Center is 2686SF compared to 1818 SF recommended in the OSDM. (ES)
- 4.
- 5.
- 6.

Building features that are non-existent or very inadequate:

1. Classroom doors are not recessed from the Corridor and open outward, which impede traffic flow in the Corridors.
2. Buses and other vehicular traffic use the same entrance and exit points to the site, which do not provide safe vehicular traffic flow.
3. The building is reported to contain asbestos and other hazardous materials.
- 4.
- 5.
- 6.

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Environmental Hazards Assessment Cost Estimates

Owner:	Worthington City
Facility:	Worthington Hills Elementary
Date of Initial Assessment:	Sep 24, 2015
Date of Assessment Update:	Dec 30, 2015
Cost Set:	2015

District IRN:	45138
Building IRN:	64089
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
1970 Worthington Hills Elementary	45,323	\$64,532.30	\$64,532.30
1988 Addition 1	5,037	\$503.70	\$503.70
1999 Addition 2	2,146	\$214.60	\$214.60
Total	52,506	\$65,250.60	\$65,250.60
Total with Regional Cost Factor (100.00%)	—	\$65,250.60	\$65,250.60
Regional Total with Soft Costs & Contingency	—	\$81,191.52	\$81,191.52

Environmental Hazards(Enhanced) - Worthington City (45138) - Worthington Hills Elementary (64089) - Worthington Hills Elementary

Owner: Worthington City

Bldg. IRN: 64089

Facility: Worthington Hills Elementary

BuildingAdd: Worthington Hills Elementary

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	20000	\$3.00	\$60,000.00
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			\$60,000.00
36. (Sum of Lines 1-34)	Total Asb. Hazard Abatement Cost for Demolition Work			\$60,000.00

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

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

D. Fluorescent Lamps & Ballasts Recycling/Incineration				<input type="checkbox"/> Not Applicable
Area Of Building Addition	Square Feet w/Fluorescent Lamps & Ballasts	Unit Cost	Total Cost	
1. 45323		\$0.10	\$4,532.30	

E. Other Environmental Hazards/Remarks			<input type="checkbox"/> 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	\$64,532.30
2. A36, B1, D1, and E2	Total Cost for Env. Hazards Work - Demolition	\$64,532.30

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

- Unless reported otherwise by the District, materials installed after 1980 are assumed to be asbestos-free.
- Unless reported otherwise by the District, small quantities (less than 1,000 square feet) of the following materials are assumed to be asbestos free: hard plaster, acoustical plaster and gypsum board systems; acoustical panels and tiles; fireproofing; 12"x12" floor tile and mastic.
- 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) - Worthington Hills Elementary (64089) - Addition 1

Owner: Worthington City

Bldg. IRN: 64089

Facility: Worthington Hills Elementary

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	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			\$0.00
36.	(Sum of Lines 1-34)	Total Asb. Hazard Abatement Cost for Demolition Work			\$0.00

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

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

D. Fluorescent Lamps & Ballasts Recycling/Incineration				<input type="checkbox"/> Not Applicable
Area Of Building Addition	Square Feet w/Fluorescent Lamps & Ballasts	Unit Cost	Total Cost	
1.	5037	\$0.10	\$503.70	

E. Other Environmental Hazards/Remarks			<input type="checkbox"/> 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	\$503.70
2.	A36, B1, D1, and E2	Total Cost for Env. Hazards Work - Demolition	\$503.70

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

- Unless reported otherwise by the District, materials installed after 1980 are assumed to be asbestos-free.
- Unless reported otherwise by the District, small quantities (less than 1,000 square feet) of the following materials are assumed to be asbestos free: hard plaster, acoustical plaster and gypsum board systems; acoustical panels and tiles; fireproofing; 12"x12" floor tile and mastic.
- 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) - Worthington Hills Elementary (64089) - Addition 2

Owner: Worthington City

Bldg. IRN: 64089

Facility: Worthington Hills Elementary

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	Not Present	0	\$3.00	\$0.00
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			\$0.00
36.	(Sum of Lines 1-34)	Total Asb. Hazard Abatement Cost for Demolition Work			\$0.00

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

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

D. Fluorescent Lamps & Ballasts Recycling/Incineration				<input type="checkbox"/> Not Applicable
Area Of Building Addition	Square Feet w/Fluorescent Lamps & Ballasts	Unit Cost	Total Cost	
1.	2146	\$0.10	\$214.60	

E. Other Environmental Hazards/Remarks			<input type="checkbox"/> 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	\$214.60
2.	A36, B1, D1, and E2	Total Cost for Env. Hazards Work - Demolition	\$214.60

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

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

